LA-5600-MS

769

Publications of LASL Research

1972

los alamos
scientific laboratory
of the University of California
LOS ALAMOS, NEW MEXICO 87544

UNITED STATES
ATOMIC ENERGY COMMISSION
CONTRACT W-7405-ENG. 36

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

This report was prepared as an account of work sponsored by the United States Government. Neither the United States nor the United States Atomic Energy Commission, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.

In the interest of prompt distribution, this LAMS report was not edited by the Technical Information staff.

Printed in the United States of America. Available from
National Technical Information Service
U. S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22151
Price: Printed Copy $7.60 Microfiche $0.95

LA-5600-MS
UC-2

Issued: March 1974

los alamos
scientific laboratory
of the University of California
LOS ALAMOS, NEW MEXICO 87544

NOTICE
This report was prepared as an account of work sponsored by the United States Government. Neither the United States nor the United States Atomic Energy Commission, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.

Publications of LASL Research

1972

Compiled by

Alison K. Kerr

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

CONTENTS

Introduction iii

Preface v

Publications Arranged in Subject Categories

1. Aerospace Studies 1
2. Analytical Technology 4
3. Astrophysics 8
4. Atomic and Molecular Physics, Equation of State, Opacity 10
5. Biology and Medicine 14
6. Chemical Dynamics and Kinetics 18
7. Chemistry 19
8. Cryogenics 21
9. Crystallography 23
10. CTR and Plasma Physics 25
11. Earth Science and Engineering 32
12. Engineering and Equipment 33
13. EPR, ESR, NMR Studies 35
14. Explosives and Detonations 36
15. Fission Physics 38
16. Health and Safety 39
17. Hydrodynamics and Radiation Transport 42
18. Instruments 44
19. Lasers 46
20. Mathematics and Computers 50
21. Medium Energy Physics 55
22. Metallurgy and Ceramics Technology 60
23. Neutronics and Criticality Studies 63
24. Nuclear Physics 65
25. Nuclear Safeguards 77
26. Physics 80
27. Reactor Technology 82
28. Solid State Science 83
29. Miscellaneous 84

Author Index 86

Numerical Index 123

Publication Tabulation 127

Words Excluded from KWIC Index 129

Keyword-in-Context (KWIC) Index 132

INTRODUCTION

The Los Alamos Scientific Laboratory (LASL), which is operated for the Atomic Energy Commission by the University of California, was founded in 1943 at the site of the Los Alamos Ranch School, a boys' preparatory school in the mountains of Northern New Mexico, as part of the wartime Manhattan Project. It had a single assignment--to create the world's first nuclear fission bombs. Success in that task, one of the greatest scientific and technological achievements of all time, was followed by equal success in developing the first thermo-nuclear weapons. Since 1952 the Laboratory has diversified its programs, and while still serving as one of the nation's two development centers for nuclear weapons, LASL now devotes about one half of its total effort to unclassified research exploring several peaceful applications of nuclear energy. The various LASL weapons and non-weapons programs are supported by extensive fundamental research in physics, mathematics, chemistry, metallurgy, biology, medicine, and other fields.

Major non-weapons research activities at Los Alamos include: a newly formed Energy Division to look especially into new technology to bring to both old energy activities and new energy sources such as solar and geothermal; the Laboratory's involvement, as one of the major participants, in Project Sherwood, the AEC's program of research in the control of thermonuclear reactions; a new accelerator facility, called LAMPF, for medium-energy nuclear physics research; low-energy and intermediate-energy nuclear physics research using a variety of particle accelerators and neutron sources including underground nuclear explosions; and a program of medical and biological effects of radiation and basic work in molecular and cellular biology. Besides LAMPF, the experimental and test facilities of LASL, many of which are unique, include nuclear reactors, particle accelerators, and a large number of specialized laboratories. Examples are a 25-MeV, 3-stage Van de Graaff particle accelerator; a 27-MeV electron accelerator used to produce a very intense, very short burst of x rays for high-speed flash radiography; and a computing center consisting of three CDC 6600/s, two 7600's, and the locally designed and built MANIAC II.

LAMPF is a $55-million, 800-MeV, 1-mA-beam linear accelerator to be used to produce beams of protons, mesons, and other nuclear particles with intensities up to 10,000 times greater than those available from present machines. Also under construction is Scyllac, an $8.5-million toroidal theta-pinch device 15 meters in circumference, for producing thermonuclear reactions in deuterium plasmas.

LASL, as of 1972, employed about 4,000 people. About one third of the total staff are scientists and engineers. The total operating costs--excluding construction--of the Laboratory are about $100 million per year. The value of the AEC-owned buildings and equipment at Los Alamos is more than $275 million.

PREFACE

The Libraries' continuing program of locating, recording, and announcing publications of LASL-sponsored research has resulted in the previous publications: "Selected Bibliography of Publications of LASL Research, 1957-1962," (LAMS-2895 and supplement), and "Publications of LASL Research," for each of the years 1963 through 1971. This bibliography lists unclassified 1972 publications of work done at the Los Alamos Scientific Laboratory and those earlier publications that were received too late for inclusion in earlier compilations. Papers published in 1972 are included regardless of when they were actually written. Declassification of previously classified reports is considered to constitute publication. All classified issuances are omitted–even those papers, themselves unclassified, which were published only as part of a classified document. If a paper was published more than once, all places of publication are included.

The bibliography includes Los Alamos Scientific Laboratory reports, papers released as non-Los Alamos reports, journal articles, books, chapters of books, conference papers whether published separately or as part of conference proceedings issued as books or reports, papers published in congressional hearings, theses, and U. S. patents. Publications by LASL authors which are not records of Laboratory-sponsored work are included when the Library becomes aware of them. These publications are indicated by three asterisks following the author's name in place of a group designation.

The arrangement in each bibliographical citation is title first, place(s) of publication indented, then authors, further indented. The *Chemical Abstracts* abbreviation is used for journal citations except for the capitalization. The group designations given after the authors' names indicate the groups with which the authors were associated at the time the papers were written. The asterisks at the end of LA-DC-entries indicate that the LASL Libraries ordered reprints of the papers. Parenthetical information includes report and reprint numbers, book call numbers, and patent numbers. The parentheses indicate the information by which Los Alamos borrowers may obtain the material from the LASL Libraries.

The entries are arranged in sections by broad subject categories. Within each section they are alphabetical by title. All types of publications are interfiled.

The author and numerical indexes refer to the item numbers, which consist of a number designating the section, followed by a dash and a number for the alphabetic arrangement of the item within the section. In the numerical index, the LA- and LA-xxxx-MS numbers of formal reports are interfiled. An appendix gives a tabulation of the entries by type of publication.

There is a Keyword-in-Context index, plus a list of words not included in that index.

Most of the reports listed in this publication are available for sale from

National Technical Information Service
U. S. Department of Commerce
Springfield, Virginia 22151

or on request by government agencies and their contractors for sale from

Technical Information Center
U. S. Atomic Energy Commission
P. O. Box 62
Oak Ridge, Tennessee 37830.

Reprints of journal articles whose citations are followed by a report number and an asterisk are available as long as the supply lasts from the first author listed. Address requests to him at

Los Alamos Scientific Laboratory
University of California
Post Office Box 1663
Los Alamos, New Mexico 87544

This bibliography has been prepared by the LASL Library Services Group, ISD-4, from the records of the Technical Information Group, ISD-6, from abstracting and indexing journals, and from supplementary library files. Inquiries regarding any of the materials included should be directed to the Serials Unit of the LASL libraries.

The Libraries gratefully acknowledge the assistance of members of LASL's Technical Information Group in assigning subject categories, and of members of the Computer Division for assistance with the computerized system for handling publication information.

1. AEROSPACE STUDIES

1-1
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972.
LASL, 1972. 44P. (LA-4877-PR)
PETERSON, ROBERT W. (J-16)
GUTHALS, PAUL R. (CNC-11)
WOLCOTT, JOHN H. (J-16)

1-2
AURORAL CONJUGACY.
ANTARCTIC J., V.7, P.160-1. 1972.
NIELSEN, HANS C. S.
WESCOTT, EUGENE M.
PETERSON, ROBERT W. (J-16)

1-3
AURORAL INTENSITIES AT CONJUGATE POINTS.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.470. 1972.
NIELSEN, HANS C. S.
WESCOTT, EUGENE M.
DAVIS, T. NEIL
PETERSON, ROBERT W. (J-16)

1-4
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES.
APPL. OPT., V.11, P.2684-96. 1972.
(LA-DC-13371)*
COLLINS, DAVID G.
BLATTNER, WOLFRAM G.
WELLS, MICHAEL B.
HORAK, HENRY G. (J-10)

1-5
COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA.
REV. GEOPHYS. SPACE PHYS., V.8, P.729-811. 1970. (LA-DC-11068)*
ALSO PUBLISHED IN:
SOLAR TERRESTRIAL PHYSICS. 1970. INTERNATIONAL SYMPOSIUM, LENINGRAD. PROC., PT.2, P.1-31. REIDEL, 1972. (523:S684T 1970) (LA-DC-11068A)*
HUNDHAUSEN, ARTHUR J. (T-12)

1-6
COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3.
J. GEOPHYS. RES., V.77, P.5542-54. 1972.
GOSLING, JOHN T. (P-4)
HUNDHAUSEN, ARTHUR J.
PIZZO, V.
ASBRIDGE, JOHN R. (P-4)

1-7
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.1107. 1972.
FELDMAN, WILLIAM C. (P-4)
ASBRIDGE, JOHN R. (P-4)
BAME, SAMUEL J., JR. (P-4)

1-8
COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT OF A SUBSTORM.
J. GEOPHYS. RES., V.77, P.4682-99. 1972.
MENDE, S. B.
SHARP, R. D.
SHELLEY, E. G.
HAERENDEL, GERHARD
HONES, EDWARD W., JR. (P-4)

1-9
EMP IN THE IONOSPHERE: ROCKET TEST 152-133.
LASL, 1972. 15P. (LA-4947)
BENTON, CLARENCE U. (J-16)
WAKEFIELD, RICHARD L. (J-16)
NIPER, E. D.
SCHELLENBAUM, R. L.

1-10
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS.
J. GEOPHYS. RES., V.77, P.5432-41. 1972. (LA-DC-13076)*
ABSTRACT PUBLISHED IN:
EOS, V.52, P.915. 1971.
MONTGOMERY, MICHAEL D. (P-4)
BAME, SAMUEL J., JR. (P-4)
HUNDHAUSEN, ARTHUR J.

1-11
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE.
PLANETARY SPACE SCI., V.20, P.1909-14. 1972.
VERZARIU, POMPILIU
SUGIURA, MASAHISA
STRONG, IAN B. (P-4)

1-12
HIGH ALTITUDE IRON VAPOR RELEASE.
DTIE, 1972. 14P. MN (LA-DC-72-484)
BEARDALL, JOHN S. (J-10)
PEEK, H. MILTON (J-10)
JEFFRIES, ROBERT A. (J-10)

1-13
INTERPENETRATING ION BEAMS IN THE SOLAR WIND.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.504. 1972.
FELDMAN, WILLIAM C. (P-4)
ASBRIDGE, JOHN R. (P-4)
BAME, SAMUEL J., JR. (P-4)
MONTGOMERY, MICHAEL D. (P-4)

1-14
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B.
J. GEOPHYS. RES., V.77, P.5503-22.
1972. (LA-DC-72-352)*
HONES, EDWARD W., JR. (P-4)
ASBRIDGE, JOHN R. (P-4)
BAME, SAMUEL J., JR. (P-4)
MONTGOMERY, MICHAEL D. (P-4)
SINGER, SIDNEY (P-4)
AKASOFU, SYUN I. (P-4)

1-15
MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.488. 1972.
HONES, EDWARD W., JR. (P-4)
BAME, SAMUEL J., JR. (P-4)
MONTGOMERY, MICHAEL D. (P-4)
SINGER, SIDNEY (P-4)
AKASOFU, SYUN I. (P-4)

1-16
MICROSTRUCTURE OF THE EARTH'S BOW SHOCK.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.1099. 1972.
FORSLUND, DAVID W. (P-18)
KINDEL, JOSEPH M. (T-6)
LINDMAN, ERICK L. (J-10)

1-17
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.1107. 1972.
BAME, SAMUEL J., JR. (P-4)
ASBRIDGE, JOHN R. (P-4)
FELDMAN, WILLIAM C. (P-4)
MONTGOMERY, MICHAEL D. (P-4)

1-18
OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEATH.
J. GEOPHYS. RES., V.77, P.6688-95.
1972. (LA-DC-72-453)*
HONES, EDWARD W., JR. (P-4)
AKASOFU, SYUN I. (P-4)
BAME, SAMUEL J., JR. (P-4)
SINGER, SIDNEY (P-4)

1-19
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES.
PHYS. REV. LETTERS, V.29, P.249-52.
1972. (LA-DC-72-285)*
FORSLUND, DAVID W. (P-18)
KINDEL, JOSEPH M. (P-18)
LINDMAN, ERICK L. (J-10)

1-20
PARAMETRIC INSTABILITIES OF VLF WAVES.
DTIE, 1972. 6P. MN (LA-DC-72-746)
FORSLUND, DAVID W. (P-18)
KINDEL, JOSEPH M. (T-6)
LINDMAN, ERICK L. (J-10)

1-21
PLASMA SHEET VARIATIONS DURING SUBSTORMS.
PLANETARY SPACE SCI., V.20, P.1409-31.
1972. (LA-DC-12858)*
HONES, EDWARD W., JR. (P-4)

1-22
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.503. 1972.
MONTGOMERY, MICHAEL D. (P-4)
ASBRIDGE, JOHN R. (P-4)
BAME, SAMUEL J., JR. (P-4)
FELDMAN, WILLIAM C. (P-4)

1-23
PRELIMINARY LIGHTNING HAZARD STUDY.
LASL, 1972. 8P. (LA-4866-MS)
MILLER, LESTON W. (J-16)

1-24
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.479. 1972.
SINGER, SIDNEY (P-4)
MONTGOMERY, MICHAEL D. (P-4)
BAME, SAMUEL J., JR. (P-4)

1-25
RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS.
J. GEOPHYS. RES., V.77, P.1844-58.
1972.
NIELSEN, HANS C. S.
DAVIS, T. NEIL
GLASS, NEEL W. (J-16)

1-26
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS.
LASL, 1969. 26P. (LA-4313)
ALSO PUBLISHED IN:
PLANETARY SPACE SCI., V.20, P.165-82.
1972. (LA-DC-20459)*
HORAK, HENRY G. (J-10)
KERR, DONALD M., JR. (J-10)
TIERNEY, MARTIN S. (J-10)

1-27
SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967.
SOLAR PHYS., V.23, P.467-86. 1972.
HIRSHBERG, JOAN
BAME, SAMUEL J., JR. (P-4)
ROBBINS, DONALD E.

1-28
SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS.
J. GEOPHYS. RES., V.77, P.12-26. 1972.
GOSLING, JOHN T. (P-4)
BAME, SAMUEL J., JR. (P-4)

1-29
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES.
DTIE, 1972. 26P. MN (LA-DC-12711)
ALSO PUBLISHED IN:
EARTH'S MAGNETOSPHERIC PROPERTIES, B. M. MC CORMAC, ED., P.365-78. REIDEL, 1972. (LA-DC-12711)*
HONES, EDWARD W., JR. (P-4)

1-30
SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE.
DTIE, 1972. 28P. MN (LA-DC-72-1165)
ALSO PUBLISHED IN:
SOLAR TERRESTRIAL RELATIONS. 1972. CONFERENCE, CALGARY. PROC., P.125-52. CALGARY UNIV., 1973. (523:S684TE)
HONES, EDWARD W., JR. (P-4)

1-31
THERMAL ENERGY TRANSPORT IN THE SOLAR WIND.
COSMIC PLASMA PHYSICS. 1971. CONFERENCE, FRASCATI. PROC., P.61-72. PLENUM, 1972. (523:C834P)
(LA-DC-12485)*
MONTGOMERY, MICHAEL D. (P-4)

1-32
TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.493. 1972.
REASONER, DAVID L.
RICH, FREDERICK J.
HONES, EDWARD W., JR. (P-4)

1-33
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS.
J. GEOPHYS. RES., V.77, P.2982-6. 1972. (LA-DC-72-212)*
WESCOTT, EUGENE M.
PEEK, H. MILTON (J-10)
NIELSEN, HANS C. S.
MURCRAY, WALLACE B.
JENSEN, REED J. (J-10)
DAVIS, T. NEIL

1-34
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.)
MONATSH. CHEM., V.103, P.307-25. 1972.
HUDSON, FRANK P.
STAMMLER, MANFRED (J-10)

1-35
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII.
J. GEOPHYS. RES., V.77, P.6665-70. 1972. (LA-DC-72-591)*
FEHLAU, PAUL E. (A-2)
CHAMBERS, WILLIAM H. (A-2)
KUNZ, WALTER E. (A-2)
FULLER, JACK C. (W-10)

1-36
VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE.
J. GEOPHYS. RES., V.77, P.3583-8. 1972.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.504. 1972.
HIRSHBERG, JOAN
ASBRIDGE, JOHN R. (P-4)
ROBBINS, DONALD E.

2. ANALYTICAL TECHNOLOGY

2-1
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970.
LASL, 1972. 39P. (LA-4724-MS)
SCHUYLER, DONALD R., II (GMX-1)
FEIERTAG, THOMAS H. (GMX-1)

2-2
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS.
ABSTRACT PUBLISHED IN:
BULL. AM. CERAM. SOC., V.51, P.393. 1972.
FRENCH, P. M.
JACOBY, W. R.
SHALEK, P. D.
JOHNSON, KAYE ALLAN (CMB-11)

2-3
ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP.
ANALYTICAL CHEMISTRY OF NUCLEAR FUELS. 1970. PANEL MEETING, VIENNA. PROC., P.135-42. IAEA, 1972. (626:A532C)
REIN, JAMES E. (CMB-1)
METZ, CHARLES F. (CMB-1)

2-4
ANALYSIS OF NUCLEAR FUELS. A REVIEW.
DTIE, 1972. 28P. MN (LA-DC-12804)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P.155-74. IAEA, 1972. (IAEA-SM-149/32) (626:A532M)
METZ, CHARLES F. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-5
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972.
LASL, 1972. 9P. (LA-5064-SR)
WATERBURY, GLENN R. (CMB-1) COMP.

2-6
APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS.
ANALYTICAL CHEMISTRY OF NUCLEAR FUELS. 1970. PANEL MEETING, VIENNA. PROC., P.97-109. IAEA, 1972. (626:532C)
REIN, JAMES E. (CMB-1)
METZ, CHARLES F. (CMB-1)

2-7
APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL.
ANALYTICAL CHEMISTRY OF NUCLEAR FUELS. 1970. PANEL MEETING, VIENNA. PROC., P.85-90. IAEA, 1972. (626:A532C)
METZ, CHARLES F. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-8
CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM.
RESEARCH ON URANIUM PLASMAS AND THEIR TECHNOLOGICAL APPLICATIONS. 1970. SYMPOSIUM, GAINESVILLE, FL, PROC., P.151-63. NASA, 1971. (NASA SP-236)
ABSTRACT PUBLISHED IN:
RESEARCH ON URANIUM PLASMAS AND THEIR TECHNOLOGICAL APPLICATION. 1970. SYMPOSIUM, GAINESVILLE, FL. TRANSACTIONS, P.37. UNIV. OF FLORIDA, 1972. (626:R432U)
STEINHAUS, DAVID W. (CMB-1)
RADZIEMSKI, LEON J., JR. (CMB-1)
COWAN, ROBERT D. (T-DOT)

2-9
DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL.
DTIE, 1972. 18P. MN (LA-DC-12805)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P.395-407. IAEA, 1972. (IAEA-SM-149/34) (626:A532M)
METZ, CHARLES F. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-10
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS.
ANALYTICAL CHEMISTRY OF NUCLEAR FUELS. 1970. PANEL MEETING, VIENNA. PROC., P.143-55. IAEA, 1972. (626:A532C)
REIN, JAMES E. (CMB-1)
METZ, CHARLES F. (CMB-1)

2-11
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16.
LASL, 1972. 9P. (LA-4849)
MAC DOUGALL, CAROLYN SUE (CMB-1)
SMITH, MAYNARD E. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-12
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS.
LASL, 1972. 8P. (LA-4971)
MAC DOUGALL, CAROLYN SUE (CMB-1)
SMITH, MAYNARD E. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-13
ELEMENTAL ANALYSIS OF BIOLOGICAL SAMPLES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.548. 1972.
MALANIFY, JOHN J. (A-1)
UMBARGER, C. JOHN (A-1)

2-14
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6- TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY.
J. CHROMATOG., V.71, P.481-6. 1972.
(LA-DC-72-406)*
YASUDA, STANLEY K. (GMX-2)

2-15
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS.
DTIE, 1971. 13P. MN (LA-DC-12806)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P.35-44. IAEA, 1972. (IAEA-SM-149/33)
(626:A532M)
METZ, CHARLES F. (CMB-1)
WATERBURY, GLENN R. (CMB-1)
DAHLBY, JOEL W. (CMB-1)

2-16
NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS.
DTIE, 1972. 23P. MN (LA-DC-72-525)
ALSO PUBLISHED IN:
REMOTE SYSTEMS TECHNOLOGY. 1972. 20TH CONFERENCE, IDAHO FALLS. PROC., P.115-22. ANS, 1972. (626:H832C 20TH)
PHILLIPS, JOHN R. (CMB-1)
WATERBURY, GLENN R. (CMB-1)
MOTTAZ, GLENN H. (CMB-1)
QUINTANA, JOHNNY N. (CMB-1)

2-17
NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS.
REMOTE SYSTEMS TECHNOLOGY. 1972. 20TH CONFERENCE, IDAHO FALLS. PROC., P.115-22. ANS, 1972. (LA-DC-72-195)*
PHILLIPS, JOHN R. (CMB-1)
WATERBURY, GLENN R. (CMB-1)
MOTTAZ, GLENN H. (CMB-1)
QUINTANA, JOHNNY N. (CMB-1)

2-18
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE.
LASL. 1972. 3P. (LA-5063)
RADZIEMSKI, LEON J., JR. (CMB-1)

2-19
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.314-26. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-20
PLUTONIUM BY A CERIC SULFATE TITRATION - PHOTOMETRIC END-POINT DETECTION METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.268-74. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-21
PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.299-306. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-22
PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.293-9. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-23
PLUTONIUM BY A ZINC AMALGAM REDUCTION - CERIC SULFATE TITRATION METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.274-85. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-24
PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.254-61. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-25
PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - POTENTIOMETRIC END-POINT DETECTION METHOD.
SELECTED MEASUREMENT METHODS FOR PLUTONIUM AND URANIUM IN THE NUCLEAR FUEL CYCLE, C. J. RODDEN, ED. P.261-8. OFFICE OF INFORMATION SERVICES, AEC, 1972. (TID-7029)
CMB-1 GROUP

2-26
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM - PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS.
DTIE, 1972. 10P. MN (LA-DC-12811)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P 137-44. IAEA, 1972. (IAEA-SM-149/39) (626:A532M)
REIN, JAMES E. (CMB-1)
PHELPS, ROBERT T. (CMB-1)
ASHLEY, WILLIAM H. (CMB-1)
WATERBURY, GLENN R. (CMB-1)
METZ, CHARLES F. (CMB-1)

2-27
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES.
APPL. SPECTRY., V.26, P.405-6. 1972. (LA-DC-13197)*
MC DOWELL, ROBIN S. (CNC-4)

2-28
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE.
TALANTA, V.19, P.857-62. 1972. (LA-DC-12940)*
REIN, JAMES E. (CMB-1)
ABERNATHEY, ROBERT M. (CMB-1)

2-29
RAPID SEPARATION AND DETERMINATION OF MERCURY.
TALANTA, V.19, P.197-202. 1972.
KRESSIN, IVAN K. (CNC-4)

2-30
REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS.
DTIE, 1972. 18P. MN (LA-DC-72-524)
MAC DOUGALL, CAROLYN SUE (CMB-1)
SMITH, MAYNARD E. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-31
REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS.
REMOTE SYSTEMS TECHNOLOGY. 1972. 20TH CONFERENCE, IDAHO FALLS. PROC., P.137-42. ANS, 1972. (626:H832C 20TH) (LA-DC-72-183)*
MAC DOUGALL, CAROLYN SUE (CMB-1)
SMITH, MAYNARD E. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-32
SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS.
ANALYTICAL CHEMISTRY OF NUCLEAR FUELS. 1970. PANEL MEETING, VIENNA. PROC., P.59-65. IAEA, 1972. (626:A532C)
METZ, CHARLES F. (CMB-1)
WATERBURY, GLENN R. (CMB-1)

2-33
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS.
DTIE, 1972. 13P. MN (LA-DC-12810)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P.513-21. IAEA, 1972. (IAEA-SM-149/37) (626:A532M)
ABERNATHEY, ROBERT M. (CMB-1)
MATLACK, GEORGE M. (CMB-1)
REIN, JAMES E. (CMB-1)

2-34
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY.
THERMOCHIM. ACTA, V.3, P.383-9. 1972. (LA-DC-13040)*
ABSTRACT PUBLISHED IN:
THERMAL CONDUCTIVITY. 1971. 11TH INTERNATIONAL CONFERENCE, ALBUQUERQUE. ABSTRACTS, P.111-2. SANDIA, 1971. (536:C748 11TH)
ORTIZ, LAWRENCE W. (GMX-2)
ROGERS, RAYMOND N. (GMX-2)

2-35
STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS.
DTIE, 1972. 15P. (LA-DC-12812)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P.59-66. IAEA, 1972. (IAEA-SM-149/36) (626:A532M)
ZEIGLER, ROYAL K. (C-5)
MATLACK, GEORGE M. (CMB-1)
REIN, JAMES E. (CMB-1)
METZ, CHARLES F. (CMB-1)

2-36
STATUS OF BURNUP MEASUREMENT METHODOLOGY.
DTIE, 1971. 32P. MN (LA-DC-12808)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL
CYCLE. 1971. SYMPOSIUM, VIENNA. PROC.,
P.449-72. IAEA, 1972. (IAEA-SM-149/40)
(626:A532M)
REIN, JAMES E. (CMB-1)

3. ASTROPHYSICS

3-1
CAN THE OPTICAL FLUCTUATIONS OF 3C 273 BE RANDOM?
EXTERNAL GALAXIES AND QUASI-STELLAR OBJECTS. 1970. IAU SYMPOSIUM NO. 44, UPPSALA. PROC., P.179-87. REIDEL, 1972.
(520:IN61S 44) (LA-DC-11632)*
TERRELL, JAMES (P-DOR)
OLSEN, KENNETH H. (J-15)

3-2
CANADIAN TOTAL SOLAR ECLIPSE FLIGHT.
SKY TELESCOPE, V.43, P.290. 1972.
(LA-DC-72-259)*
COX, ARTHUR N. (J-15)

3-3
COMET FORMATION.
ABSTRACT PUBLISHED IN:
BULL. AM. ASTRON. SOC., V.4, P.369. 1972.
HUEBNER, WALTER F. (T-4)
FULLERTON, L. WAYNE (T-4)

3-4
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET.
ABSTRACT PUBLISHED IN:
BULL. AM. ASTRON. SOC., V.4, P.425. 1972.
COX, ARTHUR N. (J-15)
MERTS, ATHEL L. (T-4)
MAGEE, NORMAN H. (T-4)

3-5
NUCLEAR REACTIONS OF IMPORTANCE IN ASTROPHYSICS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1193. 1972.
HOWARD, W. MICHAEL (P-11)

3-6
ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES.
ASTROPHYS. J., V.177, P.137-43. 1972.
(LA-DC-72-298)*
MERTS, ATHEL L. (T-4)
MAGEE, NORMAN H. (J-15)

3-7
ORIGIN OF QSOS (QUASISTELLAR OBJECTS).
NATURE, V.236, P.166. 1972.
(LA-DC-13362)*
TERRELL, JAMES (P-DOR)

3-8
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4.
ASTROPHYS. J., V.171, P.L87-90, 1972.
(LA-DC-12768)*
ABSTRACT PUBLISHED IN:
BULL. AM. ASTRON. SOC., V.3, P.498. 1971.
BELIAN, RICHARD D. (P-4)
CONNER, JERRY P. (P-4)
EVANS, W. DOYLE (P-4)

3-9
RANDOM PULSATIONS OF CYGNUS X-1.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.501. 1972.
TERRELL, JAMES (T-6)

3-10
REDUCED PROPER MOTION DIAGRAMS.
ASTROPHYS. J., V.173, P.671-6. 1972.
(LA-DC-12718)*
ABSTRACT PUBLISHED IN:
BULL. AM. ASTRON. SOC., V.3, P.371. 1971.
JONES, ERIC M. (J-10)

3-11
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG.
ASTROPHYS. J., V.177, P.245-9. 1972.
(LA-DC-72-286)*
JONES, ERIC M. (J-10)

3-12
SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES.
SOLAR PHYS., V.22, P.70-87. 1972.
(LA-DC-12836)*
MUTSCHLECNER, J. PAUL
KELLER, CHARLES F. (J-15)

3-13
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS.
ASTROPHYS. J., V.174, P.L35-41. 1972.
(LA-DC-72-157)*
TERRELL, JAMES (T-6)

3-14
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY.
PERGAMON, 1972. 161P. (523:N677T)
NIETO, MICHAEL MARTIN (***)

3-15
W VIRGINIS MODEL USING RADIATION TRANSFER.
ASTROPHYS. J., V.172, P.419-21. 1972.
(LA-DC-12710)*
ABSTRACT PUBLISHED IN:
BULL. AM. ASTRON. SOC., V.3, P.456. 1971.
DAVIS, CECIL G. (J-15)

3-16
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS.
NATURE PHYS. SCI., V.239, P.125. 1972.
CONNER, JERRY P. (P-4)
EVANS, W. DOYLE (P-4)
MOOK, DELO E.

4. ATOMIC AND MOLECULAR PHYSICS, EQUATION OF STATE, OPACITY

4-1
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL.
J. QUANT. SPECTRY. RADIATIVE TRANSFER, V.12, P.1347-50. 1972. (LA-DC-72-6)*
ENGLEMAN, ROLF, JR. (GMX-2)

4-2
CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTN TARGETS.
PHYS. REV., V.A5, P.2328-38. 1972. (LA-DC-13021)*
STORM, ELLERY (H-1)

4-3
CALCULATION OF ATOMIC ENERGY LEVEL VALUES.
COMPUTER PHYS. COMMUN., V.3, P.9-18. 1972. (LA-4402A)*
RADZIEMSKI, LEON J., JR. (CMB-1)
FISHER, KAY J. (CMB-1)
STEINHAUS, DAVID W. (CMB-1)
GOLDMAN, AARON S. (C-5)

4-4
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
PHYS. REV., V.A5, P.1256-68. 1972. (LA-DC-12727)*
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.401, 1972.
MAIER, WILLIAMB., II (J-10)

4-5
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV.
J. PHYS. B, V.5, P.1255-69. 1972.
COWAN, ROBERT D. (T-4)
FAWCETT, BRIAN C.
HAYES, R. W.
KONONOV, E. Y.

4-6
CONFIGURATIONS 4F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM.
J. OPT. SOC. AM., V.62, P.571-9. 1972.
GRIFFIN, DONALD C. (T-DOT)
ROSS, JOHN S.
COWAN, ROBERT D. (T-DOT)

4-7
ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.401, 1972.
MAIER, WILLIAM B., II (J-10)
STEWART, BRUCE (J-10)

4-8
ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION.
J. PHYS. B (PROC. PHYS. SOC.), V.5, P.L118-20. 1972. (LA-DC-72-451)*
MAIER, WILLIAM B., II (J-10)
HOLLAND, REDUS F. (J-10)

4-9
EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.406. 1972.
HOLLAND, REDUS F. (J-10)
MAIER, WILLIAM B., II (J-10)

4-10
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS.
J. APPL. PHYS., V.43, P.2790-6. 1972. (LA-DC-12848)*
STORM, ELLERY (H-1)

4-11
EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS.
LASL, 1972. 228P. (LA-4944)
STEINHAUS, DAVID W. (CMB-1)
PHILLIPS, MARILYN V. (CMB-1)
MOODY, JEAN B. (CMB-1)
RADZIEMSKI, LEON J., JR. (CMB-1)
FISHER, KAY J. (CMB-1)
HAHN, DALE R. (CMB-1)

4-12
EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS.
ABSTRACT PUBLISHED IN:
J. OPT. SOC. AM., V.62, P.1370. 1972.
STEINHAUS, DAVID W. (CMB-1)

4-13
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN.
PHYS. EARTH PLANET. INTERIORS, V.6, P.78-82. 1972. (LA-DC-72-250)*
KERLEY, GERALD I. (T-4)

4-14
EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1105. 1972.
JOHNSON, JAMES O. (WX-7)
HALLECK, PHILLIP M. (WX-7)

4-15
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS.
PHYS. REV., V.B5, P.1221-5. 1972.
(LA-DC-12486)*
BORING, A. MICHAEL (CMB-5)
SNOW, EDWARD C. (CMB-5)

4-16
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES.
PHYS. REV. LETTERS, V.28, P.711-3. 1972.
FREEDMAN, M. S.
PORTER, F. T.
MANN, JOSEPH B., JR. (T-4)

4-17
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.695. 1972.
ENGELKE, SANDRA Z. (CMB-5)

4-18
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS.
J. QUANT. SPECTRY. RADIATIVE TRANSFER, V.12, P.1409-33. 1972. (LA-DC-72-180)*
BARFIELD, W. DAVID (T-4)
KOONTZ, GLENN D. (T-DOT)
HUEBNER, WALTER F. (T-4)

4-19
FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS.
J. CHEM. PHYS., V.57,P.4497-8. 1972.
(LA-DC-72-868)*
HOLLAND, REDUS F. (J-10)
MAIER, WILLIAM B., II (J-10)

4-20
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1092. 1972.
DICK, RICHARD DEAN (GMX-4)
WARNES, RICHARD H. (GMX-4)

4-21
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.164, PAPER NO.INOR-041. 1972.
REISFELD, MARTIN J. (CNC-4)

4-22
LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS.
PHYS. REV., V.B6, P.4445-58. 1972.
(LA-DC-72-801)*
MORIARTY, JOHN A. (CMB-5)

4-23
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH.
APPL. SPECTRY., V.26, P.66-73. 1972.
(LA-DC-12761)*
BLATZ, LAURENCE A. (CNC-2)

4-24
LOW TEMPERATURE EQUATION OF STATE FOR METALS.
DTIE, 1972. 11P. MN (LA-DC-13178)
MERTS, ATHEL L. (T-4)
MAGEE, NORMAN H. (J-15)

4-25
MEASUREMENTS OF FILTERED X RAY SPECTRA.
LASL, 1972. 37P. (LA-4878)
LIER, DOUGLAS W. (J-14)
ISRAEL, HARVEY I. (H-1)
STORM, ELLERY (H-1)

4-26
MODIFIED HARTREE-FOCK CALCULATIONS FOR ATOMS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.598. 1972.
BASS, J. N.
GREEN, A. E. S.
WOOD, JOHN H. (CMB-5)

4-27
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA.
J. PHYS. B, V.5, P.2143-51. 1972.
FAWCETT, BRIAN C.
HAYES, R. W.
COWAN, ROBERT D. (T-4)

4-28
NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE.
ABSTRACT PUBLISHED IN:
J. OPT. SOC. AM., V.62, P.1371. 1972.
RADZIEMSKI, LEON J., JR. (CMB-1)
KAUFMAN, VICTOR

4-29
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES.
LASL, 1972. 69P. (LA-4823)
HANCOCK, JOHN H. (C-4)
JONES, RONALD C. (C-4)
MILLS, CARROLL B. (T-6)

4-30
OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS.
ABSTRACT PUBLISHED IN:
J. OPT. SOC. AM., V.62, P.714. 1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.477. 1972.
STONER, JOHN O., JR.
RADZIEMSKI, LEON J., JR. (CMB-1)

4-31
OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS.
APPL. PHYS. LETTERS, V.21, P.165-6. 1972. (LA-DC-72-460)*
STONER, JOHN O., JR.
RADZIEMSKI, LEON J., JR. (CMB-1)

4-32
ON THE METALLIC RADIUS OF ACTINIUM.
CHEM. PHYS. LETTERS, V.16, P.114-8. 1972. (LA-DC-72-583)*
HILL, H. HUNTER (CMB-5)

4-33
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.109. 1972.
PORTER, LEONARD E. (P-DOR)
BROLLEY, JOHN E., JR. (P-DOR)
FONG, JOHN C.
SHERMAN, ROBERT H. (P-8)
THEOBALD, J. KARL (J-10)

4-34
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES.
J. CHEM. PHYS., V.57, P.2050-64. 1972. (LA-DC-13348)*
JONES, LLEWELLYN H. (CNC-4)
MC DOWELL, ROBIN S. (CNC-4)
GOLDBLATT, MAXWELL (CNC-4)
SWANSON, BASIL I. (CNC-4)

4-35
PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS.
PHYS. REV., V.B5, P.2066-81. 1972. (LA-DC-13274)*
MORIARTY, JOHN A. (CMB-5)

4-36
RAMAN SPECTRA OF SINGLE CRYSTALS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.163, PAPER NO. INOR-070. 1972.
JONES, LLEWELLYN H. (CNC-4)

4-37
RAMAN SPECTRAL STUDIES OF HTO IN WATER.
J. CHEM. PHYS., V.56, P.4216-22. 1972. (LA-DC-72-17)*
WALRAFEN, GEORGE E.
BLATZ, LAURENCE A. (CNC-2)

4-38
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1093. 1972.
SEITZ, WENDELL LEE (WX-7)
WACKERLE, JERRY D. (WX-7)

4-39
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM.
J. CHEM. PHYS., V.57, P.967-72. 1972.
LIBERMAN, DAVID A. (T-4)
WABER, JAMES T.

4-40
SHOCK WAVE DATA AND EQUATIONS OF STATE.
SEISMIC COUPLING. 1968. MEETING, MENLO PARK, CA. PROC., P.53-65. UNIV. OF MICHIGAN, 1968. (AD-848,608)
MC QUEEN, ROBERT G. (GMX-6)

4-41
SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1092. 1972.
DICK, RICHARD DEAN (GMX-4)

4-42
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES.
ABSTRACT PUBLISHED IN:
J. OPT. SOC. AM., V.62, P.1337. 1972.
COWAN, ROBERT D. (T-4)

4-43
STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.405. 1972.
HOLLAND, REDUS F. (J-10)
MAIER, WILLIAM B., II (J-10)

4-44
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1079. 1972.
FRITZ, JOSEPH N. (GMX-6)
MORGAN, JERRY A. (GMX-6)

4-45
STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN.
J. CHEM. PHYS., V.56, P.5229-46. 1972. (LA-DC-12911)*
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.406. 1972.
HOLLAND, REDUS F. (J-10)
MAIER, WILLIAM B., II (J-10)

4-46
STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.695-6. 1972.
MAIER, WILLIAM B., II (J-10)
HOLLAND, REDUS F. (J-10)

4-47
THEORETICAL EQUATION OF STATE FOR DEUTERIUM.
LASL, 1972. 28P. (LA-4776)
KERLEY, GERALD I. (T-4)

4-48
TORSIONAL MODE OF DIBORON TETRACHLORIDE.
J. CHEM. PHYS., V.57, P.1012-3. 1972.
(LA-DC-72-262)*
JONES, LLEWELLYN H. (CNC-4)
RYAN, ROBERT R. (CNC-4)

4-49
TOTAL ENERGY OF COPPER, SILVER AND GOLD.
PHYS. REV., V.B6, P.1239-52. 1972.
(LA-DC-72-50)*
MORIARTY, JOHN A. (CMB-5)

4-50
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.163, PAPER NO. INOR-080. 1972.
BAILAR, JOHN C., JR.
JONES, LLEWELLYN H. (CNC-4)
MEMERING, MELVIN N.

4-51
VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE.
J. CHEM. PHYS., V.56, P.5712-21. 1972.
(LA-DC-12424)*
MC DOWELL, ROBIN S. (CNC-4)
ASPREY, LARNED B. (CNC-4)
HOSKINS, L. CLARON

4-52
VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE.
J. CHEM. PHYS., V.57, P.3062-8. 1972.
(LA-DC-72-594)*
MC DOWELL, ROBIN S. (CNC-4)
ASPREY, LARNED B. (CNC-4)

4-53
WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES.
COMPUTER PHYS. COMMUN., V.3, P.19-21. 1972. (LA-DC-11936)*
RADZIEMSKI, LEON J., JR. (CMB-1)
FISHER, KAY J. (CMB-1)
STEINHAUS, DAVID W. (CMB-1)
GOLDMAN, AARON S. (C-5)

4-54
X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV.
APPLICATIONS OF X-RAY ANALYSIS. 1971. 20TH ANNUAL CONFERENCE, DENVER. PROC., ADVANCES IN X-RAY ANALYSIS, V.15, K. F. J. HEINRICH ET AL., ED., P.339-51. PLENUM, 1972. (545:C748I 20TH)
(LA-DC-12468)*
ALSO PUBLISHED AS:
DTIE, 1971. 13P. MN (LA-DC-12468)
STORM, ELLERY (H-1)
ISRAEL, HARVEY I. (H-1)
LIER, DOUGLAS W. (J-14)

5. BIOLOGY AND MEDICINE

5-1
ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972.
LASL, 1972. 12P. (LA-5120-PR)
DROPESKY, BRUCE J. (CNC-11) COMP.
O'BRIEN, HAROLD A., JR. (CNC-11) COMP.

5-2
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY.
ACTA CYTOL., V.16, P.26-30. 1972.
ABSTRACT PUBLISHED IN:
J. HISTOCHEM. CYTOCHEM., V.18, P.676. 1970.
TRUJILLO, THEODORE T. (H-4)
VAN DILLA, MARVIN A. (H-4)

5-3
ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY.
ACTA CYTOL., V.16, P.26-30. 1972.
(LA-DC-10663)*
TRUJILLO, THEODORE T. (H-4)
VAN DILLA, MARVIN A. (H-4)

5-4
APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE.
LASL, 1972. 5P. (LA-4902)
BUCHHOLZ, JERRY R. (H-7)
ADAMS, WARREN H. (H-7)
CHRISTENSON, CONARD W. (H-7)
JOHNSON, GEORGE L. (H-7-T)
KOLLMAN, VICTOR H. (H-4)
FOWLER, ERIC B. (H-7)

5-5
ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID?
ABSTRACT PUBLISHED IN:
J. CELL BIOL., V.55, P.A57. 1972.
DEAVEN, LARRY L. (H-4)
PETERSEN, DONALD F. (H-4)

5-6
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN.
J. CELLULAR PHYSIOL., V.79, P.259-65. 1972. (LA-DC-12843)*
TOBEY, ROBERT A. (H-4)

5-7
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971.
LASL, 1972. 153P. (LA-4923-PR)
RICHMOND, CHESTER R. (H-4)
VOELZ, GEORGE L. (H-DO)

5-8
BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME.
LASL, 1972. 15P. (LA-4865)
HARRIS, DONALD R., JR. (T-2)
BEYER, WILLIAM A. (T-DOT)

5-9
CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION?
ABSTRACT PUBLISHED IN:
PHYS. MED. BIOL., V.17, P.120. 1972.
LUNDY, ARVID S. (MP-1)
HUTSON, RICHARD L. (MP-7)

5-10
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE.
J. CELL BIOL., V.55, P.713-7. 1972.
(LA-DC-13354)*
KRAEMER, PAUL M. (H-4)
TOBEY, ROBERT A. (H-4)

5-11
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS.
ABSTRACT PUBLISHED IN:
RADIATION RES., V.51, P.465-6. 1972.
SPALDING, JOHN F. (H-4)
HOLLAND, LAURENCE M. (H-4)
PRINE, JAMES R. (H-4)

5-12
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE.
RADIATION RES., V.51, P.608-14. 1972.
(LA-DC-72-44)*
SPALDING, JOHN F. (H-4)
BASMANN, NORMA J. (H-4)
ARCHULETA, RUBEN F. (H-4)
JOHNSON, OGDEN S. (H-4)

5-13
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS.
PROC. SOC. EXPTL. BIOL. MED., V.141, P.445-7. 1972. (LA-DC-72-687)*
SPALDING, JOHN F. (H-4)
BROOKS, MARY R. (H-4)

5-14
COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES.
LASL, 1972. 9P. (LA-5032)
BRUNSTING, ALBERT (H-4)

5-15
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.
ARCH. BIOCHEM. BIOPHYS., V.153, P.599-602. 1972. (LA-DC-72-709)*
SHEPHERD, GEORGE R. (H-4)
HARDIN, JULIA MARIE (H-4)
NOLAND, BILLIE JEAN (H-4)

5-16
DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION.
J. COLLOID INTERFACE SCI., V.39, P.492-6. 1972. (LA-DC-12652)*
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.162, PAPER NO.COLL-13. 1971.
MULLANEY, PAUL F. (H-4)
BRUNSTING, ALBERT (H-4)

5-17
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.
ARCH. BIOCHEM. BIOPHYS., V.148, P.558-67. 1972. (LA-DC-13095)*
BYVOET, PAUL
SHEPHERD, GEORGE R. (H-4)
HARDIN, JULIA MARIE (H-4)
NOLAND, BILLIE JEAN (H-4)

5-18
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER.
ADVAN. CELL BIOL., V.2, P.47-108. 1972. (LA-DC-13366)*
KRAEMER, PAUL M. (H-4)
DEAVEN, LARRY L. (H-4)
CRISSMAN, HARRY A. (H-4)
VAN DILLA, MARVIN A. (H-4)

5-19
EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES.
LAB. INVESTIGATION, V.27, P.538-49. 1972.
JORDAN, S. W.
DEAN, PHILLIP N. (H-4)
AHLQUIST, A. JOHN (H-8)

5-20
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE.
CANCER RES., V.32, P.2720-5. 1972. (LA-DC-72-568)*
TOBEY, ROBERT A. (H-4)

5-21
EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG.
LIFE SCI. SPACE RES., V.10, P.155-64. 1972. (LA-DC-12600)*
SPALDING, JOHN F. (H-4)
HOLLAND, LAURENCE M. (H-4)
PRINE, JAMES R. (H-4)

5-22
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS.
BIOCHEMISTRY, V.11, P.269-77. 1972. (LA-DC-12767)*
ENGER, M. DUANE (H-4)
TOBEY, ROBERT A. (H-4)

5-23
EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS.
ABSTRACT PUBLISHED IN:
RADIATION RES., V.51, P.455-6. 1972.
WALTERS, RONALD A. (H-4)
GURLEY, LAWRENCE R. (H-4)
TOBEY, ROBERT A. (H-4)
ENGER, M. DUANE (H-4)
RATLIFF, ROBERT L. (H-4)

5-24
EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS.
ARCH. BIOCHEM. BIOPHYS., V.149, P.175-82. 1972. (LA-DC-13143)*
SHEPHERD, GEORGE R. (H-4)
WALTERS, RONALD A. (H-4)
HARDIN, JULIA MARIE (H-4)
NOLAND, BILLIE JEAN (H-4)

5-25
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS.
LASL, 1972. 15P. (LA-4974)
MANLEY, JOHN H. (RAJM)

5-26
FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS.
ABSTRACT PUBLISHED IN:
J. CELL BIOL., V.55, P.A141. 1972.
KRAEMER, PAUL M. (H-4)
CRISSMAN, HARRY A. (H-4)
VAN DILLA, MARVIN A. (H-4)

5-27
INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN.
BIOCHEMISTRY, V.11, P.1345-50. 1972.
HOLLSTEIN, ULRICH (H-4)
BUTLER, PATRICK L.

5-28
INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.164, PAPER NO.BIOL-071. 1972.
SMITH, DAVID A. (H-4)
MARTINEZ, AARON M. (H-4)
WILLIAMS, D. LLOYD (H-4)

5-29
KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE.
BIOTECH. BIOENG., V.14, P.819-29. 1972. (LA-DC-12525)*
FOWLER, ERIC B. (H-7)
ADAMS, WARREN H. (H-7)
CHRISTENSON, CONARD W. (H-7)
KOLLMAN, VICTOR H. (H-7)
BUCHHOLZ, JERRY R. (H-7)

5-30
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS.
DTIE, 1972. 32P. MN (LA-DC-72-355)
ALSO PUBLISHED IN:
NUCL. NEWS, V.15, P.56-61. 1973. (LA-DC-72-355)*
ROSEN, LOUIS (MP-DO)

5-31
LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS.
APPL. OPT., V.11, P.675-80. 1972. (LA-DC-12883)*
BRUNSTING, ALBERT (H-4)
MULLANEY, PAUL F. (H-4)

5-32
LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM.
REV. SCI. INSTR., V.43, P.1514-9. 1972. (LA-DC-72-536)*
BRUNSTING, ALBERT (H-4)
MULLANEY, PAUL F. (H-4)

5-33
LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS.
PROC. SOC. EXPTL. BIOL. MED., V.139, P.15-18. 1972. (LA-DC-12231)*
SPALDING, JOHN F. (H-4)
BROOKS, MARY R. (H-4)

5-34
LOW MOLECULAR WEIGHT RNAS OF POST - RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA.
BIOCHIM. BIOPHYS. ACTA, V.269, P.428-40. 1972. (LA-DC-12536)*
HAMPEL, ARNOLD E. (H-4)
SAPONARA, ARTHUR G. (H-4)
WALTERS, RONALD A. (H-4)
ENGER, M. DUANE (H-4)

5-35
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE.
ARCH. BIOCHEM. BIOPHYS., V.148, P.633-41. 1972. (LA-DC-13141)*
GURLEY, LAWRENCE R. (H-4)
WALTERS, RONALD A. (H-4)
TOBEY, ROBERT A. (H-4)

5-36
METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION.
ARCH. BIOCHEM. BIOPHYS., V.153, P.304-11. 1972. (LA-DC-72-649)*
GURLEY, LAWRENCE R. (H-4)
WALTERS, RONALD A. (H-4)

5-37
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE.
ABSTRACT PUBLISHED IN:
J. CELL BIOL., V.55, P.A261. 1972.
TOBEY, ROBERT A. (H-4)
CRISSMAN, HARRY A. (H-4)
KRAEMER, PAUL M. (H-4)

5-38
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX.
J. CELL BIOL., V.54, P.638-45. 1972. (LA-DC-72-445)*
TOBEY, ROBERT A. (H-4)
CRISSMAN, HARRY A. (H-4)
KRAEMER, PAUL M. (H-4)

5-39
METRICS IN BIOLOGY, AN INTRODUCTION.
LASL, 1972. 6P. (LA-4973)
BEYER, WILLIAM A. (T-DOT)
STEIN, MYRON L. (C-7)
ULAM, STANISLAW M.
SMITH, TEMPLE F.

5-40
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS.
CURR. TOP. RADIATION RES. QUART., V.8, P.159-233. 1972. (LA-DC-20483)*
RAJU, MUDUNDI R. (H-4)
RICHMAN, CHAIM (H-4)

5-41
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE.
DTIE, 1972. 13P. MN (LA-DC-72-1055)
PIMBLEY, GEORGE H. (T-DOT)

5-42
PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY.
LASL, 1972. 20P. (LA-5041-MS)
RAJU, MUDUNDI R. (H-4)

5-43
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.342-3. 1972.
RAJU, MUDUNDI R. (H-9)

5-44
PI MINUS BEAMS IN RADIOTHERAPY.
ABSTRACT PUBLISHED IN:
PHYS. MED. BIOL., V.17, P.693. 1972.
RAJU, MUDUNDI R. (H-9)

5-45
PRE-EMPLOYMENT MEDICAL EVALUATION BY QUESTIONNAIRE.
J. OCCUPATIONAL MED., V.14, P.18-23. 1972.
VOELZ, GEORGE L. (H-DO)
SPICKARD, JOHN H.

5-46
PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE.
EXPTL. CELL RES., V.75, P.460-4. 1972. (LA-DC-72-494)*
TOBEY, ROBERT A. (H-4)
CRISSMAN, HARRY A. (H-4)

5-47
RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS.
ABSTRACT PUBLISHED IN:
PHYS. MED. BIOL., V.17, P.127. 1972.
HUTSON, RICHARD L. (MP-7)

5-48
RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE.
ABSTRACT PUBLISHED IN:
J. CELL BIOL., V.55, P.A99. 1972.
GURLEY, LAWRENCE R. (H-4)
WALTERS, RONALD A. (H-4)
TOBEY, ROBERT A. (H-4)

5-49
SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE.
CANCER RES., V.32, P.309-19. 1972. (LA-DC-13063)*
TOBEY, ROBERT A. (H-4)

5-50
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY.
ABSTRACT PUBLISHED IN:
PHYS. MED. BIOL., V.17, P.693. 1972.
LUNDY, ARVID S. (MP-3)
HUTSON, RICHARD L. (MP-3)
KNAPP, EDWARD A. (MP-3)
ROSEN, LOUIS (MP-DO)

5-51
STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS.
ABSTRACT PUBLISHED IN:
PROC. AUSTRALIAN BIOCHEM. SOC., V.5, P.19. 1972.
SHEPHERD, GEORGE R. (H-4)
NOLAND, BILLIE JEAN (H-4)
HARDIN, JULIA MARIE (H-4)

5-52
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE.
ABSTRACT PUBLISHED IN:
FED. PROC., V.31, P.A425. 1972.
RATLIFF, ROBERT L. (H-4)

5-53
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION.
ARCH. BIOCHEM. BIOPHYS., V.153, P.603-9. 1972.
CANN, JOHN R.
GOAD, WALTER B., JR. (T-DOT)

5-54
TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS.
EXPTL. CELL RES., V.75, P.397-400. 1972. (LA-DC-72-12)*
SHEPHERD, GEORGE R. (H-4)
NOLAND, BILLIE JEAN (H-4)
HARDIN, JULIA MARIE (H-4)

5-55
TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.
ABSTRACT PUBLISHED IN:
FED. PROC., V.31, P.A845. 1972.
ABSTRACT PUBLISHED IN:
PROC. AM. ASSOC. CANCER RES., V.13, P.59. 1972.
BYVOET, PAUL
SHEPHERD, GEORGE R. (H-4)
HARDIN, JULIA MARIE (H-4)
NOLAND, BILLIE JEAN (H-4)

5-56
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO.
ANAT. REC., V.175, P.C57-71. 1973.
ABSTRACT PUBLISHED IN:
J. CELL. BIOL., V.55, P.A133. 1972.
KELLEY, ROBERT O.
BAKER, THOMAS I.
CRISSMAN, HARRY A. (H-4)
HENDERSON, CAROLYN S.

5-57
USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION.
CANCER RES., V.32, P.2726-32. 1972. (LA-DC-72-569)*
TOBEY, ROBERT A. (H-4)
CRISSMAN, HARRY A. (H-4)

5-58
X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.88. 1972.
UMBARGER, C. JOHN (A-1)
MALANIFY, JOHN J. (A-1)

6. CHEMICAL DYNAMICS AND KINETICS

6-1
DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES.
J. CHEM. PHYS., V.56, P.5347-51. 1972.
(LA-DC-13312)*
BRESHEARS, W. DALE (GMX-7)
BIRD, PAUL F. (GMX-7)

6-2
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION.
THERMOCHIM. ACTA, V.3, P.437-47. 1972.
(LA-DC-13134)*
ROGERS, RAYMOND N. (GMX-2)

6-3
HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE - BROMINE SYSTEMS.
J. CHEM. PHYS., V.57, P.2344-9. 1972.
(LA-DC-72-589)*
WHITE, JOHN MICHAEL (CNC-4)
SU, H. Y.

6-4
ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE.
J. CHEM. PHYS., V.56, P.1723-7. 1972.
(LA-DC-13069)*
WOOD, GERRY O. (CNC-4)

6-5
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS.
INORG. CHEM., V.11, P.2616-20. 1972.
(LA-DC-72-343)*
LAVALLEE, CAROLYN (CNC-2)
NEWTON, THOMAS W. (CNC-2)

6-6
MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION.
J. CHEM. PHYS., V.57, P.2589-60. 1972.
(LA-DC-72-236)*
THOMPSON, DONALD L. (GMX-2)

6-7
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE.
J. CHEM. PHYS., V.57, P.4164-9. 1972.
(LA-DC-72-666)*
THOMPSON, DONALD L. (CNC-4)

6-8
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN - AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE.
J. CHEM. PHYS., V.57, P.4170-3. 1972.
(LA-DC-72-760)*
THOMPSON, DONALD L. (CNC-4)

6-9
ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS.
J. CHEM. PHYS., V.56, P.3570-80. 1972.
(LA-DC-13209)*
THOMPSON, DONALD L. (GMX-2)

6-10
PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES.
DTIE, 1972. 22P. MN (LA-DC-72-369)
BRESHEARS, W. DALE (L-3)
BIRD, PAUL F. (L-3)

6-11
RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN.
INTERN. J. CHEM. KINETICS, V.4, P.463-77. 1972. (LA-DC-10976)*
BEATTIE, WILLARD H. (W-7)

6-12
SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY.
ANAL. CHEM., V.44, P.1336-7. 1972.
(LA-DC-13135)*
ROGERS, RAYMOND N. (GMX-2)

6-13
THERMAL ACTINOMETER FOR FLASH PHOTOLYSIS.
CHEM. PHYS. LETTERS, V.16, P.314-7. 1972. (LA-DC-72-551)*
GREINER, NORMAN R. (L-3)

6-14
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.164, PAPER NO.PHYS-118. 1972.
SCHOTT, GARRY L. (L-3)
GETZINGER, RICHARD W. (L-3)
SEITZ, WILLIAM A.

6-15
VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS.
CHEM. PHYS. LETTERS, V.13, P.529-32. 1972. (LA-DC-13372)*
BIRD, PAUL F. (GMX-7)
BRESHEARS, W. DALE (GMX-7)

7. CHEMISTRY

7-1
2,6-BIS(PICRYLAMINO)-3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION.
FILED 1971, PATENTED JUL. 18, 1972.
(U. S. PATENT 3,678,061)
COBURN, MICHAEL D. (GMX-2)

7-2
ACID - BASE TITRATIONS IN SULFOLANE.
THESIS, UNIV. OF NEW MEXICO. 1972.
LASL, 1972. 118P. (LA-4893-T)
LAWRENCE, FRANCINE O. (CNC-11)

7-3
CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS.
DTIE, 1972. 19P. MN (LA-DC-72-473)
ALSO PUBLISHED IN:
POWER FROM RADIOISOTOPES. 1972. 2ND INTERNATIONAL SYMPOSIUM, MADRID. PROC., P.49-67. OECD, 1972.
(621:P887R 2ND)
MULLINS, LAWRENCE J., JR. (CMB-11)
MATLACK, GEORGE M. (CMB-1)
BUBERNAK, JOSEPH (CMB-1)
LEARY, JOSEPH A. (CMB-DO)

7-4
CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.163, PAPER NO. NUCL-024. 1972.
BOWMAN, MELVIN G. (CMB-3)

7-5
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO-1,3,5-TRINITRO-S-TRIAZINE (RDX).
J. CHEM. ENG. DATA, V.17, P.369-71. 1972. (LA-DC-12815)*
CADY, HOWARD H. (GMX-2)

7-6
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.163, PAPER NO. WATR-026. 1972.
VARGA, LOUIS P. (CNC-4)
RICE, G. K.
TOETZ, DALE W.
LOUGHRAN, E. DAN (GMX-2)

7-7
DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA.
J. CHEM. PHYS., V.57, P.4106-10. 1972. (LA-DC-72-803)*
ALEI, MOHAMMED, JR. (CNC-2)
LITCHMAN, WILLIAM M. (CNC-2)

7-8
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC.
J. CHEM. THERMODYNAMICS, V.4, P.621-36. 1972. (LA-DC-13330)*
BAKER, FLOYD B. (CMF-2)
FITZGIBBON, GEORGE C. (CNC-2)
PAVONE, DANIEL (CMF-2)
HOLLEY, CHARLES E., JR. (CNC-2)
HANSEN, LEE D.
LEWIS, EDWIN A.

7-9
ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE.
J. CHEM. THERMODYNAMICS, V.4, P.349-58. 1972. (LA-DC-13018)*
FITZGIBBON, GEORGE C. (CNC-2)
HUBER, ELMER J., JR. (CNC-2)
HOLLEY, CHARLES E., JR. (CNC-2)

7-10
ENTHALPY OF FORMATION OF NEPTUNIUM MONOCARBIDE.
THERMOCHIMIE. 1971. COLLOQUIUM, MARSEILLE. PROC., P.399-401. CENTRE DE LA RECHERCHE SCIENTIFIQUE, 1972.
(541:T411H)
HUBER, ELMER J., JR. (CNC-2)
HOLLEY, CHARLES E., JR. (CNC-2)

7-11
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES.
ABSTRACT PUBLISHED IN:
J. ELECTROCHEM. SOC., V.119, P.107C. 1972.
WONG, DAVID N. K.
PITT, CHARLES
ELLIOTT, GUY R. B. (CNC-2)

7-12
MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1.
J. HETEROCYCLIC CHEM., V.9, P.57-65. 1972. (LA-DC-12582)*
LOUGHRAN, E. DAN (GMX-2)
WEWERKA, EUGENE M. (CMB-13)
HAMMONS, GEORGE J. (GMX-2)

7-13
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.163, PAPER NO. INOR-129. 1972.
VERGAMINI, PHILLIP J. (CNC-4)
BURGER, THOMAS J.
DAHL, LAWRENCE F.

7-14
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR.
LASL, 1972. 3P. (LA-4837)
GREINER, NORMAN R. (GMX-2)

7-15
PICRYLAMINO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2).
J. HETEROCYCLIC CHEM., V.9, P.1039-44. 1972. (LA-DC-72-767)*
COBURN, MICHAEL D. (GMX-2)
SINGLETON, JANNIE L. (GMX-2)

7-16
PREPARATION AND EVALUATION OF MEDICAL - GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971.
LASL, 1972. 83P. (LA-4940)
MULLINS, LAWRENCE J., JR. (CMB-11) COMP.

7-17
RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER.
LASL, 1972. 4P. (LA-4904)
ALEI, MOHAMMED, JR. (CNC-2)

7-18
SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE.
NUCL. TECH., V.16, P.531-5. 1972. (LA-DC-72-533)*
KERRISK, JERRY F. (CMB-11)
CLIFTON, DAVID G. (CMB-11)

7-19
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE.
HIGH TEMP. SCI., V.4, P.1-27. 1972. (LA-DC-12531)*
ROBINSON, PRESS L. (CNC-2)
ELLIOTT, GUY R. B. (CNC-2)

7-20
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION.
LASL, 1972. 10P. (LA-4791)
CONANT, DONALD R., JR. (CNC-2)
ELLIOTT, GUY R. B. (CNC-2)

7-21
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE.
THERMOCHIM. ACTA, V.3, P.367-8. 1972. (LA-DC-11769)*
ROGERS, RAYMOND N. (GMX-2)
DINEGAR, ROBERT H. (GMX-7)

7-22
THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE.
THERMOCHIM. ACTA, V.3, P.379-81. 1972. (LA-DC-13039)*
ROGERS, RAYMOND N. (GMX-2)
ORTIZ, LAWRENCE W. (GMX-2)

7-23
THORIUM NITROGEN OXYGEN PHASE DIAGRAM.
J. NUCL. MATER., V.43, P.1-7. 1972.
BENZ, ROBERT (CMB-3)

7-24
TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT.
LASL, 1972. 28P. (LA-4985)
LEE, CLARENCE E. (TD-1)
WALLACE, TERRY C. (CMB-3)

7-25
TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.
ABSTRACT PUBLISHED IN:
J. ELECTROCHEM. SOC., V.119, P.C107. 1972.
GRIFFITHS, DON A.
BRAITHWAITE, JEFFREY
BECKSTEAD, LEO W.
ELLIOTT, GUY R. B. (CNC-2)

7-26
USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES.
AICHE J., V.18, P.1220-30. 1972. (LA-DC-72-32)*
TESTER, JEFFERSON W. (CMB-13)
BIVINS, ROBERT L. (C-7)
HERRICK, CLAUDE C. (CMB-13)

8. CRYOGENICS

8-1
APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY.
TEMPERATURE: ITS MEASUREMENT AND CONTROL IN SCIENCE AND INDUSTRY. 1971. 5TH SYMPOSIUM, WASHINGTON. PROC., P.1253-7. ISA, 1972.
(536:S989T 5TH PT.2)
STEYERT, WILLIAM A., JR. (P-8)

8-2
APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW.
DTIE, 1972. 9P. MN (LA-DC-72-922)
CAMPBELL, LAURENCE J. (P-8)

8-3
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN.
DTIE, 1972. 17P. MN (LA-DC-72-260)
SYDORIAK, STEPHEN G. (P-8)

8-4
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM.
J. LOW TEMP. PHYS., V.8, P.105-13. 1972. (LA-DC-13337)*
CAMPBELL, LAURENCE J. (P-8)

8-5
CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE.
DTIE, 1972. 23P. MN (LA-DC-72-855)
KELLER, WILLIAM E. (P-8)

8-6
CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY.
DTIE, 1972. 9P. MN (LA-DC-72-400)
BARTLIT, JOHN R. (P-8)

8-7
DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM.
DTIE, 1972. 11P. MN (LA-DC-72-941)
TAYLOR, R. DEAN (P-8)
DECKER, WAYNE R.
ERICKSON, DENNIS J. (P-8)
GIORGI, ANGELO L. (CMB-3)
MATTHIAS, BERND T. (T-DO)
OLSEN, CLAYTON E. (CMB-13)
SZKLARZ, EUGENE G. (CMB-3)

8-8
DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM.
DTIE, 1972. 10P. MN (LA-DC-72-914)
KELLER, WILLIAM E. (P-8)
HAMMEL, EDWARD F., JR. (P-8)

8-9
DISSIPATION IN SATURATED SUPERFLUID FILM FLOW.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.38. 1972.
CAMPBELL, LAURENCE J. (P-8)
FRASER, JAMES C. (P-8)
HAMMEL, EDWARD F., JR. (P-8)
HOFFER, JAMES K. (P-8)
KELLER, WILLIAM E. (P-8)
SHERMAN, ROBERT H. (P-8)

8-10
DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM.
DTIE, 1972. 11P. MN (LA-DC-72-891)
HOFFER, JAMES K. (P-8)
FRASER, JAMES C. (P-8)
CAMPBELL, LAURENCE J. (P-8)
KELLER, WILLIAM E. (P-8)
HAMMEL, EDWARD F., JR. (P-8)
SHERMAN, ROBERT H. (P-8)

8-11
ENERGY STORAGE AND SWITCHING WITH SUPERCONDUCTORS.
DTIE, 1971. 3P. MN (LA-DC-12990)
ALSO PUBLISHED IN:
FUSION REACTOR TECHNOLOGY. 1971. INTERNATIONAL WORKING SESSIONS, OAK RIDGE, TN. PROC., P.338-9. ORNL, 1972. (CONF-710624)
LAQUER, HENRY L. (P-8)
RIBE, FRED L. (P-15)

8-12
FURTHER INVESTIGATIONS ON THE FLOWING SUPERFLUID FILM.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.39. 1972.
CAMPBELL, LAURENCE J. (P-8)
FRASER, JAMES C. (P-8)
HAMMEL, EDWARD F., JR. (P-8)
HOFFER, JAMES K. (P-8)
KELLER, WILLIAM E. (P-8)
SHERMAN, ROBERT H. (P-8)

8-13
HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM.
ADVAN. CRYOG. ENG., V.17, P.316-22. 1972. (LA-DC-11274)*
LIEBENBERG, DONALD H. (CMF-9)

8-14
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES.
ABSTRACT PUBLISHED IN:
FUSION REACTOR TECHNOLOGY. 1971. INTERNATIONAL WORKING SESSIONS, OAK RIDGE, TN. PROC., P.336. ORNL, 1972. (CONF-710624)
ROGERS, JOHN D., JR. (P-8)

8-15
HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS.
DTIE, 1972. 10P. MN (LA-DC-72-785)
SYDORIAK, STEPHEN G. (P-8)

8-16
OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.39. 1972.
CAMPBELL, LAURENCE J. (P-8)
LIEBENBERG, DONALD H. (P-8)

8-17
RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS.
TEMPERATURE: ITS MEASUREMENT AND CONTROL IN SCIENCE AND INDUSTRY. 1971. 5TH SYMPOSIUM, WASHINGTON. PROC., P.875-83. ISA, 1972.
(536: S989T 5TH PT.2)
LIEBENBERG, DONALD H. (P-8)
ALLEN, LARRY D. (CMF-4)

8-18
SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW.
PHYS. REV. LETTERS, V.29, P.1065-7. 1972. (LA-DC-72-730)*
CAMPBELL, LAURENCE J. (P-8)
LIEBENBERG, DONALD H. (P-8)

8-19
SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER.
DTIE, 1972. 7P. MN (LA-DC-72-470)
LAQUER, HENRY L. (P-8)
LINDSAY, JAMES D. G. (P-8)
LITTLE, EDWARD M. (P-15)
WELDON, DAVID M. (P-15)

8-20
SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER.
APPLIED SUPERCONDUCTIVITY. 1972. CONFERENCE, ANNAPOLIS, MD. PROC., P.98-101. IEEE, 1972. (537:A652S 1972)
LAQUER, HENRY L. (P-8)
LINDSAY, JAMES D. G. (P-8)
LITTLE, EDWARD M. (P-15)
WELDON, DAVID M. (P-15)

8-21
SUPERCONDUCTIVITY OF PROTACTINIUM.
DTIE, 1972. 9P. MN (LA-DC-72-919)
FOWLER, ROBERT D.
ASPREY, LARNED B. (CNC-4)
LINDSAY, JAMES D. G. (P-8)
WHITE, RALPH W. (CMB-3)

8-22
SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS.
DTIE, 1972. 7P. MN (LA-DC-13299)
ALSO PUBLISHED IN:
SUPERCONDUCTIVITY IN D- AND F- BAND METALS. 1971. CONFERENCE, ROCHESTER, NY. PROC., P.147-53. AIP, 1972.
(669:S959D)
GIORGI, ANGELO L. (CMB-3)
SZKLARZ, EUGENE G. (CMB-3)
KRUPKA, MILTON C. (CMB-3)

8-23
THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER.
TEMPERATURE: ITS MEASUREMENT AND CONTROL IN SCEINCE AND INDUSTRY. 1971. 5TH SYMPOSIUM, WASHINGTON. PROC., P.1259-65. ISA, 1972.
(536:S989T 5TH PT.2) (LA-DC-12276)*
TAYLOR, R. DEAN (P-8)

8-24
ULTRALOW TEMPERATURE NUCLEAR PHYSICS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.164, PAPER NO.NUCL-006. 1972.
STEYERT, WILLIAM A., JR. (P-8)

8-25
ULTRALOW TEMPERATURE NUCLEAR PHYSICS.
PHYS. TEACHER, V.10, P.75-9. 1972. (LA-DC-12316)*
SITES, JAMES R. (P-8)

8-26
VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL.
DTIE, 1972. 15P. MN (LA-DC-72-724)
ROGERS, JOHN D., JR. (P-8)

9. CRYSTALLOGRAPHY

9-1
AXIAL CHANNELING IN THORIUM DIOXIDE.
J. APPL. PHYS., V.43, P.4937-42. 1972.
(LA-DC-72-688)*
CLINARD, FRANK W., JR. (CMB-5)
SANDERS, WILLIAM MORT (J-12)

9-2
CRYSTAL CHEMISTRY OF REFRACTORY CARBIDES.
MATERIALS RESEARCH. 1971. 5TH SYMPOSIUM, GAITHERSBURG, MD. PROC., SOLID STATE CHEMISTRY, P.561-6. GPO, 1972. (541:M377R 5TH)
BOWMAN, ALLEN L. (CMB-3)

9-3
CRYSTAL STRUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V).
ACTA CRYST., V.B28, P.979-81. 1972.
(LA-DC-12701)*
RYAN, ROBERT R. (CNC-4)
ASPREY, LARNED B. (CNC-4)

9-4
CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6).
ACTA CRYST., V.B28, P.3102-3. 1972.
BOWMAN, ALLEN L. (CMB-3)
ARNOLD, GEORGE P. (P-2)
NERESON, NORRIS G. (P-2)
STORMS, EDMUND K. (CMB-3)

9-5
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE.
ACTA CRYST., V.B28, P.2128-32. 1972.
(LA-DC-13045)*
CROMER, DON T. (CMB-5)
LARSON, ALLEN C. (CMB-5)

9-6
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)).
ACTA CRYST., V.B28, P.858-64. 1972.
ABSTRACT PUBLISHED IN:
ACTA CRYST., V.A25, P.S175. 1969.
WILLIAMS, RICKEY J. (CMF-5)
CROMER, DON T. (CMF-5)
LARSON, ALLEN C. (CMF-5)

9-7
DETERMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON DIFFRACTION.
DTIE, 1972. 13P. MN (LA-DC-72-894)
MILLS, ROBERT L. (P-8)
YARNELL, JOHN L. (P-2)
SCHUCH, ADAM F. (P-8)

9-8
DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE.
ACTA CRYST., V.B28, P.1629-32. 1972.
(LA-DC-13111)*
PENNEMAN, ROBERT A. (CNC-4)
RYAN, ROBERT R. (CNC-4)

9-9
DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE.
ACTA CRYST., V.B27, P.853-4. 1972.
(LA-DC-11859)*
BENZ, ROBERT (CMB-3)

9-10
DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE.
J. INORG. NUCL. CHEM., V.34, P.3427-31. 1972.
BAYBARZ, R. D.
ASPREY, LARNED B. (CNC-4)
STROUSE, CHARLES E. (CNC-4)
FUKUSHIMA, EIICHI (CNC-4)

9-11
EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE.
APPLICATIONS OF X-RAY ANALYSIS. 1971. 20TH ANNUAL CONFERENCE, DENVER. PROC., ADVANCES IN X-RAY ANALYSIS, V.15, K. F. J. HEINRICH ET AL., ED., P.307-18. PLENUM, 1972. (545:C748I 20TH)
(LA-DC-12563)*
ALSO PUBLISHED AS:
DTIE, 1971. 11P. MN (LA-DC-12563)
ROOF, RAYMOND BRADLEY, JR. (CMB-5)

9-12
EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2.
DTIE, 1972. 5P. MN (LA-DC-72-602)
ROOF, RAYMOND BRADLEY, JR. (CMB-5)

9-13
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS.
ACTA CRYST., V.A28, P.365-93. 1972.
CRUICKSHANK, D. W. J.
STEWART, J. W.
AHMED, F. R.
LARSON, ALLEN C. (CMB-5)

9-14
LOW ENERGY ELECTRON DIFFRACTION (LEED).
OPTICAL TRANSFORMS, H. LIPSON, ED., CHAP.7, P.229-65. ACADEMIC, 1972.
(535:L767OT)
ELLIS, WALTON P. (CMB-8)

9-15
ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS.
ACTA CRYST., V.B28, P.1016-22. 1972.
(LA-DC-11185)*
CROMER, DON T. (CMF-5)
LARSON, ALLEN C. (CMF-5)

9-16
PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM.
ABSTRACT PUBLISHED IN:
ACTA CRYST., V.A28, P.188. 1972.
SCHUCH, ADAM F. (P-8)
YARNELL, JOHN L. (P-2)
MILLS, ROBERT L. (P-8)

9-17
PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM.
DTIE, 1972. 12P. MN (LA-DC-72-903)
SCHUCH, ADAM F. (P-8)
YARNELL, JOHN L. (P-2)
MILLS, ROBERT L. (P-8)

9-18
RECENT ADVANCES IN THE STUDY OF SOLID SURFACES.
SURFACE CHEMISTRY AND COLLOIDS, M. KERKER, ED. CHAP.3, P.79-96.
BUTTERWORTHS, 1972. (541:K39S)
ELLIS, WALTON P. (CMB-8)

9-19
REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C.
ABSTRACT PUBLISHED IN:
ACTA CRYST., V.A28, P.53. 1972.
LARSON, ALLEN C. (CMB-5)
CROMER, DON T. (CMB-5)

9-20
STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES.
INORG. CHEM., V.11, P.400-4. 1972.
(LA-DC-11407)*
LUNDBERG, LYNN B. (CMF-5)
CROMER, DON T. (CMF-5)
MAGEE, CHARLES B.

9-21
STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE.
INORG. CHEM., V.11, P.3122. 1972.
(LA-DC-72-435)*
ASPREY, LARNED B. (CNC-4)
RYAN, ROBERT R. (CNC-4)
FUKUSHIMA, EIICHI (CNC-4)

9-22
STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANOPYRIDINE.
ACTA CRYST., V.B28, P.1052-8. 1972.
(LA-DC-12106)*
CROMER, DON T. (CMF-5)
LARSON, ALLEN C. (CMF-5)

9-23
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III).
INORG. CHEM., V.11, P.2322-4. 1972.
(LA-DC-13351)*
RYAN, ROBERT R. (CNC-4)
CROMER, DON T. (CMB-5)

9-24
THORIUM CYANIDE CRYSTAL STRUCTURE.
ACTA CRYST., V.B28, P.1725-7. 1972.
BENZ, ROBERT (CMB-3)
ARNOLD, GEORGE P. (P-2)
ZACHARIASEN, WILLIAM H.

9-25
X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
J. NUCL. MATER., V.42, P.217-22. 1972.
BENZ, ROBERT (CMB-3)
FARR, JOHN D. (CMB-3)

10. CTR AND PLASMA PHYSICS

10-1
500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.1023-4. 1972.
WILLIAMS, ARTHUR H. (P-7)
FREIWALD, DAVID A. (P-7)
MATHER, JOSEPH W. (P-7)
WARE, KENNETH D. (P-7)

10-2
ALL METAL DISCHARGE TUBE.
FILED 1971, PATENTED MAY 30, 1972.
(U. S. PATENT 3,667,059)
PHILLIPS, JAMES A. (P-14)
SCHOFIELD, ALDRED E. (P-14)
BRISCOE, WILLIAM L. (P-1)

10-3
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY.
CONTROLLED FUSION AND PLASMA PHYSICS.
1972. 5TH EUROPEAN CONFERENCE,
GRENOBLE. PROC., V.1, P.120-1. CEN,
1972. (537:E89C 5TH V.1)
DREICER, HARRY (P-13)
ELLIS, RICHARD F. (P-13)
INGRAHAM, JOHN C. (P-13)

10-4
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY.
CONTROLLED FUSION AND PLASMA PHYSICS.
1972. 5TH EUROPEAN CONFERENCE,
GRENOBLE. PROC., V.2, P.242. CEN,
1972. (537:E89C 5TH V.2)
DREICER, HARRY (P-13)
ELLIS, RICHARD F. (P-13)
INGRAHAM, JOHN C. (P-13)

10-5
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.1015. 1972.
ELLIS, RICHARD F. (P-13)
INGRAHAM, JOHN C. (P-13)
DREICER, HARRY (P-13)

10-6
APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.
CONTROLLED FUSION AND PLASMA PHYSICS.
1972. 5TH EUROPEAN CONFERENCE,
GRENOBLE. PROC., V.1, P.41. CEN, 1972.
(537:E89C 5TH V.1)
LEWIS, H. RALPH, JR. (P-18)
FREIDBERG, JEFFREY P. (P-18)

10-7
APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.1013. 1972.
LEWIS, H. RALPH, JR. (P-18)

10-8
CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.1044. 1972.
MAGEE, NORMAN H. (T-4)
MERTS, ATHEL L. (T-4)

10-9
CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION.
LASL, 1972. 57P. (LA-4858-MS, VOL. 1)
ALSO PUBLISHED IN:
NUCL. ENG. DESIGN, V.24, P.263-313.
1973.
BOOTH, LAWRENCE A. (N-DOT) COMP.

10-10
CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.691. 1972.
WARE, KENNETH D. (P-7)
WILLIAMS, ARTHUR H. (P-7)
MATHER, JOSEPH W. (P-7)
CARPENTER, JAMES P. (P-7)

10-11
COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS.
J. COMPUTAT. PHYS., V.10, P.85-106.
1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.16,
P.1252. 1971.
SYKES, A.
LEWIS, H. RALPH, JR. (P-18)
WESSON, JOHN A.

10-12
COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS.
NTIS, 1972. 152P. MN (COO-3086-14)
GULA, WILLIAM P. (***)

10-13
DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1066. 1972.
MERTS, ATHEL L. (T-4)
MAGEE, NORMAN H. (T-4)

10-14
DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1023. 1972.
EISNER, MELVIN
DOWNING, JAMES N., JR. (P-7)
MATHER, JOSEPH W. (P-7)

10-15
ELECTRON BEAM/PLASMA FOCUS INTERACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.691. 1972.
CARPENTER, JAMES P. (P-7)
MATHER, JOSEPH W. (P-7)
WARE, KENNETH D. (P-7)
WILLIAMS, ARTHUR H. (P-7)

10-16
ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE.
PHYS. FLUIDS, V.15, P.1303-18. 1972.
(LA-DC-12822)*
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.16, P.1192. 1971.
FORSLUND, DAVID W. (P-18)
MORSE, RICHARD L. (P-18)
NIELSON, CLAIR W. (P-18)
FU, JERRY H.

10-17
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES.
LASL, 1972. 6P. (LA-4930-MS)
MORSE, RICHARD L. (T-6)

10-18
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES.
PHYS. FLUIDS, V.16, P.545-9. 1973.
(LA-DC-72-297)*
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.666. 1972.
MORSE, RICHARD L. (T-6)

10-19
EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.1107. 1972.
ASBRIDGE, JOHN R. (P-4)
BAME, SAMUEL J., JR. (P-4)
FELDMAN, WILLIAM C. (P-4)
LEWIS, H. RALPH, JR. (P-18)

10-20
ENERGY AND THE FUTURE OF NUCLEAR FUSION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.95. 1972.
TUCK, JAMES L. (P-DO)

10-21
EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1029. 1972.
BURKHARDT, LOUIS C. (P-14)
DI MARCO, JOSEPH N. (P-14)
FORMAN, PETER R. (P-14)
HABERSTICH, ALBERT (P-14)
KARR, HUGH J. (P-14)
PHILLIPS, JAMES A. (P-14)

10-22
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS.
LASL, 1971. 3P. (LA-4709-MS)
ALSO PUBLISHED IN:
FUSION REACTOR TECHNOLOGY. 1971. INTERNATIONAL WORKING SESSIONS, OAK RIDGE, TN. PROC., P.203-5. ORNL, 1972. (CONF-710624)
DREICER, HARRY (P-13)
HENDERSON, DALE B. (P-13)

10-23
FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1024. 1972.
DOWNING, JAMES N., JR. (P-7)
PHILLIPS, JAMES D. (P-7)
MATHER, JOSEPH W. (P-7)
WARE, KENNETH D. (P-7)

10-24
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.992. 1972.
BURNETT, SIBLEY C. (P-15)
GRIBBLE, ROBERT F. (P-15)
HARDER, CARROLL R. (P-15)
KUTAC, KENNETH J. (P-16)

10-25
FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.666. 1972.
GRIBBLE, ROBERT F. (P-15)
BURNETT, SIBLEY C. (P-15)
HARDER, CARROLL R. (P-15)

10-26
FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.855. 1972.
GRIBBLE, ROBERT F. (P-15)
BURNETT, SIBLEY C. (P-15)
HARDER, CARROLL R. (P-15)

10-27
FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR.
DTIE, 1972. 9P. MN (LA-DC-72-125)
GREEN, WALTER V. (CMB-13)
RIBE, FRED L. (P-15)

10-28
FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA.
NUCLEAR FUSION REACTORS. 1969. BRITISH NUCLEAR ENERGY SOCIETY CONFERENCE, CULHAM, ENGLAND. PROC., P.306-21. UKAEA, CULHAM LABS, 1970. (537:N964F)
ABSTRACT PUBLISHED IN:
THERMONUCLEAR FUSION REACTOR DESIGN. 1970. SYMPOSIUM, LUBBOCK, TX. PROC., P.204-5. TEXAS TECH, 1970. (ORO-3778-3)
OLIPHANT, THOMAS A., JR. (P-18)

10-29
FUSION REACTOR SYSTEMS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.627-8. 1972.
RIBE, FRED L. (P-DO)

10-30
GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.37. 1972.
OLIPHANT, THOMAS A., JR. (P-18)
RIBE, FRED L. (P-15)

10-31
HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH.
PHYS. FLUIDS, V.15, P.1658-66. 1972. (LA-DC-72-130)*
THOMAS, KEITH S. (P-15)
HARDER, CARROLL R. (P-15)
QUINN, WARREN E. (P-15)
SIEMON, RICHARD E. (P-15)

10-32
HOLOGRAPHIC INTERFEROMETRY AT 10.6 MICRONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.986. 1972.
FORMAN, PETER R. (P-14)
HUMPHRIES, STANLEY, JR. (P-14)
PETERSON, RICHARD W. (P-15)

10-33
HOLOGRAPHIC INTERFEROMETRY COOKBOOK.
LASL, 1972. 17P. (LA-5058-MS)
JAHODA, FRANZ C. (P-15)
SIEMON, RICHARD E. (P-15)

10-34
L'ENERGIE DE FUSION.
RECHERCHE, V.3, P.857-72. 1972.
TUCK, JAMES L. (P-DO)

10-35
LASL INTENSE 14 MEV NEUTRON SOURCE.
LASL, 1972. 9P. (LA-4863-MS)
HENDERSON, DALE B. (P-DO)

10-36
LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS.
PHYS. FLUIDS, V.15, P.103-15. 1972. (LA-DC-11349)*
LEWIS, H. RALPH, JR. (P-18)

10-37
LOW DENSITY LIMIT OF THE THETA PINCH.
LASL, 1972. 9P. (LA-5019-MS)
KAUFMANN, MICHAEL (P-15)

10-38
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1013. 1972.
MARDER, BARRY M. (P-18)
FREIDBERG, JEFFREY P. (P-18)
WEITZNER, HAROLD (P-18)

10-39
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1013. 1972.
FREIDBERG, JEFFREY P. (P-18)
MARDER, BARRY M. (P-18)
WEITZNER, HAROLD (P-18)

10-40
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1012. 1972.
ELLIS, WILLIAM R., JR. (P-15)
JAHODA, FRANZ C. (P-15)
SIEMON, RICHARD E. (P-15)

10-41
MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.691. 1972.
GERWIN, RICHARD A. (P-7)
WILLIAMS, ARTHUR H. (P-7)
WARE, KENNETH D. (P-7)
MATHER, JOSEPH W. (P-7)
CARPENTER, JAMES P. (P-7)

10-42
MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17. P.667. 1972.
ELLIS, WILLIAM R., JR. (P-15)
JAHODA, FRANZ C. (P-15)
SIEMON, RICHARD E. (P-15)

10-43
MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1028-9. 1972.
BAKER, DON A. (P-18)
MANN, LAWRY W. (P-18)

10-44
MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1029. 1972.
HABERSTICH, ALBERT (P-14)

10-45
MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.847-8. 1972.
BAKER, DON A. (P-18)
MANN, LAWRY W. (P-18)

10-46
MODEL OF A STRAIGHT THETA PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.993. 1972.
GULA, WILLIAM P. (T-6)

10-47
MODELING OF LONG STRAIGHT THETA PINCHES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.850. 1972.
MORSE, RICHARD L. (T-6)
GULA, WILLIAM P. (T-6)

10-48
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA.
LASL, 1972. 5P. (LA-5010)
HUMPHRIES, STANLEY, JR. (P-14)

10-49
NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.37-8. 1972.
WATSON, CLAYTON W. (N-DOT)

10-50
NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1044. 1972.
LINDMAN, ERICK L. (J-10)
FORSLUND, DAVID W. (P-18)
KINDEL, JOSEPH M. (T-6)

10-51
NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS.
PHYS. FLUIDS, V.15, P.1570-7. 1972. (LA-DC-12945)*
GITOMER, STEVEN J. (P-18)
FORSLUND, DAVID W. (P-18)
RUDSINSKI, LAWRENCE E. (C-4)

10-52
NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.684. 1972.
HABERSTICH, ALBERT (P-14)

10-53
ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES.
PHYS. FLUIDS, V.15, P.2363-6. 1972. (LA-DC-72-512)*
FORSLUND, DAVID W. (P-18)
MORSE, RICHARD L. (T-6)
NIELSON, CLAIR W. (P-18)

10-54
PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.36-7. 1972.
BURNETT, SIBLEY C. (P-15)
ELLIS, WILLIAM R., JR. (P-15)
RIBE, FRED L. (P-15)

10-55
PARAMETRIC INSTABILITIES NEAR THE LOWER HYBRID.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1063. 1972.
KINDEL, JOSEPH M. (T-6)
OKUDA, H.
DAWSON, JOHN M.

10-56
PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1028. 1972.
FORSLUND, DAVID W. (P-18)
KINDEL, JOSEPH M. (T-6)
LINDMAN, ERICK L. (J-10)

10-57
PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1023. 1972.
WARE, KENNETH D. (P-7)
GERWIN, RICHARD A. (P-7)
MATHER, JOSEPH W. (P-7)
WILLIAMS, ARTHUR H. (P-7)

10-58
PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1012. 1972.
QUINN, WARREN E. (P-15)
ELLIS, WILLIAM R., JR. (P-15)
RIBE, FRED L. (P-DO)
HAMMER, CHARLES F. (P-16)

10-59
PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17. P.666. 1972.
THOMAS, KEITH S. (P-15)
HARRIS, HARLAN W. (P-16)
JAHODA, FRANZ C. (P-15)
SAWYER, GEORGE A. (P-15)

10-60
PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.849. 1972.
THOMAS, KEITH S. (P-15)
HARRIS, HARLAN W. (P-16)
JAHODA, FRANZ C. (P-15)
SAWYER, GEORGE A. (P-15)
SIEMON, RICHARD E. (P-15)

10-61
PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.845. 1972.
ELLIS, WILLIAM R., JR. (P-15)
HAMMER, CHARLES F. (P-16)
JAHODA, FRANZ C. (P-15)
QUINN, WARREN E. (P-15)
RIBE, FRED L. (P-15)
SIEMON, RICHARD E. (P-15)

10-62
PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17. P.666. 1972.
QUINN, WARREN E. (P-15)
HAMMER, CHARLES F. (P-16)
SAWYER, GEORGE A. (P-15)

10-63
PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH.
ASTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1012-3. 1972.
THOMAS, KEITH S. (P-15)
HARRIS, HARLAN W. (P-16)
JAHODA, FRANZ C. (P-15)
SAWYER, GEORGE A. (P-15)
SIEMON, RICHARD E. (P-15)

10-64
PLASMA PRESSURE PROFILES OF ZT-1A.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.666. 1972.
FORMAN, PETER R. (P-14)
BURKHARDT, LOUIS C. (P-14)
DI MARCO, JOSEPH N. (P-14)
KARR, HUGH J. (P-14)
PHILLIPS, JAMES A. (P-14)

10-65
PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.666. 1972.
DI MARCO, JOSEPH N. (P-14)
BURKHARDT, LOUIS C. (P-14)
KARR, HUGH J. (P-14)
FORMAN, PETER R. (P-14)
PHILLIPS, JAMES A. (P-14)

10-66
PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1023. 1972.
GERWIN, RICHARD A. (P-7)
MATHER, JOSEPH W. (P-7)
WARE, KENNETH D. (P-7)

10-67
PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH.
DTIE, 1972. 4P. MN (LA-DC-72-702)
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.856. 1972.
BURNETT, SIBLEY C. (P-15)
ELLIS, WILLIAM R.g JR.
OLIPHANT, THOMAS A., Jr. (P-18)
RIBE, FRED L. (P-DO)

10-68
RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES.
COMM. PLASMA PHYS. CONTROLLED FUSION, V.1, P.17-22. 1972.
RIBE, FRED L. (P-15)

10-69
RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P. 846. 1972.
BURKHARDT, LOUIS C. (P-14)
DI MARCO, JOSEPH N. (P-14)
FORMAN, PETER R. (P-14)
HABERSTICH, ALBERT (P-14)
KARR, HUGH J. (P-14)
PHILLIPS, JAMES A. (P-14)

10-70
REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH.
LASL, 1972, 34P. (LA-5121-MS)
BURNETT, SIBLET C. (P-15)
ELLIS, WILLIAM R., JR. (P-15)
OLIPHANT, THOMAS A., JR. (P-18)
RIBE, FRED L. (P-DO)

10-71
RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT AT-1.
CONTROLLED FUSION AND PLASMA PHYSICS, 1972. 5TH EUROPEAN CONFERENCE, GRENOBLE. PROC., V.2, P.234. CEN, 1972. (537:E89C 5TH V.2)
ALSO PUBLISHED AS:
DTIE, 1973, 2P, MN (LA-DC-72-927)
BURKHARDT, LOUIS C. (P-14)
DI MARCO, JOSEPH N. (P-14)
FORMAN, PETER R. (P-14)
HABERSTICH, ALBERT (P-14)
KARR, HUGH J. (P-14)
PHILLIPS, JAMES A. (P-14)

10-72
RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1.
CONTROLLED FUSION AND PLASMA PHYSICS, 1972, 5TH EROPEAN CONFERENCE, GRENOBLE, PROC., V.1, P.45. CEN, 1972. (537:E89C 5TH V.1)
BURKHARDT, LOUIS C. (P-14)
DI MARCO, JOSEPH N. (P-14)
FORMAN, PETER R. (P-14)
HABERSTICH, ALBERT (P-14)
KARR, HUGH J. (P-14)
PHILLIPS, JAMES A. (P-14)

10-73
REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS.
LASL, 1972. 10P. (LA-5087-MS)
THOMASSEN, KEITH I. (P-15)

10-74
STABILITY OF A FINITE BETA, L = 2 STELLERATOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.848. 1972.
FREIDBERG, JEFFREY P. (P-18)

10-75
STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.848. 1972.
FREIDBERG, JEFFREY P. (P-18)
MARDER, BARRY M. (P-18)

10-76
STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971.
LASL, 1972. 118P. (LA-4888-PR)
MOTZ, HENRY T. (P-DO) COMP.

10-77
SURVEY OF SCYLLAC EXPERIMENTS.
DTIE, 1972. 12P. MN (LA-DC-72-896)
BURNETT, SIBLEY C. (P-15)
ELLIS, WILLIAM R., JR. (P-15)
GRIBBLE, ROBERT F. (P-15)
HAMMER, CHARLES F. (P-16)
HARDER, CARROLL R. (P-15)
HARRIS, HARLAN W. (P-16)
JAHODA, FRANZ C. (P-15)
QUINN, WARREN E. (P-15)
RIBE, FRED L. (P-DO)
SAWYER, GEORGE A. (P-15)
SIEMON, RICHARD E. (P-15)
THOMAS, KEITH S. (P-15)

10-78
SURVEY OF SCYLLAC EXPERIMENTS.
CONTROLLED FUSION AND PLASMA PHYSICS. 1972. 5TH EUROPEAN CONFERENCE, GRENOBLE. PROC., V.2, P.35-46. CEN, 1972. (537:E89C 5TH V.2)
BURNETT, SIBLEY C. (P-15)
ELLIS, WILLIAM R., JR. (P-15)
GRIBBLE, ROBERT F. (P-15)
HAMMER, CHARLES F. (P-16)
HARDER, CARROLL R. (P-15)
HARRIS, HARLAN W. (P-16)
JAHODA, FRANZ C. (P-15)
QUINN, WARREN E. (P-15)
RIBE, FRED L. (P-15)
SAWYER, GEORGE A. (P-15)
SIEMON, RICHARD E. (P-15)
THOMAS, KEITH S. (P-15)

10-79
TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS.
ABSTRACT PUBLISHED IN:
THERMONUCLEAR FUSION REACTOR DESIGN. 1970. SYMPOSIUM, LUBBOCK, TX. PROC., P.1-2. TEXAS TECH, 1970. (ORO-3778-3)
RIBE, FRED L. (P-15)

10-80
TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1051. 1972.
GITOMER, STEVEN J. (P-18)
FORSLUND, DAVID W. (P-18)

10-81
THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1015. 1972.
INGRAHAM, JOHN C. (P-13)
DREICER, HARRY (P-13)
ELLIS, RICHARD F. (P-13)

10-82
TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA.
PHYS. FLUIDS., V.15, P.150-9. 1972.
BERGE, GERHARD (P-18)

10-83
TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.631. 1972.
MUIR, DOUGLAS W. (T-2)
WYMAN, MARVIN E.

10-84
TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER.
APPL. OPTICS., V.11, P.477-9. 1972.
FORMAN, PETER R. (P-14)
JAHODA, FRANZ C. (P-15)
PETERSON, RICHARD W. (P-15)

10-85
TWO STAGE HEATING OF THETA PINCHES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.851. 1972.
FREIDBERG, JEFFREY P. (P-18)
MORSE, RICHARD L. (T-6)

10-86
VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS.
J. COMPUTAT. PHYS., V.10, P.400-19. 1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.16, P.1252. 1971.
LEWIS, H. RALPH, JR. (P-18)

10-87
VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.846-7. 1972.
FREIDBERG, JEFFREY P. (P-18)
LEWIS, H. RALPH, JR. (P-18)

10-88
VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.
PHYS. FLUIDS, V.15, P.1102-8. 1972.
(LA-DC-13124)*
FREIDBERG, JEFFREY P. (P-18)

10-89
VUV EMISSION FROM A NEON SEEDED THETA PINCH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1066. 1972.
THOMSON, DAVID B. (GMX-6)
BAILEY, ARTHUR G. (P-16)
ENGLEMAN, ROLF, JR. (GMX-2)

10-90
WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1015. 1972.
DREICER, HARRY (P-13)
ELLIS, RICHARD F. (P-13)
INGRAHAM, JOHN C. (P-13)

10-91
WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY.
DTIE, 1968. 7P. MN (CONF-680502-2)
(LA-DC-9519)
ALSO PUBLISHED AS:
NASA, 1968. 7P. MN (N68-28181)
ALSO PUBLISHED IN:
COSMOLOGY, FUSION AND OTHER MATTERS: GEORGE GAMOW MEMORIAL VOLUME, F. REINES, ED. CHAP.12, P.192-231. COLORADO ASSOCIATED UNIVERSITY PRESS, 1972. (530:R366C)
TUCK, JAMES L. (P-DO)

11. EARTH SCIENCE AND ENGINEERING

11-1
CLEAN ENERGY FROM THE EARTH.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17.
P.669. 1972.
SMITH, MORTON C. (CMB-13)

11-2
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.1099. 1972.
POTTER, ROBERT M. (CNC-4)

11-3
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.21-2.
1972.
AAMODT, R. LEE (J-DO)
SMITH, MORTON C. (CMB-13)

11-4
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS.
DTIE, 1972. 31P. MN (LA-DC-72-669)
AAMODT, R. LEE (J-DO)
SMITH, MORTON C. (CMB-13)

11-5
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS.
LASL, 1972. 8P. (LA-5094-MS)
KRUPKA, MILTON C. (CMB-3)

11-6
METHOD AND APPARATUS FOR TUNNELING BY MELTING.
FILED 1971, PATENTED SEP. 26, 1972.
(U. S. PATENT 3,693,731)
ARMSTRONG, DALE E. (CNC-4)
MC INTEER, BERTHUS B. (CNC-4)
MILLS, ROBERT L. (P-8)
POTTER, ROBERT M. (CNC-4)
ROBINSON, EUGENE S. (CNC-4)
ROWLEY, JOHN C. (N-7)
SMITH, MORTON C. (CMB-13)

11-7
NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS.
DTIE, 1972. 23P. MN (LA-DC-72-1157)
BROWN, DONALD W. (N-7)
SMITH, MORTON C. (CMB-13)
POTTER, ROBERT M. (CNC-4)

11-8
THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION.
J. GEOPHYS. RES., V.77, P.7038-48. 1972.
(LA-DC-72-158)*
HARLOW, FRANCIS H., JR. (T-3)
PRACHT, WILLIAM E. (T-3)

12. ENGINEERING AND EQUIPMENT

12-1
AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT.
TEMPERATURE: ITS MEASUREMENT AND CONTROL IN SCIENCE AND INDUSTRY. 1971. 5TH SYMPOSIUM, WASHINGTON. PROC., P.1071-6. ISA, 1972.
(536: S989T 5TH PT.2)
TALLMAN, CHARLES R. (N-4)

12-2
BASELINE COMPENSATING INTEGRATOR.
FILED 1970, PATENTED FEB. 8, 1972.
(U. S. PATENT 3,641,444)
WATTS, GEOFFREY P. (N-4)

12-3
CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS.
DTIE, 1972. 7P. MN (LA-DC-72-556)
FITZGIBBON, FRANCIS (CMB-14)
MONTGOMERY, C. DONALD (CMB-14)
TRUJILLO, JOE R. (CMB-14)

12-4
COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL.
DTIE, 1972. 9P. (LA-DC-72-228)
BRUNDIGE, EDWARD L. (CMB-6)

12-5
COMPUTER GENERATED OPTICAL SOUND TRACKS.
LASL, 1972. 4P. (LA-5034)
TUCKER, EDWIN K. (ENG-DO)
BAKER, LARA H., JR. (ENG-DO)
BUCKNER, DAVID C. (C-8)

12-6
DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES.
REMOTE SYSTEMS TECHNOLOGY. 1972. 20TH CONFERENCE, IDAHO FALLS. PROC., P.331-2. ANS, 1972. (626:H832C 20TH)
MONTGOMERY, C. DONALD (CMB-14)
CHAVEZ, MARIANO G. (ENG-2)
LAZARUS, MICHAEL E. (CMB-14)

12-7
EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL.
MAGNET TECHNOLOGY. 1970. 3RD INTERNATIONAL CONFERENCE, HAMBURG. PAPERS, P.1205-11. DESY, 1970.
(537:I61MA 3RD)
VOGEL, HERBERT F. (MP-6)

12-8
FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT.
LASL, 1972. 9P. (LA-5030-MS)
GILES, PAUL M. (W-3)

12-9
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY.
DTIE, 1972. 13P. MN (LA-DC-72-909)
GILES, PAUL M. (W-3)

12-10
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES.
DTIE, 1972. 69P. MN (LA-DC-12575)
ABSTRACT PUBLISHED IN:
MECH. ENG., V.94, NO.2, P.52. FEB. 1972.
BANKSTON, CHARLES A., JR. (N-7)
SMITH, HADLEY J. (N-7)

12-11
INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER.
LASL, 1972. 4P. (LA-4924)
NEWFIELD, STEPHEN E. (CMB-6)
EBAUGH, LARRY R. (SD-2)
HARTSHORNE, P. F. (CMB-6)
FAUSSONE, ROSCOE A. (CMB-6)
EHART, EDWIN P. (CMB-6)
WHITE, ROBERT L. (CMB-6)

12-12
INVESTIGATION OF COMPUTER GENERATED OPTICAL SOUND TRACKS.
DTIE, 1972. 7P. (LA-DC-72-710)
TUCKER, EDWIN K. (ENG-7)
BAKER, LARA H., JR. (W-2)
BUCKNER, DAVID C. (E-1)

12-13
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES.
LASL, 1972. 12P. (LA-4882)
SULLIVAN, JOHN A. (N-7)
KING, CHARLES R. (MP-6)

12-14
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS.
REV. SCI. INSTR., V.43, P.104-6. 1972.
(LA-DC-12845)*
LIEBER, ALBERT (J-12)

12-15
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET.
MAGNET TECHNOLOGY. 1970. 3RD INTERNATIONAL CONFERENCE, HAMBURG. PAPERS, P.262-70. DESY, 1970. (537:I61MA 3RD)
VOGEL, HERBERT F. (MP-6)

12-16
POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING.
ABSTRACT PUBLISHED IN:
J. ELECTROCHEM. SOC., V.119, P.C106. 1972.
SANDSTROM, DONALD J. (CMB-6)
HANKS, GALE S. (CMB-6)

12-17
POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING.
DTIE, 1972. 13P. MN (LA-DC-72-581)
SANDSTROM, DONALD J. (CMB-6)

12-18
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES.
MAGNET TECHNOLOGY. 1970. 3RD INTERNATIONAL CONFERENCE, HAMBURG. PAPERS, P.1193-1204. DESY, 1970. (537:I61MA 3RD)
HASSENZAHL, WILLIAM V. (MP-6)
ROGERS, JOHN D., JR. (CMF-9)
LAQUER, HENRY L. (CMF-9)
ARMSTRONG, W. COLTON (CMF-9)

12-19
RADIOISOTOPE PRODUCTION AT LAMPF.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.704. 1972.
ROSEN, LOUIS (MP-DO)
DROPESKY, BRUCE J. (CNC-11)
O'BRIEN, HAROLD A., JR. (CNC-11)
ORTH, CHARLES J. (CNC-11)
SCHILLACI, MARIO E. (MP-3)

12-20
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT.
LASL, 1972. 48P. (LA-4964)
RAND, JOHN L. (ENG-7)

12-21
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY.
REV. SCI. INSTR., V.43, P.829-30. 1972. (LA-DC-13301)*
DALTON, LARRY J. (GMX-1)

12-22
SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES.
MAGNET TECHNOLOGY. 1970. 3RD INTERNATIONAL CONFERENCE, HAMBURG. PAPERS, P.780-97. DESY, 1970. (537:I61MA 3RD)
HASSENZAHL, WILLIAM V. (MP-6)
LAQUER, HENRY L. (CMF-9)
NOVAK, JAN K. (CMF-9)
ROGERS, JOHN D., JR. (CMF-9)
STOKES, ROBERT W. (CMF-9)

12-23
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER.
LASL, 1972. 77P. (LA-4906-MS)
FARMER, OTIS A. (T-3)
HAFER, JOHN F. (N-4)

13. EPR, ESR, NMR STUDIES

13-1
CARBON -13 NMR OF PARAMAGNETIC COMPLEXES.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS,
V.164, PAPER NO.INOR-084. 1972.
MATWIYOFF, NICHOLAS A. (CNC-4)

13-2
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS.
BIOCHEM. BIOPHYS. RES. COMMUN., V.49,
P.1158-64. 1972. (LA-DC-72-1087)*
MATWIYOFF, NICHOLAS A. (CNC-4)
NEEDHAM, TERENCE E. (CNC-4)

13-3
CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B.
BIOCHEM. BIOPHYS. RES. COMMUN., V.46,
P.328-34. 1972. (LA-DC-13048)*
STROUSE, CHARLES E. (CNC-4)
KOLLMAN, VICTOR H. (H-4)
MATWIYOFF, NICHOLAS A. (CNC-4)

13-4
CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES.
CHEM. PHYS. LETTERS, V.13, P.150-3.
1972.
ANDERSON, STANLEY E., JR.
MATWIYOFF, NICHOLAS A. (CNC-4)

13-5
CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE.
FEBS LETTERS, V.28, P.259-64. 1972.
(LA-DC-72-1109)*
EAKIN, R. T. (CNC-4)
MORGAN, LEON O. (CNC-4)
GREGG, CHARLES T. (H-4)
MATWIYOFF, NICHOLAS A. (CNC-4)

13-6
NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS,
V.164, PAPER NO.INOR-119. 1972.
ALEI, MOHAMMED, JR. (CNC-2)

13-7
NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA.
J. CHEM. PHYS., V.56, P.5818-22. 1972.
(LA-DC-13286)*
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS,
V.163, PAPER NO. PHYS-148. 1972.
LITCHMAN, WILLIAM M. (CNC-2)
ALEI, MOHAMMED, JR. (CNC-2)

13-8
NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.658. 1972.
BURNETT, LOWELL J. (CNC-2)
HARMON, J. FRANK

13-9
NUCLEAR SPIN RELAXATION IN LIQUID ARSINE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.128. 1972.
BURNETT, LOWELL J. (CNC-2)
ZELTMANN, ALFRED H. (CNC-2)

13-10
OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS,
V.164, PAPER NO.INOR-096. 1972.
ZELTMANN, ALFRED H. (CNC-2)

13-11
PULSE NMR RELAXATION STUDY OF LIQUID ARSINE.
J. CHEM. PHYS., V.56, P.4695-701.
1972. (LA-DC-13245)*
BURNETT, LOWELL J. (CNC-2)
ZELTMANN, ALFRED H. (CNC-2)

13-12
ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL.
Z. PHYSIK, V.253, P.183-6. 1972.
(LA-DC-72-303)*
HARMON, J. FRANK
BURNETT, LOWELL J. (CNC-2)

13-13
SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS.
J. CHEM. PHYS., V.57, P.1293-7. 1972.
(LA-DC-72-434)*
BURNETT, LOWELL J. (CNC-2)
HARMON, J. FRANK

13-14
SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE.
DTIE, 1972. 8P. MN (LA-DC-72-509)
FUKUSHIMA, EIICHI (CNC-4)

13-15
STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS.
DTIE, 1971. 23P. MN (LA-DC-12602)
ALSO PUBLISHED IN:
J. MAGN. RESONANCE, V.6, P.384-95.
1972. (LA-DC-12602)*
RABIDEAU, SHERMAN W. (CNC-2)
HECHT, HARRY G. (CNC-2)
LEWIS, W. BURTON (CNC-2)

14. EXPLOSIVES AND DETONATIONS

14-1
CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS.
AIAA J., V.10, P.514-6. 1972.
(LA-DC-12595)*
FICKETT, WILDON (GMX-10)
JACOBSON, JACK D. (GMX-10)
SCHOTT, GARRY L. (GMX-10)

14-2
CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES.
BEHAVIOR AND UTILIZATION OF EXPLOSIVES IN ENGINEERING DESIGN AND BIOMECHANICAL PRINCIPLES APPLIED TO CLINICAL MEDICINE. 1972. 12TH ANNUAL SYMPOSIUM, ALBUQUERQUE. PROC., P.38-45. ASME, 1972. (621:B419U)
ALSO PUBLISHED AS:
DTIE, 1972. 11P. MN (LA-DC-72-58)
MADER, CHARLES L. (T-4)

14-3
DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE.
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PREPRINTS, P.216-23. NTIS, 1970. (AD-712,081M)
ALSO PUBLISHED IN:
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PROC., P.321-9.
ONR, 1972. (623:SY89OP 5TH)
CRAIG, BOBBY G. (GMX-8)
MARSHALL, ELISABETH F. (GMX-4)

14-4
DETONATION PHENOMENA.
BEHAVIOR AND UTILIZATION OF EXPLOSIVES IN ENGINEERING DESIGN AND BIOMECHANICAL PRINCIPLES APPLIED TO CLINICAL MEDICINE. 1972. 12TH ANNUAL SYMPOSIUM, ALBUQUERQUE. PROC., P.5-14. ASME, 1972. (621:B419U)
DAVIS, WILLIAM C. (GMX-8)

14-5
EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN.
LASL, 1972. 5P. (LA-5036)
DINEGAR, ROBERT H. (WX-7)
ROCHESTER, RICHARD H. (WX-7)
HORTON, WILLIAM B.
JOHNSON, JAMES O. (WX-7)

14-6
EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES.
LASL, 1972. 4P. (LA-4943)
DU BOIS, FREDERICK W. (GMX-3)
BAYTOS, JOHN F. (GMX-3)

14-7
EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT.
LASL, 1972. 14P. (LA-4843)
RANDOLPH, ALAN D. (GMX-3)
HATLER, LARRY E. (GMX-3)
POPOLATO, ALPHONSE (GMX-3)

14-8
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404.
LASL, 1972. 9P. (LA-4989-MS)
ROGERS, WILLIAM H. (GMX-2)
SMITH, LOUIS C. (GMX-2)

14-9
FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS.
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PREPRINTS, P.1-8.
NTIS, 1970. (AD-712,081M)
ALSO PUBLISHED IN:
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PROC., P.3-11.
ONR, 1972. (623:SY89OP 5TH)
RIVARD, WILLIAM C. (GMX-10)
DAVIS, WILLIAM C. (GMX-8)
FICKETT, WILDON (GMX-10)
VENABLE, DOUGLAS (GMX-11)

14-10
HIGH EXPLOSIVE MATERIALS.
BEHAVIOR AND UTILIZATION OF EXPLOSIVES IN ENGINEERING DESIGN AND BIOMECHANICAL PRINCIPLES APPLIED TO CLINICAL MEDICINE. 1972. 12TH ANNUAL SYMPOSIUM, ALBUQUERQUE. PROC., P.15-34. ASME, 1972. (621:B419U)
ALSO PUBLISHED AS:
DTIE, 1972. 20P. MN (LA-DC-72-148)
POPOLATO, ALPHONSE (GMX-3)

14-11
MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE.
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PROC., P.447-54.
ONR, 1972. (623:SY89OP 5TH)
HAYES, BERNARD (GMX-8)
FRITZ, JOSEPH N. (GMX-6)

14-12
NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION.
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PREPRINTS, P.115-23. NTIS, 1970. (AD-712,081M)
ALSO PUBLISHED IN:
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PROC., P.77-84.
ONR, 1972. (623:SY89OP 5TH)
MADER, CHARLES L. (T-5)

14-13
PETN-DIPEHN-TRI-PEON SYSTEM.
LASL, 1972. 61P. (LA-4486-MS)
CADY, HOWARD H. (WX-2)

14-14
PRESSURE MEASUREMENTS FOR COMPOSITION B-3.
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PREPRINTS, P.9-16 NTIS, 1970. (AD-712,081M)
ALSO PUBLISHED IN:
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PROC., P.13-21. ONR, 1972. (623:SY89OP 5TH)
DAVIS, WILLIAM C. (GMX-8)
VENABLE, DOUGLAS (GMX-1 .,

14-15
PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1105. 1972.
WACKERLE, JERRY D. (WX-7)
JOHNSON, JAMES O. (WX-7)

14-16
RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST.
LASL, 1972. 10P. (LA-5122-MS)
RANDOLPH, ALAN D. (WX-3)

14-17
SPHERICAL EXPLOSIONS IN WATER.
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PREPRINTS, P.478-82. NTIS, 1970. (AD-712,081M)
ALSO PUBLISHED IN:
DETONATION. 1970. 5TH INTERNATIONAL SYMPOSIUM, PASADENA. PROC., P.599-604. ONR, 1972. (623:SY89OP 5TH)
HANTEL, LAWRENCE W. (GMX-2)
DAVIS, WILLIAM C. (GMX-8)

14-18
TWO DIMENSIONAL DETONATIONS.
LASL, 1972. 7P. (LA-4962)
MADER, CHARLES L. (T-4)

14-19
X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE.
LASL, 1972. 3P. (LA-4872-MS)
BENZIGER, THEODORE M. (GMX-2)

15. FISSION PHYSICS

15-1
ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.138-9. 1972.
BRITT, HAROLD C. (P-DOR)
BOLSTERLI, MARK (T-9)
NIX, JAMES R. (T-9)

15-2
CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI.
ANN. REV. NUCL. SCI., V.22, P.65-120. 1972. (LA-DC-72-335)*
NIX, JAMES R. (T-9)

15-3
CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES.
PHYS. REV. LETTERS, V.29, P.504-5. 1972. (LA-DC-72-419)*
MOORE, MICHAEL S. (W-11)
MILLER, LOWELL G.
STOKES, GORDON E.

15-4
DEFORMABLE MASS FORMULA AND FISSION DATA.
ATOMIC MASSES AND FUNDAMENTAL CONSTANTS. 1971. 4TH INTERNATIONAL CONFERENCE, TEDDINGTON. PROC., P.255-66. PLENUM, 1972. (541:A831M 4TH)
SEEGER, PHILIP A. (W-8)

15-5
EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES.
PHYS. REV., V.C6, P.1090-2. 1972. (LA-DC-72-624)*
BRITT, HAROLD C. (P-DOR)
ERKKILA, BRUCE H. (P-12)
BACK, BIRGER BO (P-DOR)

15-6
FISSION INDUCED BY (HELIUM-3,DEUTERON), (HELIUM-3,ALPHA), (HELIUM-3,TRITON) AND (TRITON,ALPHA) REACTIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.441. 1972.
HANSEN, OLE (P-DOR)
BACK, BIRGER BO (P-DOR)
BRITT, HAROLD C. (P-DOR)
GARRETT, J. D. (P-DOR)

15-7
FISSION OF URANIUM-238 WITH 140 MEV HELIUM-4 IONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.441. 1972.
VIOLA, VICTOR E., JR.
ROCHE, CHARLES T.
MINOR, MICHAEL (P-2)

15-8
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM-250 AND CALIFORNIUM-250.
PHYS.REV., V.C7, P.276-9. 1972. (LA-DC-72-999)*
HOFFMAN, DARLEANE C. (CNC-11)
FORD, GEORGE P. (CNC-11)
BALAGNA, JOHN P., JR. (CNC-11)

15-9
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM-250 AND CALIFORNIUM-250.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.139. 1972.
HOFFMAN, DARLEANE C. (CNC-11)
FORD, GEORGE P. (CNC-11)
BALAGNA, JOHN P., JR. (CNC-11)

15-10
NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI.
PHYS. REV., V.C5, P.1050-77. 1972. (LA-DC-12817)*
BOLSTERLI, MARK (T-9)
FISET, EDMUND O. (T-9)
NIX, JAMES R. (T-9)
NORTON, JOHN L. (TD-3)

15-11
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.890. 1972.
HOFFMAN, DARLEANE C. (CNC-11)

15-12
RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.442. 1972.
BACK, BIRGER BO (P-DOR)
BRITT, HAROLD C. (P-DOR)
HANSEN, OLE (P-DOR)
GARRETT, J. D. (P-DOR)
ERKKILA, BRUCE H. (P-12)

15-13
SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES.
PHYS. REV. LETTERS, V.28, P.1707-10. 1972. (LA-DC-72-495)*
BACK, BIRGER BO (P-DOR)
BRITT, HAROLD C. (P-DOR)
GARRETT, J. D. (P-DOR)
HANSEN, OLE (P-DOR)

16. HEALTH AND SAFETY

16-1
AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER.
ENVIRON. SCI. TECH., V.6, P.614-7. 1972. (LA-DC-11872)*
MOSS, OWEN R. (H-5)
ETTINGER, HARRY J. (H-5)
COULTER, JAMES ROSS (SD-5)

16-2
AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS.
ABSTRACT PUBLISHED IN:
J. AM. IND. HYG. ASSOC., V.33, P.6. 1972.
MOSS, OWEN R. (H-5)
ETTINGER, HARRY J. (H-5)

16-3
BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN.
HEALTH PHYS., V.22, P.943-52. 1972. (LA-DC-13083)*
ALSO PUBLISHED AS:
DTIE, 1972. 32P. MN (LA-DC-13083)
LANGHAM, WRIGHT H. (H-4)

16-4
CMB-5 HEALTH AND SAFETY MANUAL.
LASL, 1972. 21P. (LA-4867)
MINER, WILLIAM N. (CMB-5)
ELLIOTT, REED O. (CMB-5)
DOUGLASS, DANA L. (CMB-5)
SCHONFELD, FRED W. (CMB-5)

16-5
DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972.
LASL, 1972. 7P. (LA-5104-PR)
WOOD, GERRY O. (H-5)
CAMPBELL, EVAN E. (H-5)
ANDERSON, ROBERT G. (H-5)

16-6
EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE.
ABSTRACT PUBLISHED IN:
J. AM. IND. HYG. ASSOC., V.33, P.47. 1972.
HYATT, EDWIN C. (H-5)
PRITCHARD, JOHN A. (H-5)
RICHARDS, CHARLES P. (H-5)
GEOFFRION, LOUIS A. (H-5)

16-7
ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971.
LASL, 1972. 43P. (LA-4871-MS)
HERCEG, JOSEPH E. (H-8) COMP.

16-8
ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971.
LASL, 1972. 46P. (LA-4970)
HERCEG, JOSEPH E. (H-8) COMP.

16-9
EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE.
HEALTH PHYS., V.23, P.739-40. 1972. (LA-DC-72-153)*
ATWATER, HENRY F. (A-2)

16-10
EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972.
LASL, 1972. 10P. (LA-5105-PR)
WOOD, GERRY O. (H-5)
CAMPBELL, EVAN E. (H-5)
TRUJILLO, PATRICIO E., JR. (H-5)
STEIN, PATRICIA C. (H-5)

16-11
FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY.
ATMOS. ENVIRON., V.6, P.353-62. 1972. (LA-DC-11871)*
STAFFORD, RONALD G. (H-5)
ETTINGER, HARRY J. (H-5)

16-12
HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY.
HEALTH PHYSICS OPERATIONAL MONITORING, C. A. WILLIS AND J. S. HANDLOSER, EDS, P.141-64. GORDON AND BREACH, 1972. (542:W734H)
VALENTINE, ALLEN M. (H-1)
FITZGIBBON, FRANCIS (CMB-14)
MARTINEZ, LEOPOLDO E. (H-1)

16-13
HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS.
PROTECTION AGAINST ACCELERATOR AND SPACE RADIATION. 1971. INTERNATIONAL CONFERENCE. GENEVA, PROC., P.893-914. CERN, 1971. (CERN 71-16, VOL. 2)
ALSO PUBLISHED IN:
HEALTH PHYSICS OPERATIONAL MONITORING, C. A. WILLIS AND J. S. HANDLOSER, EDS, P.179-99. GORDON AND BREACH, 1972. (542:W734H)
ABSTRACT PUBLISHED IN:
HEALTH PHYS., V.21, P.8. 1971.
ENGELKE, MORRIS J. (H-1)
PARKER, JOSEPH R. (MP-1)

16-14
HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72.
LASL, 1972. 6P. (LA-5008)
CAMPBELL, EVAN E. (H-5)
MILLIGAN, MORRIS F. (H-5)
MOSS, WILLIAM D. (H-5)
SCHULTE, HARRY F. (H-5)

16-15
HUMAN VALUES IN STANDARD SETTING.
DTIE, 1972. 24P. MN (LA-DC-12746)
OTWAY, HARRY J. (J-DOT)

16-16
IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY.
AIR POLLUTION, TURBULENCE AND DIFFUSION. 1971. SYMPOSIUM, LAS CRUCES, NM. PROC., P.294-5. SANDIA, 1972. (SC-LA-84)
ALSO PUBLISHED AS:
DTIE, 1972. 8P. MN (LA-DC-13316)
SEDLACEK, WILLIAM A. (CNC-11)
GUTHALS, PAUL R. (CNC-11)
SMITH, HELEN LOUISE (CNC-11)

16-17
IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM-239 FOLLOWING ACCIDENTAL EXPOSURE.
HEALTH PHYS., V.22, P.410-2. 1972. (LA-DC-13043)*
JOHNSON, LAMAR J. (H-1)
DEAN, PHILLIP N. (H-4)
IDE, HAROLD M. (H-5)

16-18
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST.
J. AM. IND. HYG. ASSOC., V.33, P.360-6. 1972.
SCHULTE, HARRY F. (H-5)

16-19
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES.
INTERN. J. APPL. RAD. ISOTOPES, V.23, P.381-2. 1972. (LA-DC-72-156)*
UMBARGER, C. JOHN (A-1)
MALANIFY, JOHN J. (A-1)

16-20
IONIZING RADIATION.
INDUSTRIAL ENVIRONMENTAL HEALTH, THE WORKER AND THE COMMUNITY, L. V. CRALLEY, ED. P.243-69. ACADEMIC, 1972. (614.85:C888I)
SCHULTE, HARRY F. (H-5)

16-21
LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972.
LASL, 1972. 26P. (LA-5097-MS)
JOHNSON, LAMAR J. (H-8)

16-22
MERCURY IN MAN.
ABSTRACT PUBLISHED IN:
J. AM. IND. HYG. ASSOC., V.33, P.59. 1972.
STEIN, PATRICIA C. (H-5)
CAMPBELL, EVAN E. (H-5)
EUTSLER, BERNARD C. (H-5)
MOSS, WILLIAM D. (H-5)
BOYLES, M. EUDENA (H-2)

16-23
MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES.
ABSTRACT PUBLISHED IN:
J. AM. IND. HYG. ASSOC., V.33, P.71. 1972.
STEIN, PATRICIA C. (H-5)
EUTSLER, BERNARD C. (H-5)
CAMPBELL, EVAN E. (H-5)

16-24
NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF.
DTIE, 1972. 6P. MN (LA-DC-72-780)
ALSO PUBLISHED IN:
CYCLOTRONS. 1972. 6TH INTERNATIONAL CONFERENCE, VANCOUVER. PROC., P.531-7. AIP, 1972. (539:C995C 6TH)
PARKER, JOSEPH R. (MP-1)
RICHARDSON, JAMES H. (MP-1)
EASLEY, JAMES D. (MP-1)

16-25
NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.396-9. LASL, 1972. (LA-5115)
PARKER, JOSEPH R. (MP-1)
RICHARDSON, JAMES H. (MP-1)
EASLEY, JAMES D. (MP-1)

16-26
PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION.
ABSTRACT PUBLISHED IN:
HEALTH PHYS., V.22, P.933. 1972.
MOSS, WILLIAM D. (H-5)
CAMPBELL, EVAN E. (H-5)

16-27
PLUTONIUM IN MAN.
ABSTRACT PUBLISHED IN:
HEALTH PHYS., V.22, P.931. 1972.
CAMPBELL, EVAN E. (H-5)
EUTSLER, BERNARD C. (H-5)
MC CLELLAND, JEAN (H-5)
MILLIGAN, MORRIS F. (H-5)
MOSS, WILLIAM D. (H-5)
SCHULTE, HARRY F. (H-5)
IDE, HAROLD M. (H-5)

16-28
PLUTONIUM PLANT SAFETY.
SCIENCE, V.177, P.209-10. 1972.
HEMPELMANN, LOUIS H.
LANGHAM, WRIGHT H. (H-DO-T)

16-29
PROBLEMS OF PLUTONIUM MEASUREMENT IN THE ENVIRONMENT.
IEEE TRANS. NUCL. SCI., V.NS-19, NO.1, P.219-23. 1972.
HEALY, JOHN W. (H-DO)

16-30
QUANTIFICATION OF SOCIAL VALUES.
RISK VS BENEFIT: SOLUTION OR DREAM:
RISK VS BENEFIT: SOLUTION OR DREAM?
PAPERS, P.1-13. LASL, 1972.
(LA-4860-MS)
OTWAY, HARRY J. (J-DO)

16-31
QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972.
LASL, 1972. 3P. (LA-5095-PR)
BATTAT, MORRIS E. (T-1) COMP.

16-32
RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS.
LASL, 1972. 12P. (LA-5022)
STAFFORD, RONALD G. (H-5)
ETTINGER, HARRY J. (H-5)
ROWLAND, THOMAS J. (H-5)

16-33
RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS.
ABSTRACT PUBLISHED IN:
J. AM. IND. HYG. ASSOC., V.33, P.55. 1972.
STAFFORD, RONALD G. (H-1)
ETTINGER, HARRY J. (H-5)
ROWLAND, THOMAS J. (H-5)

16-34
RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS.
ABSTRACT PUBLISHED IN:
J. AM. IND. HYG. ASSOC., V.33, P.55. 1972.
HYATT, EDWIN C. (H-5)
PRITCHARD, JOHN A. (H-5)
GEOFFRION, LOUIS A. (H-5)
RICHARDS, CHARLES P. (H-5)

16-35
RISK VS BENEFIT: SOLUTION OR DREAM.
LASL, 1972. 65P. (LA-4860-MS)
OTWAY, HARRY J. (J-DO) ED.

16-36
SIZE CHARACTERISTICS OF PLUTONIUM AEROSOLS.
DTIE, 1972. 15P. MN (LA-DC-72-920)
ETTINGER, HARRY J. (H-5)
ELDER, JOHN C. (H-5)
GONZALES, MANUEL (H-5)

16-37
SIZE SELECTIVE SAMPLING FOR PLUTONIUM -238.
HEALTH PHYS., V.23, P.41-6. 1972.
(LA-DC-12068)*
ABSTRACT PUBLISHED IN:
HEALTH PHYS., V.21, P.34. 1971.
ETTINGER, HARRY J. (H-5)
MOSS, WILLIAM D. (H-5)
JOHNSON, LAMAR J. (H-1)

16-38
SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS.
LASL, 1972. 15P. (LA-4914-MS)
BRONISZ, STANLEY E. (CMB-5)

16-39
SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING.
DTIE, 1968. 23P. CONF-680503-2 MN
(LA-DC-9005)
ALSO PUBLISHED IN:
HEALTH PHYSICS OPERATIONAL MONITORING, C. A. WILLIS AND J. S. HANDLOSER, EDS, P.519-37. GORDON AND BREACH, 1972.
(542:W734H)
ENDERS, JOHN W. (H-1)

16-40
VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT.
J. AIR POLLUTION CONTROL ASSOC., V.22, P.108-11. 1972. (LA-DC-12197)*
ETTINGER, HARRY J. (H-5)
ROYER, GEORGE W. (H-5)

16-41
X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS.
HEALTH PHYS., V.23, P.73-84. 1972.
(LA-DC-12593)*
STORM, ELLERY (H-1)
LIER, DOUGLAS W. (J-14)

17. HYDRODYNAMICS AND RADIATION TRANSPORT

17-1
2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS.
LASL, 1972. 39P. (LA-4846)
KERSHNER, JAMES D. (T-4)
MADER, CHARLES L. (T-4)

17-2
ACOUSTIC RAY TRACING IN UNSTEADY FLOWS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1104. 1972.
ENGELKE, RAY (M-3)

17-3
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE; STEADY-STATE SOLUTION.
LASL, 1972. 33P. (LA-4839)
PIMBLEY, GEORGE H. (T-DOT)

17-4
CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN.
J. COMPUTAT. PHYS., V.10, P.324-40. 1972. (LA-DC-13289)*
HIRT, CYRIL W., JR. (T-3)
COOK, JAMES L. (T-3)

17-5
CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.659. 1972.
KERSHNER, JAMES D. (T-4)
MADER, CHARLES L. (T-4)

17-6
DETONATIONS NEAR THE WATER SURFACE.
LASL, 1972. 27P. (LA-4958)
MADER, CHARLES L. (T-4)

17-7
EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.958-9. 1972.
DUDZIAK, DONALD J. (T-1)
BOSLER, GERALD E. (T-1)

17-8
ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.272-3. 1972.
LATHROP, KAYE D. (T-1)

17-9
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES.
LASL, 1972. 15P. (ENDF-182) (LASL-4963)
DUDZIAK, DONALD J. (T-1)
BOSLER, GERALD E. (T-1)

17-10
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF.
LASL, 1972. 12P. (ENDF-156) (LA-4750-MS)
DUDZIAK, DONALD J. (T-1)
SEAMON, ROBERT E. (T-2)
SUSCO, DANTE V. (TD-4)

17-11
MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES.
J. VACUUM SCI. TECH., V.9, P.1056-61. 1972. (LA-DC-13277)*
WARD, JOHN W. (CMB-5)
FRASER, MALCOLM V. (C-4)
BIVINS, ROBERT L. (C-7)

17-12
MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.569-70. 1972.
DUDZIAK, DONALD J. (T-1)

17-13
NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION.
PHYS. FLUIDS, V.15, P.728-33. 1972. (LA-DC-11078)*
RIVARD, WILLIAM C. (GMX-10)
KULINSKI, E. S.

17-14
NUMERICAL CALCULATION OF INTERNAL WAVE MOTION.
J. FLUID MECH., V.56, P.265-76. 1972.
YOUNG, JAMES A.
HIRT, CYRIL W., JR. (T-3)

17-15
NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES.
AIR POLLUTION, TURBULENCE AND DIFFUSION. 1971. SYMPOSIUM, LAS CRUCES, NM. PROC., P.35-42. SANDIA, 1972. (SC-LA-84)
ALSO PUBLISHED AS:
DTIE, 1972. 8P. MN (LA-DC-13071)
HOTCHKISS, ROBERT S. (T-3)

17-16
NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS.
PHYS. FLUIDS, V.15, P.753-9. 1972.
(LA-DC-12962)*
MEYER, KENNETH A. (TD-5)
BLEWETT, PATRICK J. (TD-5)

17-17
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS.
J. COMPUTAT. PHYS., V.10, P.185-201. 1972.
KIRKPATRICK, JOHN R. (***)
WALKER, WILLIAM F.

17-18
NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.676. 1972.
HOTCHKISS, ROBERT S. (T-3)

17-19
NUMERICAL STUDY OF UNDULAR BORES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1107. 1972.
WITTING, JAMES
NICHOLS, BILL D. (T-3)

17-20
PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES.
LASL, 1972. 5P. (LA-5001-MS)
BROTBECK, GEORGE N. (TD-5)

17-21
PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS.
COMPUTER SIMULATION. 1972. SUMMER CONFERENCE, SAN DIEGO. PROC., P.1037-41. SIMULATION COUNCILS, 1972.
(510.7:S955C 1972 V.2)
ALSO PUBLISHED AS:
DTIE, 1972. 11P. MN (LA-DC-72-364)
HOTCHKISS, ROBERT S. (T-3)
HIRT, CYRIL W., JR. (T-3)

17-22
TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES.
DTIE, 1972. 8P. MN (LA-72-711)
NICHOLS, BILL D. (T-3)
HIRT, CYRIL W., JR. (T-3)

17-23
TURBULENCE TRANSITIONS IN CONVECTIVE FLOW.
DTIE, 1972. 8P. MN (LA-DC-72-705)
DALY, BART J. (T-3)

17-24
TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER.
LASL, 1972. 18P. (LA-4932)
MADER, CHARLES L. (T-4)
KERSHNER, JAMES D. (T-4)

17-25
USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES.
DTIE, 1972. 31P. MN (LA-DC-72-1129)
DUDZIAK, DONALD J. (T-1)

18. INSTRUMENTS

18-1
ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV.
NUCL. INSTR. METHODS, V.105, P.573-84. 1972.
DROSG, MANFRED (P-DOR)

18-2
ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS.
REV. SCI INSTR., V.43, P.1692-4. 1972. (LA-DC-72-758)*
FRASER, JAMES C. (P-8)

18-3
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.
LASL, 1972. 11P. (LA-4968-MS)
LEE, DAVID M. (MP-7)
SOBOTTKA, STANLEY (MP-DO)
THIESSEN, HENRY A. (MP-7)

18-4
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.
NUCL. INSTR. METHODS, V.104, P.179-88. 1972. (LA-DC-72-510)*
LEE, DAVID M. (MP-7)
THIESSEN, HENRY A. (MP-7)
SOBOTTKA, STANLEY (MP-DO)

18-5
CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES.
NUCL. INSTR. METHODS, V.104, P.589-91. 1972. (LA-DC-72-314)*
ATWATER, HENRY F. (A-2)

18-6
CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS.
LASL, 1972. 6P. (LA-4972-MS)
EAST, LARRY V. (A-1)
SWANSEN, JAMES E. (A-1)

18-7
DESIGN OF ALBEDO NEUTRON DOSIMETERS.
DTIE, 1972, 6P. (LA-DC-72-1144)
HANKINS, DALE E. (H-1)

18-8
EFFICIENCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV.
LASL, 1972. 8P. (LA-4886-MS)
LYONS, PETER B. (J-14)

18-9
FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS.
LASL, 1972. 17P. (LA-4832)
HANKINS, DALE E. (H-1)

18-10
FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER.
APPL. OPTICS, V.11, P.873-80. 1972. (LA-DC-12976)*
ROMERO, HAROLD V. (P-DOR)
GURSKY, JUDITH C. (P-12)
BLAIR, ALLEN G. (P-DOR)

18-11
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY.
REV. SCI. INSTR., V.43, P.865-6. 1972. (LA-DC-72-28)*
MC CALL, GENE H. (J-8)

18-12
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA.
NUCL. INSTR. METHODS, V.98, P.419-28. 1972.
HEAD, J. HOWARD (A-2)

18-13
NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS.
LASL, 1972. 5P. (LA-4937-MS)
SUTPHIN, HOWARD D. (E-4)
LIEBER, ALBERT (J-12)

18-14
PROBE VELOCITY TRANSDUCER.
LASL, 1972. 6P. (LA-4999-MS)
STARKOVICH, VICTOR S. (W-10)
TODD, BILLY E. (W-10)
STEPHANI, EVON L. (W-10)
HAWKINS, EUGENE V. (W-10)

18-15
PULSED PIEZORESISTIVE GAUGE BRIDGE.
LASL, 1972. 8P. (LA-4935-MS)
FULLWOOD, RALPH R. (P-8)

18-16
SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER.
IEEE TRANS. NUCL. SCI., V.NS-19, P.626-31. 1972. (LA-DC-12766)*
ALSO PUBLISHED AS:
DTIE, 1972. 8P. MN (LA-DC-12766)
SINGER, SIDNEY (P-4)
AIELLO, WILLIAM P. (P-1)
BERGEY, JAMES A. (P-1)
EDESKUTY, FREDERICK J. (P-8)
WILLIAMSON, KENNETH D., JR. (P-8)

18-17
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS.
NUCL. INSTR. METHODS, V.98, P.205-10. 1972. (LA-DC-12802)*
KRANE, KENNETH S. (P-8)

18-18
SPECTROMETER DESIGN AT LASL.
LASL, 1972. 13P. (LA-5072-MS)
THIESSEN, HENRY A. (MP-7)
KLEIN, MORRIS M. (C-6)

18-19
SUBNANOSECOND HIGH VOLTAGE ATTENUATOR.
REV. SCI. INSTR., V.43, P.1535-6, 1972. (LA-DC-72-529)*
SUTPHIN, HOWARD D. (E-4)

18-20
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS.
NUCL. INSTR. METHODS, V.98, P.535-40. 1972.
JONES, DAVID F. (MP-3)
MARTIN, E. RAY (MP-3)

18-21
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING.
DTIE, 1972. 9P. MN (LA-DC-13313)
FULLWOOD, RALPH R. (W-8)

18-22
USING THE CA3054 MWPC AMPC AMPLIFIER.
LASL, 1972. 3P. (LA-5085-MS)
JONES, DAVID F. (MP-3)
MARTIN, E. RAY (MP-3)

19. LASERS

19-1
AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1054. 1972.
FELDMAN, BARRY J. (T-6)

19-2
CALORIMETER FOR PICOSECOND LASER PULSES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053. 1972.
WATT, BOB E. (L-2)

19-3
CHARACTERISTICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.399. 1972.
FENSTERMACHER, CHARLES A. (J-18)
NUTTER, MURLIN J. (J-18)
LELAND, WALLACE T. (P-10)
BOYER, KEITH (J-DO)

19-4
CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER.
CHEM. PHYS. LETTERS, V.16, P.164-8. 1972. (LA-DC-72-368)*
BEATTIE, WILLARD H. (L-3)
ARNOLD, GEORGE P. (L-3)
WENZEL, ROBERT G. (L-3)

19-5
CHEMICAL LASERS: A LIGHT REVIEW.
CHEMTECH, P.250-5. APRIL 1972. (LA-DC-12892)*
JENSEN, REED J. (J-10)
RICE, WALTER W. (J-10)

19-6
COLD GLOW DISCHARGE LASER ENERGY SOURCE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.399-400. 1972.
MILLS, CARROLL B. (T-DOT)

19-7
COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1000. 1972.
COOPER, RALPH S. (TD-1)

19-8
COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1043. 1972.
NIELSON, CLAIR W. (P-18)
RICHARD L. (T-6)

19-9
COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053. 1972.
TERRELL, JAMES (T-6)

19-10
COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1043. 1972.
GODFREY, BRENDAN B. (T-6)

19-11
CONDENSED EXPLOSIVES LASER.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.67. 1972.
ROBINSON C. PAUL (N-DOT)
SULLIVAN, JOHN A. (N-7)

19-12
CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES.
ABSTRACT PUBLISHED IN:
EOS, V.53, P.1095. 1972.
KINDEL, JOSEPH M. (T-6)
FORSLUND, DAVID W. (P-18)
KENNEL, C. F.

19-13
CURRENT IN THE COLD LASER PLASMA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.400. 1972.
MILLS, CARROLL B. (T-DOT)
TODD, JAY, JR. (GMX-7)

19-14
DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION.
PHYS. FLUIDS, V.15, P.1620-9. 1972. (LA-DC-12606)*
MJOLSNESS, RAYMOND C. (T-9)
RUPPEL, HANS M. (T-9)

19-15
DOUBLE DISCHARGE INITIATED HF LASER.
IEEE J. QUANTUM ELECTRON. V.QE-8, P.26-7. 1972. (LA-DC-12946)*
WENZEL, ROBERT G. (P-2)
ARNOLD, GEORGE P. (P-2)

19-16
ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1054. 972.
ELLIOTT, C. JAMES (T-6)

19-17
ELECTRICAL EXCITATION OF LASING LEVELS.
ABSTRACT PUBLISHED IN:
IEEE J. QUANTUM ELECTRON., V.QE-8, P.596. 1972.
MILLS, CARROLL B. (T-DOT)

19-18
ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS.
DTIE, 1972. 19P. MN (LA-DC-72-447)
ALSO PUBLISHED IN:
IEEE J. QUANTUM ELECTRON., V.QE-9, P.157-63. 1973. (LA-DC-72-447)*
STRATTON, THOMAS F. (L-1)
ERICKSON, GEORGE F. (L-1)
FENSTERMACHER, CHARLES A. (L-1)
SWICKARD, EARL O., JR. (L-1)

19-19
ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE.
APPL. PHYS. LETTERS, V.20, P.56-60. 1972. (LA-DC-12720)*
ABSTRACT PUBLISHED IN:
J. OPT. SOC. AM., V.62, P.731. 1972.
FENSTERMACHER, CHARLES A. (J-18)
NUTTER, MURLIN J. (J-18)
LELAND, WALLACE T. (L-1)
BOYER, KEITH (J-DO)

19-20
HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS.
DTIE, 1972. 25P. MN (LA-DC-72-1090)
ALSO PUBLISHED IN:
LASER INTERACTION WITH MATTER. 1972. JAPAN-U.S. SEMINAR, KYOTO. PROC., P.53-68. JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE, 1973. (535:J35U)
BOYER, KEITH (L-DO)

19-21
HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053. 1972.
FENSTERMACHER, CHARLES A. (L-1)
STRATTON, THOMAS F. (L-1)
BOYER, KEITH (L-DO)

19-22
HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.971. 1972.
KEPHART, JOHN F. (L-4)
GODWIN, ROBERT P. (L-4)
MC CALL, GENE H. (L-4)

19-23
HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION.
J. PHYS. CHEM., V.76, P.805-10. 1972. (LA-DC-12837)*
RICE, WALTER W. (J-10)
JENSEN, REED J. (J-10)

19-24
INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1031. 1972.
KOLB, ALAN
ROSTOKER, NORMAN
WHITE, ROGER
ROBINSON, C. PAUL (L-3)
SULLIVAN, JOHN A. (L-3)
JENSEN, REED J. (L-3)

19-25
INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS.
IEEE J. QUANTUM ELECTRON., V.QE-9, P.154-7. 1973.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1054. 1972.
ROCKWOOD, STEPHEN D. (T-6)
CANAVAN, GREGORY H.
PROCTOR, W. A.

19-26
INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1000. 1972.
MUELLER, MARVIN M. (L-4)

19-27
KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.400. 1972.
LOCKETT, ANDREW M., III (T-9)

19-28
LARGE FARADAY - EFFECT OPTICAL ISOLATOR.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053. 1972.
MC LEOD, JOHN J. (L-2)
GILL, DENNIS H. (L-2)
WATT, BOB E. (L-2)

19-29
LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1052. 1972.
GILL, DENNIS H. (L-2)
HYER, RONALD C. (L-2)
MACE, PHILLIP N. (L-2)
MC CALL, GENE H. (L-4)
MC LEOD, JOHN J. (L-2)
PERRY, JOSEPH E., JR. (L-2)
WATT, BOB E. (L-2)

19-30
LASER ACTIVATION OF SOLAR CELLS.
DTIE, 1972. 11P. MN (LA-DC-72-468)
BACKUS, CHARLES E. (N-5)

19-31
LASER BEAM TRANSPORT IN FUSION REACTORS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1036. 1972.
HENDERSON, DALE B. (L-DOT)

19-32
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1035. 1972.
MASON, RODNEY J. (TD-1)
COOPER, RALPH S. (TD-1)
CLARKE, JOHN S. (TD-1)
FISHER, HENRY N. (TD-1)

19-33
LASER INDUCED DISSOCIATION OF TETRAFLUOROHYDRAZINE.
CHEM. PHYS. LETTERS, V.13, P.421-4. 1972.
LYMAN, JOHN L. (J-10)
JENSEN, REED J. (J-10)

19-34
LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA.
LASL, 1972. 19P. (LA-5086-MS)
HENDERSON, DALE B. (L-DOT)

19-35
LASER PULSE SHAPES FOR IGNITION OF DT SPHERES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1035. 1972.
CLARKE, JOHN S. (TD-1)

19-36
LASER SUPERRADIANCE.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.265. 1972.
LATHROP, KAYE D. (T-1)

19-37
LASL 51MM DISC AMPLIFIER.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1052-3. 1972.
MACE, PHILLIP N. (L-2)
HYER, RONALD C. (L-2)

19-38
MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.971. 1972.
GODWIN, ROBERT P. (L-4)
KEPHART, JOHN F. (L-4)
MC CALL, GENE H. (L-4)

19-39
MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1043. 1972.
NACHAMKIN, JACK (T-6)
MORSE, RICHARD L. (T-6)
NIELSON, CLAIR W. (P-18)

19-40
MODEL FOR THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA.
LASL, 1972. 7P. (LA-4984-MS)
MJOLSNESS, RAYMOND C. (T-9)
RUPPEL, HANS M. (T-9)

19-41
MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION.
DTIE, 1972. 9P. MN (LA-DC-72-415)
COOPER, RALPH S. (TD-1)

19-42
NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING.
IEEE J. QUANTUM ELECTRON., V.QE-8, P.917-8. 1972. (LA-DC-72-788)*
DE POORTER, GERALD L. (L-3)
BALOG, GEORGE (L-3)

19-43
NONLINEAR OPTICS CODE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053. 1972.
SUYDAM, BERGEN R. (T-6)
DICKMAN, DONALD O. (C-4)
GOLDSTEIN, JOHN C. (T-6)

19-44
NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1116. 1972.
RIVARD, WILLIAM C. (T-3)
BUTLER, THOMAS D. (T-3)
FARMER, OTIS A. (T-3)

19-45
OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1043. 1972.
MORSE, RICHARD L. (T-6)
NIELSON, CLAIR W. (P-18)

19-46
OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS.
LASL, 1972. 15P. (LA-4986-MS)
MORSE, RICHARD L. (T-6)
NIELSON, CLAIR W. (P-18)

19-47
OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS.
PHYS. REV. LETTERS, V.28, P.85-7. 1972. (LA-DC-13070)*
GODWIN, ROBERT P. (W-10)

19-48
PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY.
PHYS. REV. LETTERS, V.29, P.995-7. 1972. (LA-DC-72-755)*
KINDEL, JOSEPH M. (T-6)
OKUDA, H.
DAWSON, JOHN M.

19-49
PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA.
ABSTRACT PUBLISHED IN:
IEEE J. QUANTUM ELECTRON., V.QE-8, P.596. 1972.
FENSTERMACHER, CHARLES A. (J-18)
LELAND, WALLACE T. (J-18)
NUTTER, MURLIN J. (J-18)
RINK, JOHN P. (J-18)
BOYER, KEITH (J-DO)

19-50
PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC , SER.2, V.17, P.1054. 1972.
JUDD, O'DEAN P. (T-6)
WADA, J.

19-51
PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053. 1972.
GOLDSTEIN, JOHN C. (T-6)

19-52
RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS.
PHYS. REV. LETTERS, V.28, P.795-9. 1972. (LA-DC-13198)*
FREIDBERG, JEFFREY P. (P-18)
MITCHELL, ROBERT W. (P-18)
MORSE, RICHARD L. (P-18)
RUDSINSKI, LAWRENCE E. (C-4)

19-53
ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1044. 1972.
KINDEL, JOSEPH M. (T-6)
FORSLUND, DAVID W. (P-18)
LINDMAN, ERICK L. (J-10)

19-54
SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1044. 1972.
MC CALL, GENE H. (L-4)
GODWIN, ROBERT P. (L-4)
KEPHART, JOHN F. (L-4)

19-55
SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY.
IEEE J. QUANTUM ELECTRON., V.QE-8, P.872-6. 1972. (LA-DC-72-424)*
GREINER, NORMAN R. (L-3)

19-56
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES.
J. APPL. PHYS., V.43, P.2441. 1972. (LA-DC-13364)*
RINK, JOHN P. (J-18)

19-57
THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.1053-4. 1972.
LOCKETT, ANDREW M., III (T-6)

19-58
TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES.
LASL, 1972. 8P. (LA-5102-MS)
HENDERSON, DALE B. (L-DOT)

19-59
VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT.
LASL, 1972. 5P. (LA-4921-MS)
LIEBENBERG, DONALD H. (P-8)

20. MATHEMATICS AND COMPUTERS

20-1
ANALYZED BINARY COMPUTING.
DTIE, 1972. 4P. MN (LA-DC-72-783)
ALSO PUBLISHED IN:
IEEE TRANS. COMPUT., V.C-22, P.573-6.
1973. (LA-DC-72-783)*
METROPOLIS, NICHOLAS C. (C-DO)

20-2
APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS.
THESIS, UNIV. OF NEW MEXICO. 1972.
LASL, 1972. 126P. (LA-4950-T)
BUZBEE, BILLY L. (C-4)

20-3
ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT.
DISCRETE MATH., V.6, P.29-34. 1973.
(LA-DC-13347)*
ABSTRACT PUBLISHED IN:
NOTICES AM. MATH. SOC., V.19, P.300.
1972.
EVERETT, CORNELIUS J. (TD-6)
STEIN, PAUL R. (C-6)

20-4
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN.
BULL. AM. MATH. SOC., V.78, P.490-6.
1972. (LA-DC-20439)*
STEIN, PAUL R. (C-6)

20-5
COLLOCATION AT GAUSSIAN POINTS.
NUMERICAL ALGEBRA. 1972. 5TH GATLINBURG SYMPOSIUM, LOS ALAMOS, NM. LECTURE NOTES, P.4.1-12. LASL, 1972.
(512:N971A)
SWARTZ, BLAIR K. (C-6)

20-6
COMPARATIVE STUDIES OF SOME TESTS OF NORMALITY.
LASL, 1972. 13P. (LA-5101-MS)
LOHRDING, RONALD K. (C-5)

20-7
COMPUTER ARCHITECTURE AND VERY LARGE PROBLEMS.
JOINT COMPUTER CONFERENCE. 1972.
ATLANTIC CITY, PROC., P.45-9. AFIPS,
1972. (510:J74P V.40) (LA-DC-12679)*
ALSO PUBLISHED AS:
DTIE, 1972. 15P. MN (LA-DC-12679)
LAZARUS, ROGER B. (C-DO)

20-8
CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT.
MATER. EVALUATION, V.30, P.195-9. 1972.
(LA-DC-72-57)*
ALSO PUBLISHED AS:
DTIE, 1972. 22P. MN (LA-DC-72-57)
ABSTRACT PUBLISHED IN:
MATER. EVALUATION, V.30, P.25A. 1972.
JANNEY, DONALD H. (GMX-11)
HUNT, BOB R. (C-5)
ZEIGLER, ROYAL K. (C-5)

20-9
DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT.
PROC. IEEE, V.60, P.884-7. 1972.
(LA-DC-12840)*
ALSO PUBLISHED AS:
DTIE, 1971. 7P. MN (LA-DC-12840)
HUNT, BOB R. (C-5)

20-10
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY.
IEEE TRANS. AUTOMATIC CONTROL, V.AC-17, P.703-5. 1972. (LA-DC-12699)*
ALSO PUBLISHED AS:
DTIE, 1972. 21P. MN (LA-DC-12699)
HUNT, BOB R. (C-5)

20-11
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II.
COMMUN. ASSOC. COMPUT. MACH., V.15, P.867-72. 1972. (LA-DC-12097)*
MORRIS, JAMES B. (C-7)

20-12
DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY.
CIRCUITS AND SYSTEMS. 1971. 5TH CONFERENCE, PACIFIC GROVE, CA. PAPERS, P.26-30. WESTERN PERIODICALS, 1972.
(621.3:C578S 5TH)
STUTZ, ROGER A. (TD-3)

20-13
DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES.
J. AM. STATIST. ASSOC., V.67, P.698-701. 1972. (LA-DC-11028)*
ABSTRACT PUBLISHED IN:
ANN. MATH. STATISTICS, V.41, P.1134.
1970.
GOLDMAN, AARON S. (C-5)
ZEIGLER, ROYAL K. (C-5)

20-14
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION.
SIAM J. APPL. MATH., V.22, P.503-13. 1972. (LA-DC-12009)*
HAYES, JOHN K. (T-5)
KELLNER, RICHARD G. (C-6)

20-15
ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM.
NUMERISCHE MATH., V.19, P.195-205. 1972. (LA-DC-12521)*
BEYER, WILLIAM A. (T-DOT)
WATERMAN, MICHAEL S.

20-16
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION.
J. APPROXIMATION THEORY, V.6, P.6-49. 1972. (LA-DC-11694)*
SWARTZ, BLAIR K. (C-6)
VARGA, RICHARD (C-DO)

20-17
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS.
TECHNOMETRICS, V.14, P.583-97. 1972.
TIETJEN, GARY L. (C-5)
MOORE, ROGER H. (C-5)

20-18
FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS.
NUCL. INSTR. METHODS, V.98, P.541-7. 1972.
MARTIN, E. RAY (MP-3)
JONES, DAVID F. (MP-3)

20-19
FOCAL LSL PROGRAMMING MANUAL.
LASL, 1972. 41P. (LA-4983-MS)
EAST, LARRY V. (A-1)

20-20
GENRD: A FREE FORMAT CARD INPUT PROCESSOR.
LASL, 1972. 9P. (LA-4793)
COX, CLARICE W. (T-1)

20-21
GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION.
LASL, 1972. 4P. (LA-4992)
AAMODT, R. LEE (J-DO)

20-22
GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS.
LASL, 1972. 11P. (LA-4864)
AXFORD, ROY A. (TD-4)

20-23
IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION.
DTIE, 1972. 8P. MN (LA-DC-72-626)
HUNT, BOB R. (C-5)

20-24
IMPROVED METHOD FOR NUMERICAL CONFORMAL MAPPING.
MATH. COMPUTAT., V.26, P.327-34. 1972. (LA-DC-12489)*
HAYES, JOHN K. (TD-5)
KAHANER, DAVID K. (C-6)
KELLNER, RICHARD G. (C-6)

20-25
LASL COMPUTER NETWORK.
LASL, 1972. 5P. (LA-5103-MS)
CHRISTMAN, RONALD D. (C-2)

20-26
LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES.
APPLICATIONS OF NUMBER THEORY TO NUMERICAL ANALYSIS, S. K. ZAREMBA, ED. P.361-70. ACADEMIC, 1972. (LA-DC-13217)*
BEYER, WILLIAM A. (T-DOT)

20-27
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE.
J. COMBINATORIAL THEORY, V.13, P.176-82. 1972. (LA-DC-11071)*
BEYER, WILLIAM A. (T-8)
WELLS, MARK B. (C-7)

20-28
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/PDP-15 COMPUTER.
LASL, 1972. 17P. (LA-5118-MS)
EAST, LARRY V. (A-1)
AEBERSOLD, PAUL M. (A-1)

20-29
MCN: A NEUTRON MONTE CARLO CODE.
LASL, 1972. 32P. (LA-4751)
CASHWELL, EDMOND D. (TD-6)
NEERGAARD, JAMES R. (C-7)
TAYLOR, WILLIAM M. (TD-6)
TURNER, G. DAVID (TD-6)

20-30
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES.
DTIE, 1972. 14P. MN (LA-DC-72-410)
MORRIS, JAMES B. (C-7)

20-31
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER.
LASL, 1972. 12P. (LA-4916-MS)
BISWELL, LAVON R. (MP-1)
RAJALA, ROBERT E. (MP-4)

20-32
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES.
IEEE TRANS. COMPUT., V.21, P.1219-22. 1972. (LA-DC-12994)*
HUNT, BOB R. (C-5)

20-33
MINIMUM NORM DIFFERENTIATION FORMULAS.
MATH. COMPUTAT., V.26, P.477-85. 1972.
(LA-DC-11516)*
ABSTRACT PUBLISHED IN:
NOTICES AM. MATH. SOC., V.18, P.234.
1971.
KAHANER, DAVID K. (C-6)

20-34
MODULAR SIMULATION APPROACH TO SYSTEM TESTING.
DTIE, 1972. 7P. MN (LA-DC-72-252)
COLLINS, MAURICE W. (C-2)
HARDER, DUANE G. (C-4)
JONES, RONALD C. (C-4)

20-35
MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM.
DTIE, 1972. 45P. MN (LA-DC-72-1078)
WATSON, CLAYTON W. (N-2)
CASHWELL, EDMOND D. (TD-6)

20-36
MONTE CARLO SAMPLER.
LASL, 1972. 47P. (LA-5061-MS)
EVERETT, CORNELIUS J. (TD-6)
CASHWELL, EDMOND D. (TD-6)

20-37
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS.
NUCL. SCI. ENG., V.48, P.403-11. 1972.
(LA-DC-12081)*
CARTER, LELAND L. (T-8)
CASHWELL, EDMOND D. (T-8)
TAYLOR, WILLIAM M. (T-2)

20-38
MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR.
LASL, 1972. 32P. (LA-4948)
MORRIS, ROGER A. (M-1)
DALTON, LARRY J. (M-1)

20-39
MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING.
J. ACM, V.5, P.319-29. 1972.
(LA-DC-11432)*
CHRISTMAN, RONALD D. (C-2)

20-40
NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH.
LASL, 1972. 14P. (LA-4934)
BIVINS, ROBERT L. (C-7)
METROPOLIS, NICHOLAS C. (C-DO)
PASTA, JOHN R. (C-7)

20-41
NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM.
ABSTRACT PUBLISHED IN:
NOTICES AM. MATH. SOC., V.19, P.A232.
1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.689. 1972.
KAHANER, DAVID K. (C-6)

20-42
NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM.
MATH. COMPUTAT., V.26, P.689-93. 1972.
(LA-DC-12844)*
KAHANER, DAVID K. (C-6)

20-43
ON COMPLETELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY.
J. COMBINATORIAL THEORY, V.13,
P.367-73. 1972. (LA-DC-11026)*
ABSTRACT PUBLISHED IN:
NOTICES AM. MATH. SOC., V.17, P.277.
1970.
EVERETT, CORNELIUS J. (T-8)
METROPOLIS, NICHOLAS C. (C-DO)

20-44
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS.
LASL, 1972. 5P. (LA-5029)
EVERETT, CORNELIUS J. (TD-6)
BEYER, WILLIAM A. (T-DOT)

20-45
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*.
J. MATH. PHYS., V.13, P.1957-84. 1972.
(LA-DC-72-496)*
BIEDENHARN, LAWRENCE C. (T-9)
LOUCK, JAMES D. (T-2)
CHACON, E.
CIFTAN, M.

20-46
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE.
J. MATH. PHYS., V.13, P.1985-2001.
1972. (LA-DC-72-471)*
BIEDENHARN, LAWRENCE C. (T-9)
LOUCK, JAMES D. (T-9)

20-47
PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES.
THESIS, UNIV. OF NEW MEXICO. 1972.
LASL, 1972. 89P. (LA-5020-T)
CLARK, JAMES L. (T-6)

20-48
PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM.
LASL, 1972. 9P. (LA-4915)
MORRIS, ROGER A. (GMX-1)
FORD, RICHARD M. (GMX-1)

20-49
POWERFUL GOODNESS OF FIT TEST.
ABSTRACT PUBLISHED IN:
BIOMETRICS, V.28, P.909. 1972.
LOHRDING, RONALD K. (C-5)

20-50
PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.572-3. 1972.
WEISBIN, CHARLES R. (T-2)
HARRIS, DONALD R., JR. (T-2)
BATTAT, MORRIS E. (T-2)
LA BAUVE, RAPHAEL J. (T-2)
TAYLOR, WILLIAM M. (TD-6)
TURNER, G. DAVID (TD-6)
SEAMON, ROBERT E. (T-2)

20-51
PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11.
LASL, 1972. 14P. (LA-5028-MS)
BEVINGTON, PHILIP R. (MP-7)

20-52
REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER.
LASL, 1972. 5P. (LA-4975-MS)
EAST, LARRY V. (A-1)
STEPHENS, MELVIN M. (A-1)

20-53
REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES.
TWO-DIMENSIONAL MAN-MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROC., P.1-10. ACM, 1972. (510.7:T974D)
ALSO PUBLISHED AS:
DTIE, 1972. 10P. MN (LA-DC-72-984)
WELLS, MARK B. (C-7)

20-54
SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER.
LASL, 1972. 13P. (LA-4873)
MORRIS, ROGER A. (GMX-1)
DALTON, LARRY J. (GMX-1)

20-55
SOME IDEAS AND PROSPECTS IN MATHEMATICS.
ANN. REV. BIOPHYS. ENG., V.1, P.277-92. 1972.
ULAM, STANISLAW M. (RASU)

20-56
SPECIFICATION OF PROGRAM FLOW IN MADCAP VI.
DTIE, 1972. 32P. MN (LA-DC-72-141)
MORRIS, JAMES B. (C-7)
WELLS, MARK B. (C-7)

20-57
SPECIFICATIONS FOR CAMAC SUBROUTINES.
LASL, 1972. 10P. (LA-5059-MS)
THOMAS, RICHARD F., JR. (MP-1)

20-58
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM.
ADVAN. MATH., V.9, P.399-407. 1972. (LA-DC-72-892)*
TUCK, JAMES L. (P-DO)
MENZEL, MARY T. (T-9)

20-59
SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE.
ABSTRACT PUB ISHED IN:
MATER. EVALUATION, V.30, P.25-6A. 1972.
HUNT, BOB R. (C-5)
JANNEY, DONALD H. (GMX-11)
ZEIGLER, ROYAL K. (C-5)

20-60
SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE.
MATER. EVALUATION, V.31, P.1-5. 1973.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.686. 1972.
HUNT, BOB R. (C-5)
JANNEY, DONALD H. (GMX-11)
ZEIGLER, ROYAL K. (C-5)

20-61
SYNERGY AND ARTIFICIAL INTELLIGENCE.
LASL, 1972. 31P. (LA-4879)
CONANT, DONALD R., JR. (CNC-2)

20-62
TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES.
J. AM. STATIST. ASSOC., V.67, P.581-3. 1972. (LA-DC-72-40)*
TIETJEN, GARY L. (C-5)
BECKMAN, RICHARD J. (C-5)

20-63
TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE.
DTIE, 1972. 10P. MN (LA-DC-72-411)
ALSO PUBLISHED IN:
TWO-DIMENSIONAL MAN-MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROC., P.130-6. ACM, 1972. (510.7:T974D)
DEVANEY, MARJORIE A. (C-7)
HUDGINS, H. JEANNE (C-7)

20-64
THEOREM ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION.
IEEE TRANS. AUDIO ELECTROACOUSTICS, V.AU-20, P.94-5. 1972. (LA-DC-12915)*
HUNT, BOB R. (C-5)

20-65
THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES.
DTIE, 1972. 16P. MN (LA-DC-72-389)
ALSO PUBLISHED IN:
J. STATIST. COMPUT. SIMUL., V.2, P.139-48. 1973. (LA-DC-72-389)*
LOHRDING, RONALD K. (C-5)

20-66
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS.
J. COMPUTAT. PHYS., V.10, P.420-31. 1972. (LA-DC-13255)*
BARFIELD, W. DAVID (T-4)

20-67
TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING.
USA-JAPAN COMPUTER. 1972. 1ST CONFERENCE, TOKYO. PROC., P.683-89. AFIPS, 1972. (510.7:U84J)
METROPOLIS, NICHOLAS C. (C-DO)
WORLTON, WILLIAM J. (C-DO)

20-68
TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING.
DTIE, 1972. 30P. MN (LA-DC-72-243)
METROPOLIS, NICHOLAS C. (C-DO)
WORLTON, WILLIAM J. (C-DO)

20-69
TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS.
ACM, 1972. 160P. (510.7:T974D)
WELLS, MARK B. (C-7) ED.
MORRIS, JAMES B. (C-7) ED.

20-70
TWO DIMENSIONAL PROGRAMMING LANGUAGE.
DTIE, 1972. 19P. MN (LA-DC-72-331)
WELLS, MARK B. (C-7)

20-71
TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D.
LASL, 1972. 6P. (LA-4891-MS)
JAMESON, ROBERT A. (MP-9)
MILLS, RENE S. (MP-2)

20-72
UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI.
INTERN. J. COMPUTER INFORM. SCI., V.1, P.193-208. 1972. (LA-DC-13302)*
WELLS, MARK B. (C-7)
MORRIS, JAMES B. (C-7)

20-73
USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS.
LASL, 1972. 11P. (LA-5073-MS)
MARTIN, E. RAY (MP-3)
JONES, DAVID F. (MP-3)

20-74
YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER.
DTIE, 1972. 8P. (LA-DC-12854)
EAST, LARRY V. (A-1)

21. MEDIUM ENERGY PHYSICS

21-1
3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS.
LASL, 1972. 1P. (LA-5077-MS)
CHRISTIAN, RICHARD
VOGEL, HERBERT F. (MP-7)

21-2
ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.209-17. LASL, 1972. (LA-5115)
COLSTON, ELBERT W. (MP-8)
HART, VALGENE E. (MP-8)

21-3
ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.368. 1972.
SCHILLACI, MARIO E. (MP-3)

21-4
AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.422-6. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 6P. MN (LA-DC-72-1289)
STOVALL, JAMES E. (MP-9)

21-5
BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF.
LASL, 1972. 34P. (LA-4961-MS)
STEVENS, RALPH R., JR. (MP-9)
PALERMO, STEPHEN D. (MP-7)
PACIOTTI, MICHAEL A. (MP-3)
MUELLER, DONALD W. (MP-9)
MILLS, RENE S. (MP-2)
MEYER, EARL A. (MP-9)
KOHL, DONALD K. (MP-9)
GOPLEN, BRUCE C. (MP-9)

21-6
BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.73-9. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 8P. MN (LA-DC-72-1309)
STEVENS, RALPH R., JR. (MP-9)
GOPLEN, BRUCE C. (MP-9)
STOVALL, JAMES E. (MP-9)

21-7
BIOMEDICAL APPLICATIONS: BEAM LINE AND FACILITY.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.78. LASL, 1972. (LA-4874-MS)
HUTSON, RICHARD L. (MP-7)

21-8
BIOMEDICAL PROGRAM.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.79-83. LASL, 1972. (LA-4874-MS)
KLIGERMAN, MORTON M. (***)

21-9
CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.242-55. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 9P. MN (LA-DC-72-1288)
SWAIN, GEORGE R. (MP-9)
JAMESON, ROBERT A. (MP-9)
KANDARIAN, ROBERT (MP-8)
LISKA, DONALD J. (MP-9)
MARTIN, E. RAY (MP-3)
POTTER, JAMES M. (MP-3)

21-10
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.430-32. LASL, 1972. (LA-5115)
VOGEL, HERBERT F. (MP-7)
ROSENTHAL, JEROME J. (CMB-6)

21-11
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION.
EDN, V.17, NO.22, P.47. NOV.15, 1972.
DOSS, JAMES D. (MP-3)
MC CABE, CHARLES W. (MP-3)

21-12
COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT.
LASL, 1972. 3P. (LA-5075-MS)
VOGEL, HERBERT F. (MP-7)
LARI, R. J.

21-13
COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER.
LASL, 1972. 9P. (LA-5092-MS)
EGGER, J. P. (MP-7)
THIESSEN, HENRY A. (MP-7)

21-14
COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.343-8. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 6P. MN (LA-DC-72-1301)
DE HAVEN, RUSSELL A. (MP-8)

21-15
COMPUTING FACILITIES.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.86-9. LASL, 1972. (LA-4874-MS)
BUTLER, HAROLD S. (MP-1)

21-16
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.318-25. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 9P. MN (LA-DC-72-1310)
BUSH, EDGAR D., JR. (MP-8)
RHORER, RICHARD L. (MP-7)

21-17
DELTA T TURN-ON PROCEDURE.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.122-5. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 4P. MN (LA-DC-72-1253)
CRANDALL, KENNETH R. (MP-9)
JAMESON, ROBERT A. (MP-9)
MORRIS, DUARD I. (MP-9)
SWENSON, DONALD A. (MP-9)

21-18
DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING).
LASL, 1972. 53P. (LA-4946)
FULLWOOD, RALPH R. (P-3) COMP.

21-19
ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS.
LASL, 1972. 38P. (LA-5076-MS)
VOGEL, HERBERT F. (MP-7)

21-20
ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS).
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.51-4. LASL, 1972. (LA-4874-MS)
THIESSEN, HENRY A. (MP-7)

21-21
EXPERIMENTS PROPOSED FOR LAMPF.
PLANNING FOR THE FUTURE: ZERO GRADIENT SYNCHROTRON WORKSHOPS. 1971. ARGONNE, IL. PROC., V.1, P.202-12. ANL, 1972. (ANL/HEP-7208 V.1)
BURMAN, ROBERT L. (MP-7)

21-22
HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF.
HIGH ENERGY PHYSICS AND NUCLEAR STRUCTURE. 1971. 4TH INTERNATIONAL CONFERENCE, DUBNA. PROC., P.624-31. JOINT INSTITUTE FOR NUCLEAR RESEARCH, 1972. (539:H638E 4TH)
IGO, GEORGE J.
TANAKA, NOBUYUKI (MP-7)
THIESSEN, HENRY A. (MP-7)

21-23
HIGH RESOLUTION PROTON SPECTROMETER (HRS).
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.67-71. LASL, 1972. (LA-4874-MS)
SPENCER, JAMES E. (MP-7)

21-24
INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.358-64. LASL, 1972. (LA-5115)
HART, VALGENE E. (MP-8)
COLSTON, ELBERT W. (MP-8)

21-25
LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS.
DTIE, 1971. 2P. MN (LA-DC-12995)
ALSO PUBLISHED IN:
FUSION REACTOR TECHNOLOGY. 1971. INTERNATIONAL WORKING SESSIONS, OAK RIDGE, TN. PROC., P.201-2. ORNL, 1972. (CONF-710624)
GREEN, WALTER V. (CMB-13)
DUDZIAK, DONALD J. (T-1)
ZUKAS, EUGENE G. (CMB-13)

21-26
LAMPF KLYSTRON REPAIR FACILITY.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.427-9. LASL, 1972. (LA-5115)
TALLERICO, PAUL J. (MP-8)

21-27
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS.
LASL, 1972. 166P. (LA-4874-MS)
AGNEW, LEWIS E., JR. (MP-7) COMP.
HOWARD, HILLARD H. (MP-DO) COMP.
MILLER, BILLIE F. (MP-DO) COMP.

21-28
LOS ALAMOS MESON PHYSICS FACILITY (LAMPF).
INTERMEDIATE ENERGY NUCLEAR PHYSICS. 1970. SUMMER SCHOOL, BANFF. PROC., P.284-93. UNIV. OF ALBERTA, 1972. (539:I61EN)
NAGLE, DARRAGH E. (MP-DO)

21-29
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY).
TRUDY VTOROGO VSESOIUZNOGO SOVESHCHANIIA PO USKORITELIAM ZARIAZHENNYKH CHASTITS. 1970. MOSCOW, VOL.2, P.139-50. IZDATEL'STVO NAUKA, 1972. (539: V985S 2ND V.2)
KNAPP, EDWARD A. (MP-3)

21-30
LOW ENERGY PION CHANNEL.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.48-50. LASL, 1972. (LA-4874-MS)
BURMAN, ROBERT L. (MP-7)

21-31
MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET.
LASL, 1972. 11P. (LA-5084-MS)
DUNWOODY, WADE E. (MP-7)
ROLFE, R.
SPENCER, JAMES E. (MP-7)
STEARNS, ROBERT L.
TANAKA, NOBUYUKI (MP-7)
THOMASON, MICHAEL

21-32
MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS.
PHYS. REV. LETTERS, V.28, P.1472-5. 1972.
ANKENBRANDT, C.
LARSEN, R.
LEIPUNER, L.
SMITH, L.
SHIVELY, FRANK T. (MP-6)
STEFANSKI, R.
ADAIR, R.
KASHA, H.
MERLAN, S.
TURNER, R.
WANDERER, P.

21-33
MESON FACTORY AS A NEUTRON IRRADIATION FACILITY.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.240-1. 1972.
DUDZIAK, DONALD J. (T-1)
GREEN, WALTER V. (CMB-13)
REGENIE, THOMAS R. (ENG-6)
ZUKAS, EUGENE G. (CMB-13)

21-34
NEUTRINO FACILITY.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, PROC., P.84-5. LASL, 1972. (LA-4874-MS)
BURMAN, ROBERT L. (MP-7)

21-35
NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS.
LASL, 1972. 27P. (LA-4789)
FULLWOOD, RALPH R. (W-8)
CRAMER, JAMES D. (W-8)
HAARMAN, ROY A. (ENG-7)
FORREST, ROBERT P., JR. (ENG-7)
SCHRANDT, ROBERT G. (TD-6)

21-36
NUCLEAR CHEMISTRY FACILITIES.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.72-7. LASL, 1972. (LA-4874-MS)
DROPESKY, BRUCE J. (CNC-11)

21-37
NUCLEON PHYSICS LABORATORY (NPL).
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.63-6. LASL, 1972. (LA-4874-MS)
HWANG, CHESTER F. (MP-7)

21-38
OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.378-86. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 9P. MN (LA-DC-72-1267)
MUELLER, DONALD W. (MP-9)
MEYER, EARL A. (MP-9)
STEVENS, RALPH R., JR. (MP-9)
GOPLEN, BRUCE C. (MP-9)
PACIOTTI, MICHAEL A. (MP-3)
EMIGH, C. ROBERT (P-DOR)

21-39
ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY.
LASL, 1972. 68P. (LA-5000)
LIVINGSTON, M. STANLEY (MP-DO)

21-40
PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM.
DTIE, 1972. 11P. MN (LA-DC-72-1132)
BUTLER, HAROLD S. (MP-1)

21-41
PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS.
LASL, 1972. 3P. (LA-5112-MS)
VOGEL, HERBERT F. (MP-7)

21-42
PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES.
PHYS. REV., V.D5, P.177-88. 1972. (LA-DC-13106)*
FEARING, HAROLD W. (T-5)
PRATAP, MAHENDRA
SMITH, JACK

21-43
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY.
LASL, 1972. 16P. (LA-4931-MS)
RAJU, MUDUNDI R. (H-4)

21-44
PION AND PARTICLE PHYSICS (P3).
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.55-8. LASL, 1972. (LA-4874-MS)
MACEK, ROBERT J. (MP-7)

21-45
PION BEAMS AT LAMPF.
DTIE, 1972. 17P. MN (LA-DC-72-881)
BURMAN, ROBERT L. (MP-7)

21-46
PRACTICAL APPLICATIONS AT LAMPF.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.682. 1972.
KNAPP, EDWARD A. (MP-3)

21-47
PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI.
PHYS. REV., V.D6, P.3085-116. 1972.
(LA-DC-72-133)*
COCHRAN, DONALD R. F. (MP-6)
DEAN, PHILLIP N. (H-4)
GRAM, PETER A. M. (MP-6)
KNAPP, EDWARD A. (MP-3)
MARTIN, E. RAY (MP-3)
NAGLE, DARRAGH E. (MP-DO)
PERKINS, ROGER B. (P-DO)
SHLAER, WILLIAM J. (MP-3)
THIESSEN, HENRY A. (MP-7)
THERIOT, EDWARD D., JR. (MP-7)

21-48
PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE.
LASL, 1972. 22P. (LA-5079-MS)
EISENSTEIN, R. A.
BARNES, PETER D.
THIESSEN, HENRY A. (MP-7)

21-49
PROPOSED FAST ELECTRONICS FOR EPICS.
LASL, 1972. 8P. (LA-5070-MS)
THIESSEN, HENRY A. (MP-7)

21-50
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS.
LASL, 1972. 436P. (LA-5115)
HARPER, KATHERINE H. (MP-DO) ED.

21-51
QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972.
LASL, 1972. 50P. (LA-4982-PR)
DUNN, ELEANOR D. (MP-DO) COMP.

21-52
QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972.
LASL, 1972. 45P. (LA-5018-PR)
DUNN, ELEANOR D. (MP-DO) COMP.

21-53
QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972.
LASL, 1972. 46P. (LA-4899-PR)
DUNN, ELEANOR D. (MP-DO) COMP.

21-54
RELEVANCE OF LINACS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.2-3. LASL, 1972. (LA-5115)
ROSEN, LOUIS (MP-DO)

21-55
RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF.
DTIE, 1972. 20P. MN (LA-DC-72-1070)
SIMMONS, JAMES E. (P-DOR)

21-56
RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.403-6. LASL, 1972. (LA-5115)
SCHNEIDER, EDWARD J. (MP-8)

21-57
RMS EMITTANCE AND THE LAMPF BEAM.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.80-1. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 2P. MN (LA-DC-72-1442)
MUELLER, DONALD W. (MP-9)

21-58
SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.415-21. LASL, 1972. (LA-5115)
SPENCER, JAMES E. (MP-7)
THIESSEN, HENRY A. (MP-7)

21-59
SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS.
PHYS. REV., V.D5, P.158-77. 1972.
(LA-DC-13107)*
FEARING, HAROLD W. (T-5)
PRATAP, MAHENDRA
SMITH, JACK

21-60
STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.182-90. LASL, 1972. (LA-5115)
EMIGH, C. ROBERT (P-DOR)

21-61
STATUS AND PERFORMANCE OF LAMPF.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.4-11. LASL, 1972. (LA-5115)
NAGLE, DARRAGH E. (MP-DO)

21-62
STATUS OF LAMPF.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.16-20. LASL, 1972. (LA-4874-MS)
ROSEN, LOUIS (MP-DO)

21-63
STATUS OF LOS ALAMOS MESON PHYSICS FACILITY.
DTIE, 1971. 26P. MN (LA-DC-13019)
ALSO PUBLISHED IN:
HIGH ENERGY PHYSICS AND NUCLEAR STRUCTURE. 1971. 4TH INTERNATIONAL CONFERENCE, DUBNA. PROC., P.589-614. JOINT INSTITUTE FOR NUCLEAR RESEARCH, 1972. (539: H638E 4TH)
ROSEN, LOUIS (MP-DO)

21-64
STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.303-9. LASL, 1972. (LA-5115)
ALSO PUBLISHED AS:
DTIE, 1973. 20P. MN (LA-DC-72-1438)
ALLISON, PAUL W. (MP-9)
MUELLER, DONALD W. (MP-9)
MEYER, EARL A. (MP-9)
STEVENS, RALPH R., JR. (MP-9)

21-65
STATUS REPORT ON LAMPF RESEARCH PROPOSALS.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.45-7. LASL, 1972. (LA-4874-MS)
ROSEN, LOUIS (MP-DO)

21-66
STOPPED MUON CHANNEL.
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROC., P.59-62. LASL, 1972. (LA-4874-MS)
THOMPSON, PATRICK A. (MP-7)

21-67
TRANSITION REGION.
LASL, 1972. 17P. (LA-5049-MS)
SWENSON, DONALD A. (MP-9)

21-68
TRANSVERSE BEAM MATCHING USING WIRE SCANNERS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.51-53. LASL, 1972. (LA-5115)
CRANDALL, KENNETH R. (MP-9)

21-69
USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970.
LASL, 1972. 34P. (LA-4587-MS)
ROSEN, LOUIS (MP-DO)
SCHILLACI, MARIO E. (MP-3)
DROPESKY, BRUCE J. (CNC-11)
O'BRIEN, HAROLD A., JR. (CNC-11)

22. METALLURGY AND CERAMICS TECHNOLOGY

22-1
ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS.
J. GEOPHYS. RES., V.77, P.382-4. 1972.
SCHOCK, R. N.
OLINGER, BARTON W. (GMX-11)
DUBA, AL

22-2
APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON.
FILED 1970, PATENTED JAN. 25, 1972.
(U. S. PATENT 3,636,923)
MC CREARY, WILLIAM J. (CMB-8)
COURT, DONALD B. (CMB-7)

22-3
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971.
LASL, 1972. 21P. (LA-4896-PR)
SMITH, MORTON C. (CMB-13)

22-4
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971.
LASL, 1972. 11P. (LA-4917-PR)
SMITH, MORTON C. (CMB-13)

22-5
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972.
LASL, 1972. 9P. (LA-5062-PR)
SMITH, MORTON C. (CMB-13)

22-6
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972.
LASL, 1972. 12P. (LA-5123-PR)
SMITH, MORTON C. (CMB-13)

22-7
DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL.
LASL, 1972. 8P. (LA-4976-MS)
KEENAN, THOMAS K. (CMB-11)
KENT, RICHARD A. (CMB-11)
MULFORD, ROBERT N. R. (CMB-5)

22-8
DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.685. 1972.
SHUPE, MELVIN W. (CMB-11)
KENT, RICHARD A. (CMB-11)
TOKAR, MICHAEL, JR. (CMB-11)
ZOCHER, ROY W. (CMB-11)
KEENAN, THOMAS K. (CMB-11)

22-9
EFFECT OF MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE MATERIALS.
INTERNATIONAL MICROSTRUCTURAL ANALYSIS SOCIETY. 1971. 4TH ANNUAL TECHNICAL MEETING, DENVER. PROC., P.273. IMAS, 1972. (669:161MI 4TH) (LA-DC-12002)*
BILEY, ROBERT E. (CMB-6)

22-10
EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT.
METALLOGRAPHIC REV., V.1, P.32-6. 1972.
LUNDBERG, LYNN B. (CMB-5)
JOHNSON, KAYE ALLAN (CMB-11)

22-11
ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM.
J. NUCL. MATER., V.45, P.211-6. 1972.
(LA-DC-12470)*
ARMSTRONG, PHILIP E. (CMB-13)
EASH, DAVID T. (CMB-13)
HOCKETT, JOHN E., JR. (CMB-13)

22-12
EVALUATION OF URANIUM ALLOYS.
LASL, 1972. 19P. (LA-5002)
ERICKSON, WILLIAM C. (CMB-6)
JAYNES, GEORGE E., JR. (CMB-6)
SANDSTROM, DONALD J. (CMB-6)
SEEGMILLER, ROBERT S. (CMB-6)
TAUB, JAMES M. (CMB-6)

22-13
EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE.
ACTA MECH., V.13, P.69-86. 1972.
HECKER, SIEGFRIED S. (CMF-5)

22-14
FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS.
LASL, 1972. 6P. (LA-4862)
EATON, EDWIN E. (CMB-6)
EHART, EDWIN P. (CMB-6)
KELLY, DANIEL J. (CMB-1)

22-15
HELIUM INJECTION BY THE TRITIUM TRICK.
DTIE, 1971. 2P. MN (LA-DC-12996)
ALSO PUBLISHED IN:
FUSION REACTOR TECHNOLOGY. 1971. INTERNATIONAL WORKING SESSIONS, OAK RIDGE, TN. PROC., P.199-200. ORNL, 1972. (CONF-710624)
GREEN, WALTER V. (CMB-13)
ZUKAS, EUGENE G. (CMB-13)
EASH, DAVID T. (CMB-13)

22-16
HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.686. 1972.
MUELLER, BARBARA A. (CMB-5)
MULFORD, ROBERT N. R. (CMB-5)

22-17
HIGH TEMPERATURE CREEP OF A POCO GRAPHITE.
CARBON, V.10, P.519-24. 1972. (LA-DC-12292)*
ZUKAS, EUGENE G. (CMB-13)
GREEN, WALTER V. (CMB-13)

22-18
HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET.
LASL, 1972. 3P. (LA-4856-MS)
KEDDY, EDWARD S. (N-5)

22-19
HOT HARDNESS TESTING OF URANIUM - PLUTONIUM CERAMICS.
DTIE, 1972. 15P. MN (LA-DC-72-187)
TOKAR, MICHAEL, JR. (CMB-11)
GREEN, JERE L. (CMB-11)

22-20
HOT HARDNESS TESTING OF URANIUM - PLUTONIUM CERAMICS.
LASL, 1972. 5P. (LA-4887)
TOKAR, MICHAEL, JR. (CMB-11)
GREEN, JERE L. (CMB-11)

22-21
HOT PRESSING OF PLUTONIUM -238 OXIDE.
ABSTRACT PUBLISHED IN:
BULL. AM. CERAM. SOC., V.51, P.393. 1972.
NUTT, ALFRED W., JR. (W-7)

22-22
IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES.
DTIE, 1972. 12P. MN (LA-DC-72-546)
ALSO PUBLISHED IN:
REMOTE SYSTEMS TECHNOLOGY. 1972. 20TH CONFERENCE, IDAHO FALLS. PROC., P.143-7. ANS, 1972. (626:H832C 20TH)
(LA-DC-72-546)*
JEFFRIES, DORVAL D. (CMB-14)
BENDER, JOHN H., JR. (CMB-11)
JOHNSON, KAYE ALLAN (CMB-11)

22-23
IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA.
J. VACUUM SCI. TECH., V.9, P.1027-32. 1972. (LA-DC-12975)*
ELLIS, WALTON P. (CMB-8)

22-24
INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE.
DTIE, 1972. 13P. MN (LA-DC-13292)
ABSTRACT PUBLISHED IN:
BULL. AM. CERAM. SOC., V.51, P.422. 1972.
ZUKAS, EUGENE G. (CMB-13)
GREEN, WALTER V. (CMB-13)
ARMSTRONG, PHILIP E. (CMB-13)
O'ROURKE, JOHN A. (CMB-13)

22-25
LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY.
REV. SCI. INSTR., V.43, P.530-5. 1972. (LA-DC-13044)*
TESTER, JEFFERSON W. (CMB-13)
HERRICK, CLAUDE C. (CMB-13)
REID, R. C.

22-26
NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN.
J. ELECTROCHEM. SOC., V.119, P.1596-1602. 1972. (LA-DC-11286)*
ABSTRACT PUBLISHED IN:
J. ELECTROCHEM. SOC., V.117, P.254C. 1970.
BENZ, ROBERT (CMB-3)

22-27
PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES.
MTP INTERNATIONAL REVIEW OF SCIENCE, V.10, SOLID STATE CHEMISTRY, L. E. J. ROBERTS, ED. CHAP.2, P.37-78. BUTTERWORTHS, 1972. (546:R645S)
STORMS, EDMUND K. (CMB-3)

22-28
PLUTONIUM - SCANDIUM SYSTEM.
LASL, 1972. 6P. (LA-5055)
ELLINGER, FINLEY H. (CMB-5)
JOHNSON, KAYE ALLAN (CMB-11)
LAND, CLETIS C. (CMB-5)

22-29
POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY.
FILED 1969, PATENTED FEB. 22, 1972. (U. S. PATENT 3,644,221)
WAGNER, PAUL (CMF-13)
DICKINSON, JAMES M. (CMF-13)
SMITH, MORTON C. (CMF-13)

22-30
POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE.
J. AM. CERAM. SOC., V.55, P.214-9. 1972. (LA-DC-11667)*
ABSTRACT PUBLISHED IN:
BULL. AM. CERAM. SOC., V.49, P.829. 1970.
WAGNER, PAUL (CMF-13)
O'ROURKE, JOHN A. (CMF-13)
ARMSTRONG, PHILIP E. (CMF-13)

22-31
PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.164, PAPER NO.NUCL-021. 1972.
TINKLE, MARVIN C. (CMB-8)
OLSEN, CLAYTON E. (CMB-13)

22-32
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS.
FILED 1970, PATENTED MAY 30, 1972.
(U. S. PATENT 3,666,845)
DAVIDSON, KEITH V. (CMB-6)
SCHELL, DONALD H. (CMB-6)

22-33
RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972.
LASL, 1972. 7P. (LA-5125-PR)
IMPRESCIA, RICHARD J. (CMB-13)
SMITH, MORTON C. (CMB-13)

22-34
RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.686-7. 1972.
KENT, RICHARD A. (CMB-11)
SHUPE, MELVIN W. (CMB-11)
ZOCHER, ROY W. (CMB-11)
KEENAN, THOMAS K. (CMB-11)

22-35
SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES.
INTERNATIONAL MICROSTRUCTURAL ANALYSIS SOCIETY. 1971. 4TH ANNUAL TECHNICAL MEETING, DENVER. PROC., P.27-30. IMAS, 1972. (669:I61MI 4TH)
BENDER, JOHN H., JR. (CMB-11)

22-36
SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES.
DTIE, 1972. 5P. MN (LA-DC-72-230)
BENDER, JOHN H., JR. (CMB-11)

22-37
SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES.
LASL, 1972. 14P. (LA-4981-MS)
EASH, DAVID T. (CMB-13)
ZUKAS, EUGENE G. (CMB-13)
GREEN, WALTER V. (CMB-13)

22-38
THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE.
ABSTRACT PUBLISHED IN:
THERMAL CONDUCTIVITY. 1972. 12TH INTERNATIONAL CONFERENCE, BIRMINGHAM, AL. PROGRAM AND ABSTRACTS, P.109-110. SOUTHERN RESEARCH INSTITUTE, 1972. (536:C748 12TH)
STORMS, EDMUND K. (CMB-3)
WAGNER, PAUL (N-7)

22-39
THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION.
J. APPL. PHYS., V.43, P.112-7. 1972.
(LA-DC-12383)*
KERRISK, JERRY F. (CMB-11)

22-40
THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.210-1. 1972.
TOKAR, MICHAEL, JR. (CMB-11)
NUTT, ALFRED W., JR. (W-7)

22-41
THERMAL EXPANSION OF PLUTONIUM DIOXIDE.
LASL, 1972. 4P. (LA-4945)
NUTT, ALFRED W., JR. (W-7)
TOKAR, MICHAEL, JR. (CMB-11)

22-42
THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS.
LASL, 1972. 10P. (LA-4959-MS)
KRUPKA, MILTON C. (CMB-3)

22-43
ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE.
SANDIA LABORATORIES, 1972. 119P. (SC-RR-72-0031)
ALSO PUBLISHED IN:
BULL. AM. CERAM. SOC., V.51, P.324. 1972.
SKAGGS, SAMUEL R. (***)

23. NEUTRONICS AND CRITICALITY STUDIES

23-1
AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR.
NWEF, 1972. 97P. (NWEF-1090)
ALSO PUBLISHED AS:
DTIE, 1972. 18P. MN (LA-DC-13293)
CAMPBELL, JAMES E.
SANDMEIER, HENRY A. (TD-3)

23-2
ANTISOTROPIC SCATERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.910.
1972.
HIRONS, THOMAS J. (TD-6)
BATTAT, MORRIS E. (T-2)

23-3
APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.820.
1972.
ENGLE, LEON B. (N-2)

23-4
BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.312.
1972.
SAPIR, JOSEPH L. (N-2)
HELMICK, HERBERT H. (N-2)
ORNDOFF, JOHN D. (N-2)

23-5
CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.458.
1972.
BATTAT, MORRIS E. (T-2)
HIRONS, THOMAS J. (TD-4)

23-6
COUPLED REGION KINETICS FORMULATIONS.
NUCLEAR ENGINEERING. 1970. SYMPOSIUM, TUCSON. PAPERS, P.189-209. UNIV. OF ARIZONA PRESS, 1972. (626:S989N 1970)
HARRIS, DONALD R., JR. (T-DOT)
FLUHARTY, REX G. (P-DOR)

23-7
CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL.
LASL, 1972. 68P. (LA-3366 REV)
PAXTON, HUGH C. (N-2)

23-8
DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS.
DTIE, 1972. 12P. MN (LA-DC-72-749)
LA BAUVE, RAPHAEL J. (T-2)
SEAMON, ROBERT E. (T-2)
WEISBIN, CHARLES R. (T-2)
HARRIS, DONALD R., JR. (T-2)
MUIR, DOUGLAS W. (T-2)

23-9
DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION.
REACTOR TECH., V.15, P.107-35. 1972.
LATHROP, KAYE D. (T-1)

23-10
EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.273.
1972.
LATHROP, KAYE D. (T-1)

23-11
ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION.
NUCL. SCI. ENG., V.48, P.343-52. 1972.
(LA-DC-11512)*
SANDMEIER, HENRY A. (T-DOT)
HANSEN, GORDON E. (N-2)
DUPREE, STEPHEN A.

23-12
GENERAL METHOD FOR SOLVING THE P-L EQUATIONS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.271-2.
1972.
REED, WILLIAM H. (T-1)

23-13
GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS.
LASL, 1972. 17P. (LA-4938-MS)
ALCOUFFE, RAYMOND E. (T-1)

23-14
MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT.
DTIE, 1972. 20P. MN (LA-DC-13269)
HARRIS, DONALD R., JR. (T-2)
KOENIG, DANIEL R. (TD-4)
PREEG, WILLIAM E. (TD-3)

23-15
NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES.
SIAM J. APPL. MATH., V.22, P.487-94. 1972.
(LA-DC-12588)*
HENDRY, WILLIAM L., III (T-1)

23-16
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.630-1.
1972.
DUDZIAK, DONALD J. (T-1)

23-17
NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.613-4.
1972.
PLASSMANN, EUGENE A. (N-2)
GEER, WILLIAM U. (N-2)

23-18
PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.819-20.
1972.
STRATTON, WILLIAM R. (N-2)
PETERSON, DONALD M. (N-2)
ENGLE, LEON B. (N-2)

23-19
REACTOR POWER TRANSIENT STUDIES.
DTIE, 1972. 14P. MN (LA-DC-72-660)
STRATTON, WILLIAM R. (N-2)
ENGLE, LEON B. (N-2)
PETERSON, DONALD M. (N-2)

23-20
SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS.
DTIE, 1972. 11P. MN (LA-DC-72-734)
WEISBIN, CHARLES R. (T-2)
SEAMON, ROBERT E. (T-2)
HARRIS, DONALD R., JR. (T-2)
STEWART, LEONA (T-2)
LA BAUVE, RAPHAEL J. (T-2)
TURNER, G. DAVID (TD-6)

23-21
SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.
DTIE, 1972. 10P. MN (LA-DC-13275)
CARTER, LELAND L. (TD-6)
CASHWELL, EDMOND D. (TD-6)
SCHRANDT, ROBERT G. (TD-6)

23-22
SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK.
NUCL. SCI. ENG., V.47, P.230-4. 1972.
(LA-DC-12218)*
DUDZIAK, DONALD J. (T-1)

23-23
SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES.
NUCL. SCI. ENG., V.49, P.10-9. 1972.
(LA-DC-13317)*
REED, WILLIAM H. (T-1)

23-24
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM.
LASL, 1972. 25P. (LA-4600)
LATHROP, KAYE D. (T-1)
BRINKLEY, FOREST W., JR. (T-1)
ROOD, PATRICIA L. (T-1)

23-25
TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS.
LASL, 1972. 48P. (LA-4800)
REED, WILLIAM H. (T-1)

23-26
TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE.
DTIE, 1972. 8P. MN (LA-DC-13268)
LATHROP, KAYE D. (T-1)

23-27
TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM.
DTIE, 1972. 11P. MN (LA-DC-13294)
SANDMEIER, HENRY A. (TD-3)
LATHROP, KAYE D. (T-1)
BRINKLEY, FOREST W., JR. (T-1)
HANSEN, GORDON E. (N-2)
CAMPBELL, JAMES E.

23-28
TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.269-70.
1972.
LATHROP, KAYE D. (T-1)

23-29
UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.958.
1972.
HARRIS, DONALD R., JR. (T-2)

24. NUCLEAR PHYSICS

24-1
(HELIUM -3,PROTON) REACTIONS ON CHROMIUM.
3. CHROMIUM -52 (HELIUM -3,PROTON)
MANGANESE -54.
NUCL. PHYS., V.A182, P.69-83. 1972.
(LA-DC-13112)*
BETTS, RUSSELL R.
HANSEN, OLE (P-DOR)
PULLEN, D. J.

24-2
(TRITON,PROTON) AND (PROTON,TRITON)
REACTIONS ON EVEN CERIUM ISOTOPES.
PHYS. REV., V.C6, P.1802-14. 1972.
(LA-DC-12895)*
MULLIGAN, TIMOTHY J. (P-DOR)
FLYNN, EDWARD R. (P-DOR)
HANSEN, OLE (P-DOR)
CASTEN, RICHARD F. (P-DOR)
SHELINE, RAYMOND K.

24-3
14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF
METASTABLE CADMIUM -113.
J. INORG. NUCL. CHEM., V.34, P.1769-8.
1972.
WAHL, ARTHUR C. (CNC-11)

24-4
1F 7/2 MULTIPLET IN CALCIUM -42.
PHYS. LETTERS, V.B40, P.641-4. 1972.
ELLEGAARD, CLIVE SIGURD
LIEN, J.
NATHAN, OVE (P-DOR)
SLETTEN, G.
INGEBRETSEN, F.
OSNES, E.
TJOM, P. O.
HANSEN, OLE (P-DOR)
STOCK, RHEINHARD

24-5
ACCURATE 20-30 MEV NEUTRON FLUX
MEASUREMENTS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.902. 1972.
JARMIE, NELSON (P-DOR)
ERKKILA, BRUCE H. (P-12)

24-6
ACCURATE DEUTERON - DEUTERON ELASTIC
SCATTERING CROSS SECTIONS.
DTIE, 1972. 4P. MN (LA-DC-72-876)
ALSO PUBLISHED IN:
FEW PARTICLE PROBLEMS IN THE NUCLEAR
INTERACTION. 1972. INTERNATIONAL
CONFERENCE, LOS ANGELES. PROC.,
P.659-62. AMERICAN ELSEVIER, 1972.
(539:F432P) (LA-DC-72-876)*
JARMIE, NELSON (P-DOR)
JETT, JAMES H. (H-4)

24-7
ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR
CARBON AND OXYGEN.
DTIE, 1972. 17P. MN (LA-DC-72-809)
SANDERS, WILLIAM MORT (J-12)
BARNES, BARRY K.
HOLM, DALE M. (H-4)

24-8
ANALYTIC FORMS OF THE THERMONUCLEAR
FUNCTION.
COSMOLOGY, FUSION AND OTHER MATTERS:
GEORGE GAMOW MEMORIAL VOLUME, F.
REINES, ED. CHAP.11, P.186-91. COLORADO
ASSOCIATED UNIV. PRESS, 1972.
(530:R366C)
CRITCHFIELD, CHARLES L. (T-9)

24-9
ANALYZING POWER AT 45 DEGREES FROM 1.5 TO
12 MEV FOR THE REACTION TRITON (PROTON,
NEUTRON) HELIUM -3.
PHYS. REV. LETTERS, V.28, P.1587-90.
1972. (LA-DC-72-452)*
HAIGHT, ROBERT C. (P-DOR)
JARMER, JOHN J. (P-DOR)
SIMMONS, JAMES E. (P-DOR)
MARTIN, JOHN C. (P-DOR)
DONOGHUE, TIMOTHY R. (P-DOR)

24-10
ANALYZING POWER IN SILICON (PROTON,
PROTON) BELOW 15 MEV.
NUCL. INSTR. METHODS, V.103, P.425-7.
1972. (LA-DC-72-256)*
HARDEKOPF, ROBERT A. (P-DOR)
ARMSTRONG, DALE D. (P-12)
KEATON, POSEY W., JR. (P-DOR)

24-11
ANALYZING POWER IN SILICON (PROTON,
PROTON) BELOW 15 MEV.
LASL, 1972. 6P. (LA-4892)
HARDEKOPF, ROBERT A. (P-DOR)
ARMSTRONG, DALE D. (P-DOR)
KEATON, POSEY W., JR. (P-DOR)

24-12
ANALYZING POWER OF THE REACTION TRITON
(PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES
CENTER OF MASS FROM 1.5 TO 12 MEV.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17,
P.152. 1972.
JARMER, JOHN J. (P-DOR)
HAIGHT, ROBERT C. (P-DOR)
SIMMONS, JAMES E. (P-DOR)
DONOGHUE, TIMOTHY R. (P-DOR)
MARTIN, JOHN C. (P-DOR)

24-13
ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV.
DTIE, 1972. 4P. MN (LA-DC-72-906)
ALSO PUBLISHED IN:
FEW PARTICLE PROBLEMS IN THE NUCLEAR INTERACTION. 1972. INTERNATIONAL CONFERENCE, LOS ANGELES. PROC., P.735-8. AMERICAN ELSEVIER, 1972. (539:F432P)
SIMON, WILLIAM G. (P-DOR)
MITCHELL, C. KENNETH (P-DOR)
OHLSEN, GERALD G. (P-DOR)

24-14
ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.928. 1972.
KRANE, KENNETH S. (P-8)
STEFFEN, ROLF M.
WHEELER, R. M.

24-15
ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION.
PHYS. REV., V.C6, P.1593-1600. 1972. (LA-DC-72-818)*
MC DANIELS, DAVID K. (P-DOR)
DROSG, MANFRED (P-DOR)
HOPKINS, JOHN C. (P-DOR)
SEAGRAVE, JOHN D. (P-DOR)

24-16
ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF [illegible] RADIATIONS EMITTED FROM ORIENT[illegible] NUCLEI AND TRIPLE DIRECTIONAL CORRELATI[illegible]S.
LASL, 1972. 70P. (LA-4777)
ALSO PUBLISHED IN:
NUCL. DATA TABLES, V.A11, P.351-406. 1973.
KRANE, KENNETH S. (P-8)
STEFFEN, ROLF M. (P-DOR)

24-17
ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, 685-6. 1972.
JARMER, JOHN J. (P-DOR)
HAIGHT, ROBERT C. (P-DOR)
MARTIN, JOHN C. (P-DOR)
SIMMONS, JAMES E. (P-DOR)
DONOGHUE, TIMOTHY R. (P-DOR)

24-18
ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972.
LASL, 1972. 27P. (LA-5025-PR)
YOUNG, PHILLIP G., JR. (T-2)
HARRIS, DONALD R., JR. (T-2)

24-19
APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG.
PHYS. REV., V.C6, P.1136-42. 1972. (LA-DC-72-621)*
FEARING, HAROLD W. (T-5)

24-20
BEAM HEATING IN GAS TARGETS.
NUCL. INSTR. METHODS, V.99, P.77-80. 1972. (LA-DC-12803)*
MC DANIELS, DAVID K. (P-DOR)
BERGQVIST, INGVAR L. (P-DOR)
DRAKE, DARRELL M. (P-DOR)
MARTIN, JIMMIE T. (P-DOR)

24-21
BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV.
LASL, 1972. 3P. (LA-4851)
DEVANEY, JOSEPH J. (T-2)

24-22
CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI.
NUCL. PHYS., V.A193, P.647-71. 1972. (LA-DC-13345)*
FISET, EDMUND O. (T-9)
NIX, JAMES R. (T-9)

24-23
CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.153. 1972.
OHLSEN, GERALD G. (P-DOR)
MITCHELL, C. KENNETH (P-DOR)

24-24
CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES.
LASL, 1972. 27P. (LA-5024-MS)
SILBERT, MYRON G. (P-3)

24-25
COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.922-3. 1972.
SALZMAN, GARY C. (P-DOR)
OHLSEN, GERALD G. (P-DOR)
MITCHELL, C. KENNETH (P-DOR)
GRUEBLER, WILLI (P-DOR)
SIMON, WILLIAM G. (P-DOR)

24-26
COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.675. 1972.
SALZMAN, GARY C. (***)
GOSWAMI, A.
MC DANIELS, DAVID K.

24-27
COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN.
LASL, 1972. 34P. (LA-5043-MS)
LA BAUVE, RAPHAEL J. (T-2)
SEAMON, ROBERT E. (T-2)
WHITTEMORE, NADINE L. (T-2)

24-28
CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION.
NUCL. PHYS., V.A179, P.561-8. 1972.
(LA-DC-13034)*
KEATON, POSEY W., JR. (P-DOR)
ARMSTRONG, DALE D. (P-12)
FORTUNE, H. T.
ROBERSON, NATHAN R., JR.

24-29
CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING.
LASL, 1972. 6P. (LA-5051)
HARDEKOPF, ROBERT A. (P-DOR)
ARMSTRONG, DALE D. (P-DOR)
CATLIN, LLOYD L. (P-DOR)
KEATON, POSEY W., JR. (P-DOR)
LAWRENCE, GEORGE P. (P-9)

24-30
CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS.
LASL, 1972. 28P. (LA-5083-MS)
COCHRAN, DONALD R. F. (MP-6)
DEAN, PHILLIP N. (H-4)
GRAM, PETER A. M. (MP-6)
KNAPP, EDWARD A. (MP-3)
MARTIN, E. RAY (MP-3)
NAGLE, DARRAGH E. (MP-DO)
PERKINS, ROGER B. (P-DO)
SHLAER, WILLIAM J. (MP-3)
THIESSEN, HENRY A. (MP-7)
THERIOT, EDWARD D., JR. (MP-3)

24-31
DECAY OF 100,000-YEAR TIN -126.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.511. 1972.
SMITH, HASTINGS A. (P-2)
BUNKER, MERLE E. (P-2)
LOBNER, KURT E. (P-2)
ORTH, CHARLES J. (CNC-11)
STARNER, JOHN W. (P-2)

24-32
DECAY OF PHOSPHORUS -35.
PHYS. REV., V.C6, P.842-6. 1972.
(LA-DC-72-629)*
APT, KENNETH E. (CNC-11)
KNIGHT, JERE D. (CNC-11)

24-33
DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS.
PHYS. REV., V.C5, P.1205-22. 1972.
(LA-DC-13335)*
OHLSEN, GERALD G. (P-DOR)
GAMMEL, JOHN L. (T-9)
KEATON, POSEY W., JR. (P-DOR)

24-34
DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.152. 1972.
MITCHELL, C. KENNETH (P-DOR)
OHLSEN, GERALD G. (P-DOR)

24-35
E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541).
NUCL. PHYS., V.A197, P.553-67. 9 2.
(LA-DC-72-952)*
LOBNER, KURT E. (P-2)
BENNETT, MICHAEL J. (P-2)
BUNKER, MERLE E. (P-2)

24-36
E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541).
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.29. 1972.
LOBNER, KURT E. (P-2)
BENNETT, MICHAEL J. (P-2)
BUNKER, MERLE E. (P-2)

24-37
E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176.
NUCL. PHYS., V.A179, P.276-88. 1972.
(LA-DC-13010)*
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.16, P.1145-6. 1971.
LOBNER, KURT E. (P-2)
SMITH, HASTINGS A. (P-2)
BUNKER, MERLE E. (P-2)

24-38
EFFECTS OF STRONGLY ABSORPTIVE INTERACTIONS.
THESIS, UNIV. OF MASSACHUSETTS. 1972.
LASL, 1972. 27P. (LA-4980-T)
KOCH, JUSTUS H. (MP-DO)

24-39
ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE.
LASL, 1972. 9P. (LA-4969-MS)
KISSLINGER, LEONARD S. (T-DO)
BURMAN, ROBERT L. (MP-7)
KOCH, JUSTUS H. (MP-DO)
STERNHEIM, MORTON M. (MP-DO)

24-40
ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE.
PHYS. REV., V.C5, P.469-75. 1972.
(LA-DC-72-547)*
KISSLINGER, LEONARD S. (MP-DO)
BURMAN, ROBERT L. (MP-7)
STERNHEIM, MORTON M. (MP-DO)
KOCH, JUSTUS H. (MP-DO)

24-41
ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM.
ANN. PHYS., V.74, P.250-99. 1972.
(LA-DC-12954)*
SEAGRAVE, JOHN D. (P-DOR)
HOPKINS, JOHN C. (P-DOR)
DIXON, DWIGHT R.
KEATON, POSEY W., JR. (P-DOR)
KERR, EUGENE C. (P-8)
NIILER, ANDRUS
SHERMAN, ROBERT H. (P-8)
WALTER, R. KENNETH

24-42
ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.686. 1972.
ARMSTRONG, DALE D. (P-12)
HARDEKOPF, ROBERT A. (P-DOR)
KEATON, POSEY W., JR. (P-DOR)

24-43
EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240.
LASL, 1972. 18P. (LA-4901)
HUNTER, RAYMOND E. (TD-2)
STEWART, LEONA (TD-4)

24-44
EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238.
LASL, 1972. 25P. (LA-4918)
STEWART, LEONA (TD-4)
HUNTER, RAYMOND E. (TD-2)

24-45
EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN.
DTIE, 1972. 45P. MN (LA-DC-13270)
YOUNG, PHILLIP G., JR. (T-2)
FOSTER, DUNCAN G. (T-2)

24-46
EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN.
LASL, 1972. 77P. (ENDF-173) (LA-4725)
YOUNG, PHILLIP G., JR. (T-2)
FOSTER, DUNCAN G. (T-2)

24-47
EVALUATION OF THE TOTAL CROSS SECTION FOR TUNGSTEN.
LASL, 1972. 10P. (LA-4928)
DEVANEY, JOSEPH J. (T-2)
FOSTER, DUNCAN G. (T-2)

24-48
EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION.
PHYS. REV., V.C6, P.1087-90. 1972.
(LA-DC-72-625)*
BETHUNE, GLEN R.
BRITT, HAROLD C. (P-DOR)
ERKKILA, BRUCE H. (P-12)

24-49
EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58.
-58.
PHYS. REV. LETTERS, V.29, P.1748-51.
1972. (LA-DC-72-1104)*
FLYNN, EDWARD R. (P-12)
GARRETT, J. D. (P-DOR)

24-50
EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF LEAD -210.
NUCL. PHYS., V.A195, P.97-118. 1972.
(LA-DC-72-517)*
FLYNN, EDWARD R. (P-12)
IGO, GEORGE J.
BROGLIA, RICARDO A. (P-DOR)
LANDOWNE, S.
PAAR, V.
NILSSON, B.

24-51
EXTENSION OF BOUNDARY DISPERSION RELATIONS.
PHYS. REV., V.D6, P.3333-5. 1972.
JACOB, RICHARD J. (MP-DO)
HITE, G. E.

24-52
FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.589. 1972.
WIENKE, BRUCE R. (T-5)

24-53
FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES.
LASL, 1972. 39P. (LA-5042-MS)
SILBERT, MYRON G. (P-3)
LOUGHEED, R. W.
EVANS, J. E.
HOFF, R. W.

24-54
FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT.
NUCL. SCI. ENG., V.48, P.412-9. 1972. (LA-DC-13340)*
JIACOLETTI, R. J. (P-3)
BROWN, WILBUR K. (P-3)
OLSON, H. G.

24-55
FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS.
STATISTICAL PROPERTIES OF NUCLEI. 1971. INTERNATIONAL CONFERENCE, ALBANY, NY. PROC., P.131-8. PLENUM, 1972. (539:S797P)
GIBBS, WILLIAM R. (T-9)

24-56
FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.686. 1972.
KEATON, POSEY W., JR. (P-DOR)
ARMSTRONG, DALE D. (P-12)

24-57
GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239.
LASL, 1972. 10P. (LA-5048)
DRAKE, DARRELL M. (P-3)

24-58
HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.686. 1972.
MITCHELL, C. KENNETH (P-DOR)
OHLSEN, GERALD G. (P-DOR)
SALZMAN, GARY C. (P-DOR)

24-59
HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.153. 1972.
ARMSTRONG, DALE D. (P-12)
KEATON, POSEY W., JR. (P-DOR)
LEE, YUNG-KUEN
KURJAN, PHILLIP M. (P-DOR)

24-60
HIGH RESOLUTION NEUTRON CROSS SECTIONS. STATISTICAL PROPERTIES OF NUCLEI. 1971. INTERNATIONAL CONFERENCE, ALBANY, NY. PROC., P.55-79. PLENUM, 1972. (539:S797P) (LA-DC-12705)*
ALSO PUBLISHED AS:
DTIE, 1972. 32P. MN (LA-DC-12705)
MOORE, MICHAEL S. (P-3)

24-61
HOW THE BARN WAS BORN.
PHYS. TODAY, V.25, NO.7, P.9. JULY 1972.
HOLLOWAY, MARSHALL G. (DIR OFF)
BAKER, CHARLES P. (M-2)

24-62
INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE.
LASL, 1972. 12P. (LA-2234, REV.)
WYMAN, MARVIN E. (P-2)

24-63
INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS.
PHYS. REV., V.C6, P.403-7. 1972.
BAKER, GEORGE A., JR. (T-9)
GAMMEL, JOHN L. (T-9)

24-64
ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.685. 1972.
HANSEN, OLE (P-DOR)
GARRETT, J. D. (P-DOR)

24-65
J-PI = 7/2+ AND 11/2+, T = 1/2 STATES OF MASS 19.
NUCL. PHYS., V.A188, P.139-47. 1972. (LA-DC-72-205)*
GARRETT, J. D. (P-DOR)
HANSEN, OLE (P-DOR)

24-66
K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION.
PHYS. REV. LETTERS, V.28, P.1061-3. 1972. (LA-DC-72-231)*
STERNHEIM, MORTON M. (MP-DO)
KOCH, JUSTUS H. (MP-DO)

24-67
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS.
NUCL. PHYS., V.A184, P.588-98. 1972. (LA-DC-72-907)*
FISET, EDMUND O. (T-9)
FOSTER, THEODORE C. (T-9)

24-68
LASL INTENSE 14 MEV NEUTRON SOURCE.
DTIE, 1972. 10P. MN (LA-DC-72-651)
HENDERSON, DALE B. (L-DOT)

24-69
LEAST - STRUCTURE UNFOLDING CODE.
LASL, 1972. 9P. (LA-5088)
ROBBA, ARNOLD A. (A-2)
VEESER, LYNN R. (P-3)

24-70
LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES.
PHYS. REV., V.C5, P.2072-95. 1972.
(LA-DC-72-90)*
RICKEY, FRANK A., JR. (P-DOR)
JURNEY, EDWARD T. (P-2)
BRITT, HAROLD C. (P-DOR)

24-71
LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION.
PHYS. LETTERS, V.40B, P.205-7. 1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.16, P.1153. 1971.
AJZENBERG-SELOVE, FAY
CASTEN, RICHARD F. (P-DOR)
HANSEN, OLE (P-DOR)
MULLIGAN, TIMOTHY J. (P-DOR)

24-72
LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION.
PHYS. LETTERS, V.42B, P.49-50. 1972.
(LA-DC-72-918)*
FLYNN, EDWARD R. (P-12)
GARRETT, J. D. (P-DOR)

24-73
LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86.
PHYS. REV., V.C6, P.2075-81. 1972.
(LA-DC-72-794)*
TUCKER, ALLEN B. (CNC-11)
APT, KENNETH E. (CNC-11)
KNIGHT, JERE D. (CNC-11)
ORTH, CHARLES J. (CNC-11)

24-74
LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.674. 1972.
SMITH, HASTINGS A. (P-2)
STARNER, JOHN W. (P-2)
BUNKER, MERLE E. (P-2)

24-75
LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.909. 1972.
RAGAINI, RICHARD C. (CNC-11)
KNIGHT, JERE D. (CNC-11)
LELAND, WALLACE T. (L-1)

24-76
MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.695. 1972.
LAWRENCE, GEORGE P. (W-11)
FAN, C. Y.
BASHKIN, S.

24-77
MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION.
PHYS. REV. LETTERS, V.28, P.1612-5. 1972.
LAWRENCE, GEORGE P. (W-11)
FAN, C. Y.
BASHKIN, S.

24-78
MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.962. 1972.
HARRIS, DONALD R., JR. (T-2)
FLUHARTY, REX G. (W-11)
KOELLING, JERRY J. (ENG-7)
WHITTEMORE, NADINE L. (T-2)

24-79
MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS.
PHYS. REV., V.C6, P.764-9. 1972.
(LA-DC-72-393)*
SILBAR, RICHARD R. (T-5)
STERNHEIM, MORTON M. (MP-DO)

24-80
MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI.
PHYS. REV., V.D6, P.3117-26. 1972.
(LA-DC-72-840)*
STERNHEIM, MORTON M. (MP-DO)
SILBAR, RICHARD R. (T-5)

24-81
MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV.
PHYS. REV., V.C6, P.1118-20. 1972.
(LA-DC-72-423)*
STERNHEIM, MORTON M. (MP-DO)
KOCH, JUSTUS H. (MP-DO)

24-82
MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING.
PHYS. REV. LETTERS, V.28, P.1285-7. 1972. (LA-DC-72-197)*
BOLSTERLI, MARK (T-9)
HALE, GERALD M. (T-9)

24-83
MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES.
NORTHEASTERN UNIVERSITY, 1972. 14P. (NUB-2135)
ALSO PUBLISHED IN:
PHYS. REV., V.D7, P.1401-6. 1973. (LA-DC-72-681)*
AARON, RONALD (T-9)
RICH, MARVIN (T-9)
HOGAN, W. L.
SRIVASTAVA, Y. N.

24-84
MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.146. 1972.
MISCHKE, RICHARD E. (MP-4)

24-85
MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION.
PHYS. REV. LETTERS, V.29, P.1567-9. 1972. (LA-DC-72-1293)
DEVANEY, JOSEPH J. (T-2)

24-86
MULTIPLE SCATTERING OF PIONS BY CARBON -12.
PHYS. REV., V.C5, P.755-61. 1972. (LA-DC-12953)*
GIBBS, WILLIAM R. (T-5)

24-87
NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES.
DTIE, 1972. 4P. MN (LA-DC-72-848)
ALSO PUBLISHED IN:
FEW PARTICLE PROBLEMS IN THE NUCLEAR INTERACTION. 1972. INTERNATIONAL CONFERENCE, LOS ANGELES. PROC., P.882-5. AMERICAN ELSEVIER, 1972. (539:F432P) (LA-DC-72-848)*
BROLLEY, JOHN E., JR. (P-DOR)
HUFFMAN, ARTHUR H.

24-88
NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD.
PHYS. REV., V.C6, P.121-5. 1972. (LA-DC-72-354)*
MC DONALD, F. A.
NUTTALL, JOHN (T-9)

24-89
NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.679. 1972.
THOMPSON, RICHARD H. (T-5)
HELLER, LEON (T-5)

24-90
NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS.
PHYS. REV. LETTERS, V.29, P.880-3. 1972. (LA-DC-72-738)*
KEATON, POSEY W., JR. (P-DOR)
ARMSTRONG, DALE D. (P-12)
HARDEKOPF, ROBERT A. (P-DOR)
KURJAN, PHILLIP M. (P-DOR)
LEE, YUNG-KUEN

24-91
NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI.
PART. NUCL., V.3, P.1-27. 1972. (LA-DC-13224)*
WALKER, GEORGE E. (P-12)
STOKES, RICHARD H. (P-12)

24-92
NUCLEAR LEVELS IN RHENIUM -188.
PHYS. REV., V.06, P.537-67. 1972. (LA-DC-72-414)*
SHERA, E. BROOKS (P-2)
GRUBER, ULF
MAIER, BERNT P. K.
KOCH, H. RUDIGER
SCHULT, OTTO W. B.
LANIER, ROBERT C.
ONISHI, H.
SHELINE, RAYMOND K. (P-2)

24-93
NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203.
PHYS. REV., V.C5, P.1732-7. 1972. (LA-DC-72-137)*
SMITH, HASTINGS A. (P-2)

24-94
NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175.
NCUL. PHYS., V.A197, P.352-68. 1972. (LA-DC-72-440)*
KRANE, KENNETH S. (P-8)
OLSEN, CLAYTON E. (CMB-13)
STEYERT, WILLIAM A., JR. (P-8)

24-95
NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.928. 1972.
KRANE, KENNETH S. (P-8)
STEYERT, WILLIAM A., JR. (P-8)

24-96
NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM - IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133.
PHYS. REV., V.C5, P.1671-8. 1972. (LA-DC-72-43)*
KRANE, KENNETH S. (P-8)
OLSEN, CLAYTON E. (CMB-13)
STEYERT, WILLIAM A., JR. (P-8)

24-97
NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY - 126, 127, 128.
PHYS. REV., V.C6, P.2268-75. 1972.
(LA-DC-72-617)*
KRANE, KENNETH S. (P-8)
STEYERT, WILLIAM A., JR. (P-8)

24-98
NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION.
PHYS. REV., V.C5, P.1365-75. 1972.
(LA-DC-13059)*
FLEMING, D. G.
NATHAN, OVE (P-DOR)
JENSEN, HANS B.
HANSEN, OLE (P-DOR)

24-99
NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182.
PHYS. REV., V.C5, P.1104-13. 1972.
(LA-DC-13200)*
KRANE, KENNETH S. (P-8)
SITES, JAMES R. (P-8)
STEYERT, WILLIAM A., JR. (P-8)

24-100
NUCLEON - NUCLEON BREMSSTRAHLUNG.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.480. 1972.
HELLER, LEON (T-5)

24-101
OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.898. 1972.
JURNEY, EDWARD T. (P-2)
RAMAN, S.
SLAUGHTER, G. G.
HARVEY, J. A.
WELLS, J. C., JR.
LIN, JUNG
MC CLURE, D. A.

24-102
OBSERVATION OF THE DECAY OF PHOSPHORUS -35.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.485. 1972.
APT, KENNETH E. (CNC-11)
KNIGHT, JERE D. (CNC-11)

24-103
ONE AND THREE QUASIPARTICLE STATES IN TIN -121.
NUCL. PHYS., V.A180, P.49-68. 1972.
(LA-DC-12972)*
CASTEN, RICHARD F. (P-DOR)
FLYNN, EDWARD R. (P-12)
HANSEN, OLE (P-DOR)
MULLIGAN, TIMOTHY J. (P-DOR)

24-104
ONE PLUS STATES AND THE 1F-2P SHELL MODEL.
PHYS. LETTERS, V.B39, P.419-23. 1972.
HANSEN, OLE (P-DOR)
NATHAN, OVE (P-DOR)

24-105
OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY.
PHYS. REV., V.C6, P.114-21. 1972.
(LA-DC-72-248)*
STERNHEIM, MORTON M. (MP-DO)
WALKER, JAMES F.

24-106
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180.
PHYS. REV., V.C5, P.1663-7. 1972.
(LA-DC-72-16)*
KRANE, KENNETH S. (P-8)
OLSEN, CLAYTON E. (CMB-13)
STEYERT, WILLIAM A., JR. (P-8)

24-107
PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.907. 1972.
BECHETTI, F. D.
FLEMING, D. G.
FLYNN, EDWARD R. (P-12)

24-108
POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3.
PHYS. REV., V.C5, P.1826-34. 1972.
(LA-DC-13361)*
HAIGHT, ROBERT C. (P-DOR)
SIMMONS, JAMES E. (P-DOR)
DONOGHUE, TIMOTHY R. (P-DOR)

24-109
POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS.
DTIE, 1973. 8P. MN (LA-DC-72-1122)
ALSO PUBLISHED IN:
FEW PARTICLE PROBLEMS IN THE NUCLEAR INTERACTION. 1972. INTERNATIONAL CONFERENCE, LOS ANGELES. PROC., P.585-92. AMERICAN ELSEVIER, 1972.
(LA-DC-72-1122)* (539:F432P)
OHLSEN, GERALD G. (P-DOR)

24-110
POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV.
PHYS. REV., V.C5, P.761-7. 1972.
(LA-DC-13190)*
BROSTE, WILLIAM B.
MUTCHLER, GORDON S.
SIMMONS, JAMES E. (P-DOR)
ARNDT, RICHARD A.
ROPER, L. D.

24-111
POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS.
REP. PROG. PHYS., V.35, P.717-801. 1972. (LA-DC-72-307)*
OHLSEN, GERALD G. (P-DOR)

24-112
POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.922. 1972.
ARMSTRONG, DALE D. (P-12)
HARDEKOPF, ROBERT A. (P-DOR)
KEATON, POSEY W., JR. (P-DOR)
CLEGG, T. B.

24-113
POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.922. 1972.
HARDEKOPF, ROBERT A. (P-9)
ARMSTRONG, DALE D. (P-12)
GRUEBLER, WILLI (P-DOR)
KEATON, POSEY W., JR. (P-DOR)
MEYER-BERKHOUT, ULRICH (P-DOR)

24-114
POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES.
PHYS. REV. V.D6, P.203-15. 1972. (LA-DC-13238)*
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.105. 1972.
FEARING, HAROLD W. (T-5)

24-115
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.933. 1972.
FLYNN, EDWARD R. (P-12)
GARRETT, J. D. (P-DOR)

24-116
PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS.
NUCL. INSTR. METHODS, V.98, P.37-40. 1972. (LA-DC-13082)*
SAMPSON, THOMAS E. (A-2)

24-117
PREDICTIONS FOR SUPERHEAVY NUCLEI.
PHYS. TODAY, V.25, NO.4, P.30-8. APRIL 1972. (LA-DC-13334)*
NIX, JAMES R. (T-9)

24-118
PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN.
LASL, 1972. 30P. (ENDF-174) (LA-4780)
FOSTER, DUNCAN G. (T-2)
YOUNG, PHILLIP G., JR. (T-2)

24-119
PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM.
LASL, 1972. 40P. (ENDF-175) (LA-4726)
YOUNG, PHILLIP G., JR. (T-2)
FOSTER, DUNCAN G. (T-2)

24-120
PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN.
DTIE, 1972. 36P. MN (LA-DC-13271)
FOSTER, DUNCAN G. (T-2)
YOUNG, PHILLIP G., JR. (T-2)

24-121
PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING.
DTIE, 1972. 4P. MN (LA-DC-72-904)
ALSO PUBLISHED IN:
FEW PARTICLE PROBLEMS IN THE NUCLEAR INTERACTION. 1972. INTERNATIONAL CONFERENCE, LOS ANGELES. PROC., P.679-82. AMERICAN ELSEVIER, 1972. (539:F432P) (LA-DC-72-904)*
SALZMAN, GARY C. (P-DOR)
OHLSEN, GERALD G. (P-DOR)
MITCHELL, C. KENNETH (P-DOR)
GRUEBLER, WILLI (P-DOR)
SIMON, WILLIAM G. (P-DOR)

24-122
PROBLEMS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS SECTIONS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.570-1. 1972.
LA BAUVE, RAPHAEL J. (T-2)
WEISBIN, CHARLES R. (T-2)
SEAMON, ROBERT E. (T-2)
HARRIS, DONALD R., JR. (T-2)

24-123
PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.893. 1972.
BEARSE, ROBERT C. (A-1)
CLOSE, DONALD A. (A-1)
MALANIFY, JOHN J. (A-1)
UMBARGER, C. JOHN (A-1)

24-124
PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING.
ABSTRACT PUBLISHED IN:
BULL. AM. ASTRON. SOC., V.4, P.412. 1972.
HOWARD, W. MICHAEL (P-11)
WOOSLEY, STANFORD E.

24-125
PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION.
NUCL. PHYS., V.A195, P.146-58. 1972.
BARNES, PETER D.
ROMBERG, E.
ELLEGAARD, CLIVE SIGURD
CASTEN, RICHARD F. (P-DOR)
HANSEN, OLE (P-DOR)
MULLIGAN, TIMOTHY J. (P-DOR)
BROGLIA, RICARDO A. (P-DOR)
LIOTTA, R.

24-126
PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.674. 1972.
HARDEKOPF, ROBERT A. (P-DOR)
ARMSTRONG, DALE D. (P-12)
KEATON, POSEY W., JR. (P-DOR)

24-127
PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.164, PAPER NO.NUCL-034. 1972.
O'BRIEN, HAROLD A., JR. (CNC-11)
ORTH, CHARLES J. (CNC-11)
SCHILLACI, MARIO E. (MP-3)

24-128
PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.675. 1972.
LOVOI, PAUL A.
OHLSEN, GERALD G. (P-DOR)
HIEBERT, RICHARD D. (E-4)

24-129
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40.
NUCL. PHYS., V.A184, P.437-42. 1972.
CORLEY, DANIEL M.
WALL, NATHAN SANDERS
PALEVSKY, HARRY
FRIEDES, JOSEPH L.
SUTTER, RICHARD J.
BENNETT, GERALD W.
SIMPSON, W. DWAIN
PHILLIPS, GERALD C.
IGO, GEORGE J. (P-DOR)
STEARNS, ROBERT L.

24-130
R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.915. 1972.
HALE, GERALD M. (T-2)
YOUNG, PHILLIP G., JR. (T-2)
FOSTER, DUNCAN G. (T-2)

24-131
RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208.
NUCL. PHYS., V.A191, P.641-57. 1972.
(LA-DC-13195)*
BERGQVIST, INGVAR L. (P-DOR)
DRAKE, DARRELL M. (P-DOR)
MC DANIELS, DAVID K. (P-DOR)

24-132
RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS.
LASL, 1972. 148P. (LA-4785)
HARLOW, MARVIN V., JR. (J-16)
FERRELL, K. D.
PHILLIPS, ANNE N. (J-16)
WIGGLESWORTH, RITA M. (C-4)

24-133
RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.33-4. 1972.
MACEK, ROBERT J. (MP-7)

24-134
RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE.
NUCLEOSYNTHESIS. 1965. CONFERENCE, NEW YORK. PROC., P.253-62. GORDON AND BREACH, 1968. (523:N963S)
BELL, GEORGE I. (T-DOT)

24-135
RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.490-1. 1972.
MOORE, MICHAEL S. (W-11)

24-136
RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE.
NUCL. PHYS., V.B49, P.141-58. 1972.
(LA-DC-72-161)*
THOMPSON, RICHARD H. (T-5)
HARACZ, RICHARD D.

24-137
REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION.
PHYS. REV., V.C5, P.1984-9. 1972.
(LA-DC-72-193)*
HAIGHT, ROBERT C. (P-DOR)

24-138
RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF.
FEW PARTICLE PROBLEMS IN THE NUCLEAR INTERACTION. 1972. INTERNATIONAL CONFERENCE, LOS ANGELES. PROC., P.775-88. AMERICAN ELSEVIER, 1972.
(LA-DC-72-963)* (539:F432P)
(539:F432P) (LA-DC-72-963)*
SIMMONS, JAMES E. (P-DOR)

24-139
SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION.
NTIS, 1972. 13P. MN (COO-3001-11)
ALSO PUBLISHED IN:
PHYS. LETTERS, V.B40, P.333-7. 1972.
BES, DANIEL R. (P-DOR)
CASTEN, RICHARD F. (P-DOR)
FLYNN, EDWARD R. (P-DOR)
GARRETT, J. D. (P-DOR)
HANSEN, OLE (P-DOR)
MULLIGAN, TIMOTHY J. (P-DOR)
BROGLIA, RICARDO A. (P-DOR)
NILSSON, B.

24-140
SEARCH FOR ISOMERISM IN OSMIUM -193.
NUCL. PHYS., V.A181, P.11-3. 1972.
(LA-DC-13066)*
LOBNER, KURT E. (P-2)
BUNKER, MERLE E. (P-2)
STARNER, JOHN W. (P-2)

24-141
SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG.
TWO-BODY FORCE IN NUCLEI. 1971.
SYMPOSIUM, GULL LAKE, MI. PROC., P.79-99. PLENUM, 1972. (539:T974B)
(LA-DC-13108)*
HELLER, LEON (T-5)

24-142
SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.555. 1972.
VEESER, LYNN R. (P-3)
FULLWOOD, RALPH R. (P-3)
SHUNK, EDWARD R. (P-3)
ROBBA, ARNOLD A. (A-2)

24-143
SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM.
DTIE, 1972. 10P. MN (LA-DC-72-611)
VEESER, LYNN R. (P-3)
FULLWOOD, RALPH R. (P-3)
SHUNK, EDWARD R. (P-3)
ROBBA, ARNOLD A. (A-2)

24-144
STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.444. 1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17. P.674. 1972.
GARRETT, J. D. (P-DOR)
HANSEN, OLE (P-DOR)
MIDDLETON, R.

24-145
STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50.
PHYS. REV., V.C5, P.1356-65. 1972.
(LA-DC-13060)*
FLEMING, D. G.
BROGLIA, RICARDO A. (P-DOR)
ABDO, K.
NATHAN, OVE (P-DOR)
PULLEN, D. J.
ROSNER, B.
HANSEN, OLE (P-DOR)

24-146
STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205.
NUCL. PHYS., V.A180, P.97-109. 1972.
(LA-DC-13058)*
CASTEN, RICHARD F. (P-DOR)
FLYNN, EDWARD R. (P-12)
HANSEN, OLE (P-DOR)
MULLIGAN, TIMOTHY J. (P-DOR)
NATHAN, OVE (P-DOR)
STEIN, NELSON
SORENSEN, G.

24-147
STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS.
ABSTRACT PUBLISHED IN:
AM. CHEM. SOC. ABSTRACTS OF PAPERS, V.163, PAPER NO. NUCL-034. 1972.
ROCHE, CHARLES T.
VIOLA, VICTOR E., JR.
MINOR, MICHAEL (P-2)

24-148
STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.50. 1972.
TUCKER, ALLEN B. (CNC-11)
KNIGHT, JERE D. (CNC-11)
ORTH, CHARLES J. (CNC-11)
APT, KENNETH E. (CNC-11)

24-149
STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION.
NUCL. PHYS., V.A184, P.357-76. 1972.
(LA-DC-13278)*
CASTEN, RICHARD F. (P-DOR)
FLYNN, EDWARD R. (P-12)
HANSEN, OLE (P-DOR)
MULLIGAN, TIMOTHY J. (P-DOR)

24-150
SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.674-5. 1972.
OHLSEN, GERALD G. (P-DOR)
SALZMAN, GARY C. (P-DOR)
MC KIBBEN, JOSEPH L. (P-9)
KEATON, POSEY W., JR. (P-DOR)

24-151
TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT.
PHYS. REV., V.C6, P.1162-7. 1972.
(LA-DC-72-653)*
DEVANEY, JOSEPH J. (T-2)

24-152
THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209.
PHYS. LETTERS, V.41B, P.397-402. 1972.
(LA-DC-72-799)*
FLYNN, EDWARD R. (P-12)
IGO, GEORGE J. (P-DOR)
BROGLIA, RICARDO A. (P-DOR)

24-153
THREE PHONON PAIRING VIBRATION STATES IN LEAD -206.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.607. 1972.
FLYNN, EDWARD R. (P-12)
IGO, GEORGE J.
BROGLIA, RICARDO A. (P-DOR)

24-154
TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.151-2. 1972.
JARMIE, NELSON (P-DOR)
JETT, JAMES H. (A-2)

24-155
TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88.
PHYS. REV., V.C5, P.890-8. 1972.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.15, P.572. 1970.
RAGAINI, RICHARD C. (J-11)
MEYER, R. A.

24-156
TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.890. 1972.
GARRETT, J. D. (P-DOR)

24-157
TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI.
DTIE, 1972. 39P. MN (LA-DC-72-543)
HANSEN, OLE (P-DOR)

24-158
VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN.
PHYS. REV., V.C6, P.1240-54. 1972.
(LA-DC-13296)*
LEACHMAN, ROBERT B. (P-12)
FESSENDEN, PETER (P-12)
GIBBS, WILLIAM R. (T-5)

24-159
VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.99. 1972.
FLYNN, EDWARD R. (P-12)
CASTEN, RICHARD F. (P-DOR)
HANSEN, OLE (P-DOR)
KEATON, POSEY W., JR. (P-DOR)
COSMAN, ERIC R.
STEIN, NELSON
STOCK, RHEINHARD

24-160
VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.922. 1972.
OHLSEN, GERALD G. (P-DOR)
SALZMAN, GARY C. (P-DOR)
MITCHELL, C. KENNETH (P-DOR)
DODDER, DONALD C. (T-9)
GAMMEL, JOHN L. (T-9)
WITTE, KATHLEEN H. (C-7)

24-161
VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING.
DTIE, 1972. 4P. MN (LA-DC-72-905)
ALSO PUBLISHED IN:
FEW PARTICLE PROBLEMS IN THE NUCLEAR INTERACTION. 1972. INTERNATIONAL CONFERENCE, LOS ANGELES. PROC., P.460-3. AMERICAN ELSEVIER, 1972. (539:F432P) (LA-DC-72-905)*
OHLSEN, GERALD G. (P-DOR)
MITCHELL, C. KENNETH (P-DOR)
SALZMAN, GARY C. (P-DOR)

24-162
WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.30. 1972.
HANSEN, OLE (P-DOR)
CASTEN, RICHARD F. (P-DOR)
FLYNN, EDWARD R. (P-12)
GARRETT, J. D. (P-DOR)

24-163
WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI?
DTIE, 1972. 24P. MN (LA-DC-13025)
RINKER, GEORGE A., JR. (P-DOR)

24-164
WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY.
DTIE, 1972. 9P. MN (LA-DC-72-673)
MOORE, MICHAEL S. (W-11)

24-165
ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188.
PHYS. LETTERS, V.B40, P.349-51. 1972.
(LA-DC-72-539)*
SHERA, E. BROOKS (P-2)
IKEDA, AKITSU
SHELINE, RAYMOND K. (P-2)

25. NUCLEAR SAFEGUARDS

25-1
ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY.
INSTITUTE OF NUCLEAR MATERIALS MANAGEMENT. 1971. 12TH ANNUAL MEETING, WEST PALM BEACH, FL. PAPERS, P.629-47.
INMM, 1972. (353:I59N 12TH V.2)
THORPE, MUNSON M. (A-1)
AUGUSTSON, RONALD H. (A-1)
MENZEL, JOERG H. (A-1)
EVANS, ALBERT E. (A-1)
SMITH, DARRYL B. (A-1)
WEISBIN, CHARLES R. (A-1)

25-2
ADAPTABILITY OF FISSILE MATERIALS TO NUCLEAR EXPLOSIVES.
PREVENTING NUCLEAR THEFT: GUIDELINES FOR INDUSTRY AND GOVERNMENT, R. B. LEACHMAN AND P. ALTHOFF, EDS. CHAP.19, P.275-83. PRAEGER, 1972. (338:L434P)
HALL, DAVID B. (A-DO)

25-3
APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS.
LASL, 1972. 7P. (LA-5078-MS)
FOLEY, JOHN E. (A-1)

25-4
ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE.
DTIE, 1972. 33P. MN (LA-DC-72-604)
REILLY, T. DOUGLAS (A-1)

25-5
CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL.
LASL, 1972. 28P. (LA-5071-M)
MENLOVE, HOWARD O. (A-1)
FORSTER, ROBERT A. (A-1)
PARKER, JACK L. (A-1)
SMITH, DARRYL B. (A-1)

25-6
CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.174.
1972.
SMITH, DARRYL B. (A-1)
FORSTER, ROBERT A. (A-1)
MENLOVE, HOWARD O. (A-1)

25-7
CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS.
DTIE, 1972. 9P. MN (LA-DC-72-977)
MENLOVE, HOWARD O. (A-1)

25-8
DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL.
NUCL. INSTR. METHODS, V.100, P.201-2.
1972.
UMBARGER, C. JOHN (A-1)
MALANIFY, JOHN J. (A-1)

25-9
FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO.
DTIE, 1971. 26P. MN (LA-DC-12296)
ALSO PUBLISHED IN:
INSTITUTE OF NUCLEAR MATERIALS MANAGEMENT. 1971. 12TH ANNUAL MEETING, WEST PALM BEACH, FL. PAPERS, P.486-513.
INMM, 1972. (353:I59N 12TH V.2)
MENZEL, JOERG H. (A-1)
REILLY, T. DOUGLAS (A-1)
DENNIS, BERT R. (A-1)
PARKER, JACK L. (A-1)
FOLEY, JOHN E. (A-1)

25-10
FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., P.673.
1972.
EVANS, ALBERT E. (A-1)
THORPE, MUNSON M. (A-1)
MALANIFY, JOHN J. (A-1)

25-11
GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE.
IEEE TRANS. NUCL. SCI., V.NS19, P.211-8. 1972. (LA-DC-12683)*
ALSO PUBLISHED AS:
DTIE, 1972. 18P. MN (LA-DC-12583)
EAST, LARRY V. (A-1)
PARKER, JACK L. (A-1)
REILLY, T. DOUGLAS (A-1)
WALTON, RODDY B. (A-1)

25-12
ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.893. 1972.
CLOSE, DONALD A. (A-1)
EVANS, ALBERT E. (A-1)
MALANIFY, JOHN J. (A-1)
UMBARGER, C. JOHN (A-1)

25-13
ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.678-9.
1972.
MENLOVE, HOWARD O. (A-1)
FORSTER, ROBERT A. (A-1)
PARKER, JACK L. (A-1)
SMITH, DARRYL B. (A-1)

25-14
MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE.
NUCL. TECH., V.14, P.197-9. 1972.
(LA-DC-11990)*
AUGUSTSON, RONALD H. (A-1)
HENRY, CARL N. (A-2)
WEISBIN, CHARLES R. (A-1)

25-15
MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION.
NUCL. SCI. ENG., V.47, P.311-8. 1972.
(LA-DC-12783)*
KRICK, MERLYN S.
EVANS, ALBERT E. (A-1)

25-16
NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS.
DTIE, 1972. 10P. MN (LA-DC-72-186)
ALSO PUBLISHED IN:
IEEE TRANS. NUCL. SCI., V.NS-19, NO.3, P.453-6. 1972.
FOLEY, JOHN E. (A-1)

25-17
NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE.
DTIE, 1972. 25P. MN (LA-DC-12801)
ALSO PUBLISHED IN:
ANALYTICAL METHODS IN THE NUCLEAR FUEL CYCLE. 1971. SYMPOSIUM, VIENNA. PROC., P.353-72. IAEA, 1972. (IAEA-SM-149/26)
(626:A532M)
WALTON, RODDY B. (A-1)
AUGUSTSON, RONALD H. (A-1)
EAST, LARRY V. (A-1)
EVANS, ALBERT E. (A-1)
FOLEY, JOHN E. (A-1)
FORSTER, ROBERT A. (A-1)
KEEPIN, G. ROBERT (A-1)
MALANIFY, JOHN J. (A-1)
MENLOVE, HOWARD O. (A-1)
MENZEL, JOERG H. (A-1)
PARKER, JACK L. (A-1)
REILLY, T. DOUGLAS (A-1)
SMITH, DARRYL B. (A-1)
THORPE, MUNSON M. (A-1)
WEISBIN, CHARLES R. (A-1)

25-18
NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES.
NUCL. TECH., V.15, P.455-61. 1972.
(LA-DC-13319)*
WEISBIN, CHARLES R. (A-1)
AUGUSTSON, RONALD H. (A-1)
HENDRICKS, JOHN S. (A-1)
EVANS, ALBERT E. (A-1)
TURNER, G. DAVID (TD-6)
BOEHNEL, K. D.

25-19
NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972.
LASL, 1972. 19P. (LA-4994-PR)
KEEPIN, G. ROBERT (A-1)

25-20
NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY - AUGUST 1972.
LASL, 1972. 28P. (LA-5091-PR)
KEEPIN, G. ROBERT (A-1)

25-21
NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971.
LASL, 1972. 16P. (LA-4883-PR)
KEEPIN, G. ROBERT (A-1)

25-22
PASSIVE ASSAY: INNOVATIONS AND APPLICATIONS.
DTIE, 1971. 33P. MN (LA-DC-12295)
ALSO PUBLISHED IN:
INSTITUTE OF NUCLEAR MATERIALS MANAGEMENT. 1971. 12TH ANNUAL MEETING, WEST PALM BEACH, FL. PAPERS, P.514-47.
INMM, 1972. (353:I59N 12TH V.2)
PARKER, JACK L. (A-1)
REILLY, T. DOUGLAS (A-1)
FOLEY, JOHN E. (A-1)
WALTON, RODDY B. (A-1)
EAST, LARRY V. (A-1)

25-23
PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.680-1. 1972.
FORSTER, ROBERT A. (A-1)
MENLOVE, HOWARD O. (A-1)
PARKER, JACK L. (A-1)
FOREHAND, HARRY M. (A-1)

25-24
PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS.
NUCL. TECH., V.13, P.53-8. 1972.
(LA-DC-12955)*
KEEPIN, G. ROBERT (A-1)

25-25
RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT.
ISOTOP. RADIAT. TECHNOL., V.9, P.505-9. 1972
ALSO PUBLISHED AS:
DTIE, 1971. 21P. MN (LA-DC-12294)
ALSO PUBLISHED IN:
INSTITUTE OF NUCLEAR MATERIALS MANAGEMENT. 1971. 12TH ANNUAL MEETING, WEST PALM BEACH, FL. PAPERS, P.565-85.
INMM, 1972. (353:I59N 12TH V.2)
MENLOVE, HOWARD O. (A-1)
FORSTER, ROBERT A. (A-1)
EAST, LARRY V. (A-1)
FOLEY, JOHN E. (A-1)

25-26
RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.670-1. 1972.
FOLEY, JOHN E. (A-1)

25-27
REAL PROBLEMS, REAL SOLUTIONS.
DTIE, 1972. 24P. MN (LA-DC-13192)
ALSO PUBLISHED IN:
PREVENTING NUCLEAR THEFT: GUIDELINES FOR INDUSTRY AND GOVERNMENT, R. B. LEACHMAN AND P. ALTHOFF, EDS. CHAP.20, P.285-307. PRAEGER, 1972. (338:L434P)
MENZEL, JOERG H. (A-1)

25-28
SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF.
DTIE, 1972. 13P. MN (LA-DC-72-1069)
ALSO PUBLISHED IN:
APPLICATIONS OF X-RAY ANALYSIS. 1972. 21ST ANNUAL CONFERENCE, DENVER. PROC., ADVANCES IN X-RAY ANALYSIS, V.16, P.102-10. PLENUM, 1973.
(545:C7481 21ST) (LA-DC-72-1069)*
UMBARGER, C. JOHN (A-1)
BEARSE, ROBERT C. (A-1)
CLOSE, DONALD A. (A-1)
MALANIFY, JOHN J. (A-1)

25-29
SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA.
LASL, 1972. 9P. (LA-4775-MS)
WEISBIN, CHARLES R. (A-1)
FORSTER, ROBERT A. (A-1)
SMITH, DARRYL B. (A-1)
CORNGOLD, NOEL (A-1)

25-30
TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES.
NUCL. INSTR. METHODS, V.103, P.341-3. 1972. (LA-DC-72-359)*
FELDL, ERIC J.
UMBARGER, C. JOHN (A-1)

26. PHYSICS

26-1
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM.
REV. MOD. PHYS., V.44, P.540-601. 1972.
(LA-DC-12634)*
LOUCK, JAMES D. (T-9)
GALBRAITH, HAROLD W.

26-2
CLOCK PARADOX - MAJORITY VIEW.
PHYS. TODAY, V.25, NO.1, P.9. JAN. 1972.
TERRELL, JAMES (P-DOR)

26-3
COMPRESSION OF GARNET TO 100 KILOBARS.
J. GEOPHYS. RES., V.77, P.2496-9. 1972.
(LA-DC-72-189)*
DUBA, AL
OLINGER, BARTON W. (GMX-11)

26-4
CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES.
DTIE, 1972. 9P. MN (LA-DC-72-598)
GAMMEL, JOHN L. (T-9)

26-5
DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM.
LASL, 1972. 16P. (LA-4868)
CONANT, DONALD R., JR. (CNC-2)

26-6
DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.917. 1972.
SEKI, RYOICHI (T-5)

26-7
EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS.
DTIE, 1972. 4P. MN (LA-DC-72-880)
GAMMEL, JOHN L. (T-9)

26-8
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.687-8. 1972.
SILBAR, RICHARD R. (T-5)
KLINK, WILLIAM H. (T-5)

26-9
FASTER LASL LENS DESIGN SYSTEM.
ABSTRACT PUBLISHED IN:
J. OPT. SOC. AM., V.62, P.1349. 1972.
BRIXNER, BERLYN (GMX-9)

26-10
GENERALIZATIONS OF PADE APPROXIMANTS.
DTIE, 1972. 11P. MN (LA-DC-72-872)
FLEISCHER, JOCHEM B. (T-9)

26-11
GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS.
PHYS. FLUIDS, V.15, P.1854-6. 1972.
(LA-DC-12554)*
MJOLSNESS, RAYMOND C. (T-9)
VISSCHER, WILLIAM M. (T-9)

26-12
INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE.
PHYS. REV., V.D6, P.3501-5. 1972.
(LA-DC-72-680)*
BOLSTERLI, MARK (T-9)

26-13
LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS.
J. NON-CRYSTALLINE SOLIDS, V.8-10, P.477-84. 1972. (LA-DC-12538)*
VISSCHER, WILLIAM M. (T-9)

26-14
MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS.
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROC., P.256-64. LASL, 1972. (LA-5115)
TOMBRELLO, T. A.
JANCAITIS, K. S.
BENDT, PHILIP J. (P-12)
ERKKILA, BRUCE H. (P-12)
STOKES, RICHARD H. (P-12)

26-15
MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS.
LASL, 1972. 79P. (LA-5065-MS)
FOWLER, CLARENCE M. (M-6) COMP.

26-16
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS.
PHYS. REV., V.D6, P.471-7. 1972.
(LA-DC-12696)*
FEARING, HAROLD W. (T-9)
SILBAR, RICHARD R. (T-9)

26-17
MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS.
NUCL. INSTR. METHODS, V.100, P.453-7. 1972. (LA-DC-13327)*
ATWATER, HENRY F. (A-2)

26-18
MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS.
LASL, 1972. 7P. (LA-5089-MS)
EVERETT, CORNELIUS J. (TD-6)
CASHWELL, EDMOND D. (TD-6)
SCHRANDT, ROBERT G. (TD-6)

26-19
NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES.
DTIE, 1972. 5P. MN (LA-DC-72-873)
ALSO PUBLISHED IN:
J. MATH. PHYS., V.14, P.246-8. 1973. (LA-DC-72-873)*
FLEISCHER, JOCHEM B. (T-9)

26-20
NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES.
DTIE, 1972. 13P. MN (LA-DC-72-347)
FLEISCHER, JOCHEM B. (T-9)

26-21
NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD.
LASL, 1972. 3P. (LA-5031-MS)
BETHE, HANS A. (T-DO)

26-22
PADE APPROXIMANT AND GENERALIZATIONS.
DTIE, 1972. 36P. MN (LA-DC-72-595)
GAMMEL, JOHN L. (T-9)

26-23
PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE.
PHYS. REV., V.D6, P.547-64. 1972. (LA-DC-72-244)*
KUBIS, JOSEPH J. (T-9)

26-24
PAULI PRINCIPLE AND PION SCATTERING.
LASL, 1972. 4P. (LA-5052-MS)
BETHE, HANS A. (T-DO)

26-25
PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE.
DTIE, 1972. 6P. MN (LA-DC-72-1019)
LAWRENCE, GEORGE P. (P-11)
KOELLE, ALFRED R. (E-4)
MC KIBBEN, JOSEPH L. (P-9)
CLEGG, T. B.
ROY, G.

26-26
PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING.
NUCL. INSTR. METHODS, V.99, P.429-31. 1972. (LA-DC-13290)*
SEDLACEK, WILLIAM A. (CNC-11)

26-27
PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE.
DTIE, 1972. 11P. MN (LA-DC-72-296)
MC KIBBEN, JOSEPH L. (P-9)

26-28
RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS.
NATURE, V.239, P.504-7. 1972. (LA-DC-72-745)*
VISSCHER, WILLIAM M. (T-9)
BOLSTERLI, MARK (T-9)

26-29
RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES.
DTIE, 1972. 20P. MN (LA-DC-72-658)
CRITCHFIELD, CHARLES L. (T-9)
GAMMEL, JOHN L. (T-9)

26-30
RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS.
LASL, 1972. 10P. (LA-4967-MS)
EVERETT, CORNELIUS J. (TD-6)
CASHWELL, EDMOND D. (TD-6)

26-31
REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT.
DTIE, 1972. 7P. MN (LA-DC-72-879)
GAMMEL, JOHN L. (T-9)

26-32
SELF CONSISTENT BILOCAL FIELD THEORY.
LASL, 1972. 38P. (LA-4831-MS)
RICH, MARVIN (T-9)

26-33
SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY.
PHYS. REV. LETTERS, V.28, P.640-2. 1972. (LA-DC-13310)*
RINKER, GEORGE A., JR. (P-DOR)
RICH, MARVIN (T-9)

26-34
TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE.
REV. SCI. INSTR., V.43, P.552-4. 1972. (LA-DC-13033)*
BERZINS, GEORGE J. (J-12)
LIEBER, ALBERT (J-12)
GALBRAITH, JOHN
HOFFMAN, MARVIN M. (J-12)

27. REACTOR TECHNOLOGY

27-1
BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE.
DTIE, 1972. 25P. MN (LA-DC-72-552)
RANKEN, WILLIAM A. (N-5)
REICHELT, WALTER H. (L-1)

27-2
EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA.
DTIE, 1972. 19P. MN (LA-DC-72-535)
RANKEN, WILLIAM A. (N-5)
FRANK, THURMAN G. (N-5)
KEILHOLTZ, G. W.

27-3
EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS.
DTIE, 1972. 12P. MN (LA-DC-12734)
REICHELT, WALTER H. (N-5)
BACKUS, CHARLES E. (N-5)
PATRICK, ALTON J. (N-5)
RANKEN, WILLIAM A. (N-5)

27-4
EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN.
DTIE, 1972. 22P. MN (LA-DC-72-523)
FRANK, THURMAN G. (N-5)
BACKUS, CHARLES E. (N-5)

27-5
GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL.
LASL, 1969. 12P. (LA-4321)
ALSO PUBLISHED IN:
DEVELOPMENTS IN IRRADIATION TESTING TECHNOLOGY. 1969. NATIONAL SYMPOSIUM, SANDUSKY, OHIO. PAPERS, P.330-49.
CFSTI. 1969. (CONF-690910)
ALSO PUBLISHED IN:
TEMPERATURE: ITS MEASUREMENT AND CONTROL IN SCIENCE AND INDUSTRY. 1971. 5TH SYMPOSIUM, WASHINGTON. PROC., P.755-61. ISA, 1972.
(536:S989T 5TH PT.1)
SALGADO, PETER G. (K-5)
THAMER, BURTON J. (K-2)
RUDMAN, RICHARD L. (K-5)

27-6
LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES.
LASL, 1972. 95P. (LA-4941)
CARMICHAEL, BYRON M. (T-1)
VIGIL, JOHN C. (T-1)

27-7
NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR.
LASL, 1972. 5P. (LA-4977-SR)
VIGIL, JOHN C. (T-1)
CARMICHAEL, BYRON M. (T-1)
BEST, GEORGE H. (T-1)

27-8
QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972.
LASL, 1972. 26P. (LA-5106-PR)
BAKER, RICHARD D. (CMB-DO) COMP.

27-9
QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972.
LASL, 1972. 45P. (LA-5067-PR)
BAKER, RICHARD D. (CMB-DO) COMP.

27-10
QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972.
LASL, 1972. 26P. (LA-4993-PR)
BAKER, RICHARD D. (CMB-DO) COMP.

27-11
QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972.
LASL, 1972. 33P. (LA-5033-PR)
VIGIL, JOHN C. (T-1) COMP.

27-12
QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 - SEPTEMBER 30, 1972.
LASL, 1972. 19P. (LA-5098-PR)
VIGIL, JOHN C. (T-1) COMP.

27-13
QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972.
LASL, 1972. 9P. (LA-4955-PR)
VIGIL, JOHN C. (T-1) COMP.

27-14
QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971.
LASL, 1972. 13P. (LA-4889-PR)
VIGIL, JOHN C. (T-1) COMP.

27-15
QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971.
LASL, 1972. 27P. (LA-4913-PR)
BAKER, RICHARD D. (CMB-DO) COMP.

28. SOLID STATE SCIENCE

28-1
GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER.
COMPUTER PHYS. COMMUN., V.3, P.88-117. 1972. (LA-DC-12565)*
WORLTON, THOMAS G.
WARREN, JOHN L. (P-2)

28-2
MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63.
J. CHEM. PHYS., V.57, P.1502-14. 1972. (LA-DC-72-429)*
STROMBERG, THOR F.
BALESTRI, ROBERT J.
OVERTON, WILLIAM C., JR. (P-8)

28-3
NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE.
DTIE, 1972. 5P. MN (LA-DC-12885)
ALSO PUBLISHED IN:
MAGNETISM AND MAGNETIC MATERIALS. 1971. 17TH ANNUAL CONFERENCE, CHICAGO. PROC., P.1385-9. AIP, 1972. (537:C748M 17TH) (LA-DC-12885)*
NERESON, NORRIS G. (P-2)
STRUEBING, VERNON O. (CMB-5)

28-4
ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM.
PHYS. REV., V.B6, P.1112-21. 1972.
MEYER, HORST
WEINHAUS, F.
MARAVIGLIA, BRUNO
MILLS, ROBERT L. (P-8)

28-5
PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.291. 1972.
MAC FARLANE, ROBERT E. (P-2)

28-6
VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.
DTIE, 1972. 12P. MN (LA-DC-12794)
BOWMAN, ALLEN L. (CMB-3)
KRIKORIAN, NERSES H. (CMB-3)
NERESON, NORRIS G. (P-2)

28-7
ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN.
J. CHEM. PHYS., V.56, P.2395-2401. 1972. (LA-DC-13175)*
RAICH, JOHN C. (P-8)

29. MISCELLANEOUS

29-1
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS.
LASL, 1972. 7P. (LA-4925)
BAYTOS, JOHN F. (GMX-3)

29-2
DART TECHNOLOGY DEVELOPMENT FINAL REPORT.
LASL, 1972. 38P. (LA-5017-MS)
COOPER, KENNETH C. (N-3)
TURNER, WILLIAM C. (N-3)

29-3
ENERGY CRISIS: SOME POLICY ALTERNATIVES.
LASL, 1972. 13P. (LA-4895-MS)
ABRAHAMSON, DEAN E., ED.
OTWAY, HARRY J. (J-DO) ED.

29-4
ENGINEERING JOURNALS AVAILABLE.
SPECIAL LIBRARIES, V.63, NO.2, P.A10-1.
FEB. 1972.
GODFREY, LOIS E. (ISD-4)

29-5
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION.
J. SPACECRAFT ROCKETS, V.9, P.725-6.
1972. (LA-DC-72-659)*
ROEHLING, DUANE J. (N-5)
STRATTON, THOMAS F. (N-5)
FRADKIN, DAVID B. (N-7)

29-6
FUTURE DEVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS.
ABSTRACT PUBLISHED IN:
TRANS. AM. NUCL. SOC., V.15, P.1.
1972.
BALCOMB, J. DOUGLAS (N-DO)

29-7
GOVERNMENT CAUCUS.
ADMINISTRATION OF RESEARCH. 1971. 25TH NATIONAL CONFERENCE, RALEIGH, NC.
PROC., P.60-3. DENVER RESEARCH INST.,
1972. (607:C748A 25TH)
TASCHEK, RICHARD F. (DIR OFF)

29-8
HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER).
TEMPERATURE: ITS MEASUREMENT AND CONTROL IN SCIENCE AND INDUSTRY. 1971.
5TH SYMPOSIUM, WASHINGTON. PROC.,
P.1959-65. ISA, 1972.
(536:S989T 5TH PT.3)
GOODIER, BENJAMIN G. (N-4)
FRIES, RALPH JAY (N-1)
TALLMAN, CHARLES R. (N-4)

29-9
INTERNATIONALLY SPEAKING.
MATER. EVALUATION, V.30, NOS.1-12.
1972.
TENNEY, GEROLD H. (DIR OFF)

29-10
LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS.
LASL, 1972. 37P. (808:L879L)
INFORMATION SERVICES DEPARTMENT

29-11
LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS.
BULL. SEISMOLOG. SOC. AMER., V.62,
P.1559-78. 1972. (LA-DC-72-540)*
OLSEN, KENNETH H. (J-9)
STEWART, JOHN N., JR. (J-9)
MC NEIL, JAMES E.
VITOUSEK, MARTIN J.

29-12
NUCLEAR ENERGY AND THE ENVIRONMENT.
REGIONAL AND ENVIRONMENTAL EDUCATION RESEARCH IMPROVEMENT ORGANIZATION.
1972. CONFERENCE AND ANNUAL BUSINESS MEETING, LAS CRUCES, NM. PAPERS, THE ENERGY CRISIS, P.19-22. REERIO, 1972.
(333:R336E)
REINIG, L. PHILIP (ENG-DO)

29-13
NUCLEAR ROCKET REFERENCE DATA SUMMARY.
LASL, 1972. 13P. (LA-5057-MS)
BALCOMB, J. DOUGLAS (N-DO)

29-14
ODD COUPLE: ECOLOGY AND ECONOMICS.
REGIONAL AND ENVIRONMENTAL EDUCATION RESEARCH IMPROVEMENT ORGANIZATION.
1972. CONFERENCE AND ANNUAL BUSINESS MEETING, LAS CRUCES, NM. PAPERS, THE ENERGY CRISIS, P.23-7. REERIO, 1972.
(333:R336E)
BARTLIT, JOHN R. (P-8)

29-15
PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE.
LASL, 1972. 14P. (LA-4890-MS)
BALCOMB, J. DOUGLAS (N-DO)

29-16
PRESIDENT'S INTERN PROGRAM.
SCIENCE, V.177, P.1057. 1972.
AGNEW, HAROLD M. (DIR)

29-17
PUBLICATIONS OF LASL RESEARCH 1970.
LASL, 1972. 232P. (LA-4900-MS)
KERR, ALISON K. (ISD-4) COMP.

29-18
QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972.
LASL, 1972. 15P. (LA 4978-PR)
SKOBERNE, FREDERICK (N-DO) COMP.

29-19
QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972.
LASL, 1972. 13P. (LA-5021-PR)
SKOBERNE, FREDERICK (N-DO) COMP.

29-20
QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972.
LASL, 1972. 28P. (LA-5113-PR)
SKOBERNE, FREDERICK (N-DO) COMP.

29-21
RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION.
DTIE, 1972. 13P. MN (N-2-560)
(TID-24860)
GRAVES, GLEN A. (N-2)

29-22
STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM.
ASTRONAUTICAL CONGRESS. 1969. 20TH INTERNATIONAL CONGRESS, MAR DEL PLATA, ARGENTINA. PROC., SELECTED APERS, P.287-96. PERGAMON, 1972.
(629.2:161 20TH)
BOYER, KEITH (J-DO)

29-23
SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971.
LASL, 1972. 69P. (LA-5040-MS)
PURTYMUN, WILLIAM D. (H-8) COMP.
HERCEG, JOSEPH E. (H-8) COMP.

29-24
TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM.
ASTRONAUT. AERON., V.10, NO.2, P.4, FEB. 1972.
COOPER, RALPH S. (TD-1)

29-25
TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION.
ABSTRACT PUBLISHED IN:
BULL. AM. PHYS. SOC., SER.2, V.17, P.610. 1972.
BEERY, JEROME G. (P-DOR)
BEERY, JOYCE E.
FLETCHER, S. G.

29-26
TRANSURANIC WASTE REPOSITORY STUDIES.
LASL, 1972. 18P. (LA-5127-MS, V.1)
FOWLER, ERIC B. (H-7) COMP.

29-27
VICE PRESIDENT'S VIEW.
BULL. SPEC. LIBRARIES ASSOC. RIO GRANDE CHAPTER, V.15, P.35. 1972.
GODFREY, LOIS E. (ISD-4)

29-28
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY.
DTIE, 1972. 25P. MN (LA-DC-13156)
EMELITY, LUDGARD A. (H-7)
GARDE, RAYMOND (H-7)
CHRISTENSON, CONARD W. (H-7)

29-29
WATER SUPPLY AT LOS ALAMOS DURING 1971.
LASL, 1972. 29P. (LA-5039-MS)
PURTYMUN, WILLIAM D. (H-8)
HERCEG, JOSEPH E. (H-8)

AUTHOR INDEX

AAMODT, R. LEE (J-DO)
11-3
11-4
20-21

AARON, RONALD (T-9)
24-83

ABDO, K.
24-145

ABERNATHEY, ROBERT M. (CMB-1)
2-28
2-33

ABRAHAMSON, DEAN E., ED.
29-3

ADAIR, R.
21-32

ADAMS, WARREN H. (H-7)
5-4
5-29

AEBERSOLD, PAUL M. (A-1)
20-28

AGNEW, HAROLD M. (DIR)
29-16

AGNEW, LEWIS E., JR. (MP-7) COMP.
21-27

AHLQUIST, A. JOHN (H-8)
5-19

AHMED, F. R.
9-13

AIELLO, WILLIAM P. (P-1)
18-16

AJZENBERG-SELOVE, FAY
24-71

AKASOFU, SYUN I. (P-4)
1-14
1-15
1-18

ALCOUFFE, RAYMOND E. (T-1)
23-13

ALEI, MOHAMMED, JR. (CNC-2)
7-7
7-17
13-6
13-7

ALLEN, LARRY D. (CMF-4)
8-17

ALLISON, PAUL W. (MP-9)
21-64

ANDERSON, ROBERT G. (H-5)
16-5

ANDERSON, STANLEY E., JR.
13-4

ANKENBRANDT, C.
21-32

APT, KENNETH E. (CNC-11)
24-32
24-73
24-102
24-148

ARCHULETA, RUBEN F. (H-4)
5-12

ARMSTRONG, DALE D. (P-12)
24-10
24-28
24-42
24-56
24-59
24-90
24-112
24-113
24-126

ARMSTRONG, DALE D. (P-DOR)
24-11
24-29

ARMSTRONG, DALE E. (CNC-4)
11-6

ARMSTRONG, PHILIP E. (CMB-13)
22-11
22-24

ARMSTRONG, PHILIP E. (CMF-13)
22-30

ARMSTRONG, W. COLTON (CMF-9)
12-18

ARNDT, RICHARD A.
24-110

ARNOLD, GEORGE P. (L-3)
19-4

ARNOLD, GEORGE P. (P-2)
9-4
9-24
19-15

ASBRIDGE, JOHN R. (P-4)
1-6
1-7
1-13
1-14
1-17
1-22
1-36
10-19

ASHLEY, WILLIAM H. (CMB-1)
2-26

ASPREY, LARNED B. (CNC-4)
4-51
4-52
8-21
9-3
9-10
9-21

ATWATER, HENRY F. (A-2)
16-9
18-5
26-17

AUGUSTSON, RONALD H. (A-1)
25-1
25-14
25-17
25-18

AXFORD, ROY A. (TD-4)
20-22

BACK, BIRGER BO (P-DOR)
15-5
15-6
15-12
15-13

BACKUS, CHARLES E. (N-5)
19-30
27-3
27-4

BAILAR, JOHN C., JR.
4-50

BAILEY, ARTHUR G. (P-16)
10-89

BAKER, CHARLES P. (M-2)
24-61

BAKER, DON A. (P-18)
10-43
10-45

BAKER, FLOYD B. (CMF-2)
7-8

BAKER, GEORGE A., JR. (T-9)
24-63

BAKER, LARA H., JR. (ENG-DO)
12-5

BAKER, LARA H., JR. (W-2)
12-12

BAKER, RICHARD D. (CMB-DO) COMP.
27-8
27-9
27-10
27-15

BAKER, THOMAS I.
5-56

BALAGNA, JOHN P., JR. (CNC-11)
15-8
15-9

BALCOMB, J. DOUGLAS (N-DO)
29-6
29-13
29-15

BALESTRI, ROBERT J.
28-2

BALOG, GEORGE (L-3)
19-42

BAME, SAMUEL J., JR. (P-4)
1-7
1-10
1-13
1-14
1-15
1-17
1-18
1-22
1-24
1-27
1-28
10-19

BANKSTON, CHARLES A., JR. (N-7)
12-10

BARFIELD, W. DAVID (T-4)
4-18
20-66

BARNES, BARRY K.
24-7

BARNES, PETER D.
21-48
24-125

BARTLIT, JOHN R. (P-8)
8-6
29-14

BASHKIN, S.
24-76
24-77

BASMANN, NORMA J. (H-4)
5-12

BASS, J. N.
4-26

BATTAT, MORRIS E. (T-1) COMP.
16-31

BATTAT, MORRIS E. (T-2)
20-50
23-2
23-5

BAYBARZ, R. D.
9-10

BAYTOS, JOHN F. (GMX-3)
14-6
29-1

BEARDALL, JOHN S. (J-10)
1-12

BEARSE, ROBERT C. (A-1)
24-123
25-28

BEATTIE, WILLARD H. (L-3)
19-4

BEATTIE, WILLARD H. (W-7)
6-11

BECHETTI, F. D.
24-107

BECKMAN, RICHARD J. (C-5)
20-62

BECKSTEAD, LEO W.
7-25

BEERY, JEROME G. (P-DOR)
29-25

BEERY, JOYCE E.
29-25

BELIAN, RICHARD D. (P-4)
3-8

BELL, GEORGE I. (T-DOT)
24-134

BENDER, JOHN H., JR. (CMB-11)
22-22
22-35
22-36

BENDT, PHILIP J. (P-12)
26-14

BENNETT, GERALD W.
24-129

BENNETT, MICHAEL J. (P-2)
24-35
24-36

BENTON, CLARENCE U. (J-16)
1-9

BENZ, ROBERT (CMB-3)
7-23
9-9
9-24
9-25
22-26

BENZIGER, THEODORE M. (GMX-2)
14-19

BERGE, GERHARD (P-18)
10-82

BERGEY, JAMES A. (P-1)
18-16

BERGQVIST, INGVAR L. (P-DOR)
24-20
24-131

BERZINS, GEORGE J. (J-12)
26-34

BES, DANIEL R. (P-DOR)
24-139

BEST, GEORGE H. (T-1)
27-7

BETHE, HANS A. (T-DO)
26-21
26-24

BETHUNE, GLEN R.
24-48

BETTS, RUSSELL R.
24-1

BEVINGTON, PHILIP R. (MP-7)
20-51

BEYER, WILLIAM A. (T-8)
20-27

BEYER, WILLIAM A. (T-DOT)
5-8
5-39
20-15
20-26
20-44

BIEDENHARN, LAWRENCE C. (T-9)
20-45
20-46

BIRD, PAUL F. (GMX-7)
6-1
6-15

BIRD, PAUL F. (L-3)
6-10

BISWELL, LAVON R. (MP-1)
20-31

BIVINS, ROBERT L. (C-7)
7-26
17-11
20-40

BLAIR, ALLEN G. (P-DOR)
18-10

BLATTNER, WOLFRAM G.
1-4

BLATZ, LAURENCE A. (CNC-2)
4-23
4-37

BLEWETT, PATRICK J. (TD-5)
17-16

BOEHNEL, K. D.
25-18

BOLSTERLI, MARK (T-9)
15-1
15-10
24-82
26-12
26-28

BOOTH, LAWRENCE A. (N-DOT) COMP.
10-9

BORING, A. MICHAEL (CMB-5)
4-15

BOSLER, GERALD E. (T-1)
17-7
17-9

BOWMAN, ALLEN L. (CMB-3)
9-2
9-4
28-6

BOWMAN, MELVIN G. (CMB-3)
7-4

BOYER, KEITH (J-DO)
19-3
19-19
19-49
29-22

BOYER, KEITH (L-DO)
19-20
19-21

BOYLES, M. EUDENA (H-2)
16-22

BRAITHWAITE, JEFFREY
7-25

BRESHEARS, W. DALE (GMX-7)
6-1
6-15

BRESHEARS, W. DALE (L-3)
6-10

BRINKLEY, FOREST W., JR. (T-1)
23-24
23-27

BRISCOE, WILLIAM L. (P-1)
10-2

BRITT, HAROLD C. (P-DOR)
15-1
15-5
15-6
15-12
15-13
24-48
24-70

BRIXNER, BERLYN (GMX-9)
26-9

BROGLIA, RICARDO A. (P-DOR)
24-50
24-125
24-139
24-145
24-152
24-153

BROLLEY, JOHN E., JR. (P-DOR)
4-33
24-87

BRONISZ, STANLEY E. (CMB-5)
16-38

BROOKS, MARY R. (H-4)
5-13
5-33

BROSTE, WILLIAM B.
24-110

BROTBECK, GEORGE N. (TD-5)
17-20

BROWN, DONALD W. (N-7)
11-7

BROWN, WILBUR K. (P-3)
24-54

BRUNDIGE, EDWARD L. (CMB-6)
12-4

BRUNSTING, ALBERT (H-4)
5-14
5-16
5-31
5-32

BUBERNAK, JOSEPH (CMB-1)
7-3

BUCHHOLZ, JERRY R. (H-7)
5-4
5-29

BUCKNER, DAVID C. (C-8)
12-5

BUCKNER, DAVID C. (E-1)
12-12

BUNKER, MERLE E. (P-2)
24-31 24-37
24-35 24-74
24-36 24-140

BURGER, THOMAS J.
7-13

BURKHARDT, LOUIS C. (P-14)
10-21
10-64
10-65
10-69
10-71
10-72

BURMAN, ROBERT L. (MP-7)
21-21
21-30
21-34
21-45
24-39
24-40

BURNETT, LOWELL J. (CNC-2)
13-8
13-9
13-11
13-12
13-13

BURNETT, SIBLEY C. (P-15)
10-24
10-25
10-26
10-54
10-67
10-70
10-77
10-78

BUSH, EDGAR D., JR. (MP-8)
21-16

BUTLER, HAROLD S. (MP-1)
21-15
21-40

BUTLER, PATRICK L.
5-27

BUTLER, THOMAS D. (T-3)
19-44

BUZBEE, BILLY L. (C-4)
20-2

BYVOET, PAUL
5-17
5-55

CADY, HOWARD H. (GMX-2)
7-5

CADY, HOWARD H. (WX-2)
14-13

CAMPBELL, EVAN E. (H-5)
16-5
16-10
16-14
16-22
16-23
16-26
16-27

CAMPBELL, JAMES E.
23-1
23-27

CAMPBELL, LAURENCE J. (P-8)
8-2
8-4
8-9
8-10
8-12
8-16
8-18

CANAVAN, GREGORY H.
19-25

CANN, JOHN R.
5-53

CARMICHAEL, BYRON M. (T-1)
27-6
27-7

CARPENTER, JAMES P. (P-7)
10-10
10-15
10-41

CARTER, LELAND L. (T-8)
20-37

CARTER, LELAND L. (TD-6)
23-21

CASHWELL, EDMOND D. (T-8)
20-37

CASHWELL, EDMOND D. (TD-6)
20-29
20-35
20-36
23-21
26-18
26-30

CASTEN, RICHARD F. (P-DOR)
24-2
24-71
24-103
24-125
24-139
24-146
24-149
24-159
24-162

CATLIN, LLOYD L. (P-DOR)
24-29

CHACON, E.
20-45

CHAMBERS, WILLIAM H. (A-2)
1-35

CHAVEZ, MARIANO G. (ENG-2)
12-6

CHRISTENSON, CONARD W. (H-7)
5-4
5-29
29-28

CHRISTIAN, RICHARD
21-1

CHRISTMAN, RONALD D. (C-2)
20-25
20-39

CIFTAN, M.
20-45

CLARK, JAMES L. (T-6)
20-47

CLARKE, JOHN S. (TD-1)
19-32
19-35

CLEGG, T. B.
24-112
26-25

CLIFTON, DAVID C. (CMB-11)
7-18

CLINARD, FRANK W., JR. (CMB-5)
9-1

CLOSE, DONALD A. (A-1)
24-123
25-12
25-28

CMB-1 GROUP
2-19
2-20
2-21
2-22
2-23
2-24
2-25

COBURN, MICHAEL D. (GMX-2)
7-1
7-15

COCHRAN, DONALD R. F. (MP-6)
21-47
24-30

COLLINS, DAVID G.
1-4

COLLINS, MAURICE W. (C-2)
20-34

COLSTON, ELBERT W. (MP-8)
21-2
21-24

CONANT, DONALD R., JR. (CNC-2)
7-20
20-61
26-5

CONNER, JERRY P. (P-4)
3-8
3-16

COOK, JAMES L. (T-3)
17-4

COOPER, KENNETH C. (N-3)
29-2

COOPER, RALPH S. (TD-1)
19-7
19-32
19-41
29-24

CORLEY, DANIEL M.
24-129

CORNGOLD, NOEL (A-1)
25-29

COSMAN, ERIC R.
24-159

COULTER, JAMES ROSS (SD-5)
16-1

COURT, DONALD B. (CMB-7)
22-2

COWAN, ROBERT D. (T-4)
4-5
4-27
4-42

COWAN, ROBERT D. (T-DOT)
2-8
4-6

COX, ARTHUR N. (J-15)
3-2
3-4

COX, CLARICE W. (T-1)
20-20

CRAIG, BOBBY G. (GMX-8)
14-3

CRAMER, JAMES D. (W-8)
21-35

CRANDALL, KENNETH R. (MP-9)
21-17
21-68

CRISSMAN, HARRY A. (H-4)
5-18
5-26
5-37
5-38
5-46
5-56
5-57

CRITCHFIELD, CHARLES L. (T-9)
24-8
26-29

CROMER, DON T. (CMB-5)
9-5
9-19
9-23

CROMER, DON T. (CMF-5)
9-6
9-15
9-20
9-22

CRUICKSHANK, D. W. J.
9-13

DAHL, LAWRENCE F.
7-13

DAHLBY, JOEL W. (CMB-1)
2-15

DALTON, LARRY J. (GMX-1)
12-21
20-54

DALTON, LARRY J. (M-1)
20-38

DALY, BART J. (T-3)
17-23

DAVIDSON, KEITH V. (CMB-6)
22-32

DAVIS, CECIL G. (J-15)
3-15

DAVIS, T. NEIL
1-3
1-25
1-33

DAVIS, WILLIAM C. (GMX-8)
14-4
14-9
14-14
14-17

DAWSON, JOHN M.
10-55
19-48

DE HAVEN, RUSSELL A. (MP-8)
21-14

DE POORTER, GERALD L. (L-3)
19-42

DEAN, PHILLIP N. (H-4)
5-19
16-17
21-47
24-30

DEAVEN, LARRY L. (H-4)
5-5
5-18

DECKER, WAYNE R.
8-7

DENNIS, BERT R. (A-1)
25-9

DEVANEY, JOSEPH J. (T-2)
24-21
24-47
24-85
24-151

DEVANEY, MARJORIE A. (C-7)
20-63

DI MARCO, JOSEPH N. (P-14)
10-21
10-64
10-65
10-69
10-71
10-72

DICK, RICHARD DEAN (GMX-4)
4-20
4-41

DICKINSON, JAMES M. (CMF-13)
22-29

DICKMAN, DONALD O. (C-4)
19-43

DINEGAR, ROBERT H. (GMX-7)
7-21

DINEGAR, ROBERT H. (WX-7)
14-5

DIXON, DWIGHT R.
24-41

DODDER, DONALD C. (T-9)
24-160

DONOGHUE, TIMOTHY R. (P-DOR)
24-9
24-12
24-17
24-108

DOSS, JAMES D. (MP-3)
21-11

DOUGLASS, DANA L. (CMB-5)
16-4

DOWNING, JAMES N., JR. (P-7)
10-14
10-23

DRAKE, DARRELL M. (P-3)
24-57

DRAKE, DARRELL M. (P-DOR)
24-20
24-131

DREICER, HARRY (P-13)
10-3
10-4
10-5
10-22
10-81
10-90

DROPESKY, BRUCE J. (CNC-11)
12-19
21-36
21-69

DROPESKY, BRUCE J. (CNC-11) COMP.
5-1

DROSG, MANFRED (P-DOR)
18-1
24-15

DU BOIS, FREDERICK W. (GMX-3)
14-6

DUBA, AL
22-1
26-3

DUDZIAK, DONALD J. (T-1)
17-7
17-9
17-10
17-12
17-25
21-25
21-33
23-16
23-22

DUNN, ELEANOR D. (MP-DO) COMP.
21-51
21-52
21-53

DUNWOODY, WADE E. (MP-7)
21-31

DUPREE, STEPHEN A.
23-11

EAKIN, R. T. (CNC-4)
13-5

EASH, DAVID T. (CMB-13)
22-11
22-15
22-37

EASLEY, JAMES D. (MP-1)
16-24
16-25

EAST, LARRY V. (A-1)
18-6 25-17
20-19 25-22
20-28 25-25
20-52
20-74
25-11

EATON, EDWIN E. (CMB-6)
22-14

EBAUGH, LARRY R. (SD-2)
12-11

EDESKUTY, FREDERICK J. (P-8)
18-16

EGGER, J. P. (MP-7)
21-13

EHART, EDWIN P. (CMB-6)
12-11
22-14

EISENSTEIN, R. A.
21-48

EISNER, MELVIN
10-14

ELDER, JOHN C. (H-5)
16-36

ELLEGAARD, CLIVE SIGURD
24-4
24-125

ELLINGER, FINLEY H. (CMB-5)
22-28

ELLIOTT, C. JAMES (T-6)
19-16

ELLIOTT, GUY R. B. (CNC-2)
7-11
7-19
7-20
7-25

ELLIOTT, REED O. (CMB-5)
16-4

ELLIS, RICHARD F. (P-13)
10-3
10-4
10-5
10-81
10-90

ELLIS, WALTON P. (CMB-8)
9-14
9-18
22-23

ELLIS, WILLIAM R., JR. (P-15)
10-40
10-42
10-54
10-58
10-61
10-67
10-70
10-77
10-78

EMELITY, LUDGARD A. (H-7)
29-28

EMIGH, C. ROBERT (P-DOR)
21-38
21-60

ENDERS, JOHN W. (H-1)
16-39

ENGELKE, MORRIS J. (H-1)
16-13

ENGELKE, RAY (M-3)
17 2

ENGELKE, SANDRA Z. (CMB-5)
4-17

ENGER, M. DUANE (H-4)
5-22
5-23
5-34

ENGLE, LEON B. (N-2)
23-3
23-18
23-19

ENGLEMAN, ROLF, JR. (GMX-2)
4-1
10-89

ERICKSON, DENNIS J. (P-8)
8-7

ERICKSON, GEORGE F. (L-1)
19-18

ERICKSON, WILLIAM C. (CMB-6)
22-12

ERKKILA, BRUCE H. (P-12)
15-5
15-12
24-5
24-48
26-14

ETTINGER, HARRY J. (H-5)
16-1
16-2
16-11
16-32
16-33
16-36
16-37
16-40

EUTSLER, BERNARD C. (H-5)
16-22
16-23
16-27

EVANS, ALBERT E. (A-1)
25-1 25-15
25-10 25-17
25-12 25-18

EVANS, J. E.
24-53

EVANS, W. DOYLE (P-4)
3-8
3-16

EVERETT, CORNELIUS J. (T-8)
20-43

EVERETT, CORNELIUS J. (TD-6)
20-3
20-36
20-44
26-18
26-30

FAN, C. Y.
24-76
24-77

FARMER, OTIS A. (T-3)
12-23
19-44

FARR, JOHN D. (CMB-3)
9-25

FAUSSONE, ROSCOE A. (CMB-6)
12-11

FAWCETT, BRIAN C.
4-5
4-27

FEARING, HAROLD W. (T-5)
21-42
21-59
24-19
24-114

FEARING, HAROLD W. (T-9)
26-16

FEHLAU, PAUL E. (A-2)
1-35

FEIERTAG, THOMAS H. (GMX-1)
2-1

FELDL, ERIC J.
25-30

FELDMAN, BARRY J. (T-6)
19-1

FELDMAN, WILLIAM C. (P-4)
1-7
1-13
1-17
1-22
10-19

FENSTERMACHER, CHARLES A. (J-18)
19-3
19-19
19-49

FENSTERMACHER, CHARLES A. (L-1)
19-18
19-21

FERRELL, K. D.
24-132

FESSENDEN, PETER (P-12)
24-158

FICKETT, WILDON (GMX-10)
14-1
14-9

FISET, EDMUND O. (T-9)
15-10
24-22
24-67

FISHER, HENRY N. (TD-1)
19-32

FISHER, KAY J. (CMB-1)
4-3
4-11
4-53

FITZGIBBON, FRANCIS (CMB-14)
12-3
16-12

FITZGIBBON, GEORGE C. (CNC-2)
7-8
7-9

FLEISCHER, JOCHEM B. (T-9)
26-10
26-19
26-20

FLEMING, D. G.
24-98
24-107
24-145

FLETCHER, S. G.
29-25

FLUHARTY, REX G. (P-DOR)
23-6

FLUHARTY, REX G. (W-11)
24-78

FLYNN, EDWARD R. (P-12)
24-49
24-50
24-72
24-103
24-107
24-115
24-146
24-149
24-152
24-153
24-159
24-162

FLYNN, EDWARD R. (P-DOR)
24-2
24-139

FOLEY, JOHN E. (A-1)
25-3
25-9
25-16
25-17
25-22
25-25
25-26

FONG, JOHN C.
4-33

FORD, GEORGE P. (CNC-11)
15-8
15-9

FORD, RICHARD M. (GMX-1)
20-48

FOREHAND, HARRY M. (A-1)
25-23

FORMAN, PETER R. (P-14)
10-21
10-32
10-64
10-65
10-69
10-71
10-72
10-84

FORREST, ROBERT P., JR. (ENG-7)
21-35

FORSLUND, DAVID W. (P-18)
1-16
1-19
1-20
10-16
10-50
10-51
10-53
10-56
10-80
19-12
19-53

FORSTER, ROBERT A. (A-1)
25-5
25-6
25-13
25-17
25-23
25-25
25-29

FORTUNE, H. T.
24-28

FOSTER, DUNCAN G. (T-2)
24-45
24-46
24-47
24-118
24-119
24-120
24-130

FOSTER, THEODORE C. (T-9)
24-67

FOWLER, CLARENCE M. (M-6) COMP.
26-15

FOWLER, ERIC B. (H-7)
5-4
5-29

FOWLER, ERIC B. (H-7) COMP.
29-26

FOWLER, ROBERT D.
8-21

FRADKIN, DAVID B. (N-7)
29-5

FRANK, THURMAN G. (N-5)
27-2
27-4

FRASER, JAMES C. (P-8)
8-9
8-10
8-12
18-2

FRASER, MALCOLM V. (C-4)
17-11

FREEDMAN, M. S.
4-16

FREIDBERG, JEFFREY P. (P-18)
10-6
10-38
10-39
10-74
10-75
10-85
10-87
10-88
19-52

FREIWALD, DAVID A. (P-7)
10-1

FRENCH, P. M.
2-2

FRIEDES, JOSEPH L.
24-129

FRIES, RALPH JAY (N-1)
29-8

FRITZ, JOSEPH N. (GMX-6)
4-44
14-11

FU, JERRY H.
10-16

FUKUSHIMA, EIICHI (CNC-4)
9-10
9-21
13-14

FULLER, JACK C. (W-10)
1-35

FULLERTON, L. WAYNE (T-4)
3-3

FULLWOOD, RALPH R. (P-3)
18-15
24-142
24-143

FULLWOOD, RALPH R. (P-3) COMP.
21-18

FULLWOOD, RALPH R. (W-8)
18-21
21-35

GALBRAITH, HAROLD W.
26-1

GALBRAITH, JOHN
26-34

GAMMEL, JOHN L. (T-9)
24-33
24-63
24-160
26-4
26-7
26-22
26-29
26-31

GARDE, RAYMOND (H-7)
29-28

GARRETT, J. D. (P-DOR)
15-6
15-12
15-13
24-49
24-64
24-65
24-72
24-115
24-139
24-144
24-156
24-162

GEER, WILLIAM U. (N-2)
23-17

GEOFFRION, LOUIS A. (H-5)
16-6
16-34

GERWIN, RICHARD A. (P-7)
10-41
10-57
10-66

GETZINGER, RICHARD W. (L-3)
6-14

GIBBS, WILLIAM R. (T-5)
24-86
24-158

GIBBS, WILLIAM R. (T-9)
24-55

GILES, PAUL M. (W-3)
12-8
12-9

GILL, DENNIS H. (L-2)
19-28
19-29

GIORGI, ANGELO L. (CMB-3)
8-7
8-22

GITOMER, STEVEN J. (P-18)
10-51
10-80

GLASS, NEEL W. (J-16)
1-25

GOAD, WALTER B., JR. (T-DOT)
5-53

GODFREY, BRENDAN B. (T-6)
19-10

GODFREY, LOIS E. (ISD-4)
29-4
29-27

GODWIN, ROBERT P. (L-4)
19-22
19-38
19-54

GODWIN, ROBERT P. (W-10)
19-47

GOLDBLATT, MAXWELL (CNC-4)
4-34

GOLDMAN, AARON S. (C-5)
4-3
4-53
20-13

GOLDSTEIN, JOHN C. (T-6)
19-43
19-51

GONZALES, MANUEL (H-5)
16-36

GOODIER, BENJAMIN G. (N-4)
29-8

GOPLEN, BRUCE C. (MP-9)
21-5
21-6
21-38

GOSLING, JOHN T. (P-4)
1-6
1-28

GOSWAMI, A.
24-26

GRAM, PETER A. M. (MP-6)
21-47
24-30

GRAVES, GLEN A. (N-2)
29-21

GREEN, A. E. S.
4-26

GREEN, JERE L. (CMB-11)
22-19
22-20

GREEN, WALTER V. (CMB-13)
10-27
21-25
21-33
22-15
22-17
22-24
22-37

GREGG, CHARLES T. (H-4)
13-5

GREINER, NORMAN R. (GMX-2)
7-14

GREINER, NORMAN R. (L-3)
6-13
19-55

GRIBBLE, ROBERT F. (P-15)
10-24
10-25
10-26
10-77
10-78

GRIFFIN, DONALD C. (T-DOT)
4-6

GRIFFITHS, DON A.
7-25

GRUBER, ULF
24-92

GRUEBLER, WILLI (P-DOR)
24-25
24-113
24-121

GULA, WILLIAM P. (***)
10-12

GULA, WILLIAM P. (T-6)
10-46
10-47

GURLEY, LAWRENCE R. (H-4)
5-23
5-35
5-36
5-48

GURSKY, JUDITH C. (P-12)
18-10

GUTHALS, PAUL R. (CNC-11)
1-1
16-16

HAARMAN, ROY A. (ENG-7)
21-35

HABERSTICH, ALBERT (P-14)
10-21
10-44
10-52
10-69
10-71
10-72

HAERENDEL, GERHARD
1-8

HAFER, JOHN F. (N-4)
12-23

HAHN, DALE R. (CMB-1)
4-11

HAIGHT, ROBERT C. (P-DOR)
24-9
24-12
24-17
24-108
24-137

HALE, GERALD M. (T-2)
24-130

HALE, GERALD M. (T-9)
24-82

HALL, DAVID B. (A-DO)
25-2

HALLECK, PHILLIP M. (WX-7)
4-14

HAMMEL, EDWARD F., JR. (P-8)
8-8
8-9
8-10
8-12

HAMMER, CHARLES F. (P-16)
10-58
10-61
10-62
10-77
10-78

HAMMONS, GEORGE J. (GMX-2)
7-12

HAMPEL, ARNOLD E. (H-4)
5-34

HANCOCK, JOHN H. (C-4)
4-29

HANKINS, DALE E. (H-1)
18-7
18-9

HANKS, GALE S. (CMB-6)
12-16

HANSEN, GORDON E. (N-2)
23-11
23-27

HANSEN, LEE D.
7-8

HANSEN, OLE (P-DOR)
15-6
15-12
15-13
24-1
24-2
24-4
24-64
24-65
24-71
24-98
24-103
24-104
24-125
24-139
24-144
24-145
24-146
24-149
24-157
24-159
24-162

HANTEL, LAWRENCE W. (GMX-2)
14-17

HARACZ, RICHARD D.
24-136

HARDEKOPF, ROBERT A. (P-9)
24-113

HARDEKOPF, ROBERT A. (P-DOR)
24-10
24-11
24-29
24-42
24-90
24-112
24-126

HARDER, CARROLL R. (P-15)
10-24
10-25
10-26
10-31
10-77
10-78

HARDER, DUANE G. (C-4)
20-34

HARDIN, JULIA MARIE (H-4)
5-15
5-17
5-24
5-51
5-54
5-55

HARLOW, FRANCIS H., JR. (T-3)
11-8

HARLOW, MARVIN V., JR. (J-16)
24-132

HARMON, J. FRANK
13-8
13-12
13-13

HARPER, KATHERINE H. (MP-DO) ED.
21-50

HARRIS, DONALD R., JR. (T-2)
5-8
20-50
23-8
23-14
23-20
23-29
24-18
24-78
24-122

HARRIS, DONALD R., JR. (T-DOT)
23-6

HARRIS, HARLAN W. (P-16)
10-59
10-60
10-63
10-77
10-78

HART, VALGENE E. (MP-8)
21-2
21-24

HARTSHORNE, P. F. (CMB-6)
12-11

HARVEY, J. A.
24-101

HASSENZAHL, WILLIAM V. (MP-6)
12-18
12-22

HATLER, LARRY E. (GMX-3)
14-7

HAWKINS, EUGENE V. (W-10)
18-14

HAYES, BERNARD (GMX-8)
14-11

HAYES, JOHN K. (T-5)
20-14

HAYES, JOHN K. (TD-5)
20-24

HAYES, R. W.
4-5
4-27

HEAD, J. HOWARD (A-2)
18-12

HEALY, JOHN W. (H-DO)
16-29

HECHT, HARRY G. (CNC-2)
13-15

HECKER, SIEGFRIED S. (CMF-5)
22-13

HELLER, LEON (T-5)
24-89
24-100
24-141

HELMICK, HERBERT H. (N-2)
23-4

HEMPELMANN, LOUIS H.
16-28

HENDERSON, CAROLYN S.
5-56

HENDERSON, DALE B. (L-DOT)
19-31
19-34
19-58
24-68

HENDERSON, DALE B. (P-13)
10-22

HENDERSON, DALE B. (P-DO)
10-35

HENDRICKS, JOHN S. (A-1)
25-18

HENDRY, WILLIAM L., III (T-1)
23-15

HENRY, CARL N. (A-2)
25-14

HERCEG, JOSEPH E. (H-8)
29-29

HERCEG, JOSEPH E. (H-8) COMP.
16-7
16-8
29-23

HERRICK, CLAUDE C. (CMB-13)
7-26
22-25

HIEBERT, RICHARD D. (E-4)
24-128

HILL, H. HUNTER (CMB-5)
4-32

HIRONS, THOMAS J. (TD-4)
23-5

HIRONS, THOMAS J. (TD-6)
23-2

HIRSHBERG, JOAN
1-27
1-36

HIRT, CYRIL W., JR. (T-3)
17-4
17-14
17-21
17-22

HITE, G. E.
24-51

HOCKETT, JOHN E., JR. (CMB-13)
22-11

HOFF, R. W.
24-53

HOFFER, JAMES K. (P-8)
8-9
8-10
8-12

HOFFMAN, DARLEANE C. (CNC-11)
15-8
15-9
15-11

HOFFMAN, MARVIN M. (J-12)
26-34

HOGAN, W. L.
24-83

HOLLAND, LAURENCE M. (H-4)
5-11
5-21

HOLLAND, REDUS F. (J-10)
4-8
4-9
4-19
4-43
4-45
4-46

HOLLEY, CHARLES E., JR. (CNC-2)
7-8
7-9
7-10

HOLLOWAY, MARSHALL G. (DIR OFF)
24-61

HOLLSTEIN, ULRICH (H-4)
5-27

HOLM, DALE M. (H-4)
24-7

HONES, EDWARD W., JR. (P-4)
1-8
1-14
1-15
1-18
1-21
1-29
1-30
1-32

HOPKINS, JOHN C. (P-DOR)
24-15
24-41

HORAK, HENRY G. (J-10)
1-4
1-26

HORTON, WILLIAM B.
14-5

HOSKINS, L. CLARON
4-51

HOTCHKISS, ROBERT S. (T-3)
17-15
17-18
17-21

HOWARD, HILLARD H. (MP-DO) COMP.
21-27

HOWARD, W. MICHAEL (P-11)
3-5
24-124

HUBER, ELMER J., JR. (CNC-2)
7-9
7-10

HUDGINS, H. JEANNE (C-7)
20-63

HUDSON, FRANK P.
1-34

HUEBNER, WALTER F. (T-4)
3-3
4-18

HUFFMAN, ARTHUR H.
24-87

HUMPHRIES, STANLEY, JR. (P-14)
10-32
10-48

HUNDHAUSEN, ARTHUR J.
1-6
1-10

HUNDHAUSEN, ARTHUR J. (T-12)
1-5

HUNT, BOB R. (C-5)
20-8
20-9
20-10
20-23
20-32
20-59
20-60
20-64

HUNTER, RAYMOND E. (TD-2)
24-43
24-44

HUTSON, RICHARD L. (MP-3)
5-50

HUTSON, RICHARD L. (MP-7)
5-9
5-47
21-7

HWANG, CHESTER F. (MP-7)
21-37

HYATT, EDWIN C. (H-5)
16-6
16-34

HYER, RONALD C. (L-2)
19-29
19-37

IDE, HAROLD M. (H-5)
16-17
16-27

IGO, GEORGE J.
21-22
24-50
24-153

IGO, GEORGE J. (P-DOR)
24-129
24-152

IKEDA, AKITSU
24-165

IMPRESCIA, RICHARD J. (CMB-13)
22-33

INFORMATION SERVICES DEPARTMENT
29-10

INGEBRETSEN, F.
24-4

INGRAHAM, JOHN C. (P-13)
10-3
10-4
10-5
10-81
10-90

ISRAEL, HARVEY I. (H-1)
4-25
4-54

JACOB, RICHARD J. (MP-DO)
24-51

JACOBSON, JACK D. (GMX-10)
14-1

JACOBY, W. R.
2-2

JAHODA, FRANZ C. (P-15)
10-33
10-40
10-42
10-59
10-60
10-61
10-63
10-77
10-78
10-84

JAMESON, ROBERT A. (MP-9)
20-71
21-9
21-17

JANCAITIS, K. S.
26-14

JANNEY DONALD H. (GMX-11)
20-8
20-59
20-60

JARMER, JOHN J. (P-DOR)
24-9
24-12
24-17

JARMIE, NELSON (P-DOR)
24-5
24-6
24-154

JAYNES, GEORGE E., JR. (CMB-6)
22-12

JEFFRIES, DORVAL D. (CMB-14)
22-22

JEFFRIES, ROBERT A. (J-10)
1-12

JENSEN, HANS B.
24-98

JENSEN, REED J. (J-10)
1-33
19-5
19-23
19-33

JENSEN, REED J. (L-3)
19-24

JETT, JAMES H. (A-2)
24-154

JETT, JAMES H. (H-4)
24-6

JIACOLETTI, R. J. (P-3)
24-54

JOHNSON, GEORGE L. (H-7-T)
5-4

JOHNSON, JAMES O. (WX-7)
4-14
14-5
14-15

JOHNSON, KAYE ALLAN (CMB-11)
2-2
22-10
22-22
22-28

JOHNSON, LAMAR J. (H-1)
16-17
16-37

JOHNSON, LAMAR J. (H-8)
16-21

JOHNSON, OGDEN S. (H-4)
5-12

JONES, DAVID F. (MP-3)
18-20
18-22
20-18
20-73

JONES, ERIC M. (J-10)
3-10
3-11

JONES, LLEWELLYN H. (CNC-4)
4-34
4-36
4-48
4-50

JONES, RONALD C. (C-4)
4-29
20-34

JORDAN, S. W.
5-19

JUDD, O'DEAN P. (T-6)
19-50

JURNEY, EDWARD T. (P-2)
24-70
24-101

KAHANER, DAVID K. (C-6)
20-24
20-33
20-41
20-42

KANDARIAN, ROBERT (MP-8)
21-9

KARR, HUGH J. (P-14)
10-21
10-64
10-65
10-69
10-71
10-72

KASHA, H.
21-32

KAUFMAN, VICTOR
4-28

KAUFMANN, MICHAEL (P-15)
10-37

KEATON, POSEY W., JR. (P-DOR)
24-10
24-11
24-28
24-29
24-33
24-41
24-42
24-56
24-59
24-90
24-112
24-113
24-126
24-150
24-159

KEDDY, EDWARD S. (N-5)
22-18

KEENAN, THOMAS K. (CMB-11)
22-7
22-8
22-34

KEEPIN, G. ROBERT (A-1)
25-17
25-19
25-20
25-21
25-24

KEILHOLTZ, G. W.
27-2

KELLER, CHARLES F. (J-15)
3-12

KELLER, WILLIAM E. (P-8)
8-5
8-8
8-9
8-10
8-12

KELLEY, ROBERT O.
5-56

KELLNER, RICHARD G. (C-6)
20-14
20-24

KELLY, DANIEL J. (CMB-1)
22-14

KENNEL, C. F.
19-12

KENT, RICHARD A. (CMB-11)
22-7
22-8
22-34

KEPHART, JOHN F. (L-4)
19-22
19-38
19-54

KERLEY, GERALD I. (T-4)
4-13
4-47

KERR, ALISON K. (ISD-4) COMP.
29-17

KERR, DONALD M., JR. (J-10)
1-26

KERR, EUGENE C. (P-8)
24-41

KERRISK, JERRY F. (CMB-11)
7-18
22-39

KERSHNER, JAMES D. (T-4)
17-1
17-5
17-24

KINDEL, JOSEPH M. (P-18)
1-19

KINDEL, JOSEPH M. (T-6)
1-16
1-20
10-50
10-55
10-56
19-12
19-48
19-53

KING, CHARLES R. (MP-6)
12-13

KIRKPATRICK, JOHN R. (***)
17-17

KISSLINGER, LEONARD S. (MP-DO)
24-40

KISSLINGER, LEONARD S. (T-DO)
24-39

KLEIN, MORRIS M. (C-6)
18-18

KLIGERMAN, MORTON M. (***)
21-8

KLINK, WILLIAM H. (T-5)
26-8

KNAPP, EDWARD A. (MP-3)
5-50
21-29
21-46
21-47
24-30

KNIGHT, JERE D. (CNC-11)
24-32
24-73
24-75
24-102
24-148

KOCH, H. RUDIGER
24-92

KOCH, JUSTUS H. (MP-DO)
24-38
24-39
24-40
24-66
24-81

KOELLE, ALFRED R. (E-4)
26-25

KOELLING, JERRY J. (ENG-7)
24-78

KOENIG, DANIEL R. (TD-4)
23-14

KOHL, DONALD K. (MP-9)
21-5

KOLB, ALAN
19-24

KOLLMAN, VICTOR H. (H-4)
5-4
13-3

KOLLMAN, VICTOR H. (H-7)
5-29

KONONOV, E. Y.
4-5

KOONTZ, GLENN D. (T-DOT)
4-18

KRAEMER, PAUL M. (H-4)
5-10
5-18
..-26
5-37
5-38

KRANE, KENNETH S. (P-8)
18-17
24-14
24-16
24-94
24-95
24-96
24-97
24-99
24-106

KRESSIN, IVAN K. (CNC-4)
2-29

KRICK, MERLYN S.
25-15

KRIKORIAN, NERSES H. (CMB-3)
28-6

KRUPKA, MILTON C. (CMB-3)
8-22
11-5
22-42

KUBIS, JOSEPH J. (T-9)
26-23

KULINSKI, E. S.
17-13

KUNZ, WALTER E. (A-2)
1-35

KURJAN, PHILLIP M. (P-DOR)
24-59
24-90

KUTAC, KENNETH J. (P-16)
10-24

LA BAUVE, RAPHAEL J. (T-2)
20-50
23-8
23-20
24-27
24-122

LAND, CLETIS C. (CMB-5)
22-28

LANDOWNE, S.
24-50

LANGHAM, WRIGHT H. (H-4)
16-3

LANGHAM, WRIGHT H. (H-DO-T)
16-28

LANIER, ROBERT G.
24-92

LAQUER, HENRY L. (CMF-9)
12-18
12-22

LAQUER, HENRY L. (P-8)
8-11
8-19
8-20

LARI, R. J.
21-12

LARSEN, R.
21-32

LARSON, ALLEN C. (CMB-5)
9-5
9-13
9-19

LARSON, ALLEN C. (CMF-5)
9-6
9-15
9-22

LATHROP, KAYE D. (T-1)
17-8
19-36
23-9
23-10
23-24
23-26
23-27
23-28

LAVALLEE, CAROLYN (CNC-2)
6-5

LAWRENCE, FRANCINE O. (CNC-11)
7-2

LAWRENCE, GEORGE P. (P-11)
26-25

LAWRENCE, GEORGE P. (P-9)
24-29

LAWRENCE, GEORGE P. (W-11)
24-76
24-77

LAZARUS, MICHAEL E. (CMB-14)
12-6

LAZARUS, ROGER B. (C-DO)
20-7

LEACHMAN, ROBERT B. (P-12)
24-158

LEARY, JOSEPH A. (CMB-DO)
7-3

LEE, CLARENCE E. (TD-1)
7-24

LEE, DAVID M. (MP-7)
18-3
18-4

LEE, YUNG-KUEN
24-59
24-90

LEIPUNER, L.
21-32

LELAND, WALLACE T. (J-18)
19-49

LELAND, WALLACE T. (L-1)
19-19
24-75

LELAND, WALLACE T. (P-10)
19-3

LEWIS, EDWIN A.
7-8

LEWIS, H. RALPH, JR. (P-18)
10-6
10-7
10-11
10-19
10-36
10-86
10-87

LEWIS, W. BURTON (CNC-2)
13-15

LIBERMAN, DAVID A. (T-4)
4-39

LIEBENBERG, DONALD H. (CMF-9)
8-13

LIEBENBERG, DONALD H. (P-8)
8-16
8-17
8-18
19-59

LIEBER, ALBERT (J-12)
12-14
18-13
26-34

LIEN, J.
24-4

LIER, DOUGLAS W. (J-14)
4-25
4-54
16-41

LIN, JUNG
24-101

LINDMAN, ERICK L. (J-10)
1-16
1-19
1-20
10-50
10-56
19-53

LINDSAY, JAMES D. G. (P-8)
8-19
8-20
8-21

LIOTTA, R.
24-125

LISKA, DONALD J. (MP-9)
21-9

LITCHMAN, WILLIAM M. (CNC-2)
7-7
13-7

LITTLE, EDWARD M. (P-15)
8-19
8-20

LIVINGSTON, M. STANLEY (MP-DO)
21-39

LOBNER, KURT E. (P-2)
24-31
24-35
24-36
24-37
24-140

LOCKETT, ANDREW M., III (T-6)
19-57

LOCKETT, ANDREW M., III (T-9)
19-27

LOHRDING, RONALD K. (C-5)
20-6
20-49
20-65

LOUCK, JAMES D. (T-2)
20-45

LOUCK, JAMES D. (T-9)
20-46
26-1

LOUGHEED, R. W.
24-53

LOUGHRAN, E. DAN (GMX-2)
7-6
7-12

LOVOI, PAUL A.
24-128

LUNDBERG, LYNN B. (CMB-5)
22-10

LUNDBERG, LYNN B. (CMF-5)
9-20

LUNDY, ARVID S. (MP-1)
5-9

LUNDY, ARVID S. (MP-3)
5-50

LYMAN, JOHN L. (J-10)
19-33

LYONS, PETER B. (J-14)
18-8

MAC DOUGALL, CAROLYN SUE (CMB-1)
2-11
2-12
2-30
2-31

MAC FARLANE, ROBERT E. (P-2)
28-5

MACE, PHILLIP N. (L-2)
19-29
19-37

MACEK, ROBERT J. (MP-7)
21-44
24-133

MADER, CHARLES L. (T-4)
14-2
14-18
17-1
17-5
17-6
17-24

MADER, CHARLES L. (T-5)
14-12

MAGEE, CHARLES B.
9-20

MAGEE, NORMAN H. (J-15)
3-6
4-24

MAGEE, NORMAN H. (T-4)
3-4
10-8
10-13

MAIER, BERNT P. K.
24-92

MAIER, WILLIAM B., II (J-10)
4-4
4-7
4-8
4-9
4-19
4-43
4-45
4-46

MALANIFY, JOHN J. (A-1)
2-13
5-58
16-19
24-123
25-8
25-10
25-12
25-17
25-28

MANLEY, JOHN H. (RAJM)
5-25

MANN, JOSEPH B., JR. (T-4)
4-16

MANN, LAWRY W. (P-18)
10-43
10-45

MARAVIGLIA, BRUNO
28-4

MARDER, BARRY M. (P-18)
10-38
10-39
10-75

MARSHALL, ELISABETH F. (GMX-4)
14-3

MARTIN, E. RAY (MP-3)
18-20
18-22
20-18
20-73
21-9
21-47
24-30

MARTIN, JIMMIE T. (P-DOR)
24-20

MARTIN, JOHN C. (P-DOR)
24-9
24-12
24-17

MARTINEZ, AARON M. (H-4)
5-28

MARTINEZ, LEOPOLDO E. (H-1)
16-12

MASON, RODNEY J. (TD-1)
19-32

MATHER, JOSEPH W. (P-7)
10-1
10-10
10-14
10-15
10-23
10-41
10-57
10-66

MATLACK, GEORGE M. (CMB-1)
2-33
2-35
7-3

MATTHIAS, BERND T. (T-DO)
8-7

MATWIYOFF, NICHOLAS A. (CNC-4)
13-1
13-2
13-3
13-4
13-5

MC CABE, CHARLES W. (MP-3)
21-11

MC CALL, GENE H. (J-8)
18-11

MC CALL, GENE H. (L-4)
19-22
19-29
19-38
19-54

MC CLELLAND, JEAN (H-5)
16-27

MC CLURE, D. A.
24-101

MC CREARY, WILLIAM J. (CMB-8)
22-2

MC DANIELS, DAVID K.
24-26

MC DANIELS, DAVID K. (P-DOR)
24-15
24-20
24-131

MC DONALD, F. A.
24-88

MC DOWELL, ROBIN S. (CNC-4)
2-27
4-34
4-51
4-52

MC INTEER, BERTHUS B. (CNC-4)
11-6

MC KIBBEN, JOSEPH L. (P-9)
24-150
26-25
26-27

MC LEOD, JOHN J. (L-2)
19-28
19-29

MC NEIL, JAMES E.
29-11

MC QUEEN, ROBERT G. (GMX-6)
4-40

MEMERING, MELVIN N.
4-50

MENDE, S. B.
1-8

MENLOVE, HOWARD O. (A-1)
25-5
25-6
25-7
25-13
25-17
25-23
25-25

MENZEL, JOERG H. (A-1)
25-1
25-9
25-17
25-27

MENZEL, MARY T. (T-9)
20-58

MERLAN, S.
21-32

MERTS, ATHEL L. (T-4)
3-4
3-6
4-24
10-8
10-13

METROPOLIS, NICHOLAS C. (C-DO)
20-1
20-40
20-43
20-67
20-68

METZ, CHARLES F. (CMB-1)
2-3
2-4
2-6
2-7
2-9
2-10
2-15
2-26
2-32
2-35

MEYER, EARL A. (MP-9)
21-5
21-38
21-64

MEYER, HORST
28-4

MEYER, KENNETH A. (TD-5)
17-16

MEYER, R. A.
24-155

MEYER-BERKHOUT, ULRICH (P-DOR)
24-113

MIDDLETON, R.
24-144

MILLER, BILLIE F. (MP-DO) COMP.
21-27

MILLER, LESTON W. (J-16)
1-23

MILLER, LOWELL G.
15-3

MILLIGAN, MORRIS F. (H-5)
16-14
16-27

MILLS, CARROLL B. (T-6)
4-29

MILLS, CARROLL B. (T-DOT)
19-6
19-13
19-17

MILLS, RENE S. (MP-2)
20-71
21-5

MILLS, ROBERT L. (P-8)
9-7
9-16
9-17
11-6
28-4

MINER, WILLIAM N. (CMB-5)
16-4

MINOR, MICHAEL (P-2)
15-7
24-147

MISCHKE, RICHARD E. (MP-4)
24-84

MITCHELL, C. KENNETH (P-DOR)
24-13
24-23
24-25
24-34
24-58
24-121
24-160
24-161

MITCHELL, ROBERT W. (P-18)
19-52

MJOLSNESS, RAYMOND C. (T-9)
19-14
19-40
26-11

MONTGOMERY, C. DONALD (CMB-14)
12-3
12-6

MONTGOMERY, MICHAEL D. (P-4)
1-10
1-13
1-14
1-15
1-17
1-22
1-24
1-31

MOODY, JEAN B. (CMB-1)
4-11

MOOK, DELO E.
3-16

MOORE, MICHAEL S. (P-3)
24-60

MOORE, MICHAEL S. (W-11)
15-3
24-135
24-164

MOORE, ROGER H. (C-5)
20-17

MORGAN, JERRY A. (GMX-6)
4-44

MORGAN, LEON O. (CNC-4)
13-5

MORIARTY, JOHN A. (CMB-5)
4-22
4-35
4-49

MORRIS, DUARD I. (MP-9)
21-17

MORRIS, JAMES B. (C-7)
20-11
20-30
20-56
20-72

MORRIS, JAMES B. (C-7) ED.
20-69

MORRIS, ROGER A. (GMX-1)
20-48
20-54

MORRIS, ROGER A. (M-1)
20-38

MORSE, RICHARD L. (P-18)
10-16
19-52

MORSE, RICHARD L. (T-6)
10-17
10-18
10-47
10-53
10-85
19-8
19-39
19-45
19-46

MOSS, OWEN R. (H-5)
16-1
16-2

MOSS, WILLIAM D. (H-5)
16-14
16-22
16-26
16-27
16-37

MOTTAZ, GLENN H. (CMB-1)
2-16
2-17

MOTZ, HENRY T. (P-DO) COMP.
10-76

MUELLER, BARBARA A. (CMB-5)
22-16

MUELLER, DONALD W. (MP-9)
21-5
21-38
21-57
21-64

MUELLER, MARVIN M. (L-4)
19-26

MUIR, DOUGLAS W. (T-2)
10-83
23-8

MULFORD, ROBERT N. R. (CMB-5)
22-7
22-16

MULLANEY, PAUL F. (H-4)
5-16
5-31
5-32

MULLIGAN, TIMOTHY J. (P-DOR)
24-2
24-71
24-103
24-125
24-139
24-146
24-149

MULLINS, LAWRENCE J., JR. (CMB-11)
7-3

MULLINS, LAWRENCE J., JR. (CMB-11) COMP.
7-16

MURCRAY, WALLACE B.
1-33

MUTCHLER, GORDON S.
24-110

MUTSCHLECNER, J. PAUL
3-12

NACHAMKIN, JACK (T-6)
19-39

NAGLE, DARRAGH E. (MP-DO)
21-28
21-47
21-61
24-30

NATHAN, OVE (P-DOR)
24-4
24-98
24-104
24-145
24-146

NEEDHAM, TERENCE E. (CNC-4)
13-2

NEERGAARD, JAMES R. (C-7)
20-29

NERESON, NORRIS G. (P-2)
9-4
28-3
28-6

NEWFIELD, STEPHEN E. (CMB-6)
12-11

NEWTON, THOMAS W. (CNC-2)
6-5

NICHOLS, BILL D. (T-3)
17-19
17-22

NIELSEN, HANS C. S.
1-2
1-3
1-25
1-33

NIELSON, CLAIR W. (P-18)
10-16
10-53
19-8
19-39
19-45
19-46

NIETO, MICHAEL MARTIN (***)
3-14

NIILER, ANDRUS
24-41

NILSSON, B.
24-50
24-139

NIPER, E. D.
1-9

NIX, JAMES R. (T-9)
15-1
15-2
15-10
24-22
24-117

NOLAND, BILLIE JEAN (H-4)
5-15
5-17
5-24
5-51
5-54
5-55

NORTON, JOHN L. (TD-3)
15-10

NOVAK, JAN K. (CMF-9)
12-22

NUTT, ALFRED W., JR. (W-7)
22-21
22-40
22-41

NUTTALL, JOHN (T-9)
24-88

NUTTER, MURLIN J. (J-18)
19-3
19-19
19-49

O'BRIEN, HAROLD A., JR. (CNC-11)
12-19
21-69
24-127

O'BRIEN, HAROLD A., JR. (CNC-11) COMP.
5-1

O'ROURKE, JOHN A. (CMB-13)
22-24

O'ROURKE, JOHN A. (CMF-13)
22-30

OHLSEN, GERALD G. (P-DOR)
24-13
24-23
24-25
24-33
24-34
24-58
24-109
24-111
24-121
24-128
24-150
24-160
24-161

OKUDA, H.
10-55
19-48

OLINGER, BARTON W. (GMX-11)
22-
26-3

OLIPHANT, THOMAS A., JR. (P-18)
10-28
10-30
10-67
10-70

OLSEN, CLAYTON E. (CMB-13)
8-7
22-31
24-94
24-96
24-106

OLSEN, KENNETH H. (J-15)
3-1

OLSEN, KENNETH H. (J-9)
29-11

OLSON, H. G.
24-54

ONISHI, N.
24-92

ORNDOFF, JOHN D. (N-2)
23-4

ORTH, CHARLES J. (CNC-11)
12-19
24-31
24-73
24-127
24-148

ORTIZ, LAWRENCE W. (GMX-2)
2-34
7-22

OSNES, E.
24-4

OTWAY, HARRY J. (J-DO)
16-30

OTWAY, HARRY J. (J-DO) ED.
16-35
29-3

OTWAY, HARRY J. (J-DOT)
16-15

OVERTON, WILLIAM C., JR. (P-8)
28-2

PAAR, V.
24-50

PACIOTTI, MICHAEL A. (MP-3)
21-5
21-38

PALERMO, STEPHEN D. (MP-7)
21-5

PALEVSKY, HARRY
24-129

PARKER, JACK L. (A-1)
25-5
25-9
25-11
25-13
25-17
25-22
25-23

PARKER, JOSEPH R. (MP-1)
16-13
16-24
16-25

PASTA, JOHN R. (C-7)
20-40

PATRICK, ALTON J. (N-5)
27-3

PAVONE, DANIEL (CMF-2)
7-8

PAXTON, HUGH C. (N-2)
23-7

PEEK, H. MILTON (J-10)
1-12
1-33

PENNEMAN, ROBERT A. (CNC-4)
9-8

PERKINS, ROGER B. (P-DO)
21-47
24-30

PERRY, JOSEPH E., JR. (L-2)
19-29

PETERSEN, DONALD F. (H-4)
5-5

PETERSON, DONALD M. (N-2)
23-18
23-19

PETERSON, RICHARD W. (P-15)
10-32
10-84

PETERSON, ROBERT W. (J-16)
1-1
1-2
1-3

PHELPS, ROBERT T. (CMB-1)
2-26

PHILLIPS, ANNE N. (J-16)
24-132

PHILLIPS, GERALD C.
24-129

PHILLIPS, JAMES A. (P-14)
10-2
10-21
10-64
10-65
10-69
10-71
10-72

PHILLIPS, JAMES D. (P-7)
10-23

PHILLIPS, JOHN R. (CMB-1)
2-16
2-17

PHILLIPS, MARILYN V. (CMB-1)
4-11

PIMBLEY, GEORGE H. (T-DOT)
5-41
17-3

PITT, CHARLES
7-11

PIZZO, V.
1-6

PLASSMANN, EUGENE A. (N-2)
23-17

POPOLATO, ALPHONSE (GMX-3)
14-7
14-10

PORTER, F. T.
4-16

PORTER, LEONARD E. (P-DOR)
4-33

POTTER, JAMES M. (MP-3)
21-9

POTTER, ROBERT M. (CNC-4)
11-2
11-6
11-7

PRACHT, WILLIAM E. (T-3)
11-8

PRATAP, MAHENDRA
21-42
21-59

PREEG, WILLIAM E. (TD-3)
23-14

PRINE, JAMES R. (H-4)
5-11
5-21

PRITCHARD, JOHN A. (H-5)
16-6
16-34

PROCTOR, W. A.
19-25

PULLEN, D. J.
24-1
24-145

PURTYMUN, WILLIAM D. (H-8)
29-29

PURTYMUN, WILLIAM D. (H-8) COMP.
29-23

QUINN, WARREN E. (P-15)
10-31
10-58
10-61
10-62
10-77
10-78

QUINTANA, JOHNNY N. (CMB-1)
2-16
2-17

RABIDEAU, SHERMAN W. (CNC-2)
13-15

RADZIEMSKI, LEON J., JR. (CMB-1)
2-8
2-18
4-3
4-11
4-28
4-30
4-31
4-53

RAGAINI, RICHARD C. (CNC-11)
24-75

RAGAINI, RICHARD C. (J-11)
24-155

RAICH, JOHN C. (P-8)
28-7

RAJALA, ROBERT E. (MP-4)
20-31

RAJU, MUDUNDI R. (H-4)
5-40
5-42
21-43

RAJU, MUDUNDI R. (H-9)
5-43
5-44

RAMAN, S.
24-101

RAND, JOHN L. (ENG-7)
12-20

RANDOLPH, ALAN D. (GMX-3)
14-7

RANDOLPH, ALAN D. (WX 3)
14-16

RANKEN, WILLIAM A. (N-5)
27-1
27-2
27-3

RATLIFF, ROBERT L. (H-4)
5-23
5-52

REASONER, DAVID L.
1-32

REED, WILLIAM H. (T-1)
23-12
23-23
23-25

REGENIE, THOMAS R. (ENG-6)
21-33

REICHELT, WALTER H. (L-1)
27-1

REICHELT, WALTER H. (N-5)
27-3

REID, R. C.
22-25

REILLY, T. DOUGLAS (A-1)
25-4
25-9
25-11
25-17
25-22

REIN, JAMES E. (CMB-1)
2-3
2-6
2-10
2-26
2-28
2-33
2-35
2-36

REINIG, L. PHILIP (ENG-DO)
29-12

REISFELD, MARTIN J. (CNC-4)
4-21

RHORER, RICHARD L. (MP-7)
21-16

RIBE, FRED L. (P-15)
8-11
10-27
10-30
10-54
10-61
10-68
10-78
10-79

RIBE, FRED L. (P-DO)
10-29
10-58
10-67
10-70
10-77

RICE, G. K.
7-6

RICE, WALTER W. (J-10)
19-5
19-23

RICH, FREDERICK J.
1-32

RICH, MARVIN (T-9)
24-83
26-32
26-33

RICHARDS, CHARLES P. (H-5)
16-6
16-34

RICHARDSON, JAMES H. (MP-1)
16-24
16-25

RICHMAN, CHAIM (H-4)
5-40

RICHMOND, CHESTER R. (H-4)
5-7

RICKEY, FRANK A., JR. (P-DOR)
24-70

RILEY, ROBERT E. (CMB-6)
22-9

RINK, JOHN P. (J-18)
19-49
19-56

RINKER, GEORGE A., JR. (P-DOR)
24-163
26-33

RIVARD, WILLIAM C. (GMX-10)
14-9
17-13

RIVARD, WILLIAM C. (T-3)
19-44

ROBBA, ARNOLD A. (A-2)
24-69
24-142
24-143

ROBBINS, DONALD E.
1-27
1-36

ROBERSON, NATHAN R., JR.
24-28

ROBINSON, C. PAUL (L-3)
19-24

ROBINSON, C. PAUL (N-DOT)
19-11

ROBINSON, EUGENE S. (CNC-4)
11-6

ROBINSON, PRESS L. (CNC-2)
7-19

ROCHE, CHARLES T.
15-7
24-147

ROCHESTER, RICHARD H. (WX-7)
14-5

ROCKWOOD, STEPHEN D. (T-6)
19-25

ROEHLING, DUANE J. (N-5)
29-5

ROGERS, JOHN D., JR. (CMF-9)
12-18
12-22

ROGERS, JOHN D., JR. (P-8)
8-14
8-26

ROGERS, RAYMOND N. (GMX-2)
2-34
6-2
6-12
7-21
7-22

ROGERS, WILLIAM H. (GMX-2)
14-8

ROLFE, R.
21-31

ROMBERG, E.
24-125

ROMERO, HAROLD V. (P-DOR)
18-10

ROOD, PATRICIA L. (T-1)
23-24

ROOF, RAYMOND BRADLEY, JR. (CMB-5)
9-11
9-12

ROPER, L. D.
24-110

ROSEN, LOUIS (MP-DO)
5-30
5-50
12-19
21-54
21-62
21-63
21-65
21-69

ROSENTHAL, JEROME J. (CMB-6)
21-10

ROSNER, B.
24-145

ROSS, JOHN S.
4-6

ROSTOKER, NORMAN
19-24

ROWLAND, THOMAS J. (H-5)
16-32
16-33

ROWLEY, JOHN C. (N-7)
11-6

ROY, G.
26-25

ROYER, GEORGE W. (H-5)
16-40

RUDMAN, RICHARD L. (K-5)
27-5

RUDSINSKI, LAWRENCE E. (C-4)
10-51
19-52

RUPPEL, HANS M. (T-9)
19-14
19-40

RYAN, ROBERT R. (CNC-4)
4-48
9-3
9-8
9-21
9-23

SALGADO, PETER G. (K-5)
27-5

SALZMAN, GARY C. (***)
24-26

SALZMAN, GARY C. (P-DOR)
24-25
24-58
24-121
24-150
24-160
24-161

SAMPSON, THOMAS E. (A-2)
24-116

SANDERS, WILLIAM MORT (J-12)
9-1
24-7

SANDMEIER, HENRY A. (T-DOT)
23-11

SANDMEIER, HENRY A. (TD-3)
23-1
23-27

SANDSTROM, DONALD J. (CMB-6)
12-16
12-17
22-12

SAPIR, JOSEPH L. (N-2)
23-4

SAPONARA, ARTHUR G. (H-4)
5-34

SAWYER, GEORGE A. (P-15)
10-59
10-60
10-62
10-63
10-77
10-78

SCHELL, DONALD H. (CMB-6)
22-32

SCHELLENBAUM, R. L.
1-9

SCHILLACI, MARIO E. (MP-3)
12-19
21-3
21-69
24-127

SCHNEIDER, EDWARD J. (MP-8)
21-56

SCHOCK, R. N.
22-1

SCHOFIELD, ALDRED E. (P-14)
10-2

SCHONFELD, FRED W. (CMB-5)
16-4

SCHOTT, GARRY L. (GMX-10)
14-1

SCHOTT, GARRY L. (L-3)
6-14

SCHRANDT, ROBERT G. (TD-6)
21-35
23-21
26-18

SCHUCH, ADAM F. (P-8)
9-7
9-16
9-17

SCHULT, OTTO W. B.
24-92

SCHULTE, HARRY F. (H-5)
16-14
16-18
16-20
16-27

SCHUYLER, DONALD R., II (GMX-1)
2-1

SEAGRAVE, JOHN D. (P-DOR)
24-15
24-41

SEAMON, ROBERT E. (T-2)
17-10
20-50
23-8
23-20
24-27
24-122

SEDLACEK, WILLIAM A. (CNC-11)
16-16
26-26

SEEGER, PHILIP A. (W-8)
15-4

SEEGMILLER, ROBERT S. (CMB-6)
22-12

SEITZ, WENDELL LEE (WX-7)
4-38

SEITZ, WILLIAM A.
6-14

SEKI, RYOICHI (T-5)
26-6

SHALEK, P. D.
2-2

SHARP, R. D.
1-8

SHELINE, RAYMOND K.
24-2

SHELINE, RAYMOND K. (P-2)
24-92
24-165

SHELLEY, E. G.
1-8

SHEPHERD, GEORGE R. (H-4)
5-15
5-17
5-24
5-51
5-54
5-55

SHERA, E. BROOKS (P-2)
24-92
24-165

SHERMAN, ROBERT H. (P-8)
4-33
8-9
8-10
8-12
24-41

SHIVELY, FRANK T. (MP-6)
21-32

SHLAER, WILLIAM J. (MP-3)
21-47
24-30

SHUNK, EDWARD R. (P-3)
24-142
24-143

SHUPE, MELVIN W. (CMB-11)
22-8
22-34

SIEMON, RICHARD E. (P-15)
10-31
10-33
10-40
10-42
10-60
10-61
10-63
10-77
10-78

SILBAR, RICHARD R. (T-5)
24-79
24-80
26-8

SILBAR, RICHARD R. (T-9)
26-16

SILBERT, MYRON G. (P-3)
24-24
24-53

SIMMONS, JAMES E. (P-DOR)
21-55
24-9
24-12
24-17
24-108
24-110
24-138

SIMON, WILLIAM G. (P-DOR)
24-13
24-25
24-121

SIMPSON, W. DWAIN
24-129

SINGER, SIDNEY (P-4)
1-14
1-15
1-18
1-24
18-16

SINGLETON, JANNIE L. (GMX-2)
7-15

SITES, JAMES R. (P-8)
8-25
24-99

SKAGGS, SAMUEL R. (***)
22-43

SKOBERNE, FREDERICK (N-DO) COMP.
29-18
29-19
29-20

SLAUGHTER, G. G.
24-101

SLETTEN, G.
24-4

SMITH, DARRYL B. (A-1)
25-1
25-5
25-6
25-13
25-17
25-29

SMITH, DAVID A. (H-4)
5-28

SMITH, HADLEY J. (N-7)
12-10

SMITH, HASTINGS A. (P-2)
24-31
24-37
24-74
24-93

SMITH, HELEN LOUISE (CNC-11)
16-16

SMITH, JACK
21-42
21-59

SMITH, L.
21-32

SMITH, LOUIS C. (GMX-2)
14-8

SMITH, MAYNARD E. (CMB-1)
2-11
2-12
2-30
2-31

SMITH, MORTON C. (CMB-13)
11-1
11-3
11-4
11-6
11-7
22-3
22-4
22-5
22-6
22-33

SMITH, MORTON C. (CMF-13)
22-29

SMITH, TEMPLE F.
5-39

SNOW, EDWARD C. (CMB-5)
4-15

SOBOTTKA, STANLEY (MP-DO)
18-3
18-4

SORENSEN, G.
24-146

SPALDING, JOHN F. (H-4)
5-11
5-12
5-13
5-21
5-33

SPENCER, JAMES E. (MP-7)
21-23
21-31
21-58

SPICKARD, JOHN H.
5-45

SRIVASTAVA, Y. N.
24-83

STAFFORD, RONALD G. (H-1)
16-33

STAFFORD, RONALD G. (H-5)
16-11
16-32

STAMMLER, MANFRED (J-10)
1-34

STARKOVICH, VICTOR S. (W-10)
18-14

STARNER, JOHN W. (P-2)
24-31
24-74
24-140

STEARNS, ROBERT L.
21-31
24-129

STEFANSKI, R.
21-32

STEFFEN, ROLF M.
24-14

STEFFEN, ROLF M. (P-DOR)
24-16

STEIN, MYRON L. (C-7)
5-39

STEIN, NELSON
24-146
24-159

STEIN, PATRICIA C. (H-5)
16-10
16-22
16-23

STEIN, PAUL R. (C-6)
20-3
20-4

STEINHAUS, DAVID W. (CMB-1)
2-8
4-
4-11
4-12
4-53

STEPHANI, EVON L. (W-10)
18-14

STEPHENS, MELVIN M. (A-1)
20-52

STERNHEIM, MORTON M. (MP-DO)
24-39
24-40
24-66
24-79
24-80
24-81
24-105

STEVENS, RALPH R., JR. (MP-9)
21-5
21-6
21-38
21-64

STEWART, BRUCE (J-10)
4-7

STEWART, J. W.
9-13

STEWART, JOHN N., JR. (J-9)
29-11

STEWART, LEONA (T-2)
23-20

STEWART, LEONA (TD-4)
24-43
24-44

STEYERT, WILLIAM A., JR. (P-8)
8-1
8-24
24-94
24-95
24-96
24-97
24-99
24-106

STOCK, RHEINHARD
24-4
24-159

STOKES, GORDON E.
15-3

STOKES, RICHARD H. (P-12)
24-91
26-14

STOKES, ROBERT W. (CMF-9)
12-22

STONER, JOHN O., JR.
4-30
4-31

STORM, ELLERY (H-1)
4-2
4-10
4-25
4-54
16-41

STORMS, EDMUND K. (CMB-3)
9-4
22-27
22-38

STOVALL, JAMES E. (MP-9)
21-4
21-6

STRATTON, THOMAS F. (L-1)
19-18
19-21

STRATTON, THOMAS F. (N-5)
29-5

STRATTON, WILLIAM R. (N-2)
23-18
23-19

STROMBERG, THOR F.
28-2

STRONG, IAN B. (P-4)
1-11

STROUSE, CHARLES E. (CNC-4)
9-10
13-3

STRUEBING, VERNON O. (CMB-5)
28-3

STUTZ, ROGER A. (TD-3)
20-12

SU, H. Y.
6-3

SUGIURA, MASAHISA
1-11

SULLIVAN, JOHN A. (L-3)
19-24

SULLIVAN, JOHN A. (N-7)
12-13
19-11

SUSCO, DANTE V. (TD-4)
17-10

SUTPHIN, HOWARD D. (E-4)
18-13
18-19

SUTTER, RICHARD J.
24-129

SUYDAM, BERGEN R. (T-6)
19-43

SWAIN, GEORGE R. (MP-9)
21-9

SWANSEN, JAMES E. (A-1)
18-6

SWANSON, BASIL I. (CNC-4)
4-34

SWARTZ, BLAIR K. (C-6)
20-5
20-16

SWENSON, DONALD A. (MP-9)
21-17
21-67

SWICKARD, EARL O., JR. (L-1)
19-18

SYDORIAK, STEPHEN G. (P-8)
8-3
8-15

SYKES, A.
10-11

SZKLARZ, EUGENE G. (CMB-3)
8-7
8-22

TALLERICO, PAUL J. (MP-8)
21-26

TALLMAN, CHARLES R. (N-4)
12-1
29-8

TANAKA, NOBUYUKI (MP-7)
21-22
21-31

TASCHEK, RICHARD F. (DIR OFF)
29-7

TAUB, JAMES M. (CMB-6)
22-12

TAYLOR, R. DEAN (P-8)
8-7
8-23

TAYLOR, WILLIAM M. (T-2)
20-37

TAYLOR, WILLIAM M. (TD-6)
20-29
20-50

TENNEY, GEROLD H. (DIR OFF)
29-9

TERRELL, JAMES (P-DOR)
3-1
3-7
26-2

TERRELL, JAMES (T-6)
3-9
3-13
19-9

TESTER, JEFFERSON W. (CMB-13)
7-26
22-25

THAMER, BURTON J. (K-2)
27-5

THEOBALD, J. KARL (J-10)
4-33

THERIOT, EDWARD D., JR. (MP-3)
24-30

THERIOT, EDWARD D., JR. (MP-7)
21-47

THIESSEN, HENRY A. (MP-7)
18-3
18-4
18-18
21-13
21-20
21-22
21-47
21-48
21-49
21-58
24-30

THOMAS, KEITH S. (P-15)
10-31
10-59
10-60
10-63
10-77
10-78

THOMAS, RICHARD F., JR. (MP-1)
20-57

THOMASON, MICHAEL
21-31

THOMASSEN, KEITH I. (P-15)
10-73

THOMPSON, DONALD L. (CNC-4)
6-7
6-8

THOMPSON, DONALD L. (GMX-2)
6-6
6-9

THOMPSON, PATRICK A. (MP-7)
21-66

THOMPSON, RICHARD H. (T-5)
24-89
24-136

THOMSON, DAVID B. (GMX-6)
10-89

THORPE, MUNSON M. (A-1)
25-1
25-10
25-17

TIERNEY, MARTIN S. (J-10)
1-26

TIETJEN, GARY L. (C-5)
20-17
20-62

TINKLE, MARVIN C. (CMB-8)
22-31

TJOM, P. O.
24-4

TOBEY, ROBERT A. (H-4)
5-6
5-10
5-20
5-22
5-23
5-35
5-37
5-38
5-46
5-48
5-49
5-57

TODD, BILLY E. (W-10)
18-14

TODD, JAY, JR. (GMX-7)
19-13

TOETZ, DALE W.
7-6

TOKAR, MICHAEL, JR. (CMB-11)
22-8
22-19
22-20
22-40
22-41

TOMBRELLO, T. A.
26-14

TRUJILLO, JOE R. (CMB-14)
12-3

TRUJILLO, PATRICIO E., JR. (H-5)
16-10

TRUJILLO, THEODORE T. (H-4)
5-2
5-3

TUCK, JAMES L. (P-DO)
10-20
10-34
10-91
20-58

TUCKER, ALLEN B. (CNC-11)
24-73
24-148

TUCKER, EDWIN K. (ENG-7)
12-12

TUCKER, EDWIN K. (ENG-DO)
12-5

TURNER, G. DAVID (TD-6)
20-29
20-50
23-20
25-18

TURNER, R.
21-32

TURNER, WILLIAM C. (N-3)
29-2

ULAM, STANISLAW M.
5-39

ULAM, STANISLAW M. (RASU)
20-55

UMBARGER, C. JOHN (A-1)
2-13
5-58
16-19
24-123
25-8
25-12
25-28
25-30

VALENTINE, ALLEN M. (H-1)
16-12

VAN DILLA, MARVIN A. (H-4)
5-2
5-3
5-18
5-26

VARGA, LOUIS P. (CNC-4)
7-6

VARGA, RICHARD (C-DO)
20-16

VEESER, LYNN R. (P-3)
24-69
24-142
24-143

VENABLE, DOUGLAS (GMX-11)
14-9
14-14

VERGAMINI, PHILLIP J. (CNC-4)
7-13

VERZARIU, POMPILIU
1-11

VIGIL, JOHN C. (T-1)
27-6
27-7

VIGIL, JOHN C. (T-1) COMP.
27-11
27-12
27-13
27-14

VIOLA, VICTOR E., JR.
15-7
24-147

VISSCHER, WILLIAM M. (T-9)
26-11
26-13
26-28

VITOUSEK, MARTIN J.
29-11

VOELZ, GEORGE L. (H-DO)
5-7
5-45

VOGEL, HERBERT F. (MP-6)
12-7
12-15

VOGEL, HERBERT F. (MP-7)
21-1
21-10
21-12
21-19
21-41

WABER, JAMES T.
4-39

WACKERLE, JERRY D. (WX-7)
4-38
14-15

WADA, J.
19-50

WAGNER, PAUL (CMF-13)
22-29
22-30

WAGNER, PAUL (N-7)
22-38

WAHL, ARTHUR C. (CNC-11)
24-3

WAKEFIELD, RICHARD L. (J-16)
1-9

WALKER, GEORGE E. (P-12)
24-91

WALKER, JAMES F.
24-105

WALKER, WILLIAM F.
17-17

WALL, NATHAN SANDERS
24-129

WALLACE, TERRY C. (CMB-3)
7-24

WALRAFEN, GEORGE E.
4-37

WALTER, R. KENNETH
24-41

WALTERS, RONALD A. (H-4)
5-23
5-24
5-34
5-35
5-36
5-48

WALTON, RODDY B. (A-1)
25-11
25-17
25-22

WANDERER, P.
21-32

WARD, JOHN W. (CMB-5)
17-11

WARE, KENNETH D. (P-7)
10-1
10-10
10-15
10-23
10-41
10-57
10-66

WARNES, RICHARD H. (GMX-4)
4-20

WARREN, JOHN L. (P-2)
28-1

WATERBURY, GLENN R. (CMB-1)
2-4
2-7
2-9
2-11
2-12
2-15
2-16
2-17
2-26
2-30
2-31
2-32

WATERBURY, GLENN R. (CMB-1) COMP.
2-5

WATERMAN, MICHAEL S.
20-15

WATSON, CLAYTON W. (N-2)
20-35

WATSON, CLAYTON W. (N-DOT)
10-49

WATT, BOB E. (L-2)
19-2
19-28
19-29

WATTS, GEOFFREY P. (N-4)
12-2

WEINHAUS, F.
28-4

WEISBIN, CHARLES R. (A-1)
25-1
24-14
25-17
25-18
25-29

WEISBIN, CHARLES R. (T-2)
20-50
23-8
23-20
24-122

WEITZNER, HAROLD (P-18)
10-38
10-39

WELDON, DAVID M. (P-15)
8-19
8-20

WELLS, J. C., JR.
24-101

WELLS, MARK B. (C-7)
20-27
20-53
20-56
20-70
20-72

WELLS, MARK B. (C-7) ED.
20-69

WELLS, MICHAEL B.
1-4

WENZEL, ROBERT G. (L-3)
19-4

WENZEL, ROBERT G. (P-2)
19-15

WESCOTT, EUGENE M.
1-2
1-3
1-33

WESSON, JOHN A.
10-11

WEWERKA, EUGENE M. (CMB-13)
7-12

WHEELER, R. M.
24-14

WHITE, JOHN MICHAEL (CNC-4)
6-3

WHITE, RALPH W. (CMB-3)
8-21

WHITE, ROBERT L. (CMB-6)
12-11

WHITE, ROGER
19-24

WHITTEMORE, NADINE L. (T-2)
24-27
24-78

WIENKE, BRUCE R. (T-5)
24-52

WIGGLESWORTH, RITA M. (C-4)
24-132

WILLIAMS, ARTHUR H. (P-7)
10-1
10-10
10-15
10-41
10-57

WILLIAMS, D. LLOYD (H-4)
5-28

WILLIAMS, RICKEY J. (CMF-5)
9-6

WILLIAMSON, KENNETH D., JR. (P-8)
18-16

WITTE, KATHLEEN H. (C-7)
24-160

WITTING, JAMES
17-19

WOLCOTT, JOHN H. (J-16)
1-1

WONG, DAVID N. K.
7-11

WOOD, GERRY O. (CNC-4)
6-4

WOOD, GERRY O. (H-5)
16-5
16-10

WOOD, JOHN H. (CMB-5)
4-26

WOOSLEY, STANFORD E.
24-124

WORLTON, THOMAS G.
28-1

WORLTON, WILLIAM J. (C-DO)
20-67
20-68

WYMAN, MARVIN E.
10-83

WYMAN, MARVIN E. (P-2)
24-62

YARNELL, JOHN L. (P-2)
9-7
9-16
9-17

YASUDA, STANLEY K. (GMX-2)
2-14

YOUNG, JAMES A.
17-14

YOUNG, PHILLIP G., JR. (T-2)
24-18
24-45
24-46
24-118
24-119
24-120
24-130

ZACHARIASEN, WILLIAM H.
9-24

ZEIGLER, ROYAL K. (C-5)
2-35
20-8
20-13
20-59
20-60

ZELTMANN, ALFRED H. (CNC-2)
13-9
13-10
13-11

ZOCHER, ROY W. (CMB-11)
22-8
22-34

ZUKAS, EUGENE G. (CMB-13)
21-25
21-33
22-15
22-17
22-24
22-37

NUMERICAL INDEX

AD-712,081M 14-3
AD-712,081M 14-9
AD-712,081M 14-12
AD-712,081M 14-14
AD-712,081M 14-17
AD-848,608 4-40
ANL/HEP-7208 V.1 21-21
CERN 71-16, VOL. 2 16-13
CONF-680502-2 10-91
CONF-680503-2 16-39
CONF-690910 27-5
CONF-710624 8-11
CONF-710624 8-14
CONF-710624 10-22
CONF-710624 21-25
CONF-710624 22-15
COO-3001-11 24-139
COO-3086-14 10-12
ENDF-156 17-10
ENDF-173 24-46
ENDF-174 24-118
ENDF-175 24-119
ENDF-182 17-9
IAEA-SM-149/26 25-17
IAEA-SM-149/32 2-4
IAEA-SM-149/33 2-15
IAEA-SM-149/34 2-9
IAEA-SM-149/36 2-35
IAEA-SM-149/37 2-33
IAEA-SM-149/39 2-26
IAEA-SM-149/40 2-36
LA-2234, REV. 24-62
LA-3366 REV 23-7
LA-4313 1-26
LA-4321 27-5
LA-4402A 4-3
LA-4486-MS 14-13
LA-4587-MS 21-69
LA-4600 23-24
LA-4709-MS 10-22
LA-4724-MS 2-1
LA-4725 24-46
LA-4726 24-119
LA-4750-MS 17-10
LA-4751 20-29
LA-4775-MS 25-29
LA-4776 4-47
LA-4777 24-16
LA-4780 24-118
LA-4785 24-132
LA-4789 21-35
LA-4791 7-20
LA-4793 20-20
LA-4800 23-25
LA-4823 4-29
LA-4831-MS 26-32
LA-4832 18-9
LA-4837 7-14
LA-4839 17-3
LA-4843 14-7
LA-4846 17-1
LA-4849 2-11
LA-4851 24-21
LA-4856-MS 22-18
LA-4858-MS, VOL. 1 10-9
LA-4860-MS 16-30
LA-4860-MS 16-35
LA-4862 22-14
LA-4863-MS 10-35
LA-4864 20-22
LA-4865 5-8
LA-4866-MS 1-23
LA-4867 16-4
LA-4868 26-5
LA-4871-MS 16-7
LA-4872-MS 14-19
LA-4873 20-54
LA-4874-MS 21-7
LA-4874-MS 21-8
LA-4874-MS 21-15
LA-4874-MS 21-20
LA-4874-MS 21-23
LA-4874-MS 21-27
LA-4874-MS 21-30
LA-4874-MS 21-34
LA-4874-MS 21-36
LA-4874-MS 21-37
LA-4874-MS 21-44
LA-4874-MS 21-62
LA-4874-MS 21-65
LA-4874-MS 21-66
LA-4877-PR 1-1
LA-4878 4-25
LA-4879 20-61
LA-4882 12-13
LA-4883-PR 25-21
LA-4886-MS 18-8
LA-4887 22-20
LA-4888-PR 10-76
LA-4889-PR 27-14
LA-4890-MS 29-15
LA-4891-MS 20-71
LA-4892 24-11
LA-4893-T 7-2
LA-4895-MS 29-3
LA-4896-PR 22-3
LA-4899-PR 21-53
LA-4900-MS 29-17
LA-4901 24-43
LA-4902 5-4
LA-4904 7-17
LA-4906-MS 12-23
LA-4913-PR 27-15
LA-4914-MS 16-38
LA-4915 20-48
LA-4916-MS 20-31
LA-4917-PR 22-4
LA-4918 24-44
LA-4921-MS 19-59
LA-4923-PR 5-7
LA-4924 12-11
LA-4925 29-1
LA-4928 24-47
LA-4930-MS 10-17
LA-4931-MS 21-43
LA-4932 17-24
LA-4934 20-40
LA-4935-MS 18-15
LA-4937-MS 18-13
LA-4938-MS 23-13
LA-4940 7-16
LA-4941 27-6
LA-4943 14-6
LA-4944 4-11
LA-4945 22-41
LA-4946 21-18
LA-4947 1-9
LA-4948 20-38
LA-4950-T 20-2
LA-4955-PR 27-13
LA-4958 17-6
LA-4959-MS 22-42
LA-4961-MS 21-5
LA-4962 14-18
LA-4964 12-20
LA-4967-MS 26-30
LA-4968-MS 18-3
LA-4969-MS 24-39
LA-4970 16-8
LA-4971 2-12
LA-4972-MS 18-6
LA-4973 5-39
LA-4974 5-25
LA-4975-MS 20-52
LA-4976-MS 22-7
LA-4977-SR 27-7
LA-4978-PR 29-18
LA-4980-T 24-38
LA-4981-MS 22-37
LA-4982-PR 21-51
LA-4983-MS 20-19
LA-4984-MS 19-40
LA-4985 7-24
LA-4986-MS 19-46
LA-4989-MS 14-8
LA-4992 20-21
LA-4993-PR 27-10
LA-4994-PR 25-19
LA-4999-MS 18-14
LA-5000 21-39
LA-5001-MS 17-20
LA-5002 22-12
LA-5008 16-14
LA-5010 10-48
LA-5017-MS 29-2
LA-5018-PR 21-52
LA-5019-MS 10-37
LA-5020-T 20-47
LA-5021-PR 29-19
LA-5022 16-32
LA-5024-MS 24-24
LA-5025-PR 24-18
LA-5028-MS 20-51
LA-5029 20-44
LA-5030-MS 12-8
LA-5031-MS 26-21
LA-5032 5-14
LA-5033-PR 27-11
LA-5034 12-5
LA-5036 14-5
LA-5039-MS 29-29
LA-5040-MS 29-23

LA-5041-MS	5-42
LA-5042-MS	24-53
LA-5043-MS	24-27
LA-5048	24-57
LA-5049-MS	21-67
LA-5051	24-29
LA-5052-MS	26-24
LA-5055	22-28
LA-5057-MS	29-13
LA-5058-MS	10-33
LA-5059-MS	20-57
LA-5061-MS	20-36
LA-5062-PR	22-5
LA-5063	2-18
LA-5064-SR	2-5
LA-5065-MS	26-15
LA-5067-PR	27-9
LA-5070-MS	21-49
LA-5071-M	25-5
LA-5072-MS	18-18
LA-5073-MS	20-73
LA-5075-MS	21-12
LA-5076-MS	21-19
LA-5077-MS	21-1
LA-5078-MS	25-3
LA-5079-MS	21-48
LA-5083-MS	24-30
LA-5084-MS	21-31
LA-5085-MS	18-22
LA-5086-MS	19-34
LA-5087-MS	10-73
LA-5088	24-69
LA-5089-MS	26-18
LA-5091-PR	25-20
LA-5092-MS	21-13
LA-5094-MS	11-5
LA-5095-PR	16-31
LA-5097-MS	16-21
LA-5098-PR	27-12
LA-5101-MS	20-6
LA-5102-MS	19-58
LA-5103-MS	20-25
LA-5104-PR	16-5
LA-5105-PR	16-10
LA-5106-PR	27-8
LA-5112-MS	21-41
LA-5113-PR	29-20
LA-5115	16-25
LA-5115	21-2
LA-5115	21-4
LA-5115	21-6
LA-5115	21-9
LA-5115	21-10
LA-5115	21-14
LA-5115	21-16
LA-5115	21-17
LA-5115	21-24
LA-5115	21-26
LA-5115	21-38
LA-5115	21-50
LA-5115	21-54
LA-5115	21-56
LA-5115	21-57
LA-5115	21-58
LA-5115	21-60
LA-5115	21-61
LA-5115	21-64
LA-5115	21-68
LA-5115	26-14
LA-5118-MS	20-28
LA-5120-PR	5-1
LA-5121-MS	10-70
LA-5122-MS	14-16
LA-5123-PR	22-6
LA-5125-PR	22-33
LA-5127-MS, V.1	29-26
LA-72-711	17-22
LA-DC-10663	5-3
LA-DC-10976	6-11
LA-DC-11026	20-43
LA-DC-11028	20-13
LA-DC-11068	1-5
LA-DC-11068A	1-5
LA-DC-11071	20-27
LA-DC-11078	17-13
LA-DC-11185	9-15
LA-DC-11274	8-13
LA-DC-11286	22-26
LA-DC-11349	10-36
LA-DC-11407	9-20
LA-DC-11432	20-39
LA-DC-11512	23-11
LA-DC-11516	20-33
LA-DC-11632	3-1
LA-DC-11667	22-30
LA-DC-11694	20-16
LA-DC-11769	7-21
LA-DC-11859	9-9
LA-DC-11871	16-11
LA-DC-11872	16-1
LA-DC-11936	4-53
LA-DC-11990	25-14
LA-DC-12002	22-9
LA-DC-12009	20-14
LA-DC-12068	16-37
LA-DC-12081	20-37
LA-DC-12097	20-11
LA-DC-12106	9-22
LA-DC-12197	16-40
LA-DC-12218	23-22
LA-DC-12231	5-33
LA-DC-12276	8-23
LA-DC-12292	22-17
LA-DC-12294	25-25
LA-DC-12295	25-22
LA-DC-12296	25-9
LA-DC-12316	8-25
LA-DC-12383	22-39
LA-DC-12424	4-51
LA-DC-12468	4-54
LA-DC-12470	22-11
LA-DC-12485	1-31
LA-DC-12486	4-15
LA-DC-12489	20-24
LA-DC-12521	20-15
LA-DC-12525	5-29
LA-DC-12531	7-19
LA-DC-12536	5-34
LA-DC-12538	26-13
LA-DC-12554	26-11
LA-DC-12563	9-11
LA-DC-12565	28-1
LA-DC-12575	12-10
LA-DC-12582	7-12
LA-DC-12588	23-15
LA-DC-12593	16-41
LA-DC-12595	14-1
LA-DC-12600	5-21
LA-DC-12602	13-15
LA-DC-12606	19-14
LA-DC-12652	5-16
LA-DC-12679	20-7
LA-DC-12683	25-11
LA-DC-12696	26-16
LA-DC-12699	20-10
LA-DC-12701	9-3
LA-DC-12705	24-60
LA-DC-12710	3-15
LA-DC-12711	1-29
LA-DC-12718	3-10
LA-DC-12720	19-19
LA-DC-12727	4-4
LA-DC-12734	27-3
LA-DC-12746	16-15
LA-DC-12761	4-23
LA-DC-12766	18-16
LA-DC-12767	5-22
LA-DC-12768	3-8
LA-DC-12783	25-15
LA-DC-12794	28-6
LA-DC-12801	25-17
LA-DC-12802	18-17
LA-DC-12803	24-20
LA-DC-12804	2-4
LA-DC-12805	2-9
LA-DC-12806	2-15
LA-DC-12808	2-36
LA-DC-12810	2-33
LA-DC-12811	2-26
LA-DC-12812	2-35
LA-DC-12815	7-5
LA-DC-12817	15-10
LA-DC-12822	10-16
LA-DC-12834	26-1
LA-DC-12836	3-12
LA-DC-12837	19-23
LA-DC-12840	20-9
LA-DC-12843	5-6
LA-DC-12844	20-42
LA-DC-12845	12-14
LA-DC-12848	4-10
LA-DC-12854	20-74
LA-DC-12858	1-21
LA-DC-12883	5-31
LA-DC-12885	28-3
LA-DC-12892	19-5
LA-DC-12895	24-2
LA-DC-12911	4-45
LA-DC-12915	20-64
LA-DC-12940	2-28
LA-DC-12945	10-51
LA-DC-12946	19-15
LA-DC-12953	24-86
LA-DC-12954	24-41
LA-DC-12955	25-24
LA-DC-12962	17-16
LA-DC-12972	24-103
LA-DC-12975	22-23
LA-DC-12976	18-10
LA-DC-12990	8-11
LA-DC-12994	20-32
LA-DC-12995	21-25
LA-DC-12996	22-15
LA-DC-13010	24-37
LA-DC-13018	7-9
LA-DC-13019	21-63
LA-DC-13021	4-2
LA-DC-13025	24-163
LA-DC-13033	26-34
LA-DC-13034	24-28
LA-DC-13039	7-22
LA-DC-13040	2-34
LA-DC-13043	16-17

LA-DC-13044	22-25
LA-DC-13045	9-5
LA-DC-13048	13-3
LA-DC-13058	24-146
LA-DC-13059	24-98
LA-DC-13060	24-145
LA-DC-13063	5-49
LA-DC-13066	24-140
LA-DC-13069	6-4
LA-DC-13070	19-47
LA-DC-13071	17-15
LA-DC-13076	1-10
LA-DC-13082	24-116
LA-DC-13083	16-3
LA-DC-13095	5-17
LA-DC-13106	21-42
LA-DC-13107	21-59
LA-DC-13108	24-141
LA-DC-13111	9-8
LA-DC-13112	24-1
LA-DC-13124	10-88
LA-DC-13134	6-2
LA-DC-13135	6-12
LA-DC-13141	5-35
LA-DC-13143	5-24
LA-DC-13156	29-28
LA-DC-13175	28-7
LA-DC-13178	4-24
LA-DC-13190	24-110
LA-DC-13192	25-27
LA-DC-13195	24-131
LA-DC-13197	2-27
LA-DC-13198	19-52
LA-DC-13200	24-99
LA-DC-13209	6-9
LA-DC-13217	20-26
LA-DC-13224	24-91
LA-DC-13238	24-114
LA-DC-13245	13-11
LA-DC-13255	20-66
LA-DC-13268	23-26
LA-DC-13269	23-14
LA-DC-13270	24-45
LA-DC-13271	24-120
LA-DC-13274	4-35
LA-DC-13275	23-21
LA-DC-13277	17-11
LA-DC-13278	24-149
LA-DC-13286	13-7
LA-DC-13289	17-4
LA-DC-13290	26-26
LA-DC-13292	22-24
LA-DC-13293	23-1
LA-DC-13294	23-27
LA-DC-13296	24-158
LA-DC-13299	8-22
LA-DC-13301	12-21
LA-DC-13302	20-72
LA-DC-13310	26-33
LA-DC-13312	6-1
LA-DC-13313	18-21
LA-DC-13316	16-16
LA-DC-13317	23-23
LA-DC-13319	25-18
LA-DC-13327	26-17
LA-DC-13330	7-8
LA-DC-13334	24-117
LA-DC-13335	24-33
LA-DC-13337	8-4
LA-DC-13340	24-54
LA-DC-13345	24-22
LA-DC-13347	20-3
LA-DC-13348	4-34
LA-DC-13351	9-23
LA-DC-13354	5-10
LA-DC-13361	24-108
LA-DC-13362	3-7
LA-DC-13364	19-56
LA-DC-13366	5-18
LA-DC-13371	1-4
LA-DC-13372	6-15
LA-DC-20439	20-4
LA-DC-20459	1-26
LA-DC-20483	5-40
LA-DC-72-1019	26-25
LA-DC-72-1055	5-41
LA-DC-72-1069	25-28
LA-DC-72-1070	21-55
LA-DC-72-1078	20-35
LA-DC-72-1087	13-2
LA-DC-72-1090	19-20
LA-DC-72-1104	24-49
LA-DC-72-1109	13-5
LA-DC-72-1122	24-109
LA-DC-72-1129	17-25
LA-DC-72-1132	21-40
LA-DC-72-1144	18-7
LA-DC-72-1157	11-7
LA-DC-72-1165	1-30
LA-DC-72-12	5-54
LA-DC-72-125	10-27
LA-DC-72-1253	21-17
LA-DC-72-1267	21-38
LA-DC-72-1288	21-9
LA-DC-72-1289	21-4
LA-DC-72-1293	24-85
LA-DC-72-130	10-31
LA-DC-72-1301	21-14
LA-DC-72-1309	21-6
LA-DC-72-1310	21-16
LA-DC-72-133	21-47
LA-DC-72-137	24-93
LA-DC-72-141	20-56
LA-DC-72-1438	21-64
LA-DC-72-1442	21-57
LA-DC-72-148	14-10
LA-DC-72-153	16-9
LA-DC-72-156	16-19
LA-DC-72-157	3-13
LA-DC-72-158	11-8
LA-DC-72-16	24-106
LA-DC-72-161	24-136
LA-DC-72-17	4-37
LA-DC-72-180	4-18
LA-DC-72-183	2-31
LA-DC-72-186	25-16
LA-DC-72-187	22-19
LA-DC-72-189	26-3
LA-DC-72-193	24-137
LA-DC-72-195	2-17
LA-DC-72-197	24-82
LA-DC-72-205	24-65
LA-DC-72-212	1-33
LA-DC-72-228	12-4
LA-DC-72-230	22-36
LA-DC-72-231	24-66
LA-DC-72-236	6-6
LA-DC-72-243	20-68
LA-DC-72-244	26-23
LA-DC-72-248	24-105
LA-DC-72-250	4-13
LA-DC-72-252	20-34
LA-DC-72-256	24-10
LA-DC-72-259	3-2
LA-DC-72-26	18-11
LA-DC-72-260	8-3
LA-DC-72-262	4-46
LA-DC-72-285	1-19
LA-DC-72-286	3-11
LA-DC-72-296	26-27
LA-DC-72-297	10-18
LA-DC-72-298	3-6
LA-DC-72-303	13-12
LA-DC-72-307	24-111
LA-DC-72-314	18-5
LA-DC-72-32	7-26
LA-DC-72-331	20-70
LA-DC-72-335	15-2
LA-DC-72-343	6-5
LA-DC-72-347	26-20
LA-DC-72-352	1-14
LA-DC-72-354	24-88
LA-DC-72-355	5-30
LA-DC-72-359	25-30
LA-DC-72-364	17-21
LA-DC-72-368	19-4
LA-DC-72-369	6-10
LA-DC-72-389	20-65
LA-DC-72-393	24-79
LA-DC-72-40	20-62
LA-DC-72-400	8-6
LA-DC-72-406	2-14
LA-DC-72-410	20-30
LA-DC-72-411	20-63
LA-DC-72-414	24-92
LA-DC-72-415	19-41
LA-DC-72-419	15-3
LA-DC-72-423	24-81
LA-DC-72-424	19-55
LA-DC-72-429	28-2
LA-DC-72-43	24-96
LA-DC-72-434	13-13
LA-DC-72-435	9-21
LA-DC-72-44	5-12
LA-DC-72-440	24-94
LA-DC-72-445	5-38
LA-DC-72-447	19-18
LA-DC-72-451	4-8
LA-DC-72-452	24-9
LA-DC-72-453	1-18
LA-DC-72-460	4-31
LA-DC-72-468	19-30
LA-DC-72-470	8-19
LA-DC-72-471	20-46
LA-DC-72-473	7-3
LA-DC-72-484	1-12
LA-DC-72-494	5-46
LA-DC-72-495	15-13
LA-DC-72-496	20-45
LA-DC-72-50	4-49
LA-DC-72-509	13-14
LA-DC-72-510	18-4
LA-DC-72-512	10-53
LA-DC-72-517	24-50
LA-DC-72-523	27-4
LA-DC-72-524	2-30
LA-DC-72-525	2-16
LA-DC-72-529	18-19
LA-DC-72-533	7-18
LA-DC-72-535	27-2
LA-DC-72-536	5-32
LA-DC-72-539	24-165
LA-DC-72-540	29-11

LA-DC-72-543	24-157
LA-DC-72-546	22-22
LA-DC-72-547	24-40
LA-DC-72-551	6-13
LA-DC-72-552	27-1
LA-DC-72-556	12-3
LA-DC-72-568	5-20
LA-DC-72-569	5-57
LA-DC-72-57	20-8
LA-DC-72-58	14-2
LA-DC-72-581	12-17
LA-DC-72-583	4-32
LA-DC-72-589	6-3
LA-DC-72-591	1-35
LA-DC-72-594	4-52
LA-DC-72-595	26-22
LA-DC-72-598	26-4
LA-DC-72-6	4-1
LA-DC-72-602	9-12
LA-DC-72-604	25-4
LA-DC-72-611	24-143
LA-DC-72-617	24-97
LA-DC-72-621	24-19
LA-DC-72-624	15-5
LA-DC-72-625	24-48
LA-DC-72-626	20-23
LA-DC-72-629	24-32
LA-DC-72-649	5-36
LA-DC-72-651	24-68
LA-DC-72-653	24-151
LA-DC-72-658	26-29
LA-DC-72-659	29-5
LA-DC-72-660	23-19
LA-DC-72-666	6-7
LA-DC-72-669	11-4
LA-DC-72-673	24-164
LA-DC-72-680	26-12
LA-DC-72-681	24-83
LA-DC-72-687	5-13
LA-DC-72-688	9-1
LA-DC-72-702	10-67
LA-DC-72-705	17-23
LA-DC-72-709	5-15
LA-DC-72-710	12-12
LA-DC-72-724	8-26
LA-DC-72-730	8-18
LA-DC-72-734	23-20
LA-DC-72-738	24-90
LA-DC-72-745	26-28
LA-DC-72-746	1-20
LA-DC-72-749	23-8
LA-DC-72-755	19-48
LA-DC-72-758	18-2
LA-DC-72-760	6-8
LA-DC-72-767	7-15
LA-DC-72-780	16-24
LA-DC-72-783	20-1
LA-DC-72-785	8-15
LA-DC-72-788	19-42
LA-DC-72-794	24-73
LA-DC-72-799	24-152
LA-DC-72-801	4-22
LA-DC-72-803	7-7
LA-DC-72-809	24-7
LA-DC-72-818	24-15
LA-DC-72-840	24-80
LA-DC-72-848	24-87
LA-DC-72-855	8-5
LA-DC-72-868	4-19
LA-DC-72-872	26-10
LA-DC-72-873	26-19
LA-DC-72-876	24-6
LA-DC-72-879	26-31
LA-DC-72-880	26-7
LA-DC-72-881	21-45
LA-DC-72-891	8-10
LA-DC-72-892	20-58
LA-DC-72-894	9-7
LA-DC-72-896	10-77
LA-DC-72-90	24-70
LA-DC-72-903	9-17
LA-DC-72-904	24-121
LA-DC-72-905	24-161
LA-DC-72-906	24-13
LA-DC-72-907	24-67
LA-DC-72-909	12-9
LA-DC-72-914	8-8
LA-DC-72-918	24-72
LA-DC-72-919	8-21
LA-DC-72-920	16-36
LA-DC-72-922	8-2
LA-DC-72-927	10-71
LA-DC-72-941	8-7
LA-DC-72-952	24-35
LA-DC-72-963	24-138
LA-DC-72-977	25-7
LA-DC-72-984	20-53
LA-DC-72-999	15-8
LA-DC-9005	16-39
LA-DC-9519	10-91
LASL-4963	17-9
N-2-560	29-21
N68-28181	10-91
NASA SP-236	2-8
NUB-2135	24-83
NWEF-1090	23-1
ORO-3778-3	10-28
ORO-3778-3	10-79
PROC. PHYS. SOC.	4-8
SC-LA-84	16-16
SC-LA-84	17-15
SC-RR-72-0031	22-43
TID-24860	29-21
TID-7029	2-19
TID-7029	2-20
TID-7029	2-21
TID-7029	2-22
TID-7029	2-23
TID-7029	2-24
TID-7029	2-25
U. S. PATENT 3,636,923	22-2
U. S. PATENT 3,641,444	12-2
U. S. PATENT 3,644,221	22-29
U. S. PATENT 3,666,845	22-32
U. S. PATENT 3,667,059	10-2
U. S. PATENT 3,678,061	7-1
U. S. PATENT 3,693,731	11-6

PUBLICATION TABULATION

A. JOURNAL ARTICLES - 668 Articles in 138 Journals. (List is Alphabetical by the arrangement of titles in the LASL Libraries.)

Acta Crystallographica - 13
Acta Cytologica - 2
Acta Mechanica - 1
Advances in Cell Biology - 1
Advances in Cryogenic Engineering - 1
Advances in Mathematics - 1
AIChE Journal - 1
Air Pollution Control Association, Journal - 1
American Association for Cancer Research, Proceedings - 1
American Astronomical Society, Bulletin - 6
American Ceramic Society, Bulletin - 5
American Ceramic Society. Journal - 1
American Chemical Society, Abstracts of Papers - 17
American Industrial Hygiene Association, Journal - 7
American Institute of Aeronautics and Astronautics Journal - 1
American Mathematical Society, Bulletin - 1
American Mathematical Society, Notices - 4
American Nuclear Society. Transactions - 38
American Physical Society, Bulletin - 181
American Statistical Association, Journal - 2
Analytical Chemistry - 1
Anatomical Record - 1
Annals of Mathematical Statistics - 1
Annals of Physics - 1
Annual Reviews of Biophysics and Engineering - 1
Antarctic Journal of the United States - 1
Applied Optics - 2
Applied Physics Letters - 2
Applied Spectroscopy - 2
Archives of Biochemistry and Biophysics - 6
Association for Computing Machinery, Journal - 1
Astronautics and Aeronautics - 1
Astrophysical Journal - 6
Atmospheric Environment - 1
Biochemical and Biophysical Research Communications - 2
Biochemistry - 2
Biochimica et Biophysica Acta - 1
Biometrics - 1
Biotechnology and Bioengineering - 1
Bulletin of the Seismological Society of America - 1
Cancer Research - 3
Carbon - 1
Chemical Physics Letters - 6
Chemtech - 1
Comments on Plasma Physics and Controlled Fusion - 1
Computer Physics Communications - 3
Current Topics in Radiation Research Quarterly - 1
Discrete Mathematics - 1
EDN - 1
Electrochemical Society, Journal - 5
Environmental Science and Technology - 1
EOS (American Geophysical Union, Transactions) - 13
Experimental Cell Research - 2
FEBS Letters - 1
Health Physics - 9
High Temperature Science - 1
IEEE Journal of Quantum Electronics - 7
IEEE Transactions on Audio and Electroacoustics - 1
IEEE Transactions on Automatic Control - 1
IEEE Transactions on Computers - 2
IEEE Transactions on Nuclear Science - 4
Inorganic Chemistry - 4
International Journal of Applied Radiation and Isotopes - 1
International Journal of Chemical Kinetics - 1
International Journal of Computer and Information Sciences - 1
Isotopes and Radiation Technology - 1

Journal of Applied Physics - 4
Journal of Approximation Theory - 1
Journal of Cell Biology - 6
Journal of Cellular Physiology - 1
Journal of Chemical and Engineering Data - 1
Journal of Chemical Physics - 21
Journal of Chemical Thermodynamics - 2
Journal of Chromatography - 1
Journal of Colloid and Interface Science - 1
Journal of Combinatorial Theory - 2
Journal of Computational Physics - 5
Journal of Fluid Mechanics - 1
Journal of Geophysical Research - 13
Journal of Heterocyclic Chemistry - 2
Journal of Histochemistry and Cytochemistry - 1
Journal of Inorganic and Nuclear Chemistry - 2
Journal of Low Temperature Physics - 1
Journal of Magnetic Resonance - 1
Journal of Mathematical Physics - 3
Journal of Non-Crystalline Solids - 1
Journal of Nuclear Materials - 3
Journal of Occupational Medicine - 1
Journal of Physical Chemistry - 1
Journal of Physics. B. (Proceedings of the Physical Society) - 2
Journal of Quantitative Spectroscopy and Radiative Transfer - 2
Journal of Spacecraft and Rockets - 1
Journal of Statistical Computation and Simulation - 1
Journal of Vacuum Science and Technology - 2
Laboratory Investigation - 1
Life Sciences and Space Research - 1
Materials Evaluation - 5
Mathematics of Computation - 3
Mechanical Engineering - 1
Metallographic Review - 1
Monatshefte fur Chemie - 1
Nature - 2
Nature Physical Science - 1
Nuclear Data Tables - 1
Nuclear Engineering and Design - 1
Nuclear Instruments and Methods - 14
Nuclear News - 1
Nuclear Physics - 16
Nuclear Science and Engineering - 6
Nuclear Technology - 4
Numerische Mathematik - 1
Optical Society of America. Journal - 7
Particles and Nuclei - 1
Physical Review - 47
Physical Review Letters - 17
Physics in Medicine and Biology - 4
Physics Letters - 7
Physics of Fluids - 11
Physics of the Earth and Planetary Interiors - 1
Physics Teacher - 1
Physics Today - 3
Planetary and Space Science - 3
Proceedings of the Australian Biochemical Society - 1
Proceedings of the IEEE - 1
Radiation Research - 3
Reactor Technology - 1
Recherche - 1
Review of Scientific Instruments - 8
Reviews of Modern Physics - 1
Science - 2
SIAM Journal on Applied Mathematics - 2
Sky and Telescope - 1
Society for Experimental Biology and Medicine. Proceedings - 2
Solar Physics - 2
Special Libraries - 1
Talanta - 2
Technometrics - 1
Zeitschrift fur Physik - 1

B. BOOKS - 2

C. CHAPTERS OF BOOKS AND ENCYCLOPEDIA ARTICLES - 12

D. PAPERS IN CONFERENCE PROCEEDINGS PUBLISHED AS BOOKS - 95

E. PAPERS IN CONFERENCE PROCEEDINGS PUBLISHED AS REPORTS - 54

F. CONFERENCE PAPERS PUBLISHED ONLY AS ABSTRACTS IN MEETING PROGRAMS OTHER THAN ACS, ANS, APS - 2

G. U. S. PATENTS - 7

H. LOS ALAMOS SCIENTIFIC LABORATORY REPORTS - 202

I. PAPERS ISSUED AS LASL REPORTS BY TIC, NTIS, AND NASA - 157

J. PAPERS ISSUED AS REPORTS BY OTHERS - 3

K. PAPERS IN REPORTS PUBLISHED BY OTHERS - 7

L. THESES - 5

WORDS EXCLUDED FROM KWIC INDEX

A
ABOUT
ABOVE
ABSENCE
ACCELERATED
ACCELERATING
ACCOMPANY
ACCOMPLISH
ACCORDANCE
ACHIEVED
ACHIEVEMENT
ACHIEVING
ACROSS
ACTUAL
ACTUALLY
AD
ADDITIONAL
ADVANCE
ADVANCED
AFFECT
AFFECTING
AFTER
AGAINST
AIRES
ALAMOS
ALL
ALLIED
ALMOST
ALSO
ALTERNATE
AMONG
AMOUNT
AN
AND
ANOTHER
ANTICIPATED
ANY
APPLICABLE
APPLICATION
APPLICATIONS
APPLIES
APPLY
APPLYING
APPROPRIATE
APPROVED
ARE
ARISING
ARRANGEMENTS
AS
ASSIGNED
ASSOCIATED
ASSOCIATION
AT
AUTHORIZED
BASED
BASIS
BE
BECAUSE
BEEN
BEING
BELOW
BETWEEN
BEYOND
BORNE
BOTH
BRIEF
BY
CA
CALIBRATED
CAN
CANNOT
CAPABILITY
CARLO
CARRIED
CAUSED
CENT
CERTAIN
CHARACTERISTICS
CIRCUMSTANCES
CLASSIFIED
CLASSIFY
CLOSE
CLOSELY
CLOSER
COMMENT
COMPLETE
COMPLETED
CONCERNED
CONCERNING
CONDITION
CONDITIONS
CONDUCTING
CONFIDENTIAL
CONSIDERATION
CONSIDERED
CONSTITUTE
CONTAIN
CONTAINED
CONTAINING
CONTEMPLATED
CONTEXT
COVERED
DAY TO DAY
DAYS
DE
DECLASSIFICATION
DECLASSIFIED
DEDUCIBLE
DEFINED
DEGREE
DEGREES
DESCRIBED
DESCRIPTION
DESCRIPTIVE
DESIGNED
DESIRED
DETAILED
DETAILS
DETERMINATION
DETERMINATIONS
DETERMINED
DETERMINING
DEVELOP
DEVELOPED
DEVELOPING
DEVELOPMENT
DEVELOPMENTAL
DEVELOPMENTS
DIFFERENT
DIFFICULTIES
DIRECTLY
DISCERNIBLE
DISCLOSED
DO
DOCUMENTS
DOES
DUE
DURING
EACH
EARLY
ED
EITHER
ELABORATION
EMPHASIS
ENDED
ENDING
EQUAL
EQUALS
EQUIVALENT
ESTABLISHED
ETC.
EVALUATE
EVALUATED
EVALUATING
EVALUATION
EVEN
EXAMPLE
EXCEPT
EXISTENCE
EXISTING
EXPECTED

EXPECTED
EXPLICITLY
FACT
FACTOR
FACTORS
FALLS
FAR
FEATURE
FEATURES
FEET
FOLLOWED
FOLLOWING
FOLLOWS
FOR
FOUR
FOURTH
FRD
FROM
FURTHER
FY
GATHER
GATHERING
GAVE
GENERAL
GIVE
GIVES
GOOD
GRAAFF
GREATER
HANDLED
HARD
HAS
HAVE
HAVING
HEATED
HELD
HIGHLY
HOC
HOT
HOWEVER
I
IDENTIFIABLE
IDENTIFICATION
IDENTIFIED
IDENTIFY
IF
II
III
IL
IMPLY
IMPLYING
IMPORTANCE
IMPORTANT
IMPROVED
IMPROVES
IMPROVING
IN
INCHES
INCLUDE
INCLUDED
INCLUDES
INCLUDING
INDICATED
INDICATES
INDICATING
INDIRECTLY
INDIVIDUAL
INTENDED
INTEREST
INTERESTED
INTERIM
INTO
INTRODUCED
INVESTIGATION
INVESTIGATIONS
INVOLVED
INVOLVING
IS
ISSUED
IT
ITEM
ITEMS
ITS
IV
IX
JUDGMENT
KELVIN
KNOWN
LARGE
LAST
LATE
LATER
LESS
LIKE
LISTED
LOCAL
LOCALIZED
LOOSE
LOOSELY
LOT
MADE
MAINTAIN
MAINTAINED
MAINTAINING
MAKES
MAKING
MEANS
MEASURES
MEET
MEETING
MENTION
MENTIONED
MERE
MIGHT
MILES
MILLION
MINUTE
MISCELLANEOUS
MODERN
MORE
MOVING
MUST
NAMELY
NATURE
NEAR
NEAREST
NEARLY
NECESSARY
NEEDED
NM
NO
NORMALLY
NOT
NOTE
NOTED
NOTICE
NOVEL
NOW
NV
OBSERVATION
OBSERVED
OBTAINED
OCCURRED
OCCURRENCE
OF
OFFERED
OFFICERS
OFFICIAL
OFTEN
ON
ONLY
OR
ORGANIZATION
ORGANIZATIONS
OTHER
OTHERWISE
OUT
OUTSIDE
OVER
OVERALL
OVERRIDE
PAPERS
PARALLEL
PART
PARTIALLY
PARTICIPATING
PARTICIPATION
PARTICULAR
PARTICULARLY
PARTS
PAST
PER
PERCENT
PLACE
PLANNED
PLANNING
PLUS
POOR
POSSIBLE
POUNDS
PPM
PRACTICAL
PRECISE
PREDICTED
PRELIMINARY
PREPARED
PRESENCE
PRESENT
PRIOR
PROBLEMS
PROVIDE
PROVIDED
PROVIDING
PURPOSE
PURPOSES
REASON
RECENT
REFER
REFERS
REGARDING
RELATED
RELATING
RELATIONSHIP
REQUIRE
REQUIRED
REQUIREMENT
REQUIREMENTS
RESOLVE
RESULTING
RESULTS
REVEAL
REVEALED

REVEALING
REVEALS
REVISED
SAME
SATISFACTORY
SECRET
SECTION
SECTIONS
SEE
SEEN
SELECTED
SHOULD
SIMILAR
SIMILARITY
SIMPLE
SIMULTANEOUS
SIX
SIXTEEN
SLOW
SLOWLY
SO
SOME
SPECIFIED
STATEMENT
STATEMENTS
STUDY
SUBJECT
SUBMITTED
SUBSEQUENT
SUBTLE
SUCH
SUMMARIZING
TAKES
TERA
TERM
TERMS
THAN
THAT
THE
THEIR
THEM
THERE
THEREFORE
THEREOF
THESE
THEY
THIS
THOSE
THREE
THROUGH
TO
TOPIC
TOPICS
TRANS-1
TWELVE
TYPE
TYPES
UNCLASSIFIED
UNDER
UNLESS
UP
USE
USED
USEFUL
USING
V
VARIOUS
VERY
VI
VIA
VII
VIII
VOL
WAS
WAYS
WE
WERE
WHEN
WHERE
WHETHER
WHICH
WHOSE
WHY
WILL
WITH
WITHIN
WITHOUT
WORK
WOULD
XII
XIV

KWIC INDEX

ABERRATIONS
ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS. 21-19

ABSOLUTE
ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ABSORBANCE
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

ABSORBING
PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS. 22-31

ABSORPTION
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-81

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-9

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

MODEL FOR THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

ABSORPTIVE
EFFECTS OF STRONGLY ABSORPTIVE INTERACTIONS. 24-38

ABSTRACTION
ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

ABUNDANCE
VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

ACCELERATION
EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

ACCELERATOR
ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR. 10-10

PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

ACCIDENTAL
IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

ACCURATE
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

ACCURATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

ACETYL
TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

ACETYLATION
EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

ACID
PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

ACID - BASE TITRATIONS IN SULFOLANE. 7-2

CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

ACOUSTIC
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

ACOUSTIC RAY TRACING IN UNSTEADY FLOWS. 17-2

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

ACQUISITION
PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-48

ACTINIDE
RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

ACTINIUM
ON THE METALLIC RADIUS OF ACTINIUM. 4-32

ACTINOMETER
THERMAL ACTINOMETER FOR FLASH PHOTOLYSIS. 6-13

ACTIVATION
IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

LASER ACTIVATION OF SOLAR CELLS. 19-30

ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

ACTIVE
ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

ACTIVITY
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

ADAPTABILITY
ADAPTABILITY OF FISSILE MATERIALS TO NUCLEAR EXPLOSIVES. 25-2

ADAPTATION
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

ADC
MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

ADJOINT
SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

ADMITTANCE
AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF. 21-4

ADRIAMYCIN
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

ADVANCES
RECENT ADVANCES IN THE STUDY OF SOLID SURFACES. 9-18

ADVANTAGES
ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

AEC
USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-

AERODYNAMIC
AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-

AEROSOL
AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-

AEROSOLS
IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-

AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-

SIZE CHARACTERISTICS OF PLUTONIUM AEROSOLS. 16-

AEROSPACE
FUTURE DEVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS. 29-

AGE
SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-

AGENCY
ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-

AGENTS
SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

AIR
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-

NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-

AIRBORNE
NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-

AIRCRAFT
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

ALAMOSSKAIA
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-

ALBEDO
DESIGN OF ALBEDO NEUTRON DOSIMETERS. 18-

BONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

IATIONS IN SULFOLANE. 7-2

TURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC
HEROMONE OF THE HONEYBEE. 9-5

ON TESTING PROGRAM: PROGRESS REPORT ON TENSILE
H OCTOBER 1970. 2-1

RACING IN UNSTEADY FLOWS. 17-2

E FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 18-2

IDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

ICS DATA ACQUISITION SOFTWARE. 21-48

ICTURE IN (TRITON,PROTON-FISSION) AND
ON-FISSION) ON ACTINIDE NUCLEI. 15-12

TON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS
TINIDE REGION. 24-139

ANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE
REGION. 24-156

ELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE 24-162

RADIUS OF ACTINIUM. 4-32

METER FOR FLASH PHOTOLYSIS. 6-13

F AEROSOLS IN THE SOUTHWESTERN UNITED STATES
N ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

N OF SOLAR CELLS. 19-30

ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

FISSIONABLE MATERIALS AT THE LOS ALAMOS
ASSAY STANDARDS LABORATORY. 25-1

EASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT
NS AND LIQUID STRUCTURE. 7-19

VITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC
RUCTURE AND TWO LIQUID REGIONS. 7-25

FISSILE MATERIALS TO NUCLEAR EXPLOSIVES. 25-2

LUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION
LUOROMETRY. 5-2

IE FLUORESCENT FEULGEN REACTION TO CELLS IN
LOW MICROFLUOROMETRY. 5-3

FACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE 20-38

W ENERGY PHOTON TRANSPORT AND THE SIMULATION OF
RON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

TANCE MEASUREMENT AT LAMPF. 21-4

INE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN,
IAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL 5-20

IN THE STUDY OF SOLID SURFACES. 9-18

LIMITATIONS OF MASS SPECTROMETRY FOR THE
THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND

PLICATION TO NUCLEAR FUEL BURN-UP. 2-3

AEC
USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

AERODYNAMIC
AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-2

AEROSOL
AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

AEROSOLS
IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-2

SIZE CHARACTERISTICS OF PLUTONIUM AEROSOLS. 16-36

AEROSPACE
FUTURE DEVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS. 29-6

AGE
SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

AGENCY
ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

AGENTS
SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

AIR
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-18

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

AIRBORNE
NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

AIRCRAFT
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

ALAMOSSKAIA
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

ALBEDO
DESIGN OF ALBEDO NEUTRON DOSIMETERS. 18-7

2

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

ALGORITHM
ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-15

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-41

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-42

ALGORITHMS
VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

ALIGNMENT
ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

ALKALINE
LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

ALLOY
AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

ALLOYS
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

EVALUATION OF URANIUM ALLOYS. 22-12

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

ALONG
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

ALPHA
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-48

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-73

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-75

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

ALTERNATIVES
ENERGY CRISIS: SOME POLICY ALTERNATIVES. 29-3

ALTITUDE
HIGH ALTITUDE IRON VAPOR RELEASE. 1-12

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

ALUMINA
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

ALUMINUM
RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM. 24-119

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

AMALGAM
PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

AMBIENT
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

AMERICIUM
DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

AMMONIA
DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

AMMONIUM
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

AMORPHOUS
AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

AMPC
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-22

AMPEROMETRIC
PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

AMPLIFIER
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-22

LASL 51MM DISC AMPLIFIER. 19-37

AMPLIFIERS
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

AMPLITUDE
AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

AMPLITUDES
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

ANALOGS
EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

ANALOGUES
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

ANALYSES
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

ANALYSIS
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

CTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS
ITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

UTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S 20-15

ADRATURE BY THE EPSILON ALGORITHM. 20-41

ADRATURE BY THE EPSILON ALGORITHM. 20-42

ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS
OINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

ILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC 21-24

ATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION
NE EARTH METALS. 4-22

LOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

GEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM
111 AT 2400 DEGREES FAHRENHEIT. 22-10

MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT
IONS AND LIQUID STRUCTURE. 7-19

URANIUM ALLOYS. 22-12

FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN 22-26

AMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS
ATHS. 20-37

LPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL
CORONA AT 18 EARTH RADII. 1-35

BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA),
N) AND (TRITON,ALPHA) REACTIONS. 15-6

BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA),
N) AND (TRITON,ALPHA) REACTIONS. 15-6

OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

ATES IN BISMUTH -209 FROM THE POLONIUM -210
REACTION. 24-125

INE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) 24-144

HA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON)
AVY ELEMENT TARGETS. 24-147

HA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON)
AVY ELEMENT TARGETS. 24-147

ON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

CTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON)
REACTION. 24-48

TON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON 24-73

IUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) 24-75

LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID 29-7

OME POLICY ALTERNATIVES. 29-3

RON VAPOR RELEASE. 1-12

ANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE
ITUDE OF 90 KILOMETERS. 26-18

ALUMINA
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

ALUMINUM
RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM. 24-119

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

AMALGAM
PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

AMBIENT
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

AMERICIUM
DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

AMMONIA
DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

AMMONIUM
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-13

AMORPHOUS
AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

AMPC
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-22

AMPEROMETRIC
PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

AMPLIFIER
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-22

LASL 51MM DISC AMPLIFIER. 19-37

AMPLIFIERS
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

AMPLITUDE
AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

AMPLITUDES
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

ANALOGS
EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58, -58. 24-49

ANALOGUES
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

ANALYSES
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

ANALYSIS
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

2

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

ELEMENTAL ANALYSIS OF BIOLOGICAL SAMPLES. 2-13

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

ANALYSIS OF NUCLEAR FUELS. A REVIEW. 2-4

CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS. 15-1

IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-20

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

ANALYTIC
ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 24-8

ANALYTICAL
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

ANALYZED
ANALYZED BINARY COMPUTING. 20-1

ANALYZING
ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-15

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

ANCILLARY
DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES. 12-6

ANEUPLOID
ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

ANGLE
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

ANGULAR
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 12-14

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

ANHARMONICITY
MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

ND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

AL ANALYSIS OF BIOLOGICAL SAMPLES. 2-13

ION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED EL AND SOURCE MATERIALS. 2-26

TIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: G PEAK TRANSMITTANCES. 2-27

ALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OR FUEL MATERIALS. 2-35

OF NUCLEAR FUELS. A REVIEW. 2-4

TATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED 5-14

W MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF AGENTS ON CELL CYCLE PROGRESSION. 5-57

NALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL ATE. 7-21

ONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON GRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL ANALYSIS. 9-13

OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF TERING SPECTRA. 10-14

VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE L VLASOV PLASMAS. 10-36

F FISSION ISOMER EXCITATION FUNCTIONS. 15-1

ION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES VATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

OSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR JULY 1 - SEPTEMBER 30, 1972. 16-31

O ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL IFICES. 17-11

THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE OMPRESSIBLE IRROTATIONAL CASE STEADY-STATE 17-3

A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL A PDP-9/ PDP-15 COMPUTER. 20-28

D EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

NALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE 23-16

N MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 FROM 11.0 TO 30.3 MEV. 24-110

ALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

M -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

SE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC 24-82

SE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXOTIC BARYON RESONANCES. 24-83

ON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

LYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT IL 1972. 25-19

LYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT 972. 25-20

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

ANALYTIC
ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 24-8

ANALYTICAL
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

ANALYZED
ANALYZED BINARY COMPUTING. 20-1

ANALYZING
ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

ANCILLARY
DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES. 12-6

ANEUPLOID
ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

ANGLE
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

ANGULAR
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 12-14

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

ANHARMONICITY
MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

2

ANISOTROPIC
TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

ANISOTROPY
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

ANNUAL
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

ANOMALOUS
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-81

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-114

ANTIMONIDE
NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

ANTIMONY
NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY - 126, 127, 128. 24-97

PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY. 28-5

ANTISOTROPIC
ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

ANTITUMOR
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

APPARATUS
REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

METHOD AND APPARATUS FOR TUNNELING BY MELTING. 11-6

APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

APPLIED
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

APPROACH
MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-34

MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING. 20-39

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

APPROX
ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

APPROXIMANT
PADE APPROXIMANT AND GENERALIZATIONS. 26-22

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

APPROXIMANTS
GENERALIZATIONS OF PADE APPROXIMANTS. 26-10

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

APPROXIMATION
APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

APPROXIMATIONS
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

APRIL
QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

AQUATIC
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

AQUEOUS
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

AQUOBIS
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

ARABINOSIDE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

ARCHITECTURE
COMPUTER ARCHITECTURE AND VERY LARGE PROBLEMS. 20-7

ARCTIC
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

NAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY TIES. 1-7

BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE FECT THERMOMETER AND THE GAMMA RAY ANISOTROPY . 8-23

OTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

ID MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH IAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

ESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED EVALUATION GROUP, LOS ALAMOS SCIENTIFIC JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

PORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL AND ANNUAL REPORT, FY 1972. 27-11

CROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

CROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

CROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: LISION FREQUENCY AND ELECTRON HEATING. 10-5

RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING 10-53

ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE ENCY. 10-81

STABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR RID FREQUENCY. 19-48

ALOUS INTERACTION IN MUON - PROTON SCATTERING AT 24-114

ACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ID CERIUM ANTIMONIDE. 28-3

ACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ID CERIUM ANTIMONIDE. 28-3

ACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ID CERIUM ANTIMONIDE. 28-3

TATION STUDY OF THE DECAYS OF ANTIMONY - 126, 127, 24-97

URE FACTORS IN BISMUTH AND ANTIMONY. 28-5

CATTERING EFFECTS IN REFLECTED FAST CRITICAL 23-2

ESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH DRUG BLEOMYCIN. 5-6

ARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR DING MATERIALS. 2-30

ARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR DING MATERIALS. 2-31

THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH BON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE URCE. 5-4

PARATUS FOR TUNNELING BY MELTING. 11-6

COATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

EL THEORY BETA FORMULAS APPLIED TO DIATOMIC 4-17

APPROACH
MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-34

MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING. 20-39

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

APPROX
ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

APPROXIMANT
PADE APPROXIMANT AND GENERALIZATIONS. 26-22

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

APPROXIMANTS
GENERALIZATIONS OF PADE APPROXIMANTS. 26-10

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

APPROXIMATION
APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

APPROXIMATIONS
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

APRIL
QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

AQUATIC
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

AQUEOUS
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

AQUOBIS
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

ARABINOSIDE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

ARCHITECTURE
COMPUTER ARCHITECTURE AND VERY LARGE PROBLEMS. 20-7

ARCTIC
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

2

AREAS
LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

ARGENTIC
PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

ARGON
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

AROUND
CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

ARRAYS
CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-6

ARREST
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

ARSENIC
PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

ARSINE
PULSE NMR RELAXATION STUDY OF LIQUID ARSINE. 13-11

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE. 13-9

ARTIFICIAL
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

SYNERGY AND ARTIFICIAL INTELLIGENCE. 20-61

ASPECTS
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-43

CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-43

ASPHERICAL
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

ASSAY
ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

PASSIVE ASSAY: INNOVATIONS AND APPLICATIONS. 25

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25

ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25

ASSEMBLIES
ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25

ASSEMBLY
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23

ASTROPHYSICS
NUCLEAR REACTIONS OF IMPORTANCE IN ASTROPHYSICS. 3-8

ASYMMETRY
ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 2

ASYMPTOTIC
ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20

ATMOSPHERE
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26

ATMOSPHERES
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3

IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22

ATMOSPHERIC
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19

ATOM
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-1

MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-1

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-1

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-1

MENTAL RADIATION SURVEY 1972. 16-21

AREAS IN LITHIUM DRIFTED GERMANIUM 18-12

DATION, FERROUS SULFATE TITRATION
ION METHOD. 2-24

DATION, FERROUS SULFATE TITRATION
TION METHOD. 2-25

IF HYDROGEN, DEUTERIUM, NITROGEN,
OR GAS DENSITOMETRY. 4-33

QUID ARGON BETWEEN 0.26 AND 0.74 4-38

FLOWS AROUND STRUCTURES AND OVER 17-4

R USE WITH LARGE PROPORTIONAL 18-6

IN G2 FOLLOWING TREATMENT WITH 5-6

S AT 600 MEV FOR VANADIUM, COBALT,
ISMUTH TARGETS. 24-127

QUID ARSINE. 13-11

ARSINE. 13-9

L STRONTIUM AND BARIUM CLOUDS. 1-26

RES IN HOT ROCK: ARTIFICIAL 11-4

NCE. 20-61

ICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

OF HIGH LET RADIATIONS WITH 5-42

ECTS OF PI MINUS MESONS IN 5-43

DUCTING MATERIALS AND FABRICATION 7-4

STATE AND PULSED REACTORS. 10-79

ECTS OF PI-MINUS MESONS IN 21-43

: EVIDENCE FOR AN ASPHERICAL
RADII. 1-35

RIALS AT THE LOS ALAMOS
LABORATORY. 25-1

RIALS AT THE LOS ALAMOS
LABORATORY. 25-1

SUBTHRESHOLD NEUTRON 25-10

OR THE ASSAY OF PLUTONIUM RODS. 25-13

EACTOR FUEL ASSEMBLIES. 25-18

PASSIVE ASSAY: INNOVATIONS AND APPLICATIONS. 25-22

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

ASSEMBLIES
ANISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

ASSEMBLY
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-11

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

ASTROPHYSICS
NUCLEAR REACTIONS OF IMPORTANCE IN ASTROPHYSICS. 3-5

ASYMMETRY
ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

ASYMPTOTIC
ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

ATMOSPHERE
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

ATMOSPHERES
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22-22

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-35

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-36

ATMOSPHERIC
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

ATOM
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

2

HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

ATOMIC
CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

ATOMS
MODIFIED HARTREE-FOCK CALCULATIONS FOR ATOMS. 4-26

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

ATTENUATOR
SUBNANOSECOND HIGH VOLTAGE ATTENUATOR. 18-19

AUGER
IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

AUGUST
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

AURORAL
AURORAL CONJUGACY. 1-2

RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

AURORAL INTENSITIES AT CONJUGATE POINTS. 1-3

AUTOCORRELATION
SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

AUTOIONIZATION
ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

AUTOMATED
AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF. 21-4

AVAILABLE
ENGINEERING JOURNALS AVAILABLE. 29-4

AVOIDING
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

AXIAL
AXIAL CHANNELING IN THORIUM DIOXIDE 9-1

AXIALLY
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

AZACYTINIDE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

AZIDE
HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

B
CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

B-3
PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 14-14

BACKINGS
PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

BACKSCATTER
ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

BACKWARD
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

BALLISTICS
RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

BALLOON
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET. 3-4

BAND
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

BANDS
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

BARIUM
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

BARN
HOW THE BARN WAS BORN. 24-61

BARRELS
GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

BARRIERS
NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

BARYON
MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

BASE
ACID - BASE TITRATIONS IN SULFOLANE. 7-2

BASELINE
BASELINE COMPENSATING INTEGRATOR. 12-2

BASIC
SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-141

BEAGLES
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

BEAKER
APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

CTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM
MINE SYSTEMS. 6-3

ANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM
6-4

CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF
O DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF
LORIDE AND DEUTERIUM FLUORIDE. 6-8

LORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE
N. 19-23

LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING.
19-42

TIONS OF A RECENT TEST OF MUONIC ATOM THEORY.
26-33

OF ATOMIC ENERGY LEVEL VALUES. 4-3

FER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS
ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-4

OMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED
4-42

L TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC
ECULE SYSTEMS. 6-9

TREE-FOCK CALCULATIONS FOR ATOMS. 4-26

FER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS
ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-4

NSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-7

ROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY
TOMS. 5-25

ND HIGH VOLTAGE ATTENUATOR. 18-19

THORIUM METAL: AUGER STUDY OF BULK TO SURFACE
22-23

CH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF
M AUGUST 1 TO OCTOBER 31, 1971. 22-4

UGACY. 1-2

ON OF AURORAL CONJUGATE POINTS DURING SUBSTORMS.
1-25

NSITIES AT CONJUGATE POINTS. 1-3

N
EED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS.
1-28

BUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES.
3-6

MITTANCE MEASUREMENT AT LAMPF. 21-4

OURNALS AVAILABLE. 29-4

FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK
ATTICE. 20-27

LING IN THORIUM DIOXIDE. 9-1

KS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF
E USING THE AXIALLY SYMMETRIC MAGNETIC PROBE.
4-44

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

AZACYTINIDE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

AZIDE
HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

B
CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

B-3
PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 14-14

BACKINGS
PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

BACKSCATTER
ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

BACKWARD
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

BALLISTICS
RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

BALLOON
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET. 3-4

BAND
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

BANDS
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

BARIUM
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

BARN
HOW THE BARN WAS BORN. 24-61

BARRELS
GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

BARRIERS
NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

BARYON
MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

BASE
ACID - BASE TITRATIONS IN SULFOLANE. 7-2

BASELINE
BASELINE COMPENSATING INTEGRATOR. 12-2

BASIC
SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-141

BEAGLES
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

BEAKER
APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

2

BEAM
ELECTRON BEAM/PLASMA FOCUS INTERACTION. 10-15

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

CHARACTERISTICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

LASER BEAM TRANSPORT IN FUSION REACTORS. 19-31

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS. 21-19

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

RMS EMITTANCE AND THE LAMPF BEAM. 21-57

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

TRANSVERSE BEAM MATCHING USING WIRE SCANNERS. 21-68

BIOMEDICAL APPLICATIONS: BEAM LINE AND FACILITY. 21-7

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-128

BEAM HEATING IN GAS TARGETS. 24-20

BEAMS
INTERPENETRATING ION BEAMS IN THE SOLAR WIND. 1-13

OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

PI MINUS BEAMS IN RADIOTHERAPY. 5-44

PION BEAMS AT LAMPF. 21-45

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-59

SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-160

BEHAVIOR
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES.

INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES.

MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES.

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALU BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT.

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR.

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UN NEUTRON IRRADIATION AT HIGH TEMPERATURE.

BENCHMARK
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES.

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM.

BENDING
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF.

BENEFIT
RISK VS BENEFIT: SOLUTION OR DREAM.

BERYLLIUM
BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV.

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION.

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION.

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION.

BETA
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES.

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR.

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH.

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES.

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH.

STABILITY OF A FINITE BETA, L = 2 STELLERATOR.

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA.

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188.

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203.

BETHE-SALPETER
PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE.

ERACTION. 10-15

AMETER IN ELECTRON BEAM WELDING. 12-16

AMETER IN ELECTRON BEAM WELDING. 12-17

OUBLET FOR LAMPF SECONDARY BEAM 12-22

BEAM WELDING FACILITY AT LASL. 12-4

OR LAMPF. 16-24

OR LAMPF. 16-25

ON DIOXIOE LASER AMPLIFIERS. 19-18

TRICAL DISCHARGE AS A METHOD OF N DIOXIDE LASER MEDIA AT HIGH 19-19

OLLED CARBON DIOXIDE LASER 19-27

BEAM CONTROLLED PLASMA DISCHARGE. 19-3

EACTORS. 19-31

ION BEAM CONTROLLED DISCHARGE IN 19-49

RON BEAM CONTROLLED CARBON D PLASMAS. 19-57

LINE AND SPECTROMETER. 21-13

EQUIREMENTS FOR QUADRUPOLES FROM 21-19

NTENSITY PROTON INJECTOR OF LAMPF. 21-5

M. 21-57

OTON BEAM LINE IN THE INJECTOR 21-6

OTON BEAM LINE IN THE INJECTOR 21-6

IGH INTENSITY ION CURRENTS. 21-60

WIRE SCANNERS. 21-68

E AND FACILITY. 21-7

OLARIZATION MEASUREMENT. 24-128

24-20

E SOLAR WIND. 1-13

OPTICAL SPECTRA OF FAST ION 4-30

THE OPTICAL SPECTRA OF FAST ION 4-31

5-44

21-45

FOR USE WITH NEGATIVE ION BEAMS. 21-58

UON BEAMS. 21-59

R POLARIZED BEAMS. 24-150

BEHAVIOR
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES. 1-29

INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

BENCHMARK
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

BENDING
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

BENEFIT
RISK VS BENEFIT: SOLUTION OR DREAM. 16-35

BERYLLIUM
BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

BETA
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-74

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188. 24-165

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

BETHE-SALPETER
PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

2

BETTER
CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

BIFILAR
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

BIG
BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

BILOCAL
SELF CONSISTENT BILOCAL FIELD THEORY. 26-32

BINARY
ANALYZED BINARY COMPUTING. 20-1

BINDING
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

BIOASSAY
HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

BIOLOGICAL
ELEMENTAL ANALYSIS OF BIOLOGICAL SAMPLES. 2-13

COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

BIOLOGY
METRICS IN BIOLOGY, AN INTRODUCTION. 5-39

BIOME
BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

BIOMEDICAL
BIOMEDICAL APPLICATIONS: BEAM LINE AND FACILITY. 21-7

BIOMEDICAL PROGRAM. 21-8

BIOTA2
BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME 5-8

BIS
2,6- BIS(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION. 7-1

BISMUTH
PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY. 28-5

BLANKET
TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-1

BLANKETING
SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

BLEOMYCIN
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

BLOOD
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

BODY
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

BOILING
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

BOLTZMANN
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

BONDED
X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-1

BONDING
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

BONE
EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-9

BOOK
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

BORE
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

BORES
NUMERICAL STUDY OF UNDULAR BORES. 17-1

BORN
HOW THE BARN WAS BORN. 24-61

BORON
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-12

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

BOUND
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

BOUNDARIES
NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-15

PROVIDE UNIQUE OR BETTER DIAGNOSTIC 5-9

TIWIRE PROPORTIONAL CHAMBER FOR POSITION OF MINIMUM IONIZING PARTICLES. 18-3

TIWIRE PROPORTIONAL CHAMBER FOR POSITION OF MINIMUM IONIZING PARTICLES. 18-4

IT ENRICHED URANIUM CRITICAL ASSEMBLY: 23-4

CAL FIELD THEORY. 26-32

MPUTING. 20-1

ELECTRON BINDING ENERGIES AND LIMITS ON ILINEARITIES. 4-16

ETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO N CELLS. 5-26

DA-10 CALCULATIONS OF THE BINDING ENERGY OF H REALISTIC HARD CORE NUCLEON - NUCLEON 24-67

INIUM BIOASSAY PROGRAM AT THE LOS ALAMOS RY, 1944-72. 16 14

OF BIOLOGICAL SAMPLES. 2-13

CAL EFFECTS OF PROTRACTED COBALT -60 ES AND MONKEYS. 5-11

DM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

CAL ASPECTS OF HIGH LET RADIATIONS WITH HERAPY. 5-42

AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

CAL RESEARCH GROUP (H-4) OF THE LASL HEALTH ORT, JANUARY THROUGH DECEMBER 1971. 5-7

NG THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

ONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

N INTRODUCTION. 5-39

R MONTE CARLO SIMULATION OF POPULATION ME. 5-8

ONS: BEAM LINE AND FACILITY. 21-7
21-8

R MONTE CARLO SIMULATION OF POPULATION ME. 5-8

3,5-DINITROPYRIDINE AND A METHOD FOR ITS 7-1

N BISMUTH -209 FROM THE POLONIUM -210 ION. 24-125

OSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, TALLIM, AND BISMUTH TARGETS. 24-127

CTORS IN BISMUTH AND ANTIMONY. 28-5

EASUREMENT WITH APPLICATION TO FUSION REACTOR 10-83

NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

BLANKETING
SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

BLEOMYCIN
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

BLOOD
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

BODY
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

BOILING
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

BOLTZMANN
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

BONDED
X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

BONDING
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

BONE
EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-9

BOOK
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

BORE
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

BORES
NUMERICAL STUDY OF UNDULAR BORES. 17-19

BORN
HOW THE BARN WAS BORN. 24-61

BORON
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 27-42

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

BOUND
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

BOUNDARIES
NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-15

2

CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-4

BOUNDARY
EXTENSION OF BOUNDARY DISPERSION RELATIONS. 24-51

BOUNDS
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

BOW
MICROSTRUCTURE OF THE EARTH'S BOW SHOCK. 1-16

MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

BRANCH
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11. 20-51

BREAKDOWN
ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

BREAKUP
NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-88

BREMSSTRAHLUNG
CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-2

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-100

SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-141

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-19

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

BRIDGE
PULSED PIEZORESISTIVE GAUGE BRIDGE. 18-15

BRIEFING
USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

BROMIDE
HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

BROMINE
HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

BUILDING
SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

BUILDINGS
NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-18

BULK
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

BUMPY
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

BURN
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19

BURN-UP
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-1

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

BURNETT-KROLL
APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24

BURNING
PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24

BURNUP
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-

STATUS OF BURNUP MEASUREMENT METHODOLOGY. 2-

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10

B4C
REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C. 9-1

C
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19

CADMIUM
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-

INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-1

14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113. 24

CALCIUM
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24

1F 7/2 MULTIPLET IN CALCIUM -42. 24

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24

CALCULATED
CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-

CALCULATING
USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-2

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL 19-

CALCULATION
CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

TION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-4

N OF BOUNDARY DISPERSION RELATIONS. 24-51

UNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

UCTURE OF THE EARTH'S BOW SHOCK. 1-16

TIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO MITY OF THE EARTH'S BOW SHOCK. 1-17

GRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

MER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE 20-51

L BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL 19-16

TY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER 19-25

DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP D. 24-88

UNG
ED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-2

UTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PLASMAS. 19-22

EMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN NEOUS PLASMA. 19-26

NUCLEON BREMSSTRAHLUNG. 24-100

QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-141

N OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - REMSSTRAHLUNG. 24-19

VERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

ORESISTIVE GAUGE BRIDGE. 18-15

PF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION S DEVELOPMENT, DECEMBER 15, 1970. 21-69

EACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM ROMINE SYSTEMS. 6-3

EACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM ROMINE SYSTEMS. 6-3

EACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM ROMINE SYSTEMS. 6-3

NTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND ICAL RESEARCH BUILDING. 16-39

SIMULATION OF AIR POLLUTION IN THE VICINITY OF 17-18

ON TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY EITIES. 1-7

ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE 22-23

DRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO H. 10-39

BURN
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

BURN-UP
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

BURNETT-KROLL
APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-19

BURNING
PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

BURNUP
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

STATUS OF BURNUP MEASUREMENT METHODOLOGY. 2-36

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

B4C
REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C. 9-19

C
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

CADMIUM
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113. 24-3

CALCIUM
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-129

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

1F 7/2 MULTIPLET IN CALCIUM -42. 24-4

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

CALCULATED
CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-2

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

CALCULATING
USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL. 19-39

CALCULATION
CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

2

WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION. 17-14

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

CALCULATIONS
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

MODIFIED HARTREE-FOCK CALCULATIONS FOR ATOMS. 4-26

SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS. 5-47

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-38

PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-20

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

CALCULUS
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

CALIBRATION
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

CALIFORNIUM
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-B, TABLE OF VALUES. 24-53

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

CALORIMETER
CALORIMETER FOR PICOSECOND LASER PULSES. 19-2

CALORIMETRIC
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

CALORIMETRY
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY. 6-12

CAMAC
SPECIFICATIONS FOR CAMAC SUBROUTINES. 20-57

CAMERAS
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

CAMPTOTHECIN
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

CANADIAN
CANADIAN TOTAL SOLAR ECLIPSE FLIGHT. 3-2

CANISTER
INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-11

CANNIKIN
LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

LCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

ASSICAL TRAJECTORY CALCULATION OF THE RATES OF NAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM 6-7

ASSICAL TRAJECTORY CALCULATION OF THE RATES OF DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF RIDE AND DEUTERIUM FLUORIDE. 6-8

N OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY 15-10

FISSION BARRIFRS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

ULATION OF INTERNAL WAVE MOTION. 17-14

ULATION OF THREE DIMENSIONAL FLOWS OF AIR AND OUT STRUCTURES. 17-15

ULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING DIMENSIONS. 19-44

HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

RESSING DIRAC SPINOR AMPLITUDES IN TERMS OF APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

CULATION OF RECOIL SPECTRA IN HELIUM -4 UNTERS. 26-17

E SCATTERING CALCULATION OF PI-MINUS NUCLEUS R THE 3-3 RESONANCE. 26-6

CARLO CALCULATIONS OF THE POLARIZATION OF THE RADIATION EMERGING FROM SPHERICAL SHELL 1-4

IMATIONS USED IN THE ENERGY BAND CALCULATIONS OF 4-15

ULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR 4-18

ES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION EARTH METALS. 4-22

E-FOCK CALCULATIONS FOR ATOMS. 4-26

CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

PION DOSE DISTRIBUTION CALCULATIONS. 5-47

IION OF CRYSTALLOGRAPHY COMMISSION ON C COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC MS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL SIS. 9-13

THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

LATIONS OF DETONATION FAILURE AND SHOCK 14-12

IS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

ULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC 16-38

OF SPALL CALCULATIONS II. ONE DIMENSIONAL ODES. 17-20

CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS F SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN 17-24

IMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT SIBLE FLOW CALCULATIONS. 17-5

N EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

LCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR NWEF COMPUTER PROGRAM CDR. 23-1

EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

CALCULUS
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

CALIBRATION
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

CALIFORNIUM
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-53

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

CALORIMETER
CALORIMETER FOR PICOSECOND LASER PULSES. 19-2

CALORIMETRIC
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

CALORIMETRY
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY. 6-12

CAMAC
SPECIFICATIONS FOR CAMAC SUBROUTINES. 20-57

CAMERAS
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

CAMPTOTHECIN
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

CANADIAN
CANADIAN TOTAL SOLAR ECLIPSE FLIGHT. 3-2

CANISTER
INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-11

CANNIKIN
LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

2

CANONICAL
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

CAPACITY
SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-18

CAPTURE
RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE. 24-134

CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

CARBIDE
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6). 9-4

PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

CARBIDES
CRYSTAL CHEMISTRY OF REFRACTORY CARBIDES. 9-2

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

CARBON
STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

CARBON -13 NMR OF PARAMAGNETIC COMPLEXES. 13-1

CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES O THE 1,1' DIMETHYLMETALLOCENES.

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -1 SUBSTRATE.

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -1 SUBSTRATE.

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIO

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS.

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD O PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE.

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLAS PRODUCTION.

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXID SYSTEMS.

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXID SYSTEMS.

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS.

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARG CARBON DIOXIDE LASER MEDIA.

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER.

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS.

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS.

APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON.

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS NITROGEN.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY PROGRESS FROM MAY 1 TO JULY 31, 1971.

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT JULY 1 TO SEPTEMBER 30, 1972.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971.

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - B NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972.

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON A TO CARBON CROSS SECTIONS.

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OX BURNING.

QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALC -40.

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITR OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN.

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION.

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION.

ONICAL TENSOR OPERATORS IN THE UNITARY
E PATTERN CALCULUS RULES AND THE 20-45

ONICAL TENSOR OPERATORS IN THE UNITARY
E PATTERN CALCULUS RULES AND THE 20-45

ONICAL TENSOR OPERATORS IN THE UNITARY
ORS IN U(3) CHARACTERIZED BY MAXIMAL 20-46

HALPY AND HEAT CAPACITY OF URANIUM 7-18

TIC NEUTRONS BY LEAD -208. 24-131

PLE NEUTRON CAPTURE. 24-134

TONIUM -238 FROM PERSIMMON. 24-24

N TO THE CAPTURE CROSS SECTION. 24-85

ERMINATION OF BORON ISOTOPIC
E. 2-28

ES AND THE HUGONIOT ELASTIC LIMIT OF
LLY SYMMETRIC MAGNETIC PROBE. 4-44

UM(23) CARBIDE(6). 9-4

OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

STOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

TORY CARBIDES. 9-2

RICAL PROPERTIES OF REFRACTORY 22-27

NS IN MOLECULAR IONS OF CARBON 4-45

T FOR THE COMET TAIL SYSTEM OF CARBON 4-8

YRENOIDOSA USING 94 PERCENT CARBON 5-29

YRENOIDOSA USING 94 PERCENT CARBON 5-29

CTION OF CHLORELLA PYRENOIDOSA WITH
AND 6 PERCENT CARBON -12 DIOXIDE 5-4

CTION OF CHLORELLA PYRENOIDOSA WITH
AND 6 PERCENT CARBON -12 DIOXIDE 5-4

CTION OF CHLORELLA PYRENOIDOSA WITH
AND 6 PERCENT CARBON -12 DIOXIDE 5-4

BON DIOXIDE AND HYDROGEN. 6-11

IC COMPLEXES. 13-1

F RED BLOOD CELL SUSPENSIONS. 13-2

ESONANCE (NMR) SPECTRA OF CARBON -13
B. 13-3

ESONANCE (NMR) SPECTRA OF CARBON -13
B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-129

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

2

ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

MULTIPLE SCATTERING OF PIONS BY CARBON -12. 24-86

ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

CARBONATE
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

CARD
GENRD: A FREE FORMAT CARD INPUT PROCESSOR. 20-20

CARTRIDGE
RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

CASE
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

CATALOG
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

CATENA-DI-MU-CYANOCU
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

CAUCUS
GOVERNMENT CAUCUS. 29-7

CAVITY
CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC. 21-9

CA3054
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-22

CDR
AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

CELL
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE. 5-48

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES. 12-6

CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-1

CELLS
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

LASER ACTIVATION OF SOLAR CELLS. 19-30

CEMENT
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

CENTAURUS
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

CENTER
ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

CENTIGRADE
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-40

ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE. 22-43

CENTIMETER
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

-3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

TERING OF PIONS BY CARBON -12. 24-86

N ANALYSIS WITH LOW ENERGY PROTONS. 25-12

D AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE
A GREAT PLAINS RESERVOIR. 7-6

FORMAT CARD INPUT PROCESSOR. 20-20

RTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY
NS. 16-32

RTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY
NS. 16-33

E RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE
RESSIBLE IRROTATIONAL CASE STEADY-STATE 17-3

R MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

NOCU
TURE OF THE MIXED VALENCE COPPER CYANIDE
NE COMPLEX: AQUOBIS(EN)COPPER(II)
)-CYANOCUPRATE(I)). 9-6

UCUS. 29-7

OR THE LAMPF 805 MHZ LINAC. 21-9

MWPC AMPC AMPLIFIER. 18-22

ALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR
HE NWEF COMPUTER PROGRAM CDR. 23-1

NDENT DESQUAMATION OF HEPARAN SULFATE FROM THE 5-10

NDENT DESQUAMATION OF HEPARAN SULFATE FROM THE 5-10

GHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN
TION. 5-16

SINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN,
RIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL
. 5-20

PARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
ELL CYCLE TRAVERSE. 5-37

PARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
ELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION 5-38

LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS
PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

HISTONE PHOSPHORYLATION TO THE CELL CYCLE. 5-48

CHNIQUE FOR DETERMINATION OF THE EFFECTS OF
TIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

ROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF
S ON CELL CYCLE PROGRESSION. 5-57

DME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

ANCILLARY EQUIPMENT FOR USE IN HOT CELL 12-6

CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

CELLS
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

LASER ACTIVATION OF SOLAR CELLS. 19-30

CEMENT
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

CENTAURUS
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

CENTER
ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

CENTIGRADE
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-40

ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE. 22-43

CENTIMETER
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

2

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

CENTRAL
CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

CENTRIFUGE
AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

CERAMIC
EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

CERAMICS
HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-19

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-20

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

CERIC
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

CERIUM
(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES. 24-2

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

CERMET
HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

CESIUM
CRYSTAL STRUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V). 9-3

CHAMBER
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS. 20-73

SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-150

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

CHAMBERS
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

EFFICIENCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

CHANGES
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

CHANNEL
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN.

NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS.

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KIN ENERGIES.

CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS.

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS).

LOW ENERGY PION CHANNEL.

STOPPED MUON CHANNEL.

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT.

CHANNELING
AXIAL CHANNELING IN THORIUM DIOXIDE.

CHARACTER
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS.

CHARACTERISTIC
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGST TARGETS.

CHARACTERIZATION
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE US ENCAPSULATED FUEL PIN IRRADIATION TESTS.

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS.

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULF COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BOND

THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE.

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM - FUELS.

CHARACTERIZED
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNI GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMA NULL SPACE.

CHARGE
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IO AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS.

CHARGED
ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IO AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN SELECTED NUCLEI.

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS.

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCA MESON.

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCEI STUDIES.

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS.

CHEMICAL
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.)

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR T CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS.

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANAL OF REACTOR FUEL MATERIALS.

NS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75
IMETER PETN. 14-15

ER GENERATION BY LASER DRIVEN FUSION.
10-9

SUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE
ER. 16-1

RON IRRADIATION ON CERAMICS AND CERAMIC METAL
27-3

PECTRA ON THE SWELLING OF CERAMIC INSULATORS
THERMIONIC REACTOR DESIGN. 27-4

G OF URANIUM -PLUTONIUM CERAMICS.
22-19

G OF URANIUM -PLUTONIUM CERAMICS.
22-20

ION IRRADIATION ON CERAMICS AND CERAMIC METAL
27-3

SULFATE TITRATION -PHOTOMETRIC END-POINT
2-20

OUS CHLORIDE REDUCTION - CERIC SULFATE
2-22

PROTON,TRITON) REACTIONS ON EVEN CERIUM
24-2

STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM
UM ANTIMONIDE. 28-3

ALUATION OF MOLYBDENUM THULIUM OXIDE CERMET.
22-18

PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC
22-7

F CESIUM OXOTETRAFLUOROIODATE(V).
9-3

WIRE PROPORTIONAL CHAMBER FOR POSITION
F MINIMUM IONIZING PARTICLES. 18-3

WIRE PROPORTIONAL CHAMBER FOR POSITION
F MINIMUM IONIZING PARTICLES. 18-4

ORTIONAL CHAMBER DECODERS. 20-73

CHAMBER FOR POLARIZED BEAMS. 24-150

CHARGED PARTICLE INDUCED X RAY FLUORESCENCE
25-30

G AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS.
18-20

ONIZATION CHAMBERS FROM 10 TO 80 KEV.
18-8

ON READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL
20-18

RIATIONS CAUSED BY CHANGES IN THE QUIET TIME
1-11

AL EFFECTS OF IONIZING RADIATION. 1.
JCLEAR CHANGES. 5-19

TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES
GY. 22-25

OMPARISONS OF A HYDRODYNAMICAL THEORY OF

CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS). 21-20

LOW ENERGY PION CHANNEL. 21-30

STOPPED MUON CHANNEL. 21-66

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

CHANNELING
AXIAL CHANNELING IN THORIUM DIOXIDE. 9-1

CHARACTER
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

CHARACTERISTIC
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

CHARACTERIZATION
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

CHARACTERIZED
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

CHARGE
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-6

CHARGED
ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-47

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS. 24-55

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

CHEMICAL
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

2

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-4

CHEMICAL LASERS: A LIGHT REVIEW. 19-5

CHEMICALLY
NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

CHEMISCHEN
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

CHEMISTRY
CRYSTAL CHEMISTRY OF REFRACTORY CARBIDES. 9-2

SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

NUCLEAR CHEMISTRY FACILITIES. 21-36

CHEMOTHERAPEUTIC
SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

CHINESE
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

CHLORELLA
KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

CHLORIDE
PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

CHLORINE
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

CHLOROPHYLLS
CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

CHROMATOGRAPHY
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

CHROMIUM
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

KINETICS OF THE REACTION BETWEEN THE CHROMIUM (III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6). 9-4

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

CHROMOSOMALLY
ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

CHROMOSOME
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

CIRCUIT
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

CIRCUITS
DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

CLAD
BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

CLADDING
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

CLASS
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

CLASSICAL
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

CLASSIFICATION
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

CLASSIFICATIONS
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

CLATHRATES
USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

CLEAN
CLEAN ENERGY FROM THE EARTH. 11-1

CLEARANCE
IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

CLOCK
CLOCK PARADOX - MAJORITY VIEW. 26-2

CLOSED
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

CROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF
TS ON CELL CYCLE PROGRESSION. 5-57

CTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION
7-4

ORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE
N. 19-23

CIENCY IN A PULSED HYDROGEN FLUORIDE LASER.
19-4

RS: A LIGHT REVIEW. 19-5

.CULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING
O DIMENSIONS. 19-44

DER ROLLE DER CHEMISCHEN KINETIK IN DER
E UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
TICS IN THE STRATOSPHERE AND MESOSPHERE.)
1-34

STRY OF REFRACTORY CARBIDES. 9-2

MINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND
. RESEARCH BUILDING. 16-39

STRY FACILITIES. 21-36

C
CHNIQUE FOR DETERMINATION OF THE EFFECTS OF
JTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE.
5-49

EUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN
ULTURED CHINESE HAMSTER CELLS. CONTINUED
ID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF
EIC ACID (DNA) SYNTHESIS. 5-22

RADIATION ON DNA PRECURSOR METABOLISM AND DNA
CHINESE HAMSTER CELLS. 5-23

ESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH
DRUG BLEOMYCIN. 5-6

OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON
IDE. 5-29

THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH
ON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE
IRCE. 5-4

TITANOUS CHLORIDE REDUCTION - CERIC SULFATE
OD. 2-22

NT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION
6-1

GE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM
6-4

FORMANCE MEASUREMENT USING QUANTITATIVE SODIUM
OL MAN TESTS. 16-34

RIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE
19-23

J ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE
THIRD SPECTRA OF CHLORINE. 2-18

HS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY
E. 4-28

RIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE
19-23

EAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13
OPHYLLS A AND B. 13-3

OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE
O DIMENSIONAL THIN LAYER CHROMATOGRAPHY.
2-14

CHROMIUM
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

KINETICS OF THE REACTION BETWEEN THE CHROMIUM (III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS.
6-5

CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6). 9-4

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197.
24-42

CHROMOSOMALLY
ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID
5-5

CHROMOSOME
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER.
5-18

CIRCUIT
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

CIRCUITS
DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY.
20-12

CLAD
BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

CLADDING
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

CLASS
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

CLASSICAL
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

CLASSIFICATION
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV.
4-5

CLASSIFICATIONS
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

CLATHRATES
USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

CLEAN
CLEAN ENERGY FROM THE EARTH. 11-1

CLEARANCE
IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

CLOCK
CLOCK PARADDX - MAJORITY VIEW. 26-2

CLOSED
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

2

CLOSURE
EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

CLOUDS
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

CLUSTERED
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

CMB-13
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

CMB-5
CMB-5 HEALTH AND SAFETY MANUAL. 16-4

COATED
COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

COATING
APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

COAXIAL
PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

COBALT
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

CODE
CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

NONLINEAR OPTICS CODE. 19-43

MCN: A NEUTRON MONTE CARLO CODE. 20-29

PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES.

LEAST - STRUCTURE UNFOLDING CODE.

CODES
PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES.

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES.

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATI FROM DISCRETE ORDINATE CODES.

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS.

LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES

COEFFICIENT
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION ANI THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITI AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX).

COEFFICIENTS
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THI SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODER SURFACE AND FLUID TEMPERATURES.

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE.

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS.

COEXISTENCE
DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM.

COIL
VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL.

COILS
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS.

COINCIDENCE
NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICAT

COLD
CURRENT IN THE COLD LASER PLASMA.

COLD GLOW DISCHARGE LASER ENERGY SOURCE.

COLLISION
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING.

PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES.

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM.

COLLISIONAL
COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS.

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA.

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM.

COLLISIONLESS
VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLI PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS.

E RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

TION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

UTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR
IARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

IN CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF
IY 1 TO JULY 31, 1971. 22-3

IN CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF
GUST 1 TO OCTOBER 31, 1971. 22-4

N CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF
VEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

N CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF
BRUARY 1 TO APRIL 30, 1972. 22-6

SAFETY MANUAL. 16-4

S OF DIFFERENTIAL LIGHT SCATTERING FROM COATED 5-14

FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

ATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

CTION FACTORS FOR COAXIAL LITHIUM DRIFTED
ORS. 18-17

EFFICIENCIES OF COAXIAL LITHIUM DRIFTED
ORS WITH SMALL DISC SOURCES. 18-5

IGICAL EFFECTS OF PROTRACTED COBALT -60
GLES AND MONKEYS. 5-11

N OF THE PARENT ANALOGUES OF M1 RESONANCES IN
TON,NEUTRON) COBALT -58 REACTION. 24-115

I CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT,
ANTALUM, AND BISMUTH TARGETS. 24-127

PARENT ANALOGS OF THE NICKEL -58 GIANT M1
REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT 24-49

64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM 24-72

S OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

ONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR
OMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

TIGROUP PHOTON PRODUCTION MATRIX AND SOURCE 17-10

COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP
N TRICES. 17-9

CODE. 19-43

INTE CARLO CODE. 20-29

CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

LEAST - STRUCTURE UNFOLDING CODE. 24-69

CODES
PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-20

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

COEFFICIENT
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

COEFFICIENTS
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-9

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS. 26-11

COEXISTENCE
DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM. 8-7

COIL
VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

COILS
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

COINCIDENCE
NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

COLD
CURRENT IN THE COLD LASER PLASMA. 19-13

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

COLLISION
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

COLLISIONAL
COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS. 10-12

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

COLLISIONLESS
VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

2

COLLISIONS
FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS. 4-19

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

COLLOCATION
COLLOCATION AT GAUSSIAN POINTS. 20-5

COLUMN
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

COMBINATORIAL
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

COMET
COMET FORMATION. 3-3

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

COMMISSION
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

COMMONLY
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

COMMUNICATION
TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

COMMUNITY
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

COMPANY
FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

COMPARATIVE
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

COMPARATIVE STUDIES OF SOME TESTS OF NORMALITY. 20-6

COMPARING
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-1

COMPARISON
THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-1

TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-6

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-1

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-1

COMPARISONS
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

COMPARTMENTED
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

COMPENSATING
BASELINE COMPENSATING INTEGRATOR. 12-2

COMPLETELY
ON COMPLETELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY. 20-4

COMPLEX
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-1

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-8

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-3

COMPLEXES
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANOPYRIDINE. 9-22

CARBON -13 NMR OF PARAMAGNETIC COMPLEXES. 13-1

COMPONENT
TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-3

COMPONENTS
PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-4

COMPOSITES
SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-3

COMPOSITION
COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 14-1

N OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND
NITROGEN 2 PLUS. 4-19

RANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS
GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-4

LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS
ECULAR NITROGEN. 4-43

TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-7

IAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM
S. 6-15

M - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY
ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER
I. 19-14

IY IN POSITIVE PION PRODUCTION BY PROTON - PROTON
S AT MEDIUM ENERGIES. 21-3

I
ION AT GAUSSIAN POINTS. 20-5

STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA
10-24

STABILIZATION ON A THETA PINCH PLASMA COLUMN.
10-25

STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN.
10-26

AL
EW: COMBINATORIAL IDENTITIES, BY J. RIORDAN.
20-4

MATION. 3-3

C TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON
ION. 4-8

ONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON
GRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC
PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL
ANALYSIS. 9-13

ONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON
GRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC
PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL
ANALYSIS. 9-13

ON
SIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS
M. PROCEEDINGS. 20-69

AGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY.
29-28

Y EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF
25-9

VE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60
N IN BEAGLES AND MONKEYS. 5-11

VE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY
S EXPOSURE. 5-12

VE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE
NS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF
ENITORS. 5-13

VE STUDIES OF SOME TESTS OF NORMALITY. 20-6

R COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
LIAN CELL CYCLE TRAVERSE. 5-37

R COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
LIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION
5-38

DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

COMPARISON
THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS.
10-11

TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-62

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS.
21-1

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

COMPARISONS
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

COMPARTMENTED
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

COMPENSATING
BASELINE COMPENSATING INTEGRATOR. 12-2

COMPLETELY
ON COMPLETELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY.
20-43

COMPLEX
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS.
6-5

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

COMPLEXES
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING.
7-13

STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4-CYANOPYRIDINE. 9-22

CARBON -13 NMR OF PARAMAGNETIC COMPLEXES. 13-1

COMPONENT
TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

COMPONENTS
PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS.
21-41

COMPOSITES
SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

COMPOSITION
COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 14-14

2

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

COMPOUND
VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

COMPOUNDS
MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS. 8-22

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

COMPRESSIBLE
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

COMPRESSION
ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS. 22-1

COMPRESSION OF GARNET TO 100 KILOBARS. 26-3

COMPRESSIONS
COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1-6

COMPRISE
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

COMPUTATION
MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION. 17-12

MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

CDMPUTATIDN OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

PROBLEMS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS SECTIONS. 24-122

COMPUTATIONAL
DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

COMPUTATIONS
ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-15

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

COMPUTE
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

COMPUTER
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS CC MMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS. 10-12

INVESTIGATION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

COMPUTER GENERATED OPTICAL SOUND TRACKS.

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETI DECAY INSTABILITY.

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS.

LASL COMPUTER NETWORK.

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER.

MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER.

MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR.

REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER.

SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER.

COMPUTER ARCHITECTURE AND VERY LARGE PROBLEMS.

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER.

COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER.

COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF.

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM.

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA A FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR.

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS.

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM.

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER.

COMPUTING
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPH COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS.

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE F COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS.

ANALYZED BINARY COMPUTING.

MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING.

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING.

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING.

COMPUTING FACILITIES.

CONCENTRATION
PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION.

VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT.

NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION.

CONCEPTS
CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT.

CONDENSATION
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION.

CONDENSED
CONDENSED EXPLOSIVES LASER.

CONDITIONING
PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER.

CONDUCTION
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THE PINCHES.

RAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
TIONS WITH TEMPERATURE AND COMPOSITION. 28-6

-32 COMPOUND NUCLEUS WIDTH WITH ENERGY 24-158

DY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

ARIOUS TERNARY THORIUM COMPOUNDS. 8-22

TRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2
ATED COMPOUNDS. 9-15

DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC 17-17

ONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT
LOW CALCULATIONS. 17-5

COMPRESSION OF OLIVINE TO 140 KILOBARS. 22-1

TO 100 KILOBARS. 26-3

ACTIONS IN THE SOLAR WIND: VELA 3. 1-6

INAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE
RNAS COMPRISE A DIFFERENTIAL POPULATION 5-34

PHOTON PRODUCTION CROSS SECTION 17-12

ION TIME FOR USING THE TECHNIQUE OF
ILTERING OF PICTURES. 20-32

C END FIELDS, AND COMPARISON WITH 21-12

S IN COMPUTATION OF MULTIGROUP CROSS 24-122

MPUTATIONAL ORGANIZATION IN DIGITAL 20-9

ITH CONTINUED FRACTIONS AND JACOBI'S 20-15

TATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

ERENCED, DIFFUSION EQUATION FOR NEUTRON 23-13

TE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP
ICES. 17-9

. WAVEFUNCTIONS VIA COMPUTER PRODUCED 4-42

FFERENTIAL LIGHT SCATTERING FROM COATED 5-14

CRYSTALLOGRAPHY COMMISSION ON
TING. STANDARD TESTS FOR CRYSTALLOGRAPHIC
ALCULATIONS COMMONLY USED IN CRYSTAL 9-13

SLIGHTLY COLLISIONAL PLASMAS. 10-12

ER GENERATED OPTICAL SOUND TRACKS. 12-12

ECTRON BEAM WELDING FACILITY AT LASL. 12-4

COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-5

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

LASL COMPUTER NETWORK. 20-25

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER. 20-54

COMPUTER ARCHITECTURE AND VERY LARGE PROBLEMS. 20-7

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF. 21-14

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-40

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER. 28-1

COMPUTING
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

ANALYZED BINARY COMPUTING. 20-1

MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING. 20-39

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-67

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-68

COMPUTING FACILITIES. 21-15

CONCENTRATION
PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION. 16-26

VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

CONCEPTS
CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT. 20-8

CONDENSATION
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29 5

CONDENSED
CONDENSED EXPLOSIVES LASER. 19-11

CONDITIONING
PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

CONDUCTION
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

2

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

CONDUCTIVITY
CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

CONFERENCE
PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

CONFIGURATIONS
CONFIGURATIONS 4F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM. 4-6

CONFINED
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

CONFORMAL
IMPROVED METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

CONICAL
MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

CONJUGACY
AURORAL CONJUGACY. 1-2

CONJUGATE
RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

AURORAL INTENSITIES AT CONJUGATE POINTS. 1-3

CONNECTIVE
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

CONSERVATION
ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES. 24-64

CONSIDERATIONS
DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

CONSISTENT
SELF CONSISTENT BILOCAL FIELD THEORY. 26-32

CONSONANT
TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION. 29-25

CONSTANCY
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

CONSTANT
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

CONSTANTS
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY. 6-12

DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

CONSTRAINED
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20

IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20

CONSTRUCTION
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20

CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21

CONTACT
CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13

TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION. 29-

CONTAMINATION
SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16

CONTENT
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-1

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-

CONTINUATION
CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-

CONTINUED
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-1

CONTINUOUS
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-2

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-5

CONTINUOUSLY
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-3

CONTINUUM
DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-1

CONTRAST
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

CONTRIBUTION
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA 10-18

TY
IONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE
N OF PBX 9404 BY OBLIQUE IMPACT. 14-7

TALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

NEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM.
IGS. 21-50

IONS
ATIONS 4F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM. 4-6

PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

ILO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL
ORIFICES. 17-11

CONJUGACY. 1-2

MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

NTENSITIES AT CONJUGATE POINTS. 1-3

ND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK
RE LATTICE. 20-27

N
NSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) 24-64

NS
ISIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

NAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON
ARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE
RS. 22-42

STENT BILOCAL FIELD THEORY. 26-32

LATE CONTACT DURING CONSONANT PRODUCTION. 29-25

ANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

E STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR
FT VELOCITY. 12-21

NSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

ND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK
IE LATTICE. 20-27

IC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM
ATIC AND MAGNETIC FIELDS. 26-30

CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL
ISOTOPIC SPECIES. 4-34

DETERMINATION OF RATE CONSTANTS BY SCANNING
RY. 6-12

DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

CONSTRAINED
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20-23

CONSTRUCTION
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

CONTACT
CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION. 29-25

CONTAMINATION
SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

CONTENT
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

CONTINUATION
CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-4

CONTINUED
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-15

CONTINUDUS
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

RAPID, CONTINUDUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

CONTINUOUSLY
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

CONTINUUM
DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

CONTRAST
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

CONTRIBUTION
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

2

CONTROL
POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF. 21-14

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-40

CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23-7

CONTROLLED
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

CHARACTERISTICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

CONTROLLER
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

CONVECTIVE
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

TURBULENCE TRANSITIONS IN CONVECTIVE FLOW. 17-23

CONVERGENCE
EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

CONVERSION
RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

COOKBOOK
HOLOGRAPHIC INTERFEROMETRY COOKBOOK.

COORDINATED
COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELO
A SUBSTORM.

COPPER
TOTAL ENERGY OF COPPER, SILVER AND GOLD.

STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDA
AND WITH 4- CYANOPYRIDINE.

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)).

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)).

MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63.

CORE
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY
NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS.

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NU
ROCKET ENGINE PROGRAM (ROVER).

CORNERS
EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE.

CORRECTED
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY
CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN.

CORRECTION
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS.

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION.

CORRELATION
HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT K
ENERGIES.

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NU
PHYSICS.

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPON
FROM A COMPLEX PULSE.

CORRELATIONS
MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS.

ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NU

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED
ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIO
EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS.

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTE
ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIO
EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS.

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTE
ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATION
EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS.

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI.

COULOMB
REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION.

NTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

NTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

L SYSTEM FOR LAMPF. 16-24

L SYSTEM FOR LAMPF. 16-25

N CONTROL AT THE LOS ALAMOS CHEMISTRY AND CH BUILDING. 16-39

OL FOR A PDP-9,9/L COMPUTER. 20-52

GUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

EPICS BEAM LINE AND SPECTROMETER. 21-13

LAMPF'S 201.25 MHZ RF. 21-14

COMPUTER CONTROL SYSTEM. 21-40

OPERATIONS WITH FISSILE MATERIAL. 23-7

M IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE ROLLED POTENTIAL COULOMETRIC METHOD. 2-19

ASL CONTROLLED THERMONUCLEAR RESEARCH H PERIOD ENDING OCTOBER 1971. 10-76

ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

LLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

LLED ELECTRICAL DISCHARGE AS A METHOD OF S OF CARBON DIOXIDE LASER MEDIA AT HIGH 19-19

EAM CONTROLLED CARBON DIOXIDE LASER 19-27

ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

THE ELECTRON BEAM CONTROLLED DISCHARGE IN EDIA. 19-49

THE ELECTRON BEAM CONTROLLED CARBON R PRODUCED PLASMAS. 19-57

HITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

TOR CONTROLLER PROVIDING CONSTANT ANGULAR 12-21

ECTIVE HEAT TRANSFER COEFFICIENTS FOR THE OGEN AND HELIUM IN SMOOTH TUBES AT MODERATE PERATURES. 12-13

IS IN CONVECTIVE FLOW. 17-23

ERGENCE ACCELERATION OPTIONS IN TRANSPORT 23-10

RS (NOISE) IN THE TERMS OF A POWER SERIES ON E PADE APPROXIMANTS. 26-7

ERSION OF NITRIC OXIDE TO NITROGEN AND 7-17

T CONVERSION OF ENERGY IN A DEUTERIUM 10-28

NT AND CONVERSION TO METRIC SYSTEM. 29-24

COOKBOOK
HOLOGRAPHIC INTERFEROMETRY COOKBOOK. 10-33

COORDINATED
COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT OF A SUBSTORM. 1-8

COPPER
TOTAL ENERGY OF COPPER, SILVER AND GOLD. 4-49

STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANOPYRIDINE. 9-22

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

CORE
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

CORNERS
EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE. 22-13

CORRECTED
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

CORRECTION
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

CORRELATION
HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

CORRELATIONS
MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS. 21-32

ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

COULOMB
REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

2

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES. 24-26

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

COULOMETRIC
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

COUNTER
CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-6

COUNTERS
NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

COUNTING
ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

COUPLE
ODD COUPLE: ECOLOGY AND ECONOMICS. 29-14

COUPLED
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

COUPLED REGION KINETICS FORMULATIONS. 23-6

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

COUPLING
PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES. 24-26

CREATED
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

CREEP
HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

CRISIS
ENERGY CRISIS: SOME POLICY ALTERNATIVES. 29-3

CRITICAL
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

CRITICALITY
CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23-7

CROSS
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-5

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION. 17-1

MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-3

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-2

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-2

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-1

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM. 24-1

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-1

PROBLEMS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS SECTIONS. 24-1

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-1

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-1

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-1

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-1

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

EVALUATION OF THE TOTAL CROSS SECTION FOR TUNGSTEN. 24-47

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-53

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS. 24-55

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

RMANIUM -73 AND QUASIPARTICLE PHONON 24-26

RING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

I URANIUM DIOXIDE - PLUTONIUM DIOXIDE
LLED POTENTIAL COULOMETRIC METHOD. 2-19

IFIER FOR USE WITH LARGE PROPORTIONAL 18-6

NTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

I OF RECOIL SPECTRA IN HELIUM -4 26-17

F THE COUNTING EFFICIENCY OF A NE-213
EN 2 AND 26 MEV. 18-1

ECONOMICS. 29-14

A PAIR OF COUPLED INTEGRAL EQUATIONS
OLUTION OF LAPLACE'S EQUATION. 20-14

LATORS: MODAL EQUATION APPROACH. 20-40

NEUTRON GAMMA SN TRANSPORT FROM A 14.1
R OVER GROUND USING THE LASL TWDTRAN-FC 23-27

ORMULATIONS. 23-6

AY MULTIGROUP CROSS SECTIONS FOR NITROGEN,
, CARBON, IRON, AND HYDROGEN. 24-27

NG STATES SEEN IN INELASTIC PROTON
ISOTOPES. 24-107

RMANIUM -73 AND QUASIPARTICLE PHONON 24-26

EATED BY HYDRAULIC FRACTURING IN HOT DRY 11-2

F A POCO GRAPHITE. 22-17

ON THE ELASTIC MODULUS,
ATION AND DENSITY OF A POCO GRAPHITE. 22-24

ALTERNATIVES. 20-3

F CRITICAL VELOCITY THEORIES FOR 8-4

F CRITICAL VELOCITY THEORIES FOR 8-4

FFECTS IN REFLECTED FAST CRITICAL 23-2

ICHED URANIUM CRITICAL ASSEMBLY: 23-4

D FAST CRITICAL ASSEMBLIES AND COMPARISON 23-5

ERATIONS WITH FISSILE MATERIAL. 23-7

CROSS

FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION. 17-12

MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-29

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-118

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM. 24-119

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-120

PROBLEMS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS SECTIONS. 24-122

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

EVALUATION OF THE TOTAL CROSS SECTION FOR TUNGSTEN. 24-47

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-53

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS. 24-55

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

2

1 2/4

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

HIGH RESOLUTION NEUTRON CROSS SECTIONS. 24-60

MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

CRYOGENIC
CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-5

CRYOGENICS
CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8-6

CRYSTAL
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C. 9-19

CRYSTAL CHEMISTRY OF REFRACTORY CARBIDES. 9-2

STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

THORIUM CYANIDE CRYSTAL STRUCTURE. 9-24

CRYSTAL STRUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V). 9-3

CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6). 9-4

CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(III) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

DETERMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON DIFFRACTION. 9-7

DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

CRYSTALLINE
THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

CRYSTALLOGRAPHIC
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAP COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS.

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE.

CRYSTALLOGRAPHY
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAP COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS.

CRYSTALS
RAMAN SPECTRA OF SINGLE CRYSTALS.

CTR
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES.

CUBIC
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC.

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.7 GRAMS PER CUBIC CENTIMETER PETN.

ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM.

CULTURED
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS.

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATIO IN CULTURED MAMMALIAN CELLS.

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS.

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELL

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS.

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTI OF CULTURED MAMMALIAN CELLS.

CURIUM
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250.

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250.

CURRENT
CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM

CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR.

PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR.

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES.

CURRENT IN THE COLD LASER PLASMA.

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM.

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALA MESON.

CURRENTS
STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS.

ERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

N NEUTRON CROSS SECTIONS. 24-60

V ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

NCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

NDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL 24-84

ION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

ERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

RESSING DIRAC SPINOR AMPLITUDES IN TERMS OF APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

UMENTATION AT AND ABOVE LIQUID HYDROGEN RESENT AND FUTURE. 8-5

ACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC 8-6

IS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL 7-21

IUM: THE CRYSTAL STRUCTURE AND MAGNETIC F AMERICIUM IODIDE. 9-10

NION OF CRYSTALLOGRAPHY COMMISSION ON IC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC AMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL YSIS. 9-13

S AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

S AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

F THE CRYSTAL STRUCTURE OF B4C. 9-19

RY OF REFRACTORY CARBIDES. 9-2

HE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM IMONATE(III). 9-23

CRYSTAL STRUCTURE. 9-24

RE OF CESIUM OXOTETRAFLUOROIODATE(V). 9-3

RE OF CHROMIUM(23) CARBIDE(6). 9-4

RE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ROMONE OF THE HONEYBEE. 9-5

RE OF THE MIXED VALENCE COPPER CYANIDE COMPLEX: AQUOBIS(EN)COPPER(II) CYANOCUPRATE(I)). 9-6

F THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON 9-7

TIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE RE. 9-9

TERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

F ANHARMONICITY IN THE SPECIFIC HEAT OF ER -63. 28-2

ION OF CRYSTALLOGRAPHY COMMISSION ON C COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC MS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL IS. 9-13

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

CRYSTALLOGRAPHY
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

CRYSTALS
RAMAN SPECTRA OF SINGLE CRYSTALS. 4-36

CTR
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

CUBIC
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

CULTURED
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

CURIUM
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

CURRENT
CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR. 10-10

PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

CURRENT IN THE COLD LASER PLASMA. 19-13

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS. 21-56

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

CURRENTS
STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

2

CURVED
ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

CURVES
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

CYANIDE
STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANOPYRIDINE. 9-22

THORIUM CYANIDE CRYSTAL STRUCTURE. 9-24

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

CYANOPYRIDINE
STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANOPYRIDINE. 9-22

CYCLE
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE. 5-48

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

CYCLIC
RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

CYCLING
GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

CYCLOTRON
ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE. 10-16

TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

CYG
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

CYGNUS
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

RANDOM PULSATIONS OF CYGNUS X-1. 3-9

CYLINDERS
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

CYLINDRICAL
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

CYTOSINE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

D
LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1572. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

D-BAND
PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

DAMAGE
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

DAMPING
TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

DART
DART TECHNOLOGY DEVELOPMENT FINAL REPORT. 29-2

DATA
SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

DEFORMABLE MASS FORMULA AND FISSION DATA. 15-4

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI. 20-72

DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-48

ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS. 22-1

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

ION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

T CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

RES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE 4- CYANOPYRIDINE. 9-22

CYANIDE CRYSTAL STRUCTURE. 9-24

STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE EDIAMINE COMPLEX: AQUOBIS(ENICOPPER(II) A-DI-MU-CYANOCUPRATE(I)). 9-6

MR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

DINE
RES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE 4- CYANOPYRIDINE. 9-22

CAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL OGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

LE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE FACE. 5-10

OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, IDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL AVERSE. 5-20

SM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING ASE OF THE MAMMALIAN LIFE CYCLE. 5-35

FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ALIAN CELL CYCLE TRAVERSE. 5-37

OR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION 5-38

ION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS 1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

SHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE. 5-48

APID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF ERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

UCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB YME (HLM15) IN VITRO. 5-56

OW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF AGENTS ON CELL CYCLE PROGRESSION. 5-57

UCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR LE. 25-17

OR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY DITIONS. 16-32

MIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

CYCLOTRON DRIFT INSTABILITY AND TURBULENCE. 10-16

CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

ERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

E CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

ULSATIONS OF CYGNUS X-1. 3-9

CYLINDERS
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

CYLINDRICAL
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

CYTOSINE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

D
LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

D-BAND
PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

DAMAGE
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

DAMPING
TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

DART
DART TECHNOLOGY DEVELOPMENT FINAL REPORT. 29-2

DATA
SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

DEFORMABLE MASS FORMULA AND FISSION DATA. 15-4

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI. 20-72

DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-48

ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS. 22-1

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

2

NUCLEAR ROCKET REFERENCE DATA SUMMARY. 29-13

DAUGHTERS
PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-116

DAUNOMYCIN
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

DC
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

DECAY
COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS. 21-32

OBSERVATION OF THE DECAY OF PHOSPHORUS -35. 24-102

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

DECAY OF 100,000-YEAR TIN -126. 24-31

DECAY OF PHOSPHORUS -35. 24-32

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

DECAYING
OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

DECAYS
MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS. 21-32

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-95

NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY - 126, 127, 128. 24-97

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

DECEMBER
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

DECENOIC
CRY STAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

DECODERS
USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS. 20-73

DECOMPOSITION
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSI TION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 1

DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE. 1

EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 1

DECONVOLUTION
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND IT RELATIONSHIP TO THE WIENER THEORY. 2

THEOREM ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 2

DEFENSE
ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 2

DEFICIENCY
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS.

DEFORMABLE
DEFORMABLE MASS FORMULA AND FISSION DATA. 1

DELAYED
MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 2

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF TH ENERGY OF THE NEUTRON INDUCING FISSION. 2

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 2

DELTA
DELTA T TURN-ON PROCEDURE.

DEMAND
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 2

DENSE
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 1

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 1

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA.

FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS.

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS.

CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS.

DENSITOMETRY
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4

DENSITY
DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-

DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DEN PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10

LOW DENSITY LIMIT OF THE THETA PINCH. 10

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 1

ENCE DATA SUMMARY. 29-13

OF GAMMA RAY ENERGIES FROM URANIUM -238 24-116

ABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, IN, AND CAMPTOTHECIN ON MAMMALIAN CELL 5-20

C POWER SUPPLY TO 0.01 PERCENT. 12-20

SATURATION OF THE WEAKLY DRIVEN PARAMETRIC 19-10

CORRELATIONS IN K-MU-3+ DECAYS. 21-32

CAY OF PHOSPHORUS -35. 24-102

ICLE FOUR HOLE STATES IN STRONTIUM -88 AND UM -88. 24-155

IN -126. 24-31

5. 24-32

NTS IN THE FIRST FORBIDDEN BETA DECAY OF 24-93

TUDY OF THE DECAY OF NEPTUNIUM -239 -IRON -2: PARITY MIXING IN PLUTONIUM -235 E OF PLUTONIUM -239 AND FISSION PRODUCTS 24-96

NG STATES, AND PERTURBATION THEORY. 24-105

CORRELATIONS IN K-MU-3+ DECAYS. 21-32

ND PARITY MIXING STUDIES OF THE DECAYS OF UM -169, 175. 24-94

TUDIES OF THE DECAYS OF RHENIUM -183, 184G, 24-95

TUDY OF THE DECAYS OF ANTIMONY - 126, 127, 24-97

D PARITY MIXING IN THE DECAYS FROM ORIENTED 24-99

L RESEARCH GROUP (H-4) OF THE LASL HEALTH T, JANUARY THROUGH DECEMBER 1971. 5-7

RING IN THE VICINITY OF THE LOS ALAMOS JULY THROUGH DECEMBER 1971. 16-8

E PRODUCTION. BRIEFING TO THE AEC DIVISION NT, DECEMBER 15, 1970. 21-69

ARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, 971. 25-21

RT ON THE THEORETICAL REACTOR PHYSICS CEMBER 31, 1971. 27-14

RT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, 31, 1971. 27-15

QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC E OF THE HONEYBEE. 9-5

TIONAL CHAMBER DECODERS. 20-73

CALORIMETRIC DETERMINATION OF KINETICS HAT MELT WITH DECOMPOSITION. 6-2

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE. 14-3

EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

DECONVOLUTION
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

THEOREM ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 20-64

DEFENSE
ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

DEFICIENCY
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

DEFORMABLE
DEFORMABLE MASS FORMULA AND FISSION DATA. 15-4

DELAYED
MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 25-24

DELTA
DELTA T TURN-ON PROCEDURE. 21-17

DEMAND
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-11

DENSE
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-1

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

DENSITOMETRY
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

DENSITY
DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

LOW DENSITY LIMIT OF THE THETA PINCH. 10-37

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

2

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

DEOXYNUCLEOTIDYL
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

DEOXYRIBONUCLEIC
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

DEOXYRIBONUCLEOTIDES
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

DEPENDENCE
VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

DEPENDENT
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

DEPHOSPHORYLATION
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DER
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

DERIVATION
DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

DESCRIBING
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

DESIGN
TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

SPECTROMETER DESIGN AT LASL. 18-18

DESIGN OF ALBEDO NEUTRON DOSIMETERS. 18-7

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-12

FASTER LASL LENS DESIGN SYSTEM. 26-9

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

DESPITE
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

DESQUAMATION
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE 5-10

DETECTABILITY
SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

DETECTABLE
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

DETECTION
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

DETECTOR
ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

DETECTORS
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

DETONATION
MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

DETONATION PHENOMENA. 14-4

DETONATIONS
CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

ECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH
NSITY AND QUANTUM EFFICIENCY. 19-55

OF CREEP STRAIN ON THE ELASTIC MODULUS,
GRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

RTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

TIDYL
OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND
NUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

CLEIC
ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN
IN CULTURED CHINESE HAMSTER CELLS. CONTINUED
C ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF
NUCLEIC ACID (DNA) SYNTHESIS. 5-22

CLEOTIDES
F MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND
NUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

ND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

ENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL
ONS. 24-84

ENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N
: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE
CE. 5-10

ENT SOLUTION TO INTERSTITIAL DIFFUSION IN A
RE GRADIENT. 7-24

GNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND
S FROM A NUCLEAR EXPLOSION. 23-11

ME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR
N OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

IME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

ATION
YLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN 5-15

UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER
ERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
NETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER
ERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
NETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER
ERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
NETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER
ERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
NETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS
D SPHERE MODEL COMPUTER PROGRAM. 26-5

METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC
ET FLOWS. 17-17

AGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL 20-30

DESIGN
TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

SPECTROMETER DESIGN AT LASL. 18-18

DESIGN OF ALBEDO NEUTRON DOSIMETERS. 18-7

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-126

FASTER LASL LENS DESIGN SYSTEM. 26-9

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

DESPITE
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

DESQUAMATION
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

DETECTABILITY
SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

DETECTABLE
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

DETECTION
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

DETECTOR
ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

DETECTORS
SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

DETONATION
MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

DETONATION PHENOMENA. 14-4

DETONATIONS
CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

2

TWO DIMENSIONAL DETONATIONS. 14-18

DETONATIONS NEAR THE WATER SURFACE. 17-6

DEUTERATED
DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

DEUTERIDE
INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

DEUTERIUM
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

THEORETICAL EQUATION OF STATE FOR DEUTERIUM. 4-47

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

DETERMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON DIFFRACTION. 9-7

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE.PRESENCE OF INTENSE LASER RADIATION. 19-14

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION. 19-41

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

DEUTEROAMMONIA
NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

DEUTERON
RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING.

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV.

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUT AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUT AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUT AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUT AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LE -208 (DEUTERON,PROTON) LEAD -209 REACTION.

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING.

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING.

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING.

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV.

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES.

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4.

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4.

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING.

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS.

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS.

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TR

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TR

FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL.

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER.

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER.

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTION

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTION

MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS.

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGI

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD.

DEUTERONS
ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRO -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197.

DEVICE
ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS.

DI-
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(III) DI-(CATENA-DI-MU-CYANOCUPRATE(I)).

AL DETONATIONS. 14-18

EAR THE WATER SURFACE. 17-6

SCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

RIMENT TO MEASURE THE TRITIUM PRODUCTION FROM MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

ON CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, , KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

QUATION OF STATE FOR DEUTERIUM. 4-47

ERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM 6-15

TION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM INE SYSTEMS. 6-3

GE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM 6-4

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF DNAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM 6-7

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF RIDE AND DEUTERIUM FLUORIDE. 6-8

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF RIDE AND DEUTERIUM FLUORIDE. 6-8

NS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

NS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON 9-7

D DIRECT CONVERSION OF ENERGY IN A DEUTERIUM 10-28

ACTERISTICS OF A PULSED FUSION REACTOR USING LASER ERIUM PLUS TRITIUM) PELLETS. 10-49

TIUM HEATING TO THERMONUCLEAR TEMPERATURES BY N COLLISIONS IN THE PRESENCE OF INTENSE LASER 19-14

DEUTERIUM UNDER LASER IRRADIATION. 19-41

ANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM TA EQUALS ZERO DEGREES. 24-112

NG AND POLARIZATION OF FAST NEUTRONS BY LIQUID TRITIUM. 24-41

RDER PARAMETER IN CUBIC DEUTERIUM. 28-4

- LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

CTURE IN (TRITON,PROTON-FISSION) AND N-FISSION) ON ACTINIDE NUCLEI. 15-12

Y (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA),) AND (TRITON,ALPHA) REACTIONS. 15-6

ANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM TA EQUALS ZERO DEGREES. 24-112

ANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM 24-113

SUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 RON) HELIUM -4 ELASTIC SCATTERING. 24-121

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-25

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-25

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

DESCRIPTION OF HELIUM -4 (DEUTERON , DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER. 24-34

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER. 24-34

FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-88

DEUTERONS
ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

DEVICE
ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

DI-
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

2

DI-AQUO
DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

DIAGNOSTIC
CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

DIAGRAM
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

THORIUM NITROGEN OXYGEN PHASE DIAGRAM. 7-23

DIAGRAMS
REDUCED PROPER MOTION DIAGRAMS. 3-10

REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

DIATOMIC
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES. 6-10

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

DIBORON
TORSIONAL MODE OF DIBORON TETRACHLORIDE. 4-48

DICARBIDE
X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

DICERIUM
DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

DIELECTRIC
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

DIFFERENCED
GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

DIFFERENTIAL
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

DIFFERENTIATION
MINIMUM NORM DIFFERENTIATION FORMULAS. 20-33

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

DIFFICULTY
THEOREM ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 20-64

DIFFRACTION
LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

DETERMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON DIFFRACTION. 9-7

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

DIFFUSE
MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-4

DIFFUSION
TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-5

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-1

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

DIFFUSIVITY
THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-3

DIGITAL
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-3

DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

DIHYDRATE
DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

DILUTION
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

DIMENSIONAL
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-84

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

TWO DIMENSIONAL DETONATIONS. 14-18

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-1

PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-2

PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

ON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

E NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC 5-9

STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

ROGEN OXYGEN PHASE DIAGRAM. 7-23

OPER MOTION DIAGRAMS. 3-10

OPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

UCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC 4-17

SUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK 6-10

CAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC LECULE SYSTEMS. 6-9

ODE OF DIBORON TETRACHLORIDE. 4-48

ACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - CARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

NOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE UCTURE. 9-9

NOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE UCTURE. 9-9

ATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

D, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON COMPUTATIONS. 23-13

ON OF DIFFERENTIAL TEMPERATURE CALIBRATION AND MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

NALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED 5-14

AL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN FICATION. 5-16

LAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE RTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION R RNA. 5-34

AL SCANNING CALORIMETRIC DETERMINATION OF KINETICS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

ON
RM DIFFERENTIATION FORMULAS. 20-33

ATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE 25-8

THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 20-64

ELECTRON DIFFRACTION (LEED). 9-14

ACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - CARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

ION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON N. 9-7

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

DIFFUSE
MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-43

DIFFUSION
TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-52

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

DIFFUSIVITY
THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

DIGITAL
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

DIHYDRATE
DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

DILUTION
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

DIMENSIONAL
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-84

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

TWO DIMENSIONAL DETONATIONS. 14-18

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-20

PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

2

META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-53

TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-70

TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

DIMENSIONS
NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

DIMERIZATION
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

DIMETHYLMETALLOCENES
CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

DIOXIDE
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-18

AXIAL CHANNELING IN THORIUM DIOXIDE. 9-1

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-1

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-1

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-2

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-2

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-2

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-

HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-

THERMAL EXPANSION OF PLUTONIUM DIOXIDE. 22-

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDE NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27

DIRAC
GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION. 2

METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26

DIRAC-SLATER
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4

DIRECT
DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM. 8

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA.

DIRECTIONAL
ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FR ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS.

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FR ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS.

DISC
CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES.

LASL 51MM DISC AMPLIFIER.

DISCHARGE
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE.

ALL METAL DISCHARGE TUBE.

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE.

OR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL 20-30

MENSIONAL PROGRAMMING LANGUAGES. 20-53

MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS EEDINGS. 20-69

PROGRAMMING LANGUAGES. 20-70

SEARCH AND INTERPOLATION ON A DISTORTED D. PROGRAM SI-PH1-G2D. 20-71

AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 RCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC 23-27

MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

ATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

ULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING DIMENSIONS. 19-44

OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE 26-28

ENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

ENES
AR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF METALLOCENES. 13-4

F OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM IN OXYGEN -16. 2-11

RANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE A CONTROLLED POTENTIAL COULOMETRIC METHDD. 2-19

RANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

ACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN UEL PIN IRRADIATION TESTS. 2-2

OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON DE. 5-29

HE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH ON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE RCE. 5-4

HE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH ON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE RCE. 5-4

XTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

ES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM 7-18

G IN THORIUM DIOXIDE. 9-1

IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 E. 9-11

IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 E. 2. 9-12

NTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE URE. 9-9

NTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE URE. 9-9

LATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-40

THERMAL EXPANSION OF PLUTONIUM DIOXIDE. 22-41

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-8

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

DIRAC
GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION. 20-21

METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

DIRAC-SLATER
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

DIRECT
DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM. 8-7

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

DIRECTIONAL
ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

DISC
CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

LASL 51MM DISC AMPLIFIER. 19-37

DISCHARGE
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

ALL METAL DISCHARGE TUBE. 10-2

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

2

DOUBLE DISCHARGE INITIATED HF LASER. 19-15

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

CHARACTERISTICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

DISCRETE
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

DISORDERED
LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

DISPERSED
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

DISPERSION
EXTENSION OF BOUNDARY DISPERSION RELATIONS. 24-51

DISPERSIONS
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

DISPLAY
REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER. 20-54

DISSIPATION
DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM. 8-10

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

DISSIPATION IN SATURATED SUPERFLUID FILM FLOW. 8-9

DISSOCIATION
DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES. 6-10

LASER INDUCED DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

DISSOLUTION
SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS. 2-32

DISTANCES
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

DISTANT
SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE. 1-30

DISTORTED
PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

DISTRIBUTION
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS. 5-47

NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-1

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-7

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

DISTRIBUTIONS
ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-4

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-1

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-1

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-1

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-1

DITCH
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

DIVALENT
DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

DIVERGENT
MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-1

DIVISION
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-6

DNA
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

ARGE INITIATED HF LASER. 19-15

AM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF GE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH 19-19

TICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN DE LASER MEDIA. 19-49

SCHARGE LASER ENERGY SOURCE. 19-6

NALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE 23-16

RMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION E ORDINATE CODES. 23-23

DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

DINATES METHODS FOR THE NUMERICAL SOLUTION OF THE QUATION. 23-9

N OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

EMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

BOUNDARY DISPERSION RELATIONS. 24-51

CY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR F A THREE PRISM SPECTROGRAPH. 4-23

AY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

INTERFACE TO A PDP-9 COMPUTER. 20-54

N THE FLOWING SATURATED SUPERFLUID FILM. 8-10

OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW RATION OF FLUCTUATION DISSIPATION. 8-16

F FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

F THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER 8-2

REMENT OF THE DISSIPATION FUNCTION OF THE FLOWING LIUM II FILM. 8-8

SATURATED SUPERFLUID FILM FLOW. 8-9

ENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION S. 6-1

REMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK 6-10

D DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

ISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM ATERIALS. 2-32

W OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

NOMENA IN THE DISTANT MAGNETOSPHERE. 1-30

TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW 17-21

AL SEARCH AND INTERPOLATION ON A DISTORTED GRID. PROGRAM SI-PH1-G2D. 20-71

DISTRIBUTION

RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS. 5-47

NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-15

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

DISTRIBUTIONS

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISDTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-41

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

DITCH

ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

DIVALENT

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

DIVERGENT

MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

DIVISION

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

DNA

DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

2

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

DOG
EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

DOMAIN
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

DOSE
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS. 5-47

DOSIMETERS
DESIGN OF ALBEDO NEUTRON DOSIMETERS. 18-7

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

DOUBLE
DOUBLE DISCHARGE INITIATED HF LASER. 19-15

DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

DOUBLET
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

DOUBLY
ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

DOWN
SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

DPF
DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

DRAG
NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

DRAINAGE
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

DREAM
RISK VS BENEFIT: SOLUTION OR DREAM. 16-35

DRIFT
ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE. 10-16

DRIFTED
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

DRIVEN
CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION.

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMET DECAY INSTABILITY.

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES.

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS.

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATER

DRIVER
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER.

PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR PDP-11.

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS.

DRUG
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN.

DRUM
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY.

DRY
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT D ROCK.

DT
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS.

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES.

DUPLICATING
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS.

DWARF
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG

DYNAMIC
GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR.

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS.

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANG IN SURFACE MORPHOLOGY.

DYNAMICS
COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA.

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS O LASER SCATTERING SPECTRA.

PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS.

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER.

DYSPROSIUM
CONFIGURATIONS 4F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM.

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIU ANTIMONIDE, AND CERIUM ANTIMONIDE.

E
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III).

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES.

E-BEAMS
INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING.

F X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA
N IN CHINESE HAMSTER CELLS. 5-23

F X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA
N IN CHINESE HAMSTER CELLS. 5-23

M OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN
D DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

F DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND
5-21

IN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING.
18-21

VE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY
S EXPOSURE. 5-12

F DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND
5-21

GATIVE PION DOSE DISTRIBUTION CALCULATIONS.
5-47

ALBEDO NEUTRON DOSIMETERS. 18 7

FFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS
G LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS.
18-9

FFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS
G LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS.
18-9

CHARGE INITIATED HF LASER. 19-15

MPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND
OF HYDROXYL AND HEAVY HYDROXYL. 4-1

WAVENUMBERS OF THE DDUBLET SIGMA TO DOUBLET PI (0,0) AND
OF HYDROXYL AND HEAVY HYDROXYL. 4-1

UCTING QUADRUPOLE DDUBLET FOR LAMPF SECONDARY BEAM
12-22

TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
AS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-7

TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA.
25-29

F DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF
TERING SPECTRA. 10-14

M CONCENTRATION: A MECHANISM FOR DRAG REDUCTION.
17-13

OR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP
UTLETS. 29-1

EFIT: SOLUTION OR DREAM. 16-35

YCLOTRON DRIFT INSTABILITY AND TURBULENCE.
10-16

TECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM
PECTRA. 18-12

E CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED
DETECTORS. 18-17

D TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED
DETECTORS WITH SMALL DISC SOURCES. 18-5

DRIVEN
CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION.
10-9

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL.
19-39

DRIVER
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER.
20-31

PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11. 20-51

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS.
25-3

DRUG
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

DRUM
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

DRY
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

DT
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-35

DUPLICATING
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

DWARF
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG.
3-11

DYNAMIC
GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR.
10-30

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

DYNAMICS
COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS.
23-18

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER. 28-1

DYSPROSIUM
CONFIGURATIONS 4F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM.
4-6

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

E
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES.
19-56

E-BEAMS
INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING. 19-24

2

EARTH
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

CLEAN ENERGY FROM THE EARTH. 11-1

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

EARTH'S
MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

MICROSTRUCTURE OF THE EARTH'S BOW SHOCK. 1-16

MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

ECLIPSE
CANADIAN TOTAL SOLAR ECLIPSE FLIGHT. 3-2

ECOLOGY
ODD COUPLE: ECOLOGY AND ECONOMICS. 29-14

ECONOMICS
ODD COUPLE: ECOLOGY AND ECONOMICS. 29-14

EDDY
PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

EDGE
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

EFFECT
OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

LARGE FARADAY - EFFECT OPTICAL ISOLATOR. 19-28

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

EFFECT OF MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE MATERIALS. 22-9

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

EFFECTIVE
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

EFFECTIVENESS
EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

EFFECTS
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-2

PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-6

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-3

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

EFFECTS OF STRONGLY ABSORPTIVE INTERACTIONS. 24-3

EFFICIENCIES
CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

EFFICIENCY
FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-1

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

MAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL GEOCORONA AT 18 EARTH RADII. 1-35

D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION KALINE EARTH METALS. 4-22

RGY FROM THE EARTH. 11-1

RON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE EARTH REGION. 24-156

ENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

UCTURE OF THE EARTH'S BOW SHOCK. 1-16

IONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO MITY OF THE EARTH'S BOW SHOCK. 1-17

TOTAL SOLAR ECLIPSE FLIGHT. 3-2

LE: ECOLOGY AND ECONOMICS. 29-14

LE: ECOLOGY AND ECONOMICS. 29-14

SED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

NSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

ON OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION 4-30

IONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION 4-31

TRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE R EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY TER. 8-23

INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR 14-5

SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE OF PBX 9404 BY OBLIQUE IMPACT. 14-7

FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

ADAY - EFFECT OPTICAL ISOLATOR. 19-28

OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM OY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE . 22-9

RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON RGENCE OF THE PADE APPROXIMANTS. 26-7

FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL 27-3

NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS ATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

S MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

S
NESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT ONS. 23-10

VE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 N IN BEAGLES AND MONKEYS. 6-11

COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-65

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-30

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

EFFECTS OF STRONGLY ABSORPTIVE INTERACTIONS. 24-38

EFFICIENCIES
CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

EFFICIENCY
FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-11

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

2

EFFICIENCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

CHEMICAL EFFICIENCY IN A PULSED HYOROGEN FLUORIDE LASER. 19-4

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

EFFICIENT
PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

EFFLUENT
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

EFFUSION
MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

EIGENVALUE
EIGENVALUE PROBLEM FOR A PAIR OF COUPLEO INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

ELASTIC
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

ELASTIC SCATERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-88

ELECTRIC
REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

ELECTRICAL
WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

ELECTRICAL EXCITATION OF LASING LEVELS. 19-17

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD O PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE.

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES.

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCT

ELECTRO-MECHANICAL
ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES THE BEAM OPTICAL ABERRATIONS.

ELECTRODE
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES.

ELECTRODELESS
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPAR THE SECOND AND THIRD SPECTRA OF CHLORINE.

ELECTRODYNAMIC
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES.

ELECTROLYTES
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES.

ELECTROMAGNETIC
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES.

NONLINEAR EVOLUTION OF ELECTRDMAGNETIC PARAMETRIC INSTABILIT

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIAL SYMMETRIC ELECTROMAGNETIC TECHNIQUE.

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES.

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS A GAMMA RAYS FROM A NUCLEAR EXPLOSION.

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC F

ELECTRON
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DU THE PROXIMITY OF THE EARTH'S BOW SHOCK.

EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES.

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IO AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS.

LOW ENERGY ELECTRON DIFFRACTION (LEED).

ELECTRON BEAM/PLASMA FOCUS INTERACTION.

ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE.

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY PINCHES.

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY PINCHES.

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING.

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAM INSTABILITIES.

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRO PLASMA FREQUENCY.

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING.

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING.

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL.

AMBERS FROM 10 TO 80 KEV. 18-8

DROGEN FLUORIDE LASER. 19-4

ROGEN FLUORINE LASER WITH HIGH CIENCY. 19-55

EFFICIENT RETRIEVAL BY ODES. 20-50

IN DRAINAGE DITCH SOIL AT SUMP 29-1

VIOR OF DIVERGENT CONICAL 17-11

COUPLED INTEGRAL EQUATIONS OF LAPLACE'S EQUATION. 20-14

D THE HUGONIOT ELASTIC LIMIT OF YMMETRIC MAGNETIC PROBE. 4-44

GAMMA POLYCRYSTALLINE URANIUM. 22-11

LASTIC MODULUS, D DENSITY OF A POCO GRAPHITE. 22-24

ARIZATION TRANSFER IN HELIUM -4 STIC SCATTERING. 24-121

EUTERON (PROTON,DEUTERON) 24-160

ANSFER IN PROTON - DEUTERON 24-161

ERS IN DEUTERON ELASTIC 24-29

OR STUDIES OF THE NUCLEAR 24-39

OR STUDIES OF THE NUCLEAR 24-40

N OF FAST NEUTRONS BY LIOJIO 24-41

EUTERONS FROM CHROMIUM -5, IRON , AND GOLD -197. 24-42

ASTIC SCATTERING CROSS SECTIONS. 24-6

PROTON HELIUM -3 ELASTIC 24-82

ERING ABOVE THE BREAKUP 24-88

TRIX ELEMENTS FOR ELECTRIC HE FIRST AND SECOND EXCITED B EXCITATION. 24-137

ECTRIC POWER R AND D PROGRAM FOR 29-18

ECTRIC POWER R AND D PROGRAM FOR 29-19

ECTRIC POWER R AND D PROGRAM FOR 29-20

OBSERVATIONS NEAR THE ELECTRON 10-90

MEDIA BY AN INTENSE OPTICAL 19-16

VELS. 19-17

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

ELECTRO-MECHANICAL
ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS. 21-19

ELECTRODE
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

ELECTRODELESS
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

ELECTRODYNAMIC
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

ELECTROLYTES
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

ELECTROMAGNETIC
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES. 1-19

NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES. 10-50

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

ELECTRON
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

ELECTRON BEAM/PLASMA FOCUS INTERACTION. 10-15

ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE. 10-16

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

2

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

CHARACTERISTICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL. 19-39

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

ELECTRONIC
ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

ELECTRONICS
PROPOSED FAST ELECTRONICS FOR EPICS. 21-49

ELECTRONS
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

ELECTROSTATIC
RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

ELEMENT
STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

ELEMENTAL
ELEMENTAL ANALYSIS OF BIOLOGICAL SAMPLES. 2-13

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

ELEMENTS
NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

ELIMINATION
ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

EMERGING
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

EMF
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

EMISSION
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-11

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-12

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-8

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

EMITTANCE
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

RMS EMITTANCE AND THE LAMPF BEAM. 21-51

EMITTED
ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-1

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-1

EMP
EMP IN THE IONOSPHERE: ROCKET TEST 152-133. 1-9

EMPIRICAL
EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-1

EN
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

ENCAPSULATED
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

END
COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-1

END-POINT
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

ENDF
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-1

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

ENERGETIC
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-2

ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES
ON ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF
VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH 19-19

ECTRON BEAM CONTROLLED CARBON DIOXIDE LASER 19-27

CS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

CULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL. 19-39

UDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN
E LASER MEDIA. 19-49

TUDIES OF THE ELECTRON BEAM CONTROLLED CARBON
FOR LASER PRODUCED PLASMAS. 19-57

OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

ANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON 4-8

ELECTRONICS FOR EPICS. 21-49

UTION OF THE BOLTZMANN EQUATION FOR ENERGY
OF ELECTRONS WITH INELASTIC SCATTERING ON 4-29

HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN
TED TARGET PLASMAS. 19-45

HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN
TED TARGET PLASMAS. 19-46

ANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY
. 19-8

HARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM
AND MAGNETIC FIELDS. 26-30

HA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON)
EAVY ELEMENT TARGETS. 24-147

OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL
THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

LYSIS OF BIOLOGICAL SAMPLES. 2-13

D DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY
ED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

GAMMA SCANNING FUEL ELEMENTS. 2-16

GAMMA SCANNING FUEL ELEMENTS. 2-17

CULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR
. 4-18

LICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

T OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC
ANSITION BETWEEN THE FIRST AND SECOND EXCITED
ANIUM -72 BY COULOMB EXCITATION. 24-137

X ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF 24-93

RAY EFFECTS IN CURVED GEOMETRIES. 17-8

EMERGING
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

EMF
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

EMISSION
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-11

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-12

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-89

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

EMITTANCE
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

RMS EMITTANCE AND THE LAMPF BEAM. 21-57

EMITTED
ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

EMP
EMP IN THE IONOSPHERE: ROCKET TEST 152-133. 1-9

EMPIRICAL
EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

EN
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

ENCAPSULATED
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

END
COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

END-POINT
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

ENDF
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

ENERGETIC
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

2

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS). 21-20

RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

ENERGIES
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-114

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-116

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

ENERGY
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

THERMAL ENERGY TRANSPORT IN THE SOLAR WIND. 1-31

EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

TOTAL ENERGY OF COPPER, SILVER AND GOLD. 4-49

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

ENERGY STORAGE AND SWITCHING WITH SUPERCONDUCTORS. 8-11

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THET PINCHES. 10-

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THET PINCHES. 10-

ENERGY AND THE FUTURE OF NUCLEAR FUSION. 10-

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-

CLEAN ENERGY FROM THE EARTH. 11-

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-

THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION. 11-

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-

HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 1

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21

LOW ENERGY PION CHANNEL. 21-

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-2

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-1

PORT OF ENERGETIC ELECTRONS IN A RADIANTLY 19-8

ANNEL AND SPECTROMETER (EPICS). 21-20

E OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

ER ELECTRON BINDING ENERGIES AND LIMITS ON ONLINEARITIES. 4-16

AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS MS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

R IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS MS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

EEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC 15-3

TIVE PION PRODUCTION BY PROTON - PROTON UM ENERGIES. 21-3

OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

US INTERACTION IN MUON - PROTON SCATTERING AT 24-114

MENT OF GAMMA RAY ENERGIES FROM URANIUM -238 24-116

IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 IES LESS THAN 1.0 MEV. 24-13

E HELIUM -3 (DEUTERON, PROTON) HELIUM -4 AT LOW ENERGIES. 24-23

E, SINGLE PARTICLE ENERGIES IN MANY - FERMION ONS. 24-63

N INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

ONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

RANSPORT IN THE SOLAR WIND. 1-31

MATIONS USED IN THE ENERGY BAND CALCULATIONS OF 4-15

AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY 4-28

N OF THE BOLTZMANN EQUATION FOR ENERGY LECTRONS WITH INELASTIC SCATTERING ON 4-29

OMIC ENERGY LEVEL VALUES. 4-3

DUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS TROGEN. 4-43

OPPER, SILVER AND GOLD. 4-49

TRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE 300 KV. 4-54

Y TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM 6-15

ECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC SYSTEMS. 6-9

D SWITCHING WITH SUPERCONDUCTORS. 8-11

AGNETIC ENERGY STORAGE AND TRANSFER. 8-19

AGNETIC ENERGY STORAGE AND TRANSFER. 8-20

ON OF A SPACE PROBE MODEL, SUPERCONDUCTING L. 8-26

LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

ENERGY AND THE FUTURE OF NUCLEAR FUSION. 10-20

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

CLEAN ENERGY FROM THE EARTH. 11-1

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION. 11-8

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-9

HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-20

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

LOW ENERGY PION CHANNEL. 21-30

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

2

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

NUCLEAR ENERGY AND THE ENVIRONMENT. 29-12

ENERGY CRISIS: SOME POLICY ALTERNATIVES. 29-3

ENGINE
PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

ENGINEERING
ENGINEERING JOURNALS AVAILABLE. 29-4

ENHANCED
OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

ENHANCEMENT
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT. 20-8

DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

ENRICHED
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

ENRICHMENTS
SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

ENTHALPIES
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

ENTHALPY
ENTHALPY OF FORMATION OF NEPTUNIUM MONOCARBIDE. 7-10

SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-18

ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE. 7-9

ENVIRONMENT
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

PROBLEMS OF PLUTONIUM MEASUREMENT IN THE ENVIRONMENT. 16-29

VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

NUCLEAR ENERGY AND THE ENVIRONMENT. 29-1

RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-2

ENVIRONMENTAL
LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-2

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

EPICS
COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-1

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS). 21-2

PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-4

PROPOSED FAST ELECTRONICS FOR EPICS. 21-4

EPR
STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-1

EPSILON
NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-4

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-4

EQUATION
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

THEORETICAL EQUATION OF STATE FOR DEUTERIUM. 4-47

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-1

GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION. 20-2

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-4

TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-6

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-1

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

EQUATIONS
SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

ATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ALCULATIONS. 24-63

AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON S. 24-67

ND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

ARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

ENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE F THE NEUTRON INDUCING FISSION. 25-15

EPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N G: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

ENERGY AND THE ENVIRONMENT. 29-12

RISIS: SOME POLICY ALTERNATIVES. 29-3

RY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

ERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR GINE PROGRAM (ROVER). 29-8

NG JOURNALS AVAILABLE. 29-4

ECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY ON SOLID TARGETS. 19-47

T
MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY OF ATOMS. 5-25

RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

F RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

OF RADIOGRAPHIC IMAGE ENHANCEMENT. 20-8

UCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENT. 20-9

ATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM NRICHED IN OXYGEN -16. 2-11

3 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 CHLOROPHYLLS A AND B. 13-3

TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: UDIES. 23-4

ARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1-27

S OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SESQUIOXIDE CUBIC. 7-8

OF FORMATION OF NEPTUNIUM MONOCARBIDE. 7-10

VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM 7-18

OF FORMATION OF EUROPIUM SESQUIOXIDE. 7-9

T
TIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

OF PLUTONIUM MEASUREMENT IN THE ENVIRONMENT. 16-29

AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

NUCLEAR ENERGY AND THE ENVIRONMENT. 29-12

RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

ENVIRONMENTAL
LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

EPICS
COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS). 21-20

PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-48

PROPOSED FAST ELECTRONICS FOR EPICS. 21-49

EPR
STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-15

EPSILON
NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-41

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-42

EQUATION
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

THEORETICAL EQUATION OF STATE FOR DEUTERIUM. 4-47

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION. 20-21

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

EQUATIONS
SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

EMPIRICAL CLOSURE RELATION FOR THE VLASDV MOMENT EQUATIONS. 10-19

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

2

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

GENERAL METHOD FOR SOLVING THE P-L EQUATIONS. 23-12

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

EQUILIBRATION
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

EQUILIBRIA
MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-43

MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA. 10-45

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

EQUILIBRIUM
TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

EQUIPMENT
DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES. 12-6

FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-35

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-36

ERBIUM
NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

ERGODIC
ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-15

ERROR
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

ERRORS
TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-67

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-68

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

ESCAPE
ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

ESTIMATION
IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20-23

ETHYLENEDIAMINE
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANDCUPRATE(I)). 9-6

EULERIAN
2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS.

EUROPIUM
ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE.

EV
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

FISSION CROSS SETIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT.

EVAPORATORS
HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS.

EVIDENCE
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES.

VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII.

EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING.

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA.

DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM.

EVOLUTION
NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES

EXAMINATIONS
CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS.

EXCHANGE
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS.

EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS.

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE.

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE.

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON.

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE.

EXCITATION
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES.

ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS.

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES.

ELECTRICAL EXCITATION OF LASING LEVELS.

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION.

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION.

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES.

F THE POISSON-BOLTZMANN AND OTHER 20-22

HE P-L EQUATIONS. 23-12

T DISCRETE ORDINATES PROGRAM FOR ANSPORT EQUATIONS. 23-25

R BETHE-SALPETER EQUATIONS FOR 26-23

USING EMF CELLS UNDERGOING VAPOR 7-20

DAL EQUILIBRIA. 10-43

ICALLY OBTAINED TOROIDAL 10-45

ELICAL EQUILIBRIA IN THE SCYLLAC AL SECTOR. 10-61

ELICAL EQUILIBRIA IN THE SCYLLAC AL SECTOR. 10-62

AGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

UGER STUDY OF BULK TO SURFACE 22-23

H BETA THETA PINCH PLASMA. 10-82

PMENT FOR USE IN HOT CELL 12-6

LES IN FLIGHT. SUMMARY OF TECHNIQUES 12-8

ENT PROBLEMS ASSOCIATED WITH S. 22-35

ENT PROBLEMS ASSOCIATED WITH S. 22-36

Y MIXING STUDIES OF THE DECAYS OF 475. 24-94

TINUED FRACTIONS AND JACOBI'S 20-15

SPLINE INTERPOLATION. 20-16

RY OF COMPUTING. 20-67

RY OF COMPUTING. 20-68

E) IN THE TERMS OF A POWER SE IES ON PPROXIMANTS. 26-7

E DEPENDENT ESCAPE OF NEUTRONS AND PLOSION. 23-11

NED LEAST-SQUARES ESTIMATION. 20-23

D VALENCE COPPER CYANIDE OBIS(EN)COPPER(III) III). 9-6

OUS EULERIAN HYDRODYNAMIC CODE FOR CTIVE HYDRODYNAMIC PROBLEMS. 17-1

ULTICOMPONENT EULERIAN CALCULATIONS V NOTCHES, VOIDS, AND RODS IN 17-24

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

EUROPIUM
ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE. 7-9

EV
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

FISSION CROSS SETIONS OF NEPTUNIUM -237 FROM 20 E V TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

EVAPORATORS
HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

EVIDENCE
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM. 8-7

EVOLUTION
NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES. 10-50

EXAMINATIONS
CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

EXCHANGE
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

EXCITATION
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES. 1-19

ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS. 15-1

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

ELECTRICAL EXCITATION OF LASING LEVELS. 19-17

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES. 24-26

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-48

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

EXCITED
FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS. 4-19

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

EXCITING
TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

EXHAUST
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

EXOTIC
MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

EXPANDING
COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

EXPANSION
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-40

THERMAL EXPANSION OF PLUTONIUM DIOXIDE. 22-41

EXPERIENCE
SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

EXPERIMENT
RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-69

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

EXPERIMENTAL
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH. 10

EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE. 22

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF LEAD -210. 24

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 24

EXPERIMENTATION
CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8

EXPERIMENTS
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1

FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10

SURVEY OF SCYLLAC EXPERIMENTS. 10

SURVEY OF SCYLLAC EXPERIMENTS. 10

EXPERIMENTS PROPOSED FOR LAMPF. 21

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21

PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24

RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE. 24

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24

EXPLICIT
TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23

EXPLORING
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

EXPLOSION
ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-1

EXPLOSIONS
SPHERICAL EXPLOSIONS IN WATER. 14-1

NCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) REACTION. 24-48

THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT 24-49

NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND GEN 2 PLUS. 4-19

NT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC TRANSITION BETWEEN THE FIRST AND SECOND EXCITED MANIUM -72 BY COULOMB EXCITATION. 24-137

RITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS ACTINIDE REGION. 24-139

CITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 OTON) SCANDIUM -48,50. 24-145

RRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE 24-162

OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE ENGTH IN ITS EXCITED STATES. 24-70

TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE TH REGION. 24-156

AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE, FINAL EBRUARY 1971 TO FEBRUARY 1972. 1-1

SE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXOTIC BARYON RESONANCES. 24-83

ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE RO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN EATED TARGET PLASMAS. 19-45

OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN EATED TARGET PLASMAS. 19-46

ANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES 22-40

ANSION OF PLUTONIUM DIOXIDE. 22-41

ADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

ADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

IENCE WITH MONAL AT OAK RIDGE. 25-4

EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF 25-9

ULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT 10-69

M THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

M THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

NS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON MENT. 23-5

S SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

XPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

AL INNER ELECTRON BINDING ENERGIES AND LIMITS ON AMIC NONLINEARITIES. 4-16

EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH. 10-21

EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE. 22-13

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-133

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF LEAD -210. 24-50

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 25-24

EXPERIMENTATION
CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8-6

EXPERIMENTS
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-31

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

SURVEY OF SCYLLAC EXPERIMENTS. 10-77

SURVEY OF SCYLLAC EXPERIMENTS. 10-78

EXPERIMENTS PROPOSED FOR LAMPF. 21-21

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-126

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE. 24-134

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

EXPLICIT
TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

EXPLORING
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

EXPLOSION
ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

EXPLOSIONS
SPHERICAL EXPLOSIONS IN WATER. 14-17

2

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

EXPLOSIVE
HIGH EXPLOSIVE MATERIALS. 14-10

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE. 14-3

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

EXPLOSIVES
CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

CONDENSED EXPLOSIVES LASER. 19-11

ADAPTABILITY OF FISSILE MATERIALS TO NUCLEAR EXPLOSIVES. 25-2

ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

EXPOSURE
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

EXPRESSING
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

EXTENDED
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

EXTENSION
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

EXTENSION OF BOUNDARY DISPERSION RELATIONS. 24-51

EXTRACTING
NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

EXTRACTION
THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION. 11-8

E1
E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-35

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-36

E1-M2-E3
E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176. 24-37

F-ATOM
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

F-RATIO
TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES.

FABRICATION
CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICA TECHNIQUES.

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGE

FABRIKA
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY).

FACIAL
EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE.

FACILITIES
DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES.

COMPUTING FACILITIES.

NUCLEAR CHEMISTRY FACILITIES.

FACILITY
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY A THE LOS ALAMOS MESON PHYSICS FACILITY.

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY A THE LOS ALAMOS MESON PHYSICS FACILITY.

FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS.

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL.

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY.

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE F RADIATION DAMAGE EXPERIMENTS.

LAMPF KLYSTRON REPAIR FACILITY.

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF).

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY).

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY.

NEUTRINO FACILITY.

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY.

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY.

BIOMEDICAL APPLICATIONS: BEAM LINE AND FACILITY.

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY.

FACTORY
MESON FACTORY AS A NEUTRON IRRADIATION FACILITY.

FAHRENHEIT
EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTAL BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT.

FAILURE
NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION.

FARADAY
FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS.

LARGE FARADAY - EFFECT OPTICAL ISOLATOR.

VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPME

FAST
OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS.

EASUREMENTS FOR THE MILROW AND CANNIKIN 29-11

14-10

IC BONDED EXPLOSIVE. 14-19

D SOLID EXPLOSIVE. 14-3

F MARKED MASS POINTS IN EXPLOSIVE 14-9

CLEI DURING EXPLOSIVE CARBON AND OXYGEN 24-124

EPTUNIUM -237 FROM 20 EV TO 7 MEV
R EXPLOSIVE EXPERIMENT. 24-54

ATION AND PERFORMANCE OF EXPLOSIVES. 14-2

R ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

R. 19-11

ERIALS TO NUCLEAR EXPLOSIVES. 25-2

LOSIVES IN DRAINAGE DITCH SOIL AT SUMP 29-1

SE PROTRACTION BY FRACTIONATION AND BY 5-12

PRODUCTION CHARACTERISTICS OF MOUSE
OSURE, INCLUDING 45 GENERATIONS OF 5-13

ISTRIBUTIONS OF MICE WITH AND WITHOUT X
IONS OF MALE PROGENITORS. 5-33

E LATE PHASE LUNG CLEARANCE OF
CCIDENTAL EXPOSURE. 16-17

AC SPINOR AMPLITUDES IN TERMS OF
TO THE CALCULATION OF CROSS SECTIONS. 26-16

ETA FORMULAS APPLIED TO DIATOMIC 4-17

YPE STATISTICS FOR THE DETECTION OF 20-17

NONICAL TENSOR OPERATORS IN THE UNITARY
HE PATTERN CALCULUS RULES AND THE 20-45

ERSION RELATIONS. 24-51

ENERGY FROM 'DRY' GEOTHERMAL 11-7

OR EXTRACTING A FAST RISING COMPONENT 26-34

HERMAL ENERGY EXTRACTION. 11-8

BETWEEN THE NILSSON STATES 1/2+ (411) 24-35

BETWEEN THE NILSSON STATES 1/2+ (411) 24-36

KEV TRANSITION IN HAFNIUM -176. 24-37

ECTORY CALCULATION OF THE RATES OF
ION OF HYDROGEN FLUORIDE AND DEUTERIUM 6-7

F-RATIO
TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-62

FABRICATION
CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

FABRIKA
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

FACIAL
EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

FACILITIES
DEVELOPMENT OF ANCILLARY EQUIPMENT FOR USE IN HOT CELL FACILITIES. 12-6

COMPUTING FACILITIES. 21-15

NUCLEAR CHEMISTRY FACILITIES. 21-36

FACILITY
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

LAMPF KLYSTRON REPAIR FACILITY. 21-26

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-28

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY. 21-33

NEUTRINO FACILITY. 21-34

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

BIOMEDICAL APPLICATIONS: BEAM LINE AND FACILITY. 21-7

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

FACTORY
MESON FACTORY AS A NEUTRON IRRADIATION FACILITY. 21-33

FAHRENHEIT
EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

FAILURE
NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

FARADAY
FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

LARGE FARADAY - EFFECT OPTICAL ISOLATOR. 19-28

VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

FAST
OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

2

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

PROPOSED FAST ELECTRONICS FOR EPICS. 21-49

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

FASTER
FASTER LASL LENS DESIGN SYSTEM. 26-9

FBR
CALIFORNIUM-252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

FEASIBILITY
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

FEBRUARY
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

FEEDBACK
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-22

FERMION
INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

FERMIUM
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

FERROMAGNETIC
PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS. 22-31

FERROMAGNETISM
DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM. 8-7

FERROUS
PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

FEULGEN
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

FEW
RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-5

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-10

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-13

FIELD
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-31

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-1

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-2

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-4

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

SELF CONSISTENT BILOCAL FIELD THEORY. 26-32

SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-23

FIELDS
PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

S OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION 4-31

IR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE OPERTIES OF STEEL. 12-7

NFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL 20-18

OF FAST POISSON SOLVERS TO THE NUMERICAL ON OF PARABOLIC PROBLEMS. 20-2

ST ELECTRONICS FOR EPICS. 21-49

C SCATTERING EFFECTS IN REFLECTED FAST CRITICAL 23-2

S OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON ENT. 23-5

TERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID ND TRITIUM. 24-41

ATION METHDD FOR EXTRACTING A FAST RISING COMPONENT LEX PULSE. 26-34

ST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

ST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL 27-3

ETY OF AN AIRBORNE FAST REACTOR. 27 7

LENS DESIGN SYSTEM. 26-9

-252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OCEDURES MANUAL. 25-5

F INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES NDENSATION. 29-5

AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL EBRUARY 1971 TO FEBRUARY 1972. 1-1

AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL EBRUARY 1971 TO FEBRUARY 1972. 1-1

RCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF M FEBRUARY 1 TO APRIL 30, 1972. 22-6

BILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA 10-24

BILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

BILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

TIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH 23-22

STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ULATIONS. 24-63

OW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN SOTOPES. 15-11

OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS. 22-31

M
CE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND ISM. 8-7

A PERCHLORIC ACID OXIDATION - FERROUS SULFATE THOD. 2-21

ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION C END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

FEULGEN
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

FEW
RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-55

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-138

FIELD
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-31

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-41

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

SELF CONSISTENT BILOCAL FIELD THEORY. 26-32

SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-23

FIELDS
PARTICULATE TRANSPORT IN HIGHLY DISTORTED T... DIMENSIONAL FLOW FIELDS. 17-21

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

2

FILM
LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM. 5-32

DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM. 8-10

FURTHER INVESTIGATIONS ON THE FLOWING SUPERFLUID FILM. 8-12

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

DISSIPATION IN SATURATED SUPERFLUID FILM FLOW. 8-9

INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-11

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

FILMS
RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

FILTER
FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-11

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

FILTERED
MEASUREMENTS OF FILTERED X RAY SPECTRA. 4-25

FILTERING
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

FILTERS
FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER. 18-10

FINAL
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

DART TECHNOLOGY DEVELOPMENT FINAL REPORT. 29-2

FINE
TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

FINITE
STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-74

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

FIRST
FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

FISSILE
CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23-7

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION.

ADAPTABILITY OF FISSILE MATERIALS TO NUCLEAR EXPLOSIVES.

FISSION
ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS.

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI.

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETR THE FERMIUM ISOTOPES.

SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES.

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCL

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KIN ENERGIES.

DEFORMABLE MASS FORMULA AND FISSION DATA.

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES.

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS.

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS.

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIU -250 AND CALIFORNIUM -250.

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIU -250 AND CALIFORNIUM -250.

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES.

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT.

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133.

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF ENERGY OF THE NEUTRON INDUCING FISSION.

FISSIONABLE
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FU CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972.

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY.

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY FISSIONABLE MATERIALS.

FIT
POWERFUL GOODNESS OF FIT TEST.

FITS
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS.

FIVE
MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH.

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR.

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR.

USING PHOTOGRAPHIC FILM. 5-32

URATED SUPERFLUID FILM. 8-10

FLOWING SUPERFLUID FILM. 8-12

II SUPERFLUID FILM. 8-13

MES IN SUPERFLUID HELIUM FILM FLOW
ATION DISSIPATION. 8-16

N MODEL OF DISSIPATION TO BEAKER 8-2

SIPATION FUNCTION OF THE FLOWING 8-8

FLUID FILM FLOW. 8-9

RAPHIC FILM CANISTER. 12-11

ATING SLIT SHUTTERED DRUM FIELD
HT PHOTOGRAPHY. 12-9

THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

NZE AND VELOCITY. 16-11

FFICIENCY UNDER CYCLIC AND STEADY 16-32

FFICIENCY UNDER PULSATING AND STEADY 16-33

AY SPECTRA. 4-25

ME FOR USING THE TECHNIQUE OF
NG OF PICTURES. 20-32

CKET BORNE RADIOMETER. 18-10

IN THE ARCTIC ATMOSPHERE. FINAL
EBRUARY 1972. 1-1

T FINAL REPORT. 29-2

ON EQUATIONS IN LIGHT OF METALLIC
WO LIQUID REGIONS. 7-25

L = 2 STELLERATOR. 10-74

ED, DIFFUSION EQUATION FOR NEUTRON 23-13

S IN A PULSED FUSION REACTOR. 10-27

TION AND LANTHANIDE SERIES COMPLEX 13-10

AL HARMONICS, FIRST COLLISION
ERSIONS OF THE TWOTRAN TRANSPORT 23-24

D MATRIX ELEMENTS FOR ELECTRIC
N THE FIRST AND SECOND EXCITED
ULOMB EXCITATION. 24-137

HE FIRST FORBIDDEN BETA DECAY OF 24-93

IONS WITH FISSILE MATERIAL. 23-7

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

ADAPTABILITY OF FISSILE MATERIALS TO NUCLEAR EXPLOSIVES. 25-2

FISSION
ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS. 15-1

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES. 15-13

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

DEFORMABLE MASS FORMULA AND FISSION DATA. 15-4

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-53

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

FISSIONABLE
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NDNDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

FIT
POWERFUL GOODNESS OF FIT TEST. 20-49

FITS
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

FIVE
MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

2

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

FLARES
SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

FLASH
THERMAL ACTINOMETER FOR FLASH PHOTOLYSIS. 6-13

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

FLIES
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

FLIGHT
CANADIAN TOTAL SOLAR ECLIPSE FLIGHT. 3-2

FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

FLOW
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1-14

MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-20

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

DISSIPATION IN SATURATED SUPERFLUID FILM FLOW. 8-9

INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

TURBULENCE TRANSITIONS IN CONVECTIVE FLOW. 17-23

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

SPECIFICATION OF PROGRAM FLOW IN MADCAP VI. 20-56

FLOWING
DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM. 8-10

FURTHER INVESTIGATIONS ON THE FLOWING SUPERFLUID FILM. 8-12

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

FLOWS
NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

ACOUSTIC RAY TRACING IN UNSTEADY FLOWS. 17-2

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

FLUCTUATION
OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

FLUCTUATIONS
CAN THE OPTICAL FLUCTUATIONS OF 3C 273 BE RANDOM 3-1

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS. 24-55

FLUID
APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

FLUIDS
NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

FLUORESCENCE
X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

FLUORESCENT
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

FLUORIDE
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

XPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

ARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1-27

ACTINOMETER FOR FLASH PHOTOLYSIS. 6-13

AY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE 14-9

GGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

TOTAL SOLAR ECLIPSE FLIGHT. 3-2

TOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES MENT. 12-8

E SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

RLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS GHT PATHS. 20-37

UTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS LABORATORY. 24-164

ENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1-14

ENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

ON OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION MICROFLUOROMETRY. 5-2

OFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO MAMMALIAN CELLS. 5-26

N OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN N FOR FLOW MICROFLUOROMETRY. 5-3

W MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF AGENTS ON CELL CYCLE PROGRESSION. 5-57

ON OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW ATURATION OF FLUCTUATION DISSIPATION. 8-16

N OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

N OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER 8-2

N IN SATURATED SUPERFLUID FILM FLOW. 8-9

SIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

ENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE LOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE ND FLUID TEMPERATURES. 12-13

R CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY ITIONS. 16-32

R CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY ITIONS. 16-33

TE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW 17-21

THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE S. 17-22

CE TRANSITIONS IN CONVECTIVE FLOW. 17-23

G TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT OMPRESSIBLE FLOW CALCULATIONS. 17-5

ON OF PROGRAM FLOW IN MADCAP VI. 20-56

N IN THE FLOWING SATURATED SUPERFLUID FILM. B-10

FURTHER INVESTIGATIONS ON THE FLOWING SUPERFLUID FILM. B-12

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

FLOWS
NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

ACOUSTIC RAY TRACING IN UNSTEADY FLOWS. 17-2

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

FLUCTUATION
OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. B-18

APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. B-2

FLUCTUATIONS
CAN THE OPTICAL FLUCTUATIONS OF 3C 273 BE RANDOM 3-1

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS. 24-55

FLUID
APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

FLUIDS
NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

FLUORESCENCE
X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

FLUORESCENT
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

FLUORIDE
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

2

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-4

FLUORINE
STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-15

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

FLUX
VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS. 21-56

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

ACCURATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

FMF
FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

FOCAL
FOCAL LSL PROGRAMMING MANUAL. 20-19

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

FOCUS
500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-1

CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR. 10-10

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

ELECTRON BEAM/PLASMA FOCUS INTERACTION. 10-15

FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

FOCUSED
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

FOLDING
FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

FORBIDDEN
NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

FORCE
VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

FORM
DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM.

FORMALISM
GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS.

FORMAT
GENRD: A FREE FORMAT CARD INPUT PROCESSOR.

FORMATION
COMET FORMATION.

FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 A EXCITED NITROGEN 2 PLUS.

ENTHALPY OF FORMATION OF NEPTUNIUM MONOCARBIDE.

ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AN SAMARIUM SESQUIOXIDE CUBIC.

ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE.

PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A.

PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDE

FORMED
NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS NITROGEN.

FORMS
HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS.

ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION.

FORMULA
DEFORMABLE MASS FORMULA AND FISSION DATA.

FORMULAS
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES.

MINIMUM NORM DIFFERENTIATION FORMULAS.

FORMULATIONS
COUPLED REGION KINETICS FORMULATIONS.

FPU
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM.

FRACTIONATION
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND CONTINUOUS EXPOSURE.

FRACTIONS
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE.

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION.

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTI OF CULTURED MAMMALIAN CELLS.

ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM.

FRACTURES
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK.

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS.

FRACTURING
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT D ROCK.

RLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF
N -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF
N FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

RLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF
N -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF
N FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS
NG LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-4

THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND
BY EPR METHODS. 13-15

SECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH
ENSITY AND QUANTUM EFFICIENCY. 19-55

FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) 24-144

AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

F AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE
PROPERTIES OF STEEL. 12-7

RRENT AND FLUX IN MINERAL INSULATED MAGNETS. 21-56

PORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR
AND THE NWEF COMPUTER PROGRAM CDR. 23-1

20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

OFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO
MAMMALIAN CELLS. 5-26

PROGRAMMING MANUAL. 20-19

A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL
ON A PDP-9/ PDP-15 COMPUTER. 20-28

V DENSE PLASMA FOCUS SYSTEM. 10-1

RISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR. 10-10

OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF
TTERING SPECTRA. 10-14

BEAM/PLASMA FOCUS INTERACTION. 10-15

OTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

ENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA
HARGE. 10-41

AL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE
CUS. 10-66

D GATING OF PROXIMITY FOCUSED CHANNEL PLATE
S. 12-14

D FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE
S. 18-13

DEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

ATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF
03. 24-93

L SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

L SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

FORM
DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-8

FORMALISM
GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS. 26-11

FORMAT
GENRD: A FREE FORMAT CARD INPUT PROCESSOR. 20-20

FORMATION
COMET FORMATION. 3-3

FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS. 4-19

ENTHALPY OF FORMATION OF NEPTUNIUM MONOCARBIDE. 7-10

ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE. 7-9

PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-65

PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

FORMED
NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

FORMS
HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 24-8

FORMULA
DEFORMABLE MASS FORMULA AND FISSION DATA. 15-4

FORMULAS
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

MINIMUM NORM DIFFERENTIATION FORMULAS. 20-33

FORMULATIONS
COUPLED REGION KINETICS FORMULATIONS. 23-6

FPU
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

FRACTIONATION
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

FRACTIONS
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-15

FRACTURES
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 11-3

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

FRACTURING
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

2

FRAGMENT
CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

FRAME
ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

FRAMING
NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

FREE
PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

GENRD: A FREE FORMAT CARD INPUT PROCESSOR. 20-20

FREQUENCY
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10 5

THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-81

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

FUEL
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL. 2-9

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-

FUELS
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

ANALYSIS OF NUCLEAR FUELS. A REVIEW. 2-4

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-3

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-1

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-1

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

FUNCTION
DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-15

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-4

ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 24-8

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-1

ATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC S. 15-3

G FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

COND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE IERS. 18-13

TRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

A FREE FORMAT CARD INPUT PROCESSOR. 20-20

QUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR ONS OF A THREE PRISM SPECTROGRAPH. 4-23

OUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

OUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

OUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: VE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

OUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: VE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

LD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE REQUENCY. 10-81

LD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON REQUENCY. 10-90

RIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR R HYBRID FREQUENCY. 19-48

ATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION TROMETRIC MEASUREMENTS. 2-10

EM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

EM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

D CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ATED FUEL PIN IRRADIATION TESTS. 2-2

TION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED EL AND SOURCE MATERIALS. 2-26

GES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND M AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

ALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OR FUEL MATERIALS. 2-35

AL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL OGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ON OF PRECISE METHODS IN DETERMINING PLUTONIUM AND N UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

ATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED CTOR FUEL. 2-9

UP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM ASMA. 10-28

MIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

GRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL 22-16

TE FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC 22-7

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-8

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

FUELS

DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

ANALYSIS OF NUCLEAR FUELS. A REVIEW. 2-4

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-34

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

FUNCTION

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-48

ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 24-8

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

2

FUNCTIONS
PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS. 15-1

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-4

FURFURYL
MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

FURNACE
NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

FUSION
ENERGY AND THE FUTURE OF NUCLEAR FUSION. 10-20

FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

FUSION REACTOR SYSTEMS. 10-29

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

L'ENERGIE DE FUSION. 10-34

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-20

LASER BEAM TRANSPORT IN FUSION REACTORS. 19-31

FUTURE
CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-5

ENERGY AND THE FUTURE OF NUCLEAR FUSION. 10-20

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

FUTURE DEVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS. 29-6

GADOLINIUM
ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

GAMMA
NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES.

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URAN

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMM FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR.

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS GAMMA RAYS FROM A NUCLEAR EXPLOSION.

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN PROGRAM.

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144.

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 GAMMA TRANSITION OF HAFNIUM -180.

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -2 DAUGHTERS.

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NIT OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN.

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTI PLUTONIUM -239 AND PLUTONIUM -240.

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTI URANIUM -235 AND URANIUM -238.

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SE FOR NITROGEN.

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SE FOR NITROGEN.

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239.

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAM REACTION.

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL.

GARNET
COMPRESSION OF GARNET TO 100 KILOBARS.

GAS
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROG OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY.

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC I AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IO AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IO AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR.

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM - HELIUM -4 GAS.

HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS.

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER.

BEAM HEATING IN GAS TARGETS.

GASEOUS
ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD.

ONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND 4-35

OMER EXCITATION FUNCTIONS. 15-1

FOR THE PRODUCTION OF FISSION ISOMERS IN TOPES. 15-5

TRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

S FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

TIONS BEYOND NATURAL BOUNDARIES. 26-4

TUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

F THE ROVER NUCLEAR FURNACE REACTOR. 23-17

E OF NUCLEAR FUSION. 10-20

NG 14 MEV NEUTRON EFFECTS IN FUSION POWER 10-22

PROBLEMS IN A PULSED FUSION REACTOR. 10-27

S. 10-29

LING IN A PULSED FUSION REACTOR. 10-30

10-34

STICS OF A PULSED FUSION REACTOR USING LASER LUS TRITIUM) PELLETS. 10-49

PULSED HIGH BETA FUSION REACTOR. 10-54

N REACTOR BASED ON THE THETA PINCH. 10-67

REACTOR (RTPR). A STUDY OF A PULSED HIGH ASED ON THE THETA PINCH. 10-70

ASUREMENT WITH APPLICATION TO FUSION REACTOR 10-83

R GENERATION BY LASER DRIVEN FUSION. 10-9

ES AND SOME SPECULATIONS ON THE FUTURE OF Y. 10-91

S FOR POSSIBLE FUSION APPLICATIONS. 19-20

IN FUSION REACTORS. 19-31

ATION AT AND ABOVE LIQUID HYDROGEN AND FUTURE. 8-5

E OF NUCLEAR FUSION. 10-20

S AND SOME SPECULATIONS ON THE FUTURE OF Y. 10-91

N AEROSPACE NUCLEAR PROGRAMS. 29-6

TTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 LATED COMPOUNDS. 9-15

SCANNING FUEL ELEMENTS. 2-16

SCANNING FUEL ELEMENTS. 2-17

DEGREES KELVIN: A COMPARISON OF THE MOMETER AND THE GAMMA RAY ANISOTROPY 8-23

USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-25

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144. 24-101

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-116

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

GARNET

COMPRESSION OF GARNET TO 100 KILOBARS. 26-3

GAS

PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-20

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

BEAM HEATING IN GAS TARGETS. 24-20

GASEOUS

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

2

GASES
EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

GATING
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

GAUGE
PULSED PIEZORESISTIVE GAUGE BRIDGE. 18-15

TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

GAUSSIAN
COLLOCATION AT GAUSSIAN POINTS. 20-5

GENERALIZATIONS
GENERALIZATIONS OF PADE APPROXIMANTS. 26-10

PADE APPROXIMANT AND GENERALIZATIONS. 26-22

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

GENERALIZED
GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

GENERATED
INVESTIGATION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-5

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

GENERATION
CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

GENERATIONS
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

GENERATORS
SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-38

GENETICALLY
ARE CHROMOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

GENRD
GENRD: A FREE FORMAT CARD INPUT PROCESSOR. 20-20

GEOCORONA
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

GEOMAGNETIC
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

GEOMETRIC
GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION. 20-21

GEOMETRIES
ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

GEOSCIENCE
MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

GEOTHERMAL
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION. 11-8

GERMANIUM
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-13

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES. 24-26

GEV
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-12

GIANT
EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

GIVEN
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

GLASS
LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

GLOW
COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

GLYCEROL
ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

GOLD
TOTAL ENERGY OF COPPER, SILVER AND GOLD. 4-49

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

GOODNESS
POWERFUL GOODNESS OF FIT TEST. 20-49

GOVERNMENT
GOVERNMENT CAUCUS. 29-7

GRADE
CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

GRADIENT
DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

GRADIENTS
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

GRAMS
PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

GRANULAR
EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

GRAPHITE
HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

NTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR 14-5

D GATING OF PROXIMITY FOCUSED CHANNEL PLATE RS. 12-14

ORESISTIVE GAUGE BRIDGE. 18-15

N REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

ON AT GAUSSIAN POINTS. 20-5

ONS
ATIONS OF PADE APPROXIMANTS. 26-10

XIMANT AND GENERALIZATIONS. 26-22

TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

ED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON COMPUTATIONS. 23-13

TION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

GENERATED OPTICAL SOUND TRACKS. 12-5

RUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED RECURRENCES. 20-26

TATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

VE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE NS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF ENITORS. 5-13

AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X URE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

RM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC RS. 16-38

IOSOMALLY ANEUPLOID CELLS GENETICALLY ANEUPLOID 5-5

REE FORMAT CARD INPUT PROCESSOR. 20-20

AN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL GEOCORONA AT 18 EARTH RADII. 1-35

C
TIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME D PRESSURE. 1-11

RY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL UBSTORM. 1-32

SSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

C INTERPRETATION OF THE DIRAC EQUATION. 20-21

ON OF RAY EFFECTS IN CURVED GEOMETRIES. 17-8

E INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ESSOR. 20-38

AL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY 11-2

AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL AL RESERVOIRS. 11-4

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

THEORETICAL STUDY OF GEO .MAL ENERGY EXTRACTION. 11-8

GERMANIUM
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES. 24-26

GEV
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-129

GIANT
EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

GIVEN
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

GLASS
LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

GLOW
COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

GLYCEROL
ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

GOLD
TOTAL ENERGY OF COPPER, SILVER AND GOLD. 4-49

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

GOODNESS
POWERFUL GOODNESS OF FIT TEST. 20-49

GOVERNMENT
GOVERNMENT CAUCUS. 29-7

GRADE
CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

GRADIENT
DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

GRADIENTS
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

GRAMS
PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

GRANULAR
EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

GRAPHITE
HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

2

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-30

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

GREAT
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

GREEN-KUBO
GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS. 26-11

GREEN'S
PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

GRID
TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

GROOVED
GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

GROSS
VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

GROUND
TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

GROUP
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER. 28-1

GROUPS
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITAR GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 2

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITAR GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 2

GROWN
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIE 1

GROWTH
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 1

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 1

GRUBBS
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 2

GUIDE
PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR T PDP-11.

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYL FOR PREPARING TECHNICAL REPORTS AND PAPERS. 2

G1
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELL IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5

G2
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN.

H
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

H-CELL
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE.

H-4
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971.

HABITS
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE.

HAFNIUM
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KE GAMMA TRANSITION OF HAFNIUM -180.

E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176.

HAIR
EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE.

HALF
CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI.

HALF-LIFE
14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113.

HALIDE
MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION.

HAMSTER
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS.

STRAIN ON THE ELASTIC MODULUS, RIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

APHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-29

CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF 1 TO JULY 31, 1971. 22-3

POLYCRYSTALLINE GRAPHITE. 22-30

AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM 30, 1972. 22-33

CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF ST 1 TO OCTOBER 31, 1971. 22-4

CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF MBER 1, 1971 TO JANUARY 31, 1972. 22-5

CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF UARY 1 TO APRIL 30, 1972. 22-6

TARGETS ON THIN GRAPHITE BACKINGS BY 26-26

ATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AT PLAINS RESERVOIR. 7-6

SM AND CONDITIONS FOR LINEAR RELATIONSHIPS EFFICIENTS. 26-11

TIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND 4-35

RCH AND INTERPOLATION ON A DISTORTED ROGRAM SI-PH1-G2D. 20-71

FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

FOR STUDYING GROSS STABILITY OF HIGH BETA 10-87

FOR STUDYING GROSS STABILITY OF HIGH BETA 10-88

PLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 IN AIR OVER GROUND USING THE LASL TWOTRAN-FC 23-27

AMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE 4-21

AL RESEARCH GROUP (H-4) OF THE LASL HEALTH RT, JANUARY THROUGH DECEMBER 1971. 5-7

PERTIES OF THE POISSON-BOLTZMANN AND OTHER TIONS. 20-22

ORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED TION GROUP, LOS ALAMOS SCIENTIFIC 71 THROUGH JUNE 30, 1972. 24-18

GONAL AND UNITARY GROUP METHODS TO THE N BODY 26-1

TICE DYNAMICS BY COMPUTER. 28-1

NOVER OF LABELED METHYL GROUPS IN HISTONE D MAMMALIAN CELLS. 5-17

ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS AN CELLS. 5-55

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

GROWN
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

GROWTH
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 11-3

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

GRUBBS
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

GUIDE
PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11. 20-51

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

G1
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

G2
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

H
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

H-CELL
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

H-4
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

HABITS
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

HAFNIUM
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176. 24-37

HAIR
EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

HALF
CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

HALF-LIFE
14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113. 24-3

HALIDE
MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

HAMSTER
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

2

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

HARDNESS
HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-19

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-20

HARMONIC
SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

HARMONICS
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

HARRIS
NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

HARTREE-FOCK
MODIFIED HARTREE-FOCK CALCULATIONS FOR ATOMS. 4-26

HAZARD
PRELIMINARY LIGHTNING HAZARD STUDY. 1-23

HAZARDS
HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

HEALTH
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

CMB-5 HEALTH AND SAFETY MANUAL. 16-4

HEAT
SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-18

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

HEATER
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

HEATING
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

TWO STAGE HEATING OF THETA PINCHES. 10-85

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

BEAM HEATING IN GAS TARGETS. 24-20

HEAVY
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-1

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-3

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-1

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-2

HELICAL
HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-3

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-6

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-6

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-1

HELICALLY
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-3

HELIUM
SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

HELIUM INJECTION BY THE TRITIUM TRICK. 22-1

TS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA CATION IN CHINESE HAMSTER CELLS. 5-23

ST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH NTITUMOR DRUG BLEOMYCIN. 5-6

S
ARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-19

ARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-20

IC
RICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION DISCRETE ORDINATE CODES. 23-23

ICS
RY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION CE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT RAM. 23-24

RICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

E-FOCK
FIED HARTREE-FOCK CALCULATIONS FOR ATOMS. 4-26

MINARY LIGHTNING HAZARD STUDY. 1-23

S
NTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

GICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH ON, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

TH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

HEALTH AND SAFETY MANUAL. 16-4

THED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DE. 7-18

TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

PRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

UREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE NIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE CE AND FLUID TEMPERATURES. 12-13

ESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF ALLINE COPPER -63. 28-2

NAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT R PENETRATORS. 11-5

PLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

ALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: TIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

TAGE HEATING OF THETA PINCHES. 10-85

RIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER TION. 19-14

ETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR WER HYBRID FREQUENCY. 19-48

HEATING IN GAS TARGETS. 24-20

REMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN ADIATED MIXED OXIDE FUELS. 2-15

ATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND NDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

HELICAL
HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-31

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

HELICALLY
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

HELIUM
SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

HELIUM INJECTION BY THE TRITIUM TRICK. 22-15

2

1

HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGRFES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-25

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-25

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION. 24-59

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION. 24-59

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES. 24-64

ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26

HEMATOPOIESIS
EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-

HEPARAN
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-

HETEROCYCLES
PICRYLAMINO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-

HETEROGENEOUS
THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 2

HEXAFLUORIDE
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4

HEXAHYDRO
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRAT AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7

HF
DOUBLE DISCHARGE INITIATED HF LASER. 1

HIGH
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-

HIGH ALTITUDE IRON VAPOR RELEASE. 1

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY TH PINCHES. 1

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY TH PINCHES. 1

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 1

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 1

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 1

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 1

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 1

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10

HIGH EXPLOSIVE MATERIALS. 14

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 1

ASE IN PLUTONIUM -238 DIOXIDE FUEL 22-16

NS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM 24-1

NS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM 24-1

ATION TRANSFER IN THE REACTION TRITON 24-108

TS AND ANALYSIS IN NEUTRON HELIUM -4 3 MEV. 24-110

THE HELIUM -3 (DEUTERON,PROTON) HELIUM 24-113

THE HELIUM -3 (DEUTERON,PROTON) HELIUM 24-113

EACTION TRITON (PROTON,NEUTRON) HELIUM -3 ASS FROM 1.5 TO 12 MEV. 24-12

TS OF POLARIZATION TRANSFER IN HELIUM -4 IUM -4 ELASTIC SCATTERING. 24-121

TS OF POLARIZATION TRANSFER IN HELIUM -4 IUM -4 ELASTIC SCATTERING. 24-121

HELIUM -3 (DEUTERON,PROTON) HELIUM -4 THAN 1.0 MEV. 24-13

HELIUM -3 (DEUTERON,PROTON) HELIUM -4 THAN 1.0 MEV. 24-13

S STATES IN THE REACTION CALCIUM -46,48 UM -45,50. 24-145

D ABSOLUTE CROSS SECTIONS FOR THE TRITON -3 NEUTRON SOURCE REACTION. 24-15

THE ANALYZING POWER IN THE TRITON -3 REACTION AT 6.00, 9.95, AND 13.55 MEV ZATION DATA. 24-17

M -3 (DEUTERON, PROTON) HELIUM -4 ENERGIES. 24-23

M -3 (DEUTERON, PROTON) HELIUM -4 ENERGIES. 24-23

TRIX DETERMINATION IN HELIUM -4 IUM -4. 24-25

TRIX DETERMINATION IN HELIUM -4 IUM -4. 24-25

DEUTERON, DEUTERON) HELIUM -4 XPERIMENTS. 24-33

DEUTERON, DEUTERON) HELIUM -4 XPERIMENTS. 24-33

T ANALOGS OF THE NICKEL -58 GIANT M1 ON NICKEL -58 (TRITON,HELIUM -3) COBALT 24-49

TERON) HELIUM -4 TENSOR POLARIZATION 24-58

TERON) HELIUM -4 TENSOR POLARIZATION 24-58

N) HELIUM -4 REACTION. 24-59

N) HELIUM -4 REACTION. 24-59

(TRITON,PROTON) AND (HELIUM -3,PROTON) 24-64

ION ANALYSIS FOR CARBON AND OXYGEN. 24-7

ULATED BY THE NICKEL -64 (TRITON,HELIUM 24-72

ALYSIS FOR PROTON HELIUM -3 ELASTIC 24-82

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

HEMATOPOIESIS
EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

HEPARAN
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

HETEROCYCLES
PICRYLAMINO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-15

HETEROGENEOUS
THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

HEXAFLUORIDE
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

HEXAHYDRO
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

HF
DOUBLE DISCHARGE INITIATED HF LASER. 19-15

HIGH
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

HIGH ALTITUDE IRON VAPOR RELEASE. 1-12

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

HIGH EXPLOSIVE MATERIALS. 14-10

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

2

HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-11

SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

SUBNANOSECOND HIGH VOLTAGE ATTENUATOR. 18-19

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-20

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

HIGH RESOLUTION PROTON SPECTROMETER (HRS). 21-23

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

HIGH RESOLUTION NEUTRON CROSS SECTIONS. 24-60

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

HIGHER
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

HISTONE
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-

RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE. 5-

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIO OF CULTURED MAMMALIAN CELLS. 5-

HISTONES
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-

HISTORY
TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-

TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-

HLM15
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-5

HOLE
PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-

HOLOGRAPHIC
HOLOGRAPHIC INTERFEROMETRY AT 10.6 MICRONS. 10-

HOLOGRAPHIC INTERFEROMETRY COOKBOOK. 10-

HONEYBEE
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

HOW
HOW THE BARN WAS BORN. 24-

HRS
HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-

HIGH RESOLUTION PROTON SPECTROMETER (HRS). 21-

HTO
RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-3

HUCKEL
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-1

HUGONIOT
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

HUMAN
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-50

EXPENSIVE PHOTODIODE ASSEMBLY. 18-11

RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

ND HIGH VOLTAGE ATTENUATOR. 18-19

DULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

M CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF E VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH 19-19

GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-20

SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA 19-21

ION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER SMAS. 19-22

OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN ATED TARGET PLASMAS. 19-45

OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN ATED TARGET PLASMAS. 19-46

ATION IN HIGH PRESSURE CARBON DIOXIDE LASER 19-51

ND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH TY AND QUANTUM EFFICIENCY. 19-55

ION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

ION PROTON SPECTROMETER (HRS). 21-23

D PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR 21-38

TION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

EMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

OLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

EAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

TURE CREEP OF A POCO GRAPHITE. 22-17

TURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

IES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

ION NEUTRON CROSS SECTIONS. 24-60

TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER ADIATION AT HIGH TEMPERATURE. 27-1

TURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR E PROGRAM (ROVER). 29-8

WER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

LATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN 5-15

AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE CULTURED MAMMALIAN CELLS. 5-17

RRADIATION ON HISTONE ACETYLATION AND METHYLATION MAMMALIAN CELLS. 5-24

F HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING OF THE MAMMALIAN LIFE CYCLE. 5-35

F HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN NA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE. 5-48

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

HISTONES
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

HISTORY
TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-67

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-68

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

HLM15
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

HOLE
PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

HOLOGRAPHIC
HOLOGRAPHIC INTERFEROMETRY AT 10.6 MICRONS. 10-32

HOLOGRAPHIC INTERFEROMETRY COOKBOOK. 10-33

HONEYBEE
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

HOW
HOW THE BARN WAS BORN. 24-61

HRS
HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

HIGH RESOLUTION PROTON SPECTROMETER (HRS). 21-23

HTO
RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-37

HUCKEL
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

HUGONIOT
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

HUMAN
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

2

HUMAN VALUES IN STANDARD SETTING. 16-15

HUMIDITY
AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-2

HYBRID
PARAMETRIC INSTABILITIES NEAR THE LOWER HYBRID. 10-55

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

HYDRAULIC
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

HYDRIDES
STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

HYDRODYNAMIC
HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

HYDRODYNAMICAL
CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

HYDRODYNAMICS
PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-20

HYDROGEN
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-

DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12

STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 15

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 1

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 1

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AN SELECTED NUCLEI. 2

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 2

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS 2

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 2

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROG OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 2

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANS

HYDROXYL
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4

ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4

HYGIENIST
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST. 1

IDEAS
SOME IDEAS AND PROSPECTS IN MATHEMATICS. 2

IDENTITIES
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN.

IGNITION
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES.

III-A
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS.

ILLUSTRATIONS
DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 2

IMAGE
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 1

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 1

IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 2

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 2

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 2

NDARD SETTING. 16-15

TRESS ON THE AERODYNAMIC SIZE OF OSOLS. 16-2

TIES NEAR THE LOWER HYBRID. 10-55

TIES AND ANOMALOUS HEATING OF PLASMAS NEAR EQUENCY. 19-48

CES CREATED BY HYDRAULIC FRACTURING IN HOT DRY 11-2

NG OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

Y CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

AL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR PONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

AL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR PONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

OMPARISONS OF A HYDRODYNAMICAL THEORY OF DATA ON NITROGEN AND HYDROGEN. 8-3

SPALL CALCULATIONS IN ONE DIMENSIONAL S. 17-20

BSERVATIONS: EVIDENCE FOR AN ASPHERICAL AT 18 EARTH RADII. 1-35

D PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

SS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, TON, XENON FOR GAS DENSITOMETRY. 4-33

FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

ASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION 6-1

ES OF CARBON DIOXIDE AND HYDROGEN. 6-11

OM YIELDS IN HYDROGEN - OXYGEN IGNITION AND FOR O + H(2) YIELDS OH + H. 6-14

THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM TEMS. 6-3

ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM 6-4

OGEN HALIDE VIBRATIONAL RELAXATION. 6-6

AL TRAJECTORY CALCULATION OF THE RATES OF ELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM 6-7

AL TRAJECTORY CALCULATION OF THE RATES OF RIUM - ATOM VIBRATIONAL RELAXATION OF ND DEUTERIUM FLUORIDE. 6-8

AL TRAJECTORY CALCULATION OF THE RATES OF RIUM - ATOM VIBRATIONAL RELAXATION OF ND DEUTERIUM FLUORIDE. 6-8

LEFINS IN AIR SATURATED WITH HYDROGEN 7-14

OMPARISONS OF A HYDRODYNAMICAL THEORY OF DATA ON NITROGEN AND HYDROGEN. 8-3

CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-5

DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-15

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-4

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-47

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER. 24-34

HYDROXYL
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

HYGIENIST
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST. 16-18

IDEAS
SOME IDEAS AND PROSPECTS IN MATHEMATICS. 20-55

IDENTITIES
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

IGNITION
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-35

III-A
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

ILLUSTRATIONS
DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

IMAGE
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20-23

SURVEY OF RADIOGRAPHIC IMACE ENHANCEMENT EXPERIENCE. 20-59

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

2

CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT. 20-8

IMMUNE
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

IMPACT
EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

IMPLICATIONS
BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-22

SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

IMPLOSION
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

IMPROVEMENTS
IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22-22

IMPULSE
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

IMPURITIES
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL. 2-9

IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

IN-PLANT
CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

INCIDENT
OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

INCOMPRESSIBLE
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

INCREASING
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

INDEX
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

INDEXES
PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

INDUCED
PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

LASER INDUCED DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FO URANIUM -235 AND URANIUM -238. 24-4

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-2

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-3

INDUCING
MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-1

INDUCTION
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 11-3

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

INDUSTRIAL
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST. 16-1

INELASTIC
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-1

INELASTICITY
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

INERT
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22-2

INEXPENSIVE
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-1

INFLUENCE
INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-2

INFORMATION
CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-1

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-1

INFRARED
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER. 18-1

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-4

INHIBITION
INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

INHOMOGENEITIES
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

INHOMOGENEOUS
INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-2

INITIATED
NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-4

DOUBLE DISCHARGE INITIATED HF LASER. 19-1

RADIOGRAPHIC IMAGE ENHANCEMENT. 20-8

- PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

RGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE F PBX 9404 BY OBLIQUE IMPACT. 14-7

YGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

MPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

TIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH 23-22

TIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

EUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS TIONS FOR THERMIONIC REACTOR DESIGN. 27-4

N IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR TIONS. 19-32

TS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22-22

OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES ONDENSATION. 29-5

ON OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE Y TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

ON OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OR FUEL. 2-9

N THORIUM METAL: AUGER STUDY OF BULK TO SURFACE 22-23

-252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

HANISM FOR ENHANCED ABSORPTION OF LASER ENERGY SOLID TARGETS. 19-47

LE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE MPRESSIBLE IRROTATIONAL CASE STEADY-STATE 17-3

F INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES ONDENSATION. 29-5

COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS AN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION 5-38

WO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

ERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 UBIC CENTIMETER PETN. 14-15

CED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), TON) AND (TRITON,ALPHA) REACTIONS. 15-6

D DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

EUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR 9 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

INDUCING
MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

INDUCTION
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 11-3

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

CALCULATED PULSATING DNE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

INDUSTRIAL
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST. 16-18

INELASTIC
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

INELASTICITY
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

INERT
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22-22

INEXPENSIVE
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-11

INFLUENCE
INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

INFORMATION
CAN NEGATIVE MUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

INFRARED
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER. 18-10

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

INHIBITION
INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

INHOMOGENEITIES
CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

INHOMOGENEOUS
INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

INITIATED
NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

DOUBLE DISCHARGE INITIATED HF LASER. 19-15

2

INITIATION
INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES. 5-28

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

INJECTION
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-11

HELIUM INJECTION BY THE TRITIUM TRICK. 22-15

INJECTOR
OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

INNER
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

INNOVATIONS
PASSIVE ASSAY: INNOVATIONS AND A PPLICATIONS. 25-22

INPUT
GENRD: A FREE FORMAT CARD INPUT PROCESSOR. 20-20

INSECT
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

INSTABILITIES
PARAMETRIC INSTABILITIES OF VLF WAVES. 1-20

NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES. 10-50

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

PARAMETRIC INSTABILITIES NEAR THE LOWER HYBRID. 10-55

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

INSTABILITY
ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE. 10-16

NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

MODEL FOR THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

INSTALLATION
INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

INSTRUMENTATION
CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-5

INSULATED
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMP

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.

INSULATORS
EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULAT AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN.

INTEGRAL
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION.

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS.

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE.

INTEGRATOR
BASELINE COMPENSATING INTEGRATOR.

INTELLIGENCE
SYNERGY AND ARTIFICIAL INTELLIGENCE.

INTENSE
LASL INTENSE 14 MEV NEUTRON SOURCE.

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL.

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES B MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION.

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD.

INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING.

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES.

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RIN (WNR RING).

LASL INTENSE 14 MEV NEUTRON SOURCE.

INTENSIFIERS
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS.

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS.

INTENSITIES
AURORAL INTENSITIES AT CONJUGATE POINTS.

INTENSITY
DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATUR PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS.

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS.

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECT OF LAMPF.

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LA

STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS.

INTERACTION
ELECTRON BEAM/PLASMA FOCUS INTERACTION.

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES.

K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION.

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGI

INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE.

TRO RNA SYNTHESIS WITH
UCLEOTIDES. 5-28

LATIONS OF DETONATION FAILURE AND SHOCK
14-12

S OF INITIATION AND PERFORMANCE OF EXPLOSIVES.
14-2

THERMAL CONDUCTIVITY AND ROUGHNESS ON THE
104 BY OBLIQUE IMPACT. 14-7

COPY: ENHANCEMENT OF SPECIMEN CONTRAST BY
S. 5-25

G OF A PHOTOGRAPHIC FILM CANISTER. 12-11

BY THE TRITIUM TRICK. 22-15

RFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR
21-38

NTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF.
21-5

TUDIES ON THE PROTON BEAM LINE IN THE INJECTOR
. 21-6

PF NEGATIVE HYDROGEN ION INJECTOR. 21-64

ER ELECTRON BINDING ENERGIES AND LIMITS ON
NONLINEARITIES. 4-16

OVATIONS AND A PPLICATIONS. 25-22

MAT CARD INPUT PROCESSOR. 20-20

ATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES.
16-19

BILITIES OF VLF WAVES. 1-20

TION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES.
10-50

ISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING
10-53

BILITIES NEAR THE LOWER HYBRID. 10-55

BILITIES AND ANDMALOUS HEATING OF PLASMAS NEAR
FREQUENCY. 19-48

ED BACKSCATTER INSTABILITIES IN LASER PLASMA
19-53

ION DRIFT INSTABILITY AND TURBULENCE.
10-16

TION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS.
10-51

BILITY OF OBLIQUE COLLISION FREE SHOCK WAVES.
10-56

F THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC
. 19-10

TABILITY ABSORPTION IN A LASER HEATED PLASMA.
19-40

ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC
21-24

MENTATION AT AND ABOVE LIQUID HYDROGEN
ENT AND FUTURE. 8-5

INSULATED
CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF.
21-16

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.
21-56

INSULATORS
EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

INTEGRAL
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION.
20-14

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE.
24-62

INTEGRATOR
BASELINE COMPENSATING INTEGRATOR. 12-2

INTELLIGENCE
SYNERGY AND ARTIFICIAL INTELLIGENCE. 20-61

INTENSE
LASL INTENSE 14 MEV NEUTRON SOURCE. 10-35

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING. 19-24

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES.
19-58

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-68

INTENSIFIERS
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

INTENSITIES
AURORAL INTENSITIES AT CONJUGATE POINTS. 1-3

INTENSITY
DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS.
16-13

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF.
21-5

STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS.
21-60

INTERACTION
ELECTRON BEAM/PLASMA FOCUS INTERACTION. 10-15

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-114

K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION. 24-66

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES.
24-87

INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE.
26-12

2

INTERACTIONS
BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

EFFECTS OF STRONGLY ABSORPTIVE INTERACTIONS. 24-38

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

INTERFACE
NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER. 20-54

INTERFACES
LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

INTERFEROMETRY
HOLOGRAPHIC INTERFEROMETRY AT 10.6 MICRONS. 10-32

HOLOGRAPHIC INTERFEROMETRY COOKBOOK. 10-33

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-84

INTERMEDIATE
INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

INTERMOLECULAR
NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

INTERN
PRESIDENT'S INTERN PROGRAM. 29-16

INTERNAL
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION. 17-14

MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

INTERNATIONAL
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

INTERNATIONALLY
INTERNATIONALLY SPEAKING. 29-9

INTERPENETRATING
INTERPENETRATING ION BEAMS IN THE SOLAR WIND. 1-13

INTERPLANETARY
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

INTERPOLATION
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

INTERPRETATION
GEOMETRIC INTERPRETATION OF THE DIRAC EQUATION. 20-21

K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION. 24-6

INTERROGATION
FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-1

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-2

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

INTERSTITIAL
TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-2

EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-

INTRACAVITY
INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASE SYSTEMS. 19-2

INTRODUCTION
METRICS IN BIOLOGY, AN INTRODUCTION. 5-3

INVARIANCE
GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-2

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-1

INVARIANTS
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-1

INVERSE
MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-4

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-2

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-2

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-2

INVISCID
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

IODIDE
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

ION
INTERPENETRATING ION BEAMS IN THE SOLAR WIND. 1-13

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

ROGRAM FOR MONTE CARLO SIMULATION OF POPULATION ONS IN A BIOME. 5-8

AL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS TH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

-15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR ONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

SIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS CTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN 17-24

F STRONGLY ABSORPTIVE INTERACTIONS. 24-38

Y PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON ONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

L INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED BETWEEN TWO FLUIDS. 17-16

E INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE SSOR. 20-38

LAY INTERFACE TO A PDP-9 COMPUTER. 20-54

F REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

TRY
HIC INTERFEROMETRY AT 10.6 MICRONS. 10-32

HIC INTERFEROMETRY COOKBOOK. 10-33

SIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER 10-84

E
ATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION LCULATIONS. 24-63

LAR
-15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR ONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

'S INTERN PROGRAM. 29-16

REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT NETRATORS. 11-5

L CALCULATION OF INTERNAL WAVE MOTION. 17-14

S FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL 26-15

AL
ONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON GRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL ANALYSIS. 9-13

PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 ER SQUARE METER. 12-23

ALLY
ONALLY SPEAKING. 29-9

ATING
TRATING ION BEAMS IN THE SOLAR WIND. 1-13

ARY
VIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR CIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

N
NDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

SIONAL SEARCH AND INTERPOLATION ON A DISTORTED LAR GRID. PROGRAM SI-PH1-G2D. 20-71

ON
INTERPRETATION OF THE DIRAC EQUATION. 20-21

K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION. 24-66

INTERROGATION
FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

INTERSTITIAL
TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

INTRACAVITY
INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

INTRODUCTION
METRICS IN BIOLOGY, AN INTRODUCTION. 5-39

INVARIANCE
GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

INVARIANTS
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

INVERSE
MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

INVISCID
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

IODIDE
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

ION
INTERPENETRATING ION BEAMS IN THE SOLAR WIND. 1-13

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

2

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

DEUTERIUM - TRITIUM HEATING TO THERMDNUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

IONIZABLE
LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-34

IONIZATION
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

EFFICIENCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

IONIZED
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

IONIZING
EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

IONIZING RADIATION. 16-20

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

IONOSPHERE
EMP IN THE IONOSPHERE: ROCKET TEST 152-133. 1-9

IONS
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

STUDY OF THE A TO X TRANSITIONS IN MDLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

IRON
HIGH ALTITUDE IRON VAPOR RELEASE. 1-

IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET. 3

POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-

CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROG OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 2

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 2

IRRADIATED
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDIN MATERIALS. 2

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACT FUELS AND CLADDING MATERIALS. 2

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACT FUELS AND CLADDING MATERIALS. 2

CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 1

IRRADIATION
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED I ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2

COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS.

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS.

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION.

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE.

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2.

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION.

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION.

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY. 2

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UN NEUTRON IRRADIATION AT HIGH TEMPERATURE. 2

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 2

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC META SEALS. 2

IRROTATIONAL
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 1

ISOELECTRONIC
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-

ISOLATOR
LARGE FARADAY - EFFECT OPTICAL ISOLATOR. 1

ISOLEUCINE
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5

MOMENT FOR THE COMET TAIL SYSTEM OF CARBON 4-8

ED STATES OF THE NITRIC OXIDE ION. 4-9

CE DUE TO CROSS FIELD ELECTRON ION STREAMING 10-53

OMAGNETIC ION CYCLOTRON WAVES. 19-12

TING TO THERMONUCLEAR TEMPERATURES BY IONS IN THE PRESENCE OF INTENSE LASER 19-14

TING TO THERMONUCLEAR TEMPERATURES BY IONS IN THE PRESENCE OF INTENSE LASER 19-14

ECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

PORT FOR HIGH INTENSITY ION CURRENTS. 21-60

GATIVE HYOROGEN ION INJECTOR. 21-64

MB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

SHIFT POLARIZED ION SOURCE. 26-25

LASL POLARIZED ION SOURCE. 26-27

N THROUGH IONIZABLE MEDIA. 19-34

ONIZATION IN COLLISIONS BETWEEN ATOMIC IONS PRIMARY ION ENERGIES BELOW 100 EV. 4-4

IZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

HIGHLY IONIZED CHROMIUM, VANADIUM AND 4-27

NERGY LEVELS IN THE SPECTRUM OF SINGLY 4-28

L EFFECTS OF IONIZING RADIATION. 1. CLEAR CHANGES. 5-19

16-20

RE PROPORTIONAL CHAMBER FOR POSITION MINIMUM IONIZING PARTICLES. 18-3

RE PROPORTIONAL CHAMBER FOR POSITION MINIMUM IONIZING PARTICLES. 18-4

ROCKET TEST 152-133. 1-9

MAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE 4-21

ONIZATION IN COLLISIONS BETWEEN ATOMIC IONS R PRIMARY ION ENERGIES BELOW 100 EV. 4-4

D BY COLLISIONS OF LOW ENERGY HELIUM IONS EN. 4-43

NSITIONS IN MOLECULAR IONS OF CARBON 4-45

OLLISIONS OF DOUBLY CHARGED RARE GAS IONS R PRIMARY ION ENERGIES BELOW 100 EV. 4-7

TRANSITION AND LANTHANIDE SERIES COMPLEX 13-1

WITH 140 MEV HELIUM -4 IONS. 15-7

IRON
HIGH ALTITUDE IRON VAPOR RELEASE. 1-12

IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET. 3-4

POTENTIAL CONSTANTS OF IRON PENT^CARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

IRRADIATED
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

IRRADIATION
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION. 19-41

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY. 21-33

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

IRROTATIONAL
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

ISOELECTRONIC
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

ISOLATOR
LARGE FARADAY - EFFECT OPTICAL ISOLATOR. 19-28

ISOLEUCINE
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

2

ISOMER
ANALYSIS OF FISSION ISOMER EXCITATION FUNCTIONS. 15-1

WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

ISOMERISM
SEARCH FOR ISOMERISM IN OSMIUM -193. 24-140

ISOMERS
EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

ISOSPIN
ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES. 24-64

ISOTOPE
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

ISOTOPES
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES. 15-13

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

USE DF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-149

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES. 24-2

ISOTOPIC
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

ISOVECTOR
INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

IV-3
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

J
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

J-PI
J-PI = 7/2+ AND 11/2+, T = 1/2 STATES OF MASS 19. 24-65

JACOBI'S
ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-1

JANUARY
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-1

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-1

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUAR 1 TO MARCH 31, 1972. 27-1

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-1

JET
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-1

JOURNALS
ENGINEERING JOURNALS AVAILABLE. 29-4

JULY
SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -23B FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-1

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-3

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-3

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-1

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-1

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRA JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-1

JUNE
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

ION ISOMER EXCITATION FUNCTIONS. 15-1

OMER SHIFT TELL US ABOUT NUCLEI 24-163

MERISM IN OSMIUM -193. 24-140

CTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN IUM ISOTOPES. 15-5

VATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) 24-64

OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION TRIC MEASUREMENTS. 2-10

ISOTOPE DILUTION MASS SPECTROMETRY TO THE OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

GE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM 6-4

OR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION VELOPMENT, DECEMBER 15, 1970. 21-69

W ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN OTOPES. 15-11

SION RESONANCES IN THORIUM ISOTOPES. 15-13

CTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN CIUM ISOTOPES. 15-5

OR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION VELOPMENT, DECEMBER 15, 1970. 21-69

TION COUPLING STATES SEEN IN INELASTIC PROTON THE ODD TIN ISOTOPES. 24-107

EUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE I) REACTION. 24-149

I) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM 24-2

CTROMETRIC DETERMINATION OF BORON ISOTOPIC BORON CARBIDE. 2-28

ND LIMITATIONS OF MASS SPECTROMETRY FOR THE OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

EXCHANGE SEPARATION AND MASS SPECTROMETRIC OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED R BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

STANTS OF IRON PENTACARBONYL FROM VIBRATIONAL TOPIC SPECIES. 4-34

CE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 18-2

N ANALYSIS WITH LOW ENERGY PROTONS. 25-12

ON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

F ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

LIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA 10-24

OMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

1/2+, T = 1/2 STATES OF MASS 19. 24-65

JACOBI'S

ERGODIC COMPUTATIONS WITH CONTINUED FRACTIONS AND JACOBI'S ALGORITHM. 20-15

JANUARY

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

JET

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

JOURNALS

ENGINEERING JOURNALS AVAILABLE. 29-4

JULY

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

JUNE

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

2

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

K
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

K-ALPHA
PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

K-MINUS
K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION. 24-66

K-MU-3
MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS. 21-32

K-N
MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

KEL-F
EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

KETO
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

KEV
EFFICIENCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144. 24-101

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176. 24-37

KEYBOARD
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

KILOBARS
ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS. 22-1

COMPRESSION OF GARNET TO 100 KILOBARS. 26-3

KILOMETERS
MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

KINETIC
KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

CORRELATION BETWEEN FISSION CHANNEL EFFECTS AND FRAGMENT KINETIC ENERGIES. 15-3

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

KINETICS
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-1

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-2

COUPLED REGION KINETICS FORMULATIONS. 23-

KINETIK
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-3

KJ
500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-

KLYSTRON
LAMPF KLYSTRON REPAIR FACILITY. 21-

KOLMOGOROV-SMIRNOV
THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-

KRYPTON
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-3

STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-

KV
X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-5

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-

L
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETR L EQUALS ONE PINCH. 10

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10

STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-

REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-

L-ALPHA
PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-

L-SPLINE
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-

L'ENERGIE
L'ENERGIE DE FUSION. 10-

LABELED
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-

NG IN THE VICINITY OF THE LOS ALAMOS
NUARY THROUGH JUNE, 1971. 16-7

OF THE DEFENSE NUCLEAR AGENCY SPONSORED
N GROUP, LOS ALAMOS SCIENTIFIC
THROUGH JUNE 30, 1972. 24-18

E THEORETICAL REACTOR PHYSICS PROGRAM APRIL
L REPORT, FY 1972. 27-11

ORT ON THE ADVANCED PLUTONIUM FUELS
0, 1972. 27-9

IC L AND K RADIATION FROM THICK TUNGSTEN 4-10

D L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 24-123

ION AND ITS INTERPRETATION. 24-66

RRELATIONS IN K-MU-3+ DECAYS. 21-32

LYSIS OF THE I = 0 K-N SYSTEM AND THE
ON RESONANCES. 24-83

NSITION IN KEL-F
HYLENE) UNDER SHOCK LOADING. 4-14

EEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC
F THE HONEYBEE. 9-5

ATION CHAMBERS FROM 10 TO 80 KEV. 18-8

EV, 3- TO 2+1 PRIMARY GAMMA RAY IN 24-101

MAL MULTIPOLE MIXING RATIOS OF THE 57 KEV
NIUM -180. 24-106

.3 KEV TRANSITION IN HAFNIUM -176. 24-37

IBING KEYBOARD BASED TWO DIMENSIONAL 20-30

OMPRESSION OF OLIVINE TO 140 KILOBARS. 22-1

100 KILOBARS. 26-3

OUTINE FOR THE U. S. STANDARD ATMOSPHERE
KILOMETERS. 26-18

LLA PYRENOIDOSA USING 94 PERCENT CARBON 5-29

ION CHANNEL EFFECTS AND FRAGMENT KINETIC 15-3

ONS IN THE SPONTANEOUS FISSION OF CURIUM 15-8

ONS IN THE SPONTANEOUS FISSION OF CURIUM 15-9

NCHED URANIUM CRITICAL ASSEMBLY: 23-4

DER CHEMISCHEN KINETIK IN DER
ESOSPHAERE (STUDY OF THE ROLE OF
TRATOSPHERE AND MESOSPHERE.) 1-34

DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-15

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

COUPLED REGION KINETICS FORMULATIONS. 23-6

KINETIK
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

KJ
500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-1

KLYSTRON
LAMPF KLYSTRON REPAIR FACILITY. 21-26

KOLMOGOROV-SMIRNOV
THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-65

KRYPTON
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-73

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-73

KV
X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-1

L
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-74

REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

L-ALPHA
PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

L-SPLINE
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

L'ENERGIE
L'ENERGIE DE FUSION. 10-34

LABELED
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

2

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY-LABELED CARBON -13 SUBSTRATE. 13-5

LABORATORY
CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8-6

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

NUCLEON PHYSICS LABORATORY (NPL). 21-37

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

LAMB
MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16. 24-76

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

LAMBDA-00
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

LAMBDA-10
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

LAMINAR
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

LAMPF
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

RADIOISOTOPE PRODUCTION AT LAMPF. 12-19

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

EXPERIMENTS PROPOSED FOR LAMPF. 21-21

HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

LAMPF KLYSTRON REPAIR FACILITY. 21-26

LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS. 21-27

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-2

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-3

AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF. 21-4

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-4

PION BEAMS AT LAMPF. 21-4

PRACTICAL APPLICATIONS AT LAMPF. 21-4

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-5

RMS EMITTANCE AND THE LAMPF BEAM. 21-5

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

STATUS AND PERFORMANCE OF LAMPF. 21-6

STATUS OF LAMPF. 21-6

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-6

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-6

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-6

CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC. 21-9

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-1

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

LAMPF'S
COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF. 21-1

LAND
LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-2

LANGUAGE
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-3

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-6

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-6

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-1

LANGUAGES
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-3

REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-5

TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-7

LANTHANIDE
OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-1

LAPHAN
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-

LAPHANO
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-1

USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-2

LAPLACE'S
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-1

LASER
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-2

VER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS
TURED MAMMALIAN CELLS. 5-55

-13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING
AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13
ATE. 13-5

RY
ENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC
TORY. 8-6

Y OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS
IFIC LABORATORY, 1944-72. 16-14

TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

NMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS
IFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

NMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS
IFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

ON PHYSICS LABORATORY (NPL). 21-37

NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS
IFIC LABORATORY. 24-164

L PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED
ECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC
TORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS
STRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

REMENT OF THE LAMB SHIFT IN OXYGEN -16. 24-76

REMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

NCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

O
A-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF
AR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON
TIALS. 24-67

O
A-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF
AR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON
TIALS. 24-67

PRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND
IVE MUONS. 5-30

EOTOPE PRODUCTION AT LAMPF. 12-19

CONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM 12-22

EAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

EAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

RUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

MENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

MENTS PROPOSED FOR LAMPF. 21-21

ESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

LLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC
L 21-24

(LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR
TION DAMAGE EXPERIMENTS. 21-25

KLYSTRON REPAIR FACILITY. 21-26

USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS. 21-27

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-28

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF. 21-4

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-40

PION BEAMS AT LAMPF. 21-45

PRACTICAL APPLICATIONS AT LAMPF. 21-46

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-55

RMS EMITTANCE AND THE LAMPF BEAM. 21-57

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

STATUS AND PERFORMANCE OF LAMPF. 21-61

STATUS OF LAMPF. 21-62

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-65

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC. 21-9

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-138

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

LAMPF'S
COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF. 21-14

LAND
LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

LANGUAGE
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

LANGUAGES
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-53

TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-70

LANTHANIDE
OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

LAPHAN
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

LAPHANO
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-25

LAPLACE'S
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

LASER
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

2

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-84

CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

CONDENSED EXPLOSIVES LASER. 19-11

CURRENT IN THE COLD LASER PLASMA. 19-13

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

DOUBLE DISCHARGE INITIATED HF LASER. 19-15

ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER AMPLIFIERS. 19-18

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

CALORIMETER FOR PICOSECOND LASER PULSES. 19-2

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING. 19-24

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

LASER ACTIVATION OF SOLAR CELLS. 19-30

LASER BEAM TRANSPORT IN FUSION REACTORS. 19-31

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

LASER INDUCED DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-34

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-35

LASER SUPERRADIANCE. 19-36

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-4

MODEL FOR THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION. 19-41

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-

LASERS
HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-

CHEMICAL LASERS: A LIGHT REVIEW. 19

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19

LASING
ELECTRICAL EXCITATION OF LASING LEVELS. 19-

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-

LASL
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

LASL INTENSE 14 MEV NEUTRON SOURCE. 10

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 1

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 1

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 1

SPECTROMETER DESIGN AT LASL. 1

LASL 51MM DISC AMPLIFIER. 19

LASL COMPUTER NETWORK. 20

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-

MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 2

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 2

A FOCUS) DETERMINED FROM ANALYSIS OF 10-14

OF A MAGNETICALLY CONFINED PLASMA. 10-48

F A PULSED FUSION REACTOR USING LASER TIUM) PELLETS. 10-49

ETRY WITH A PULSED 10.6 MICROMETER 10-84

RATION BY LASER DRIVEN FUSION. 10-9

19-11

ASMA. 19-13

TO THERMONUCLEAR TEMPERATURES BY N THE PRESENCE OF INTENSE LASER 19-14

F LASER. 19-15

ARBON DIOXIDE LASER AMPLIFIERS. 19-18

LECTRICAL DISCHARGE AS A METHOD OF RBON DIOXIDE LASER MEDIA AT HIGH 19-19

LASER PULSES. 19-2

BON DIOXIDE LASER SYSTEM FOR PLASMA 19-21

OSCOPY OF BREMSSTRAHLUNG FROM LASER 19-22

LASER FROM HYDROGEN ATOM: CHLORINE 19-23

FOR LASER PUMPING. 19-24

RBON MONOXIDE AND CARBON DIOXIDE LASER 19-25

NTROLLED CARBON DIOXIDE LASER 19-27

ER SYSTEM FOR PLASMA PRODUCTION. 19-29

LLS. 19-30

ON REACTORS. 19-31

HERICAL DT SHELLS TO THERMONUCLEAR 19-32

F TETRAFLUOROHYDRAZINE. 19-33

OUGH IONIZABLE MEDIA. 19-34

ON OF DT SPHERES. 19-35

19-36

RAYS FROM A LASER PRODUCED PLASMA. 19-38

ED HYDROGEN FLUORIDE LASER. 19-4

SORPTION IN A LASER HEATED PLASMA. 19-40

NDER LASER IRRADIATION. 19-41

CS AND NEW METHOD FOR C ATOM LASING. 19-42

CED ABSORPTION OF LASER ENERGY 19-47

ECTRON BEAM CONTROLLED DISCHARGE IN 19-49

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

LASERS
HIGH ENERGY GAS LASERS FOR POSSIBLE FUSION APPLICATIONS. 19-20

CHEMICAL LASERS: A LIGHT REVIEW. 19-5

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

LASING
ELECTRICAL EXCITATION OF LASING LEVELS. 19-17

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

LASL
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

LASL INTENSE 14 MEV NEUTRON SOURCE. 10-35

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-73

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 15-5

SPECTROMETER DESIGN AT LASL. 18-18

LASL 51MM DISC AMPLIFIER. 19-37

LASL COMPUTER NETWORK. 20-25

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-68

MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

2

FASTER LASL LENS DESIGN SYSTEM. 26-9

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

PUBLICATIONS OF LASL RESEARCH 1970. 29-17

LASL-NWEF
AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

LATTICE
EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER. 28-1

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

LAW
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

LAWS
PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

LAYER
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

LAYERS
NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

LEAD
RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206. 24-153

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF LEAD -210. 24-50

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

LEAST
WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

LEAST - STRUCTURE UNFOLDING CODE. 24-69

LEAST-SQUARES
IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20-23

LECTIN
FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

LEED
LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

LEGENDRE
NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

LENGTHS
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

LENS
FASTER LASL LENS DESIGN SYSTEM. 26-9

LET
PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

LEVEL
CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

LEVELS
NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

ELECTRICAL EXCITATION OF LASING LEVELS. 19-17

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-73

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-75

NUCLEAR LEVELS IN RHENIUM -188. 24-32

LIBRARIES
PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

LIBRARY
MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

LIBRATIONAL
ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

LIFE
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

LIGAND
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

LIGHT
STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM. 5-32

ASL LENS DESIGN SYSTEM. 26-9

NICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE
RING TECHNICAL REPORTS AND PAPERS. 29-10

ONS OF LASL RESEARCH 1970. 29-17

PORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR
E AND THE NWEF COMPUTER PROGRAM CDR. 23-1

F SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80
DIOXIDE. 9-11

F SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80
DIOXIDE. 2. 9-12

-15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

TRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED
R RECURRENCES. 20-26

UND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK
ARE LATTICE. 20-27

EORY OF LATTICE DYNAMICS BY COMPUTER. 28-1

N OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
BIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

DE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

ON OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS
ARD SPHERE MODEL COMPUTER PROGRAM. 26-5

NAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE
OCUS. 10-66

ATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE
S BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

AYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN
. 22-26

E CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

ONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES
09. 24-152

ONON PAIRING VIBRATION STATES IN LEAD -206. 24-153

NALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD
TERON,PROTON) LEAD -209 REACTION. 24-159

NALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD
TERON,PROTON) LEAD -209 REACTION. 24-159

NTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF
. 24-50

AY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF 25-9

MBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

TRUCTURE UNFOLDING CODE. 24-69

RES
STORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20-23

CROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO
D MAMMALIAN CELLS. 5-26

RGY ELECTRON DIFFRACTION (LEED). 9-14

LEGENDRE
NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

LENGTHS
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

LENS
FASTER LASL LENS DESIGN SYSTEM. 26-9

LET
PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

LEVEL
CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

LEVELS
NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

ELECTRICAL EXCITATION OF LASING LEVELS. 19-17

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-73

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-75

NUCLEAR LEVELS IN RHENIUM -188. 24-92

LIBRARIES
PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

LIBRARY
MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

LIBRATIONAL
ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

LIFE
METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

LIGAND
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

LIGHT
STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM. 5-32

2

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

CHEMICAL LASERS: A LIGHT REVIEW. 19-5

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-133

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

LIGHTNING
PRELIMINARY LIGHTNING HAZARD STUDY. 1-23

LIMB
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

LIMIT
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

LOW DENSITY LIMIT OF THE THETA PINCH. 10-37

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

LIMITATIONS
ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

LIMITS
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

LINAC
INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC. 21-9

LINACS
RELEVANCE OF LINACS. 21-54

LINE
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

BIOMEDICAL APPLICATIONS: BEAM LINE AND FACILITY. 21-7

LINEAR
PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND RELATIONSHIP TO THE WIENER THEORY.

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES.

CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION.

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS.

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS.

LINEARIZED
LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS.

LINES
ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES.

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES.

LINKAGE
LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES.

LIQUID
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS.

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN.

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE.

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITYEQUATIONS AND LIQUID STRUCTURE.

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.

DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA

CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE.

PULSE NMR RELAXATION STUDY OF LIQUID ARSINE.

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE.

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM.

LIQUIDS
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS.

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH.

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS.

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS.

LITHIUM
STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES.

MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA.

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS.

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES.

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS.

NON EQUATIONS IN LIGHT OF METALLIC
TWO LIQUID REGIONS. 7-25

EW. 19-5

N LIGHT BY PLASMA TARGETS. 19-52

HT REFLECTED FROM A LASER PRODUCED 19-54

ER LIGHT IN AN EXPANDING PLASMA. 19-7

FOR (PI-PLUS, 2PROTON) AND
LIGHT NUCLEI. 24-133

ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

D STUDY. 1-23

CYCLE CHARACTERISTICS OF HUMAN LIMB 5-56

VES AND THE HUGONIOT ELASTIC LIMIT OF
ALLY SYMMETRIC MAGNETIC PROBE. 4-44

A PINCH. 10-37

GTH FUNCTION LIMIT. 24-151

OF MASS SPECTROMETRY FOR THE
DISTRIBUTIONS OF URANIUM AND
NUCLEAR FUEL BURN-UP. 2-3

BINDING ENERGIES AND LIMITS ON
ES. 4-16

ROGENEOUS MATERIALS. 2. LIMITS OF THE 22-39

Y LIMITS FOR ELEMENTAL ANALYSIS BY
ESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

OF LAMPF 201 MHZ AND 805 MHZ LINAC 21-24

805 MHZ LINAC. 21-9

21-54

FIELD LINE TRACING EXPERIMENTS. 1-33

NKETING. 2. THE RESULTS OF
TMOSPHERES. 3-12

RE AND DENSITY IN LOW TEMPERATURE DENSE
UUM INTENSITY RATIOS. 10-13

CS AND NEW METHOD FOR C ATOM LASING. 19-42

EAM LINE AND SPECTROMETER. 21-13

HE PROTON BEAM LINE IN THE INJECTOR 21-6

M LINE AND FACILITY. 21-7

YLLAC FIVE METER, LINEAR THETA PINCH. 10-59

YLLAC FIVE METER, LINEAR THETA PINCH. 10-60

CYLLAC FIVE METER LINEAR THETA PINCH. 10-63

DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS. 26-11

LINEARIZED
LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

LINES
ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

LINKAGE
LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

LIQUID
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

SOME HUGONIOT DATA FOR LIQUID DEUTERIUM AND HYDROGEN. 4-41

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITYEQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA 7-7

CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-5

PULSE NMR RELAXATION STUDY OF LIQUID ARSINE. 13-11

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE. 13-9

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

LIQUIDS
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

LITHIUM
STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

2

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

LITTER
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

LIVED
STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

LIVES
CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

LIVING
CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

LMFBR
APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

LOADING
EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

LOCALIZATION
LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

LOCKING
AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

LONG
STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

MODELING OF LONG STRAIGHT THETA PINCHES. 10-47

EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

LONGEVITY
LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

LOOK
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

LOS
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8-6

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-66

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS. 21-27

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-28

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-16

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-23

WATER SUPPLY AT LOS ALAMOS DURING 1971. 29-29

LOSSES
MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

LOW
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

LOW DENSITY LIMIT OF THE THETA PINCH. 10-37

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

LOW ENERGY PION CHANNEL. 21-30

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-11

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

L EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM 7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

L EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM 7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

TY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES UM CONDENSATION. 29-5

TIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE ONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF OGENITORS. 5-13

F VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF N MOLECULAR ION. 4-46

FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

TION OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

-13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING D THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 E. 13-5

ION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

E FOR A PHASE TRANSITION IN KEL-F LOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING 4-14

ON
ATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

DE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

F VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF N MOLECULAR ION. 4-46

FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

G OF LONG STRAIGHT THETA PINCHES. 10-47

OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL S OF PBX 9404. 14-8

IOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN EXPLOSIONS. 29-11

TY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X SURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR UID HELIUM. 8-4

K IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN IUM ISOTOPES. 15-11

ND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT ALAMOS MESON PHYSICS FACILITY. 5-50

ICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC ORY. 8-6

HYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS C LABORATORY, 1944-72. 16-14

OS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND RGICAL RESEARCH BUILDING. 16-39

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS. 21-27

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-28

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-23

WATER SUPPLY AT LOS ALAMOS DURING 1971. 29-29

LOSSES
MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

LOW
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

LOW ENERGY ELECTRON DIFFRACTION (LEED). 9-14

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

LOW DENSITY LIMIT OF THE THETA PINCH. 10-37

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

LOW ENERGY PION CHANNEL. 21-30

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-114

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

2

MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

LOWER
PARAMETRIC INSTABILITIES NEAR THE LOWER HYBRID. 10-55

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

LSL
FOCAL LSL PROGRAMMING MANUAL. 20-19

LUNG
IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

LUYTEN'S
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

LYMAN
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

MACHINE
TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

MADCAP
SPECIFICATION OF PROGRAM FLOW IN MADCAP VI. 20-56

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI. 20-72

MAGNET
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

MAGNETIC
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET.

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS.

MAGNETICALLY
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA.

MAGNETOHYDRODYNAMIC
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMM L EQUALS ONE PINCH.

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZER BUMPY PINCH.

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA.

MAGNETOSHEATH
OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEA

MAGNETOSPHERE
SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE.

COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPM A SUBSTORM.

MAGNETOTAIL
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B.

MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL.

OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEA

MAGNETS
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES.

CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS.

CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF.

PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS.

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.

MAJORITY
CLOCK PARADOX - MAJORITY VIEW.

MALE
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS.

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS.

MAMMALIAN
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION.

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE.

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS.

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS.

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE.

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTO ON MAMMALIAN CELL CYCLE TRAVERSE.

AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

RIC INSTABILITIES NEAR THE LOWER HYBRID. 10-55

RIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR ER HYBRID FREQUENCY. 19-48

DUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ARE LATTICE. 20-27

L PROGRAMMING MANUAL. 20-19

ETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF M-239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

YMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL N GEOCORONA AT 18 EARTH RADII. 1-35

NSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS NM. PROCEEDINGS. 20-69

TION OF PROGRAM FLOW IN MADCAP VI. 20-56

CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

ATA STRUCTURE CAPABILITY IN MADCAP VI. 20-72

TIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR OCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF RBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

DUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

DUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC LITY OF AMERICIUM IODIDE. 9-10

E MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

AL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS TH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

F AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE PROPERTIES OF STEEL. 12-7

NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 CHLOROPHYLLS A AND B. 13-3

NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF METHYLMETALLOCENES. 13-4

NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 13-5

IC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

ON OF MAGNETIC END FIELDS, AND COMPARISON WITH ENT. 21-12

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

MAGNETICALLY
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

MAGNETOHYDRODYNAMIC
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

MAGNETOSHEATH
OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEATH. 1-18

MAGNETOSPHERE
SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE. 1-30

COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT OF A SUBSTORM. 1-8

MAGNETOTAIL
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1-14

MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEATH. 1-18

MAGNETS
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

CONSTRUCTION OF ALUMINA INSULATED BENDING MAGNETS FOR LAMPF. 21-16

PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-41

RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS. 21-56

MAJORITY
CLOCK PARADOX - MAJORITY VIEW. 26-2

MALE
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

MAMMALIAN
DEPHOSPHORYLATION OF HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-15

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

2

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

MAN
MERCURY IN MAN. 16-22

PLUTONIUM IN MAN. 16-27

BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

MANAGEMENT
RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

MANGANESE
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

MANGANIN
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

MANIAC
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-11

MANIFESTATIONS
MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

MANUAL
CMB-5 HEALTH AND SAFETY MANUAL. 16-4

FOCAL LSL PROGRAMMING MANUAL. 20-19

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

MANY
INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

MAPPING
IMPROVED METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

MARCH
QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

MARKED
FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

MASS
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-

DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-

RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-

MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15

DEFORMABLE MASS FORMULA AND FISSION DATA. 15

VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24

J-PI = 7/2+ AND 11/2+, T = 1/2 STATES OF MASS 19. 24

MATCHING
TRANSVERSE BEAM MATCHING USING WIRE SCANNERS. 21

MATERIAL
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-2

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL 19

CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25

MATERIALS
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-2

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-3

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-3

SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS. 2-3

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-3

FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
ALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION 5-38

TION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS
1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

APID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF
ERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

RAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

R OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS. 5-54

R OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS
RED MAMMALIAN CELLS. 5-55

IN MAN. 16-22

M IN MAN. 16-27

AL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

DR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM
AEROSOL MAN TESTS. 16-34

SIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS
M. PROCEEDINGS. 20-69

IVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

AGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

TION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM
AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM
MANGANESE -54. 24-1

IN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

GING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC 20-11

NS
TIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF
NE COPPER -63. 28-2

TH AND SAFETY MANUAL. 16-4

PROGRAMMING MANUAL. 20-19

M -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND
PROCEDURES MANUAL. 25-5

ICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE
ING TECHNICAL REPORTS AND PAPERS. 29-10

TE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION
LCULATIONS. 24-63

ETHOD FOR NUMERICAL CONFORMAL MAPPING 20-24

REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY
1, 1972. 27-10

STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS
NUARY 1 - MARCH 31, 1972. 27-13

OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE 14-9

MASS
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

NEW LOOK IN LOW ENERGY FISSION- THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

DEFORMABLE MASS FORMULA AND FISSION DATA. 15-4

VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-9

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

J-PI = 7/2+ AND 11/2+, T = 1/2 STATES OF MASS 19. 24-65

MATCHING
TRANSVERSE BEAM MATCHING USING WIRE SCANNERS. 21-68

MATERIAL
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL. 19-39

CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23-7

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

MATERIALS
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS. 2-32

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

2

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

HIGH EXPLOSIVE MATERIALS. 14-10

PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS. 22-31

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

EFFECT OF MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE MATERIALS. 22-9

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

ADAPTABILITY OF FISSILE MATERIALS TO NUCLEAR EXPLOSIVES. 25-2

RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

MATHEMATICS
SOME IDEAS AND PROSPECTS IN MATHEMATICS. 20-55

MATRICES
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

ON COMPLETELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY. 20-43

MATRIX
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-25

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

MATTER
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

MAXIMAL
ON THE STRUCT RE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

MAXIMUM
TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-62

MAY
DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 1B, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-20

MBD
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER.

MCA
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER.

MCN
MCN: A NEUTRON MONTE CARLO CODE.

MEASURE
INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE.

MEASURED
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR.

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA.

MEASUREMENT
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS.

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP.

STATUS O BURNUP MEASUREMENT METHODOLOGY.

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM.

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE.

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REAC BLANKET DESIGN.

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA.

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIAL SYMMETRIC ELECTROMAGNETIC TECHNIQUE.

PROBLEMS OF PLUTONIUM MEASUREMENT IN THE ENVIRONMENT.

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS.

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV.

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA.

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT.

MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS.

AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF.

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS.

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT.

MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16.

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION.

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE.

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF TH ENERGY OF THE NEUTRON INDUCING FISSION.

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUE

MEASUREMENTS
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B.

S FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL
TUS REPORT JUNE 1971 TO JUNE 1972. 2-5

NEW SUPERCONDUCTING MATERIALS AND FABRICATION 7-4

LS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

RIALS. 14-10

NOMAGNETIC NEUTRON ABSORBING MATERIALS. 22-31

Y OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE
XIMATION. 22-39

GY ON THE CHARACTERISTICS OF PARTICULATE 22-9

IONABLE MATERIALS AT THE LOS ALAMOS
AY STANDARDS LABORATORY. 25-1

ALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR 25-17

ILE MATERIALS TO NUCLEAR EXPLOSIVES. 25-2

S FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

RROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF
LS. 25-26

PECTS IN MATHEMATICS. 20-55

OMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP
MATRICES. 17-9

OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

AL (0,1) MATRICES AND SYMMETRIZABILITY. 20-43

GROUP PHOTON PRODUCTION MATRIX AND SOURCE 17-10

F REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

THE REDUCED MATRIX ELEMENTS FOR ELECTRIC
TION BETWEEN THE FIRST AND SECOND EXCITED
M -72 BY COULOMB EXCITATION. 24-137

G MATRIX DETERMINATION IN HELIUM -4
N) HELIUM -4. 24-25

MENTS IN THE FIRST FORBIDDEN BETA DECAY OF 24-93

DA-10 CALCULATIONS OF THE BINDING ENERGY OF
H REALISTIC HARD CORE NUCLEON - NUCLEON 24-67

F THE CANONICAL TENSOR OPERATORS IN THE UNITARY
R OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL 20-46

E MAXIMUM F-RATIO IN MULTIPLE COMPARISON 20-62

SAMPLING TECHNIQUES. LASL PROJECT R-059,
AY 16 THROUGH SEPTEMBER 15, 1972. 16-5

CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF
TO JULY 31, 1971. 22-3

SEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT 25-20

MBD
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

MCA
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

MCN
MCN: A NEUTRON MONTE CARLO CODE. 20-29

MEASURE
INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

MEASURED
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

MEASUREMENT
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

STATUS O BURNUP MEASUREMENT METHODOLOGY. 2-36

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

PROBLEMS OF PLUTONIUM MEASUREMENT IN THE ENVIRONMENT. 16-29

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

COMPUTATION OF MAGNETIC END FIELDS, AND COMPARISON WITH MEASUREMENT. 21-12

MEASUREMENT OF DECAY CORRELATIONS IN K-MU-3+ DECAYS. 21-32

AUTOMATED ADMITTANCE MEASUREMENT AT LAMPF. 21-4

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-116

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-128

MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16. 24-76

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

MEASUREMENTS
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1-14

2

MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

MEASUREMENTS OF FILTERED X RAY SPECTRA. 4-25

DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES. 6-10

STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 14-14

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

3D MAGNETIC FIELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

ACCURATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

MECHANISM
NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

MECHANISMS
MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

MEDIA
NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-B

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-34

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

MEDIATED
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

MEDICAL
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

PRE-EMPLOYMENT MEDICAL EVALUATION BY QUESTIONNAIRE. 5-45

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

MEDIUM
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

MEGABARS
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

MEGAGAUSS
MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

MELT
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

MELTING
METHOD AND APPARATUS FOR TUNNELING BY MELTING. 11-6

MERCURY
RAPID SEPARATION AND DETERMINATION OF MERCURY. 2-29

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

MERCURY IN MAN. 16-22

MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

S OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

N OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION ETRIC MEASUREMENTS. 2-10

N EXCHANGE SEPARATION AND MASS SPECTROMETRIC N OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED R BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

OF DIFFERENTIAL TEMPERATURE CALIBRATION AND SUREMENTS IN SCANNING CALORIMETRY. 2-34

S OF FILTERED X RAY SPECTRA. 4-25

ENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION S. 6-1

REMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK 6-10

L MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT TIONS AND LIQUID STRUCTURE. 7-19

TION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

S OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOR. 10-42

S OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE LUID TEMPERATURES. 12-13

N IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

SUREMENTS FOR COMPOSITION B-3. 14-14

TY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE TROMETER. 16-1

ANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

ELD COMPUTATIONS AND COMPARISON WITH MEASUREMENTS. 21-1

SUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

EMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 OM 11.0 TO 30.3 MEV. 24-110

EASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 UTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 ON) CARBON -14 REACTION. 24-28

0 MEV NEUTRON FLUX MEASUREMENTS. 24-5

S AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT ATORS. 26-14

ATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN OSIONS. 29-11

CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

ANISM FOR ENHANCED ABSORPTION OF LASER ENERGY LID TARGETS. 19-47

OR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

MENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

EAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL 19-16

M CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF E VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH 19-19

LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-34

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

MEDIATED
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

MEDICAL
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

PRE-EMPLOYMENT MEDICAL EVALUATION BY QUESTIONNAIRE. 5-45

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

MEDIUM
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

MEGABARS
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

MEGAGAUSS
MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

MELT
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

MELTING
METHOD AND APPARATUS FOR TUNNELING BY MELTING. 11-6

MERCURY
RAPID SEPARATION AND DETERMINATION OF MERCURY. 2-29

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

MERCURY IN MAN. 16-22

MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

2

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

MESENCHYME
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

MESON
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-28

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY. 21-33

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

MESONS
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-43

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-43

INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

MESOSPHAERE
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

MESOSPHERE
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

META
META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

METABOLISM
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

METAL
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

ALL METAL DISCHARGE TUBE. 10-2

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

METALLIC
ON THE METALLIC RADIUS OF ACTINIUM. 4-32

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.

METALLOGRAPHY
IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES.

METALLURGICAL
SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY A METALLURGICAL RESEARCH BUILDING.

METALS
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATION METALS.

LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICAT TO THE ALKALINE EARTH METALS.

LOW TEMPERATURE EQUATION OF STATE FOR METALS.

PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D METALS.

METASTABLE
14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113

METER
HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH.

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PI

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PI

PLASMA EXPERIMENTS ON L = 1.0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR.

PLASMA EXPERIMENTS ON L = 1.0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR.

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PI

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER.

METHANE
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS.

METHOD
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXID MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.

PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD.

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD.

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD.

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATI METHOD.

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRA - AMPEROMETRIC END-POINT DETECTION METHOD.

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRA -POTENTIOMETRIC END-POINT DETECTION METHOD.

SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIU CONTAINING MATERIALS.

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIA CELL IDENTIFICATION.

TRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF
. 24-93

TURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB
(HLM15) IN VITRO. 5-56

PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT
MOS MESON PHYSICS FACILITY. 5-50

LAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR
AMAGE EXPERIMENTS. 21-25

MESON PHYSICS FACILITY (LAMPF). 21-28

KAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS
21-29

RY AS A NEUTRON IRRADIATION FACILITY. 21-33

HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY.
21-39

S ALAMOS MESON PHYSICS FACILITY. 21-63

OTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR
24-89

D RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN
5-43

D RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN
Y. 21-43

OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE.
26-12

NG DER ROLLE DER CHEMISCHEN KINETIK IN DER
RE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
ETICS IN THE STRATOSPHERE AND MESOSPHERE.)
1-34

NG DER ROLLE DER CHEMISCHEN KINETIK IN DER
RE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
ETICS IN THE STRATOSPHERE AND MESOSPHERE.)
1-34

AGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL
20-30

OLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN
N CULTURED CHINESE HAMSTER CELLS. CONTINUED
ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF
CLEIC ACID (DNA) SYNTHESIS. 5-22

IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA
N CHINESE HAMSTER CELLS. 5-23

F HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING
OF THE MAMMALIAN LIFE CYCLE. 5-35

F HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN
DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

CLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING
EIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13
13-5

T OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN
D MIXED OXIDE FUELS. 2-15

CHARGE TUBE. 10-2

DUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL
21-35

THORIUM METAL: AUGER STUDY OF BULK TO SURFACE
22-23

T NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL
27-3

LIC RADIUS OF ACTINIUM. 4-32

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

METALLOGRAPHY
IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES.
22-22

METALLURGICAL
SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

METALS
EXCHANGE APPROXIMATIONS USED IN THE ENERGY BAND CALCULATIONS OF METALS. 4-15

LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

METASTABLE
14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113
24-3

METER
HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH.
10-31

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH.
10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH.
10-60

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH.
10-63

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

METHANE
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS.
4-20

METHOD
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.
2-19

PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS. 2-32

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

2

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

2,6- BIS(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION. 7-1

METHOD AND APPARATUS FOR TUNNELING BY MELTING. 11-6

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

IMPROVED METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

GENERAL METHOD FOR SOLVING THE P-L EQUATIONS. 23-12

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-128

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

METHODOLOGY
STATUS OF BURNUP MEASUREMENT METHODOLOGY. 2-36

METHODS
ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-15

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

METHYL
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-55

METHYLATION
EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

METRIC
TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

METRICS
METRICS IN BIOLOGY, AN INTRODUCTION. 5-39

MEV
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-2

LASL INTENSE 14 MEV NEUTRON SOURCE. 10-3

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-4

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-2

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-1

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-1

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-1

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-

PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-1

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-1

ANALYZING POWERS IN THE HELIUM 3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-1

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-2

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-3

ACCURATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-5

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-5

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-8

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-8

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-8

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

MEZONNAIA
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-2

MF
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

MHD
MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-4

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-4

OD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS AMMALIAN CELL CYCLE TRAVERSE. 5-37

OD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS AMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION X. 5-38

S(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS ARATION. 7-1

OD AND APPARATUS FOR TUNNELING BY MELTING. 11-6

METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RVOIRS. 11-7

RICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC RATED JET FLOWS. 17-17

TRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF ING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH SURE. 19-19

NFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

OVED METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

RAL METHOD FOR SOLVING THE P-L EQUATIONS. 23-12

ED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-128

METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR TIONS. 24-90

OD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF RIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT A COMPLEX PULSE. 26-34

OLOGY
US OF BURNUP MEASUREMENT METHODOLOGY. 2-36

S
YTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL E. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

CATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND UM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

ARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

Y OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND RINE BY EPR METHODS. 13-15

UATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL CT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 16-10

GROUP MONTE CARLO AND S/SU8-N METHODS FOR AIR TRANSPORT. 23-14

ETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE SPORT EQUATION. 23-9

CATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY LEM. 26-1

IBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE TIONS OF CULTURED MAMMALIAN CELLS. 5-17

OVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS LTURED MAMMALIAN CELLS. 5-55

ATION
TS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION LTURED MAMMALIAN CELLS. 5-24

ICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

CS IN BIOLOGY, AN INTRODUCTION. 5-39

MEV
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

LASL INTENSE 14 MEV NEUTRON SOURCE. 10-35

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-47

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-142

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-143

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

ACCURATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-68

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

MEZONNAIA
LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

MF
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

MHD
MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-43

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

2

MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA. 10-45

MHZ
COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF. 21-14

INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC. 21-9

MICE
LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

MICROFLUOROMETRIC
FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

MICROFLUOROMETRY
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

MICROMETER
TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-84

MICRONS
HOLOGRAPHIC INTERFEROMETRY AT 10.6 MICRONS. 10-32

MICROPROGRAMMED
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11. 20-51

MICROSCOPY
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

MICROSPHERES
APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

MICROSTRUCTURE
MICROSTRUCTURE OF THE EARTH'S BOW SHOCK. 1-16

MICROWAVE
ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-81

MIGRATION
HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

MILLIMETERS
EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-11

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-12

MILROW
LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

MIN
TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AN DECAY OF 17.8 MIN RUBIDIUM -88.

MINERAL
RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.

MINIMIZING
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES.

MINIMUM
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMAN DETECTOR SPECTRA.

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.

MINIMUM NORM DIFFERENTIATION FORMULAS.

MINUS
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY.

PI MINUS BEAMS IN RADIOTHERAPY.

14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113.

MISSION
PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE.

MITHRAMYCIN
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE.

MITOCHONDRIAL
EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES.

MIXED
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS.

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR T CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS.

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL.

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL.

SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFER

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)).

MIXING
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 K GAMMA TRANSITION OF HAFNIUM -180.

E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176.

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175.

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133.

ILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL
A. 10-45

CONTROL OF LAMPF'S 201.25 MHZ RF. 21-14

TION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC
21-24

TION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC
21-24

NING FOR THE LAMPF 805 MHZ LINAC. 21-9

Y AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X
SURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

OMETRIC
ROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO
MAMMALIAN CELLS. 5-26

OMETRY
ON OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION
MICROFLUOROMETRY. 5-2

ON OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN
N FOR FLOW MICROFLUOROMETRY. 5-3

W MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF
AGENTS ON CELL CYCLE PROGRESSION. 5-57

SIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER
10-84

HIC INTERFEROMETRY AT 10.6 MICRONS. 10-32

MMED
RAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER.
20-31

ER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE
20-51

MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY
OF ATOMS. 5-25

TION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES
VATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY.
16-16

S
FOR COATING MICROSPHERES WITH PYROLYTIC CARBON.
22-2

URE
CTURE OF THE EARTH'S BOW SHOCK. 1-16

S MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY.
10-3

S MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY.
10-4

S MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY:
COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE
QUENCY. 10-81

RATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL
22-16

ECTRUM OF URANIUM BETWEEN 19,080 AND 30,261
S. 4-11

ECTRUM OF URANIUM BETWEEN 19,080 AND 30,261
S. 4-12

D WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN
PLOSIONS. 29-11

MIN
TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND
DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

MINERAL
RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.
21-56

MINIMIZING
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF
SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

MINIMUM
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM
DETECTOR SPECTRA. 18-12

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION
SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION
SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

MINIMUM NORM DIFFERENTIATION FORMULAS. 20-33

MINUS
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN
THERAPY. 5-43

PI MINUS BEAMS IN RADIOTHERAPY. 5-44

14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113.
24-3

MISSION
PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE.
29-15

MITHRAMYCIN
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN,
AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL
CYCLE TRAVERSE. 5-20

MITOCHONDRIAL
EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1.
MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

MIXED
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN
UNIRRADIATED MIXED OXIDE FUELS. 2-15

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE
MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.
2-19

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE
CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED
OXIDE FUEL AND SOURCE MATERIALS. 2-26

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC
DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED
OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS.
2-33

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND
URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL.
2-7

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED
OXIDE REACTOR FUEL. 2-9

SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND
DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE.
5-52

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE
ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II)
DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

MIXING
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV
GAMMA TRANSITION OF HAFNIUM -180. 24-106

E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176.
24-37

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF
ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239
POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235
AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS
XENON -131, 132, 133. 24-96

2

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

MIXTURES
RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

MODAL
NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

MODE
TORSIONAL MODE OF DIBORON TETRACHLORIDE. 4-48

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

MODEL
SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

W VIRGINIS MODEL USING RADIATION TRANSFER. 3-15

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

APPLICATION OF THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER FILM FLOW. 8-2

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

MODEL OF A STRAIGHT THETA PINCH. 10-46

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL. 19-39

MODEL FOR THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-22

ONE PLUS STATES AND THE 1F-2P SHELL MODEL. 24-104

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-80

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

MODELING
MODELING OF LONG STRAIGHT THETA PINCHES. 10-47

MODELS
OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

MODERATE
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

MODIFICATION
STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-5

MODIFICATIONS
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-1

MODIFIED
MODIFIED HARTREE-FOCK CALCULATIONS FOR ATOMS. 4-2

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-

MODULAR
MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-

MODULATED
AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-

MODULATION
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-

MODULI
ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-

MODULUS
INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-2

MOLDING
INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-1

MOLECULAR
STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-2

MOLECULE
VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

MOLECULES
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

MOLTEN
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

MOLYBDENUM
HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-1

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-4

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

TURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED 24-99

IXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

CULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING D DIMENSIONS. 19-44

PLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

E OF DIBORON TETRACHLORIDE. 4-48

ULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

SOLAR LINE BLANKETING. 2. THE RESULTS OF SOLAR MODEL ATMOSPHERES. 3-12

EL USING RADIATION TRANSFER. 3-15

NG FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

D AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE A GREAT PLAINS RESERVOIR. 7-6

F THE FLUCTUATION MODEL OF DISSIPATION TO BEAKER 8-2

ULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING GE COIL. 8-26

RAIGHT THETA PINCH. 10-46

F THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

F THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA 10-87

MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA 10-88

LCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL. 19-39

E INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

IONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH 23-22

ES AND THE 1F-2P SHELL MODEL. 24-104

MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO E. 24-136

L FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

DENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

ODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM 24-80

F THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS SPHERE MODEL COMPUTER PROGRAM. 26-5

LONG STRAIGHT THETA PINCHES. 10-47

ELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

TS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE W OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE FLUID TEMPERATURES. 12-13

MODIFICATION
STRUCTURAL MODIFICATION OF H'STONES IN CULTURED MAMMALIAN CELLS. 5-51

MODIFICATIONS
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

MODIFIED
MODIFIED HARTREE-FOCK CALCULATIONS FOR ATOMS. 4-26

AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

MODIFIED PHASE SHIFT ANALYSIS OF THE $I = 0$ K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

MODULAR
MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-34

MODULATED
AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

MODULATION
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

MODULI
ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

MODULUS
INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

MOLDING
INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-11

MOLECULAR
STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

MOLECULE
VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

MOLECULES
EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

MOLTEN
INERT ELECTRODE BEHAVIOR IN CADMIUM CADMIUM IODIDE MOLTEN ELECTROLYTES. 7-11

MOLYBDENUM
HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

2

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

MOMENT
ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

MOMENTUM
MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

MONAL
ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

MONITORING
ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

MONKEYS
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

MONOANTIMONY
DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

MONOBISMUTH
DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

MONOCARBIDE
ENTHALPY OF FORMATION OF NEPTUNIUM MONOCARBIDE. 7-10

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

MONOCLINIC
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

MONOPOLE
THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

MONOXIDE
STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

MONTE
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE.

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES WATER CLATHRATES.

MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES.

MCN: A NEUTRON MONTE CARLO CODE.

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM.

MONTE CARLO SAMPLER.

MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS.

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES.

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION O THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS.

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHER (1962) TO AN ALTITUDE OF 90 KILOMETERS.

MORPHOLOGY
LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGE IN SURFACE MORPHOLOGY.

EFFECT OF MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE MATERIALS.

MORTALITY
LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS.

MOSSBAUER
THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER.

MOTION
RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS.

REDUCED PROPER MOTION DIAGRAMS.

REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALO

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIAL SYMMETRIC ELECTROMAGNETIC TECHNIQUE.

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION.

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATE

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION.

MOTOR
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGU MOTOR SHAFT VELOCITY.

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGU MOTOR SHAFT VELOCITY.

MOUNTAIN
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUN

MOUSE
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS.

MOVIES
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES.

OR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER
ON IRRADIATION AT HIGH TEMPERATURE. 27-1

ONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON
IDE ION. 4-8

CAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS.
10-19

M
TUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL
ECTIONS. 24-84

OMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID
EN. 28-7

EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

SSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF
25-9

NG
NMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS
FIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

NMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS
FIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

ATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60
TION IN BEAGLES AND MONKEYS. 5-11

MONY
M MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE
L STRUCTURE. 9-9

UTH
M MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE
L STRUCTURE. 9-9

IDE
Y OF FORMATION OF NEPTUNIUM MONOCARBIDE. 7-10

FFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE -
M DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

FFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE -
M DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

ON OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
RBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.
28-6

ON OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
RBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.
28-6

C
HES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND
M SESQUIOXIDE CUBIC. 7-8

ONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES
209. 24-152

THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON
E AND NITROGEN. 4-45

NIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON
E ION. 4-8

VITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER
19-25

D MONTE CARLO CALCULATIONS OF THE POLARIZATION
ERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL
RES. 1-4

PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION
IONS IN A BIOME. 5-8

RLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF
BRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM
6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

MCN: A NEUTRON MONTE CARLO CODE. 20-29

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

MONTE CARLO SAMPLER. 20-36

MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT.
23-14

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.
23-21

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

MORPHOLOGY
LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

EFFECT OF MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE MATERIALS. 22-9

MORTALITY
LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

MOSSBAUER
THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

MOTION
RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS.
1-25

REDUCED PROPER MOTION DIAGRAMS. 3-10

REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG.
3-11

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION. 17-14

MODEL FOR CALCULATING THE MOTION OF HOT ELECTRON DRIVEN MATERIAL.
19-39

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION. 19-41

MOTOR
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

MOUNTAIN
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY.
29-28

MOUSE
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

MOVIES
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

2

MTR
MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

MULTICHANNEL
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

MULTICOMPONENT
2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

MULTIGROUP
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION. 17-12

LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-29

PROBLEMS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS SECTIONS. 24-122

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

MULTIMODE
MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

MULTIPLE
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-62

RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE. 24-134

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

MULTIPLE SCATTERING OF PIONS BY CARBON -12. 24-86

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

MULTIPLET
1F 7/2 MULTIPLET IN CALCIUM -42. 24-4

MULTIPOLE
PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-4

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

MULTITABLE
MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION. 17-12

MULTIWIRE
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-

USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS. 20-

MUNICIPAL
SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-

MUON
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-

STOPPED MUON CHANNEL. 21-

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-

MUONIC
SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-

MUONS
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-3

MUSCLE
EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND MUSCLE. 16-

MUX
MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING. 20-

MV
SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-2

MW
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-2

MWPC
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-2

MYXIN
INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

M1
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-1

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-4

N
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

NANOSECOND
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-1

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-1

NATIONAL
FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF OHIO. 25-9

NATURAL
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-1

CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-4

NE-213
ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

NEEDS
RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-1

ENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL
ING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

L
A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL
N A PDP-9/ PDP-15 COMPUTER. 20-28

ENT
DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR
MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

IONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS
TIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN 17-24

S TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT
OMPRESSIBLE FLOW CALCULATIONS. 17-5

P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE
NDF. 17-10

E MULTIGROUP PHOTON PRODUCTION CROSS SECTION
ON. 17-12

CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP
ODUCTION MATRICES. 17-9

P MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

ME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR
ON OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

IONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

EORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-29

ND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS 24-122

EUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN,
LICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE
SSOR. 20-38

ASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON
S. 20-62

ERIMENTS ON MULTIPLE NEUTRON CAPTURE. 24-134

EACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

CATTERING OF PIONS BY CARBON -12. 24-86

ULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS
GS NEAR THE 3-3 RESONANCE. 26-6

IPLET IN CALCIUM -42. 24-4

E MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-41

LATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV
NSITION OF HAFNIUM -180. 24-106

E MULTIGROUP PHOTON PRODUCTION CROSS SECTION
ON. 17-12

LICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION
ETECTION OF MINIMUM IONIZING PARTICLES. 18-3

LICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION
ETECTION OF MINIMUM IONIZING PARTICLES. 18-4

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL
CHAMBERS. 20-18

USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS. 20-73

MUNICIPAL
SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS,
1947-1971. 29-23

MUON
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-59

STOPPED MUON CHANNEL. 21-66

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT
LOW ENERGIES. 24-114

MUONIC
SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

MUONS
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND
NEGATIVE MUONS. 5-30

MUSCLE
EVALUATION OF MASS ENERGY ABSORPTION COEFFICIENTS OF BONE AND
MUSCLE. 16-9

MUX
MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING. 20-39

MV
SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY
PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

MW
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

MWPC
USING THE CA3054 MWPC AMPC AMPLIFIER. 18-22

MYXIN
INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

M1
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN
THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1
RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT
-58. -58. 24-49

N
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY
PROBLEM. 26-1

NANOSECOND
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE
INTENSIFIERS. 12-14

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE
INTENSIFIERS. 18-13

NATIONAL
FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF
OHIO. 25-9

NATURAL
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

CONTINUATION OF FUNCTIONS BEYOND NATURAL BOUNDARIES. 26-4

NE-213
ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213
NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

NEEDS
RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

2

NEGATIVE
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS. 5-47

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

NEODYMIUM
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144. 24-101

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

NEON
VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-89

STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

NEPTUNIUM
ENTHALPY OF FORMATION OF NEPTUNIUM MONOCARBIDE. 7-10

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NETWORK
LASL COMPUTER NETWORK. 20-25

NEUTRAL
CONFIGURATIONS 4F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM. 4-6

NEUTRINO
NEUTRINO FACILITY. 21-34

NEUTRINO - DEUTERON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES. 24-87

NEUTRON
DETERMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON DIFFRACTION. 9-7

FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

LASL INTENSE 14 MEV NEUTRON SOURCE. 10-35

ACCURATE MEASUREMENT OF THE COUNTING EFFICIENCY OF A NE-213 NEUTRON DETECTOR BETWEEN 2 AND 26 MEV. 18-1

DESIGN OF ALBEDO NEUTRON DOSIMETERS. 18-7

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS.

MCN: A NEUTRON MONTE CARLO CODE.

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS.

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY.

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS.

PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS.

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA A FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR.

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS.

NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES.

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AG TO CARBON CROSS SECTIONS.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION O THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK.

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES.

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-F PROGRAM.

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-F PROGRAM.

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3.

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV.

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION.

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION C SECTIONS OF OXYGEN.

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION O SECTIONS FOR ALUMINUM.

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV.

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION C SECTIONS OF OXYGEN.

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS.

RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE.

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION.

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION.

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION.

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION.

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY.

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA.

NG THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND
S. 5-30

NG THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND
S. 5-30

ADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS.
5-40

E PION DOSE DISTRIBUTION CALCULATIONS.
5-47

NS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT
MESON PHYSICS FACILITY. 5-50

UONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC
5-9

LUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS.
21-58

AMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

EXCHANGE SEPARATION AND MASS SPECTROMETRIC
OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED
BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS.
2-33

M : GLASS LASER SYSTEM FOR PLASMA PRODUCTION.
19-29

THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN
24-101

MIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA)
24-74

MIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA)
24-74

CTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM
CERIUM ANTIMONIDE. 28-3

M A NEON SEEDED THETA PINCH. 10-89

NE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA)
24-144

MATION OF NEPTUNIUM MONOCARBIDE. 7-10

TIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV
A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

TION STUDY OF THE DECAY OF NEPTUNIUM -239
CONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235
UCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS
3. 24-96

ETWORK. 20-25

F(10)6S6P AND 4F(9)5D6S(2) IN NEUTRAL DYSPROSIUM.
4-6

Y. 21-34

RON INTERACTION CROSS SECTIONS AT LAMPF ENERGIES.
24-87

F THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON
9-7

LICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER
10-22

EV NEUTRON SOURCE. 10-35

EMENT OF THE COUNTING EFFICIENCY OF A NE-213
R BETWEEN 2 AND 26 MEV. 18-1

NEUTRON DOSIMETERS. 18-7

FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS.
18-9

MCN: A NEUTRON MONTE CARLO CODE. 20-29

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

MESON FACTORY AS A NEUTRON IRRADIATION FACILITY. 21-33

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS.
22-31

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES.
23-15

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.
23-21

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-22

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION.
24-115

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-118

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM. 24-119

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-120

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

RECENT EXPERIMENTS ON MULTIPLE NEUTRON CAPTURE. 24-134

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-149

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

2

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

COUPLED NEUTRON GAMMA RAY MULTIGROUP-CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-48

ACCURATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

HIGH RESOLUTION NEUTRON CROSS SECTIONS. 24-60

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-68

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

MEDIUM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-88

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

NEUTRONIC

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-1

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

NEUTRONS

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-6

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-1

RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-4

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-6

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 25-2

NEW

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-1

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-2

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-2

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-4

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-4

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-9

NEWTONS

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-2

NICKEL

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-1

LLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE E 0 TO 2.8 MEV. 24-21

LED NEUTRON GAMMA RAY MULTIGROUP-CROSS SECTIONS FOR NITROGEN, EN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

UATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR ONIUM -239 AND PLUTONIUM -240. 24-43

UATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR IUM -235 AND URANIUM -238. 24-44

UATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS NITROGEN. 24-45

UATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS NITROGEN. 24-46

TATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) ONIUM -235 REACTION. 24-48

RATE 20-30 MEV NEUTRON FLUX MEASUREMENTS. 24-5

A RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON ACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

RESOLUTION NEUTRON CROSS SECTIONS. 24-60

INTENSE 14 MEV NEUTRON SOURCE. 24-68

LS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) TION. 24-74

UM AND LOW ENERGY NEUTRON CROSS SECTION LIBRARY. 24-78

ENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL S SECTIONS. 24-84

RON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP SHOLD. 24-88

RON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR N. 24-89

YZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION ON (PROTON, NEUTRON) HELIUM -3. 24-9

LE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON RROGATION. 25-10

PIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

UREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

UREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE GY OF THE NEUTRON INDUCING FISSION. 25-15

UREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE GY OF THE NEUTRON INDUCING FISSION. 25-15

RON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

ORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM PLUTONIUM IN FUEL RODS. 25-7

VIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER RON IRRADIATION AT HIGH TEMPERATURE. 27-1

CT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

CT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL S. 27-3

CT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS MPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

RON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM MONIDE, AND CERIUM ANTIMONIDE. 28-3

NIC

RONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER ATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

NEUTRONS

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-142

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-143

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 25-24

NEW

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING. 19-42

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

NEWTONS

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

NICKEL

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

2

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

NILSSON
E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-35

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-36

NIOBIUM
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

NITRATE
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

NITRIC
EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

NITRIDE
X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

NITRIDES
PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

NITROGEN
FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS. 4-19

FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS. 4-19

FORMATION OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND EXCITED NITROGEN 2 PLUS. 4-19

PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

THORIUM NITROGEN OXYGEN PHASE DIAGRAM. 7-23

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA.

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN.

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITRO OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN.

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECT FOR NITROGEN.

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECT FOR NITROGEN.

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN.

NMR
CARBON -13 NMR OF PARAMAGNETIC COMPLEXES.

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS.

PULSE NMR RELAXATION STUDY OF LIQUID ARSINE.

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS.

SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE.

CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS.

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON - ENRICHED CHLOROPHYLLS A AND B.

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS.

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA.

NOISE
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS.

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS.

NON-HYGROSCOPIC
AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS.

NON-METALLIC
DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL.

NONDESTRUCTIVE
CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS.

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY.

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCL FUEL CYCLE.

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES.

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY O FISSIONABLE MATERIALS.

NONLINEAR
NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM.

NONLINEAR OPTICS CODE.

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS.

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH.

SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM.

TTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON 80, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT 24-49

OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT 24-49

COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM N. 24-72

ON PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 1). 24-35

ON PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 1). 24-36

DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

LLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, OBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

ENTED AQUATIC MODEL OF THE REL ATIONSHIP BETWEEN CARBONATE TE IN A GREAT PLAINS RESERVOIR. 7-6

ROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

TINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND 7-17

RACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - CARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

YERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN 22-26

NAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON ARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE RS. 22-42

ATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY ND NITRIDES. 22-27

OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND TROGEN 2 PLUS. 4-19

OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND TROGEN 2 PLUS. 4-19

OF NITROGEN 3 PLUS IN COLLISIONS BETWEEN NITROGEN 2 AND TROGEN 2 PLUS. 4-19

RPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, RGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

IGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS CULAR NITROGEN. 4-43

HE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON AND NITROGEN. 4-45

ISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF OLECULAR ION. 4-46

TINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND 7-17

TROGEN OXYGEN PHASE DIAGRAM. 7-23

D AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF OILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

-15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR NS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

NMR

CARBON -13 NMR OF PARAMAGNETIC COMPLEXES. 13-1

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

PULSE NMR RELAXATION STUDY OF LIQUID ARSINE. 13-11

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

NOISE

SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

NON-HYGROSCOPIC

AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-2

NON-METALLIC

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL. 2-9

NONDESTRUCTIVE

CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

NONLINEAR

NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES. 10-50

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-52

NONLINEAR OPTICS CODE. 19-43

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

2

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

NONLINEARITIES
EXPERIMENTAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON ELECTRODYNAMIC NONLINEARITIES. 4-16

NONUNIFORM
NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

NONURBAN
VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

NORM
MINIMUM NORM DIFFERENTIATION FORMULAS. 20-33

NORMAL
ON COMPLETELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY. 20-43

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

NORMALITY
COMPARATIVE STUDIES OF SOME TESTS OF NORMALITY. 20-6

NOTCHES
TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

NOVA
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

NOVEMBER
CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

NOZZLES
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

NPL
NUCLEON PHYSICS LABORATORY (NPL). 21-37

NUCLEAR
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

ANALYSIS OF NUCLEAR FUELS. A REVIEW. 2-4

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

NUCLEAR REACTIONS OF IMPORTANCE IN ASTROPHYSICS. 3-5

EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY. 8-1

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-24

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-25

ENERGY AND THE FUTURE OF NUCLEAR FUSION. 10-20

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE. 13-9

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

NUCLEAR CHEMISTRY FACILITIES. 21-36

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMDS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

NUCLEAR LEVELS IN RHENIUM -188. 24-92

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-95

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2 PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY -126, 127, 128. 24-97

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

ES
TAL INNER ELECTRON BINDING ENERGIES AND LIMITS ON
NAMIC NONLINEARITIES. 4-16

M CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

DRM DIFFERENTIATION FORMULAS. 20-33

TELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY. 20-43

LATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV
ANSITION OF HAFNIUM -180. 24-106

VE STUDIES OF SOME TESTS OF NORMALITY. 20-6

SIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS
CTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN 17-24

PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

EARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF
ROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

Y OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES
CONDENSATION. 29-5

HYSICS LABORATORY (NPL). 21-37

TION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION
ROMETRIC MEASUREMENTS. 2-10

ES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE
ENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND
AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

F NUCLEAR FUELS. A REVIEW. 2-4

L METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL
GRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

N OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE
TION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

N OF PRECISE METHODS IN DETERMINING PLUTONIUM AND
UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

EACTIONS OF IMPORTANCE IN ASTROPHYSICS. 3-5

RASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1.
RIAL AND NUCLEAR CHANGES. 5-19

N OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE
RY. 8-1

TEMPERATURE NUCLEAR PHYSICS. 8-24

TEMPERATURE NUCLEAR PHYSICS. 8-25

D THE FUTURE OF NUCLEAR FUSION. 10-20

RGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF
USION ENERGY. 10-91

NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13
HLOROPHYLLS A AND B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE. 13-9

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

NUCLEAR CHEMISTRY FACILITIES. 21-36

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

FISSION CROSS SECTIONS OF NEPTUNIUM -237 FROM 20 EV TO 7 MEV DETERMINED FROM A NUCLEAR EXPLOSIVE EXPERIMENT. 24-54

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

NUCLEAR LEVELS IN RHENIUM -188. 24-92

NUCLEAR MATRIX ELEMENTS IN THE FIRST FORBIDDEN BETA DECAY OF MERCURY -203. 24-93

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-95

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2 PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY -126, 127, 128. 24-97

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

2

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

NUCLEAR ENERGY AND THE ENVIRONMENT. 29-12

NUCLEAR ROCKET REFERENCE DATA SUMMARY. 29-13

PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-22

FUTURE DEVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS. 29-6

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

NUCLEI
NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-47

PREDICTIONS FOR SUPERHEAVY NUCLEI. 24-117

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-133

ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI. 24-157

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-80

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

NUCLEIC
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

NUCLEON
NUCLEON PHYSICS LABORATORY (NPL). 21-37

NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-100

NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-100

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING T PION EXCHANGE.

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING T PION EXCHANGE.

SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG.

SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG.

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI.

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEO NUCLEON BREMSSTRAHLUNG.

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEO NUCLEON BREMSSTRAHLUNG.

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS.

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS.

NUCLEUS
VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN.

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS.

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE.

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE.

K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION.

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS.

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE.

NULL
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITA GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE.

NUMBER
WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES.

DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER.

ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT.

NUMBERS
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTU NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV.

NUMERICAL
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES.

NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS.

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM.

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLES PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS.

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION.

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION.

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES.

ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, R - DECEMBER 1971. 25-21

SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

IOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN EXPLOSIONS. 29-11

ENERGY AND THE ENVIRONMENT. 29-12

ROCKET REFERENCE DATA SUMMARY. 29-13

ARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

N ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

F THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-22

EVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS. 29-6

PERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR NGINE PROGRAM (ROVER). 29-8

ULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY 15-10

CE STRUCTURE IN (TRITON,PROTON-FISSION) AND N,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

ION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

ON OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND NUCLEI. 21-47

NS FOR SUPERHEAVY NUCLEI. 24-117

ON OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN 24-124

XPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND OTON). REACTIONS ON LIGHT NUCLEI. 24-133

CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

EON TRANSFER AND SPHERICAL NUCLEI. 24-157

DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS ROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL IONS. 24-16

DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS ROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL IONS. 24-16

CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE 24-162

THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

ON OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

RETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) IN NUCLEI. 24-52

PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM 24-80

ND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN M IN CULTURED CHINESE HAMSTER CELLS. CONTINUED IC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF NUCLEIC ACID (DNA) SYNTHESIS. 5-22

HYSICS LABORATORY (NPL). 21-37

NUCLEON BREMSSTRAHLUNG. 24-100

NUCLEON BREMSSTRAHLUNG. 24-100

ON EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-141

SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-141

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI. 24-157

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-19

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-19

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

NUCLEUS

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

K-MINUS NUCLEUS INTERACTION AND ITS INTERPRETATION. 24-66

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

NULL

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

NUMBER

WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

NUMBERS

CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

NUMERICAL

NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-52

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION. 17-14

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

2

NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-18

NUMERICAL STUDY OF UNDULAR BORES. 17-19

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

IMPROVED METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-41

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-42

THEOREM ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 20-64

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

NUMERICALLY
MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA. 10-45

NUONS
CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

NWEF
AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

O
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

OAK
APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

OBJECTS
ORIGIN OF QSOS (QUASISTELLAR OBJECTS). 3-7

OBLIQUE
PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

OBSERVATIONS
TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT OF A SUBSTORM. 1-8

X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

OCCURRENCE
OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS.

OCS
NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING

OCTOBER
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970.

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY O PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971.

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971.

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGR OCTOBER 1 TO DECEMBER 31, 1971.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM F THE PERIOD ENDING OCTOBER 31, 1972.

ODD
PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES.

ODD COUPLE: ECOLOGY AND ECONOMICS.

OH
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

OHIO
FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OHIO.

OLEFINS
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR.

OLIGODEOXYRIBONUCLEO
INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES.

OLIVINE
ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS.

ON-LINE
MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING.

ONE
LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS.

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMET L EQUALS ONE PINCH.

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS.

PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES.

THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES.

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES.

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS.

ONE AND THREE QUASIPARTICLE STATES IN TIN -121.

ONE PLUS STATES AND THE 1F-2P SHELL MODEL.

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50.

ONSET
THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR TH PLASMA FREQUENCY.

OPACITIES
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET.

AL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED
CE BETWEEN TWO FLUIDS. 17-16

AL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC
ED JET FLOWS. 17-17

AL SIMULATION OF AIR POLLUTION IN THE VICINITY OF
S. 17-18

AL STUDY OF UNDULAR BORES. 17-19

AL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING
S IN TWO DIMENSIONS. 19-44

LUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS
IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION.
20-14

TION OF FAST POISSON SOLVERS TO THE NUMERICAL
MATION OF PARABOLIC PROBLEMS. 20-2

D METHOD FOR NUMERICAL CONFORMAL MAPPING. 20-24

CAL QUADRATURE BY THE EPSILON ALGORITHM. 20-41

CAL QUADRATURE BY THE EPSILON ALGORITHM. 20-42

M ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION.
20-64

E ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE
RT EQUATION. 23-9

LLY
BILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL
RIA. 10-45

ATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC
ATION 5-9

NSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR
PE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

NT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND
E COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

TION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM
AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS.
25-3

XPERIENCE WITH MONAL AT OAK RIDGE. 25-4

OF QSOS (QUASISTELLAR OBJECTS). 3-7

TRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES.
10-56

OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE
ON OF PBX 9404 BY OBLIQUE IMPACT. 14-7

ONS
STORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL
A SUBSTORM. 1-32

LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL
EN GEOCORONA AT 18 EARTH RADII. 1-35

NATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT OF
ORM. 1-8

SERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS.
3-18

ATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION
4-31

ELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON
FREQUENCY. 10-90

E OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75
ER CUBIC CENTIMETER PETN. 14-15

CE
ENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN
LY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN
RADIANTLY HEATED TARGET PLASMAS. 19-46

OCS
NEW INFRARED LASER LINE IN OCS AND NEW METHOD FOR C ATOM LASING.
19-42

OCTOBER
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE
TESTING THROUGH OCTOBER 1970. 2-1

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH
PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF
PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS
PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM,
OCTOBER 1 TO DECEMBER 31, 1971. 27-15

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR
THE PERIOD ENDING OCTOBER 31, 1972. 29-20

ODD
PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON
SCATTERING ON THE ODD TIN ISOTOPES. 24-107

ODD COUPLE: ECOLOGY AND ECONOMICS. 29-14

OH
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND
THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

OHIO
FIELD ASSAY EXPERIENCE WITH THE MONAL AT NATIONAL LEAD COMPANY OF
OHIO. 25-9

OLEFINS
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN
PEROXIDE VAPOR. 7-14

OLIGODEOXYRIBONUCLEO
INITIATION OF IN VITRO RNA SYNTHESIS WITH
OLIGODEOXYRIBONUCLEOTIDES. 5-28

OLIVINE
ADDITIONAL DATA ON THE COMPRESSION OF OLIVINE TO 140 KILOBARS.
22-1

ON-LINE
MUX, A SIMPLE APPROACH TO ON-LINE COMPUTING. 20-39

ONE
LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE
DIMENSIONAL VLASOV PLASMAS. 10-36

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC
L EQUALS ONE PINCH. 10-38

CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION
ZONE KINETICS. 14-1

PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL
HYDRODYNAMICS CODES. 17-20

THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED
POWER PROPERTIES. 20-65

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES.
21-42

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-59

ONE AND THREE QUASIPARTICLE STATES IN TIN -121. 24-103

ONE PLUS STATES AND THE 1F-2P SHELL MODEL. 24-104

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48
(HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

ONSET
THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE
PLASMA FREQUENCY. 10-81

OPACITIES
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET.
3-4

2

ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

OPERATING
CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

OPERATION
OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

OPERATIONS
CRITICALITY CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23-7

OPERATORS
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

OPTICAL
CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

CAN THE OPTICAL FLUCTUATIONS OF 3C 273 BE RANDOM 3-1

OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

INVESTIGATION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-5

ELECTRICAL BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL FIELD. 19-16

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

LARGE FARADAY - EFFECT OPTICAL ISOLATOR. 19-28

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS. 21-19

OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

OPTICS
NONLINEAR OPTICS CODE. 19-43

OPTIMIZING
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

OPTIONS
EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

ORDER
ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

ORDINATE
SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

ORDINATES
NEUTRONIC ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE ORDINATES. 23-16

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

ORGANIC
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANG
DISPERSIONS OF A THREE PRISM SPECTROGRAPH.

ORGANOMETALLIC
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULF
COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BOND

ORIENTATION
APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE
THERMOMETRY.

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE.

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS O
ERBIUM -171 AND YTTERBIUM -169, 175.

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184
184M.

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133.

NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY - 126, 127,
128.

ORIENTATIONAL
ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM.

ORIENTED
ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUC

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTE
ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIO
EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL
CORRELATIONS.

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED
ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATION
EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL
CORRELATIONS.

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENT
TANTALUM -182.

ORIFICES
MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES.

ORIGIN
ORIGIN OF QSOS (QUASISTELLAR OBJECTS).

ORIGINS
ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY.

ORTHOGONAL
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N
PROBLEM.

OSCILLATORS
NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH.

OSMIUM
SEARCH FOR ISOMERISM IN OSMIUM -193.

OUTBURSTS
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS.

OUTFLOW
OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEAT

OUTLETS
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP
EFFLUENT OUTLETS.

OUTLIERS
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS.

OVERLAYED
PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES.

TRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

M-252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND PROCEDURES MANUAL. 25-5

AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR 21-38

Y CONTROL IN OPERATIONS WITH FISSILE MATERIAL. 23-7

UCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY N EXTENSION OF THE PATTERN CALCULUS RULES AND THE SPLITTING IN U(3)*. 20-45

UCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY HE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL 20-46

UCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY HE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL 20-46

TATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

TICAL FLUCTUATIONS OF 3C 273 BE RANDOM 3-1

N OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION 4-30

NS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION 4-31

ION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

ENERATED OPTICAL SOUND TRACKS. 12-5

BREAKDOWN OF GASEOUS MEDIA BY AN INTENSE OPTICAL 19-16

EMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN EOUS PLASMA. 19-26

ADAY - EFFECT OPTICAL ISOLATOR. 19-28

CHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY SOLID TARGETS. 19-47

CHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM TICAL ABERRATIONS. 21-19

DELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

DEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

OPTICS CODE. 19-43

VE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: EAK TRANSMITTANCES. 2-27

ESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT NS. 23-10

NAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

ARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION TE ORDINATE CODES. 23-23

ANALYSIS OF A CTR BLANKET BENCHMARK BY DISCRETE 23-16

E DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR N OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

DINATES METHODS FOR THE NUMERICAL SOLUTION OF THE QUATION. 23-9

ORGANIC
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

ORGANOMETALLIC
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

ORIENTATION
APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY. 8-1

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-95

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NUCLEAR ORIENTATION STUDY OF THE DECAYS OF ANTIMONY - 126, 127, 128. 24-97

ORIENTATIONAL
ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

ORIENTED
ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

ORIFICES
MONTE CARLO ANALYSIS OF THE BEHAVIOR OF DIVERGENT CONICAL EFFUSION ORIFICES. 17-11

ORIGIN
ORIGIN OF QSOS (QUASISTELLAR OBJECTS). 3-7

ORIGINS
ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

ORTHOGONAL
APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

OSCILLATORS
NONLINEAR COUPLED OSCILLATORS: MODAL EQUATION APPROACH. 20-40

OSMIUM
SEARCH FOR ISOMERISM IN OSMIUM -193. 24-140

OUTBURSTS
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

OUTFLOW
OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEATH. 1-18

OUTLETS
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

OUTLIERS
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

OVERLAYED
PATRICIA II, TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

OXIDATION
PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

OXIDE
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL. 2-9

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

HOT PRESSING OF PLUTONIUM -238 OXIDE. 22-21

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-34

OXIDES
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

OXOTETRAFLUOROIODATE
CRYSTAL STRUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V). 9-3

OXYGEN
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

THORIUM NITROGEN OXYGEN PHASE DIAGRAM. 7-23

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-1

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-1

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROS SECTIONS OF OXYGEN. 24-1

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROS SECTIONS OF OXYGEN. 24-1

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-1

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-1

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-2

ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16. 24-7

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

OXYTETRAFLUORIDE
STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE. 9-21

P
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

P-L
GENERAL METHOD FOR SOLVING THE P-L EQUATIONS. 23-12

P-PROCESS
PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-12

P-SUBFOUR
LAPHAN A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

P-SUBZERO
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

P-0
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

PACKING
RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

PAD
APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

PADE
GENERALIZATIONS OF PADE APPROXIMANTS. 26-10

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

PADE APPROXIMANT AND GENERALIZATIONS. 26-22

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

PAGING
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-11

BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE METHOD. 2-21

BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION TRIC END-POINT DETECTION METHOD. 2-24

BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION ETRIC END-POINT DETECTION METHOD. 2-25

NT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN TED MIXED OXIDE FUELS. 2-15

BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION TRIC END-PDINT DETECTION METHOD. 2-24

BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION ETRIC END-POINT DETECTION METHOD. 2-25

N AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE PECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED AND SOURCE MATERIALS. 2-26

ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC TION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED S FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

N OF PRECISE METHODS IN DETERMINING PLUTONIUM AND UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

ION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED TOR FUEL. 2-9

OM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

INUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND 7-17

RATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

G OF PLUTONIUM -238 OXIDE. 22-21

N THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF -238 OXIDE FUELS. 22-34

AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE ES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

OROIODATE
RUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V). 9-3

TION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM RICHED IN OXYGEN -16. 2-11

TION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM RICHED IN OXYGEN -16. 2-11

TION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM RICHED IN OXYGEN -16. 2-11

TION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING 2-12

NT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN TED MIXED OXIDE FUELS. 2-15

APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR CLADDING MATERIALS. 2-30

APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR CLADDING MATERIALS. 2-31

PTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, GON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND EFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND EFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

THORIUM NITROGEN OXYGEN PHASE DIAGRAM. 7-23

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-118

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-120

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

ACTIVE HELIUM -3 ACTIVATION ANALYSIS FOR CARBON AND OXYGEN. 24-7

MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16. 24-76

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

OXYTETRAFLUORIDE
STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE. 9-21

P
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

P-L
GENERAL METHOD FOR SOLVING THE P-L EQUATIONS. 23-12

P-PROCESS
PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

P-SUBFOUR
LAPHAN A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

P-SUBZERO
LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

P-0
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

PACKING
RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

PAD
APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

PADE
GENERALIZATIONS OF PADE APPROXIMANTS. 26-10

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

PADE APPROXIMANT AND GENERALIZATIONS. 26-22

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

PAGING
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-11

2

PAIR
EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

PAIRING
THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206. 24-153

NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

PAJARITO
PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

PALATE
TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION. 29-25

PARA-HYDROGEN
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

PARABOLIC
APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

PARADOX
CLOCK PARADOX - MAJORITY VIEW. 26-2

PARAMAGNETIC
CARBON -13 NMR OF PARAMAGNETIC COMPLEXES. 13-1

PARAMETER
PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-20

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING· WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

ORIENTATIONAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

PARAMETERS
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

PARAMETRIC
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES. 1-19

PARAMETRIC INSTABILITIES OF VLF WAVES. 1-20

NONLINEAR EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES. 10-50

PARAMETRIC INSTABILITIES NEAR THE LOWER HYBRID. 10-55

PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

PARENT
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION.

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58.

PARITY
PARITY VICLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 K GAMMA TRANSITION OF HAFNIUM -180.

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175.

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133.

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENT TANTALUM -182.

PARTIAL
PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE.

PARTICLE
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR W STRUCTURES.

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS

FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY.

PION AND PARTICLE PHYSICS (P3).

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF.

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES.

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF.

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AN DECAY OF 17.8 MIN RUBIDIUM -88.

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LE -208 (DEUTERON,PROTON) LEAD -209 REACTION.

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS.

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS.

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES.

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESC STUDIES.

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE.

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS.

PARTICLES
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES.

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVID THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULAT OF TRANSFER RNA.

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIO PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS.

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.

PARTICULATE
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVID THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULAT OF TRANSFER RNA.

E PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS
THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE 24-162

NON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES
. 24-152

NON PAIRING VIBRATION STATES IN LEAD -206. 24-153

ND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

YNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

LATE CONTACT DURING CONSONANT PRODUCTION. 29-25

EN
PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS
3000 DEGREES KELVIN AT PRESSURES TO 35,000,000
ER SQUARE METER. 12-23

N OF FAST POISSON SOLVERS TO THE NUMERICAL
TION OF PARABOLIC PROBLEMS. 20-2

ADOX - MAJORITY VIEW. 26-2

IC
NMR OF PARAMAGNETIC COMPLEXES. 13-1

R STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

SITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

SITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

R STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL
AMICS CODES. 17-20

EPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N
G: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

ONAL ORDER PARAMETER IN CUBIC DEUTERIUM. 28-4

OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
IDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

ENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER
SECTOR. 10-42

IC EXCITATION OF ELECTROMAGNETIC WAVES. 1-19

IC INSTABILITIES OF VLF WAVES. 1-20

R EVOLUTION OF ELECTROMAGNETIC PARAMETRIC INSTABILITIES. 10-50

IC INSTABILITIES NEAR THE LOWER HYBRID. 10-55

IC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC
TABILITY. 19-10

IC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR
HYBRID FREQUENCY. 19-48

IC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN
OXIDE LASER MEDIA. 19-49

PARENT
POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

PARITY
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

PARTIAL
PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

PARTICLE
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-11

PION AND PARTICLE PHYSICS (P3). 21-44

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-55

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-138

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

FLUCTUATIONS IN CHARGED PARTICLE CROSS SECTIONS. 24-55

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

PARTICLES
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES. 1-29

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

PARTICULATE
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

2

PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

EFFECT OF MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE MATERIALS. 22-9

PARTICULATES
NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

PASS
MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

PASSIVE
PASSIVE ASSAY: INNOVATIONS AND APPLICATIONS. 25-22

PATHS
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

PATRICIA
PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

PATTERN
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

PAULI
PAULI PRINCIPLE AND PION SCATTERING. 26-24

PBX
EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

PDP-11
MICROPROGRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11. 20-51

PDP-15
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

PDP-9
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER. 20-54

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

PEAK
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

PEC
PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

PELLET-TO-PELLET
PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

PELLETS
NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

PENETRATORS
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

PENTACARBONYL
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

PENTACYANOHALOPLATIN
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

PENTAERYTHRITOL
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

PENTAFLUOROANTIMONAT
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

PERCHLORATE
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

PERCHLORIC
PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PERFORMANCE
CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-3

EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-3

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-4

STATUS AND PERFORMANCE OF LAMPF. 21-6

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-2

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

PERIOD
STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-7

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-3

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-5

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-5

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-5

LONG PERIODWATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-1

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-1

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-1

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-2

PERMANENT
ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

PERMISSIBLE
PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-4

PEROXIDE
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

ATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW 17-21

F MORPHOLOGY ON THE CHARACTERISTICS OF PARTICULATE S. 22-9

ES
L CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND ATES ABOUT STRUCTURES. 17-15

PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

SSAY: INNOVATIONS AND APPLICATIONS. 25-22

RLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS IGHT PATHS. 20-37

I. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

RUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY . AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE L SPLITTING IN U(3)*. 20-45

NCIPLE AND PION SCATTERING. 26-24

F TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE N OF PBX 9404 BY OBLIQUE IMPACT. 14-7

F LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL S OF PBX 9404. 14-8

GRAMMED BRANCH DRIVER (MBD) FOR A PDP-11 COMPUTER. 20-31

ER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE 20-51

L: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ON A PDP-9/ PDP-15 COMPUTER. 20-28

L: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ON A PDP-9/ PDP-15 COMPUTER. 20-28

E INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ESSOR. 20-38

SPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

LAY INTERFACE TO A PDP-9 COMPUTER. 20-54

ER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

TIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: G PEAK TRANSMITTANCES. 2-27

ENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

SED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

LLET
NCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY 25-23

C CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT NETRATORS. 11-5

NAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON ARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE ORS. 22-42

PENTACARBONYL
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

PENTACYANOHALOPLATIN
VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

PENTAERYTHRITOL
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

PENTAFLUOROANTIMONAT
STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

PERCHLORATE
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

PERCHLORIC
PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PERFORMANCE
CODE CALCULATIONS OF INITIATION AND PERFORMANCE OF EXPLOSIVES. 14-2

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-40

STATUS AND PERFORMANCE OF LAMPF. 21-61

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

PERIOD
STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

PERMANENT
ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

PERMISSIBLE
PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-41

PEROXIDE
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

2

PERSIMMON
CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

PERTURBATION
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

PERTURBATIONS
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

PETN
PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

PETN-DIPEHN-TRI-PEON
PETN-DIPEHN-TRI-PEON SYSTEM. 14-13

PHASE
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

THORIUM NITROGEN OXYGEN PHASE DIAGRAM. 7-23

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

PHENOMENA
SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE. 1-30

INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

DETONATION PHENOMENA. 14-4

PHEROMONE
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

PHILOSOPHY
ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

PHONON
THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206.

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES.

PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY.

PHOSPHORUS
OBSERVATION OF THE DECAY OF PHOSPHORUS -35.

DECAY OF PHOSPHORUS -35.

PHOSPHORYLATION
RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE.

PHOTO-OXIDATION
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR.

PHOTOABSORPTION
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROG OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY.

PHOTODIODE
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY.

PHOTOGRAPHIC
LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM.

INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER.

PHOTOGRAPHY
FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQ AND EQUIPMENT.

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY.

PHOTOIONIZATION
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FO LOW Z ELEMENTS.

PHOTOLYSIS
THERMAL ACTINOMETER FOR FLASH PHOTOLYSIS.

PHOTOMETER
LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM.

PHOTOMETRIC
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES.

PHOTON
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURC CODE FOR ENDF.

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION.

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATI

LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGRO PHOTON PRODUCTION MATRICES.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATIO THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION SECTIONS OF OXYGEN.

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION SECTIONS FOR ALUMINUM.

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION SECTIONS OF OXYGEN.

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCL NUCLEON BREMSSTRAHLUNG.

PHOTOPEAK
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERANIU DETECTOR SPECTRA.

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTE

OSS SECTION OF PLUTONIUM -238 FROM PERSIMMON.
OF VALUES. 24-24

COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
AN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION
5-38

ELS, DECAYING STATES, AND PERTURBATION THEORY.
24-105

ONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET.
12-15

SERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75
UBIC CENTIMETER PETN. 14-15

TERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR
14-5

I-PEON
-TRI-PEON SYSTEM. 14-13

F STATE AND PHASE DIAGRAM OF DENSE HYDROGEN.
4-13

R A PHASE TRANSITION IN KEL-F
DTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING
E OF THE MAMMALIAN LIFE CYCLE. 5-35

N OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS
THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE.
5-46

ARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE.
7-22

ROGEN OXYGEN PHASE DIAGRAM. 7-23

NTIONS AND CRYSTAL STRUCTURES OF DEUTERIUM.
9-16

NTIONS AND CRYSTAL STRUCTURES OF DEUTERIUM.
9-17

T AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA
ARGE. 10-41

STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE.
13-14

RMINATION OF THE LATE PHASE LUNG CLEARANCE OF
39 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

IONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY
D NITRIDES. 22-27

ASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC
24-82

ASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE
F EXOTIC BARYON RESONANCES. 24-83

TUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID
28-7

ENOMENA IN THE DISTANT MAGNETOSPHERE. 1-30

ACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT
TRATORS. 11-5

PHENOMENA. 14-4

UCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC
PHEROMONE OF THE HONEYBEE. 9-5

HILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF.
21-2

N MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES
24-152

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206. 24-153

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON
COUPLING THEORIES. 24-26

PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY. 28-5

PHOSPHORUS
OBSERVATION OF THE DECAY OF PHOSPHORUS -35. 24-102

DECAY OF PHOSPHORUS -35. 24-32

PHOSPHORYLATION
RELATIONSHIP OF HISTONE PHOSPHORYLATION TO THE CELL CYCLE.
5-48

PHOTO-OXIDATION
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN
PEROXIDE VAPOR. 7-14

PHOTOABSORPTION
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN,
OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

PHOTODIODE
HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-11

PHOTOGRAPHIC
LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM.
5-32

INJECTION MOLDING OF A PHOTOGRAPHIC FILM CANISTER. 12-11

PHOTOGRAPHY
FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES
AND EQUIPMENT. 12-8

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD
CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

PHOTOIONIZATION
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR
LOW Z ELEMENTS. 4-18

PHOTOLYSIS
THERMAL ACTINOMETER FOR FLASH PHOTOLYSIS. 6-13

PHOTOMETER
LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM.
5-32

PHOTOMETRIC
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS:
OPTIMIZING PEAK TRANSMITTANCES. 2-27

PHOTON
LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE
CODE FOR ENDF. 17-10

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION
COMPUTATION. 17-12

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS.
17-7

LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP
PHOTON PRODUCTION MATRICES. 17-9

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF
THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.
23-21

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS
SECTIONS OF OXYGEN. 24-118

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS
SECTIONS FOR ALUMINUM. 24-119

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS
SECTIONS OF OXYGEN. 24-120

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON -
NUCLEON BREMSSTRAHLUNG. 24-19

PHOTOPEAK
MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERANIUM
DETECTOR SPECTRA. 18-12

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER.
20-74

2

PHOTOPRODUCTION
PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

PHYSICAL
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-43

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-43

PHYSICS
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-24

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-25

HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

LOS ALAMOS MESON PHYSICS FACILITY (LAMPF). 21-28

LOS ALAMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS FACILITY). 21-29

NUCLEON PHYSICS LABORATORY (NPL). 21-37

ORIGINS AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

PION AND PARTICLE PHYSICS (P3). 21-44

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

PHYSICS OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 25-24

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

PHYSICS-B
FISSION CROSS SECTION OF CALIFORNIUm -249 FROM PHYSICS-B, TABLE OF VALUES. 24-53

PI
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-43

PI MINUS BEAMS IN RADIOTHERAPY. 5-44

PI-MINUS
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-

PI-N
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-

PI-PLUS
RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI 24-

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-

PICOSECOND
CALORIMETER FOR PICOSECOND LASER PULSES. 19-

PICRYLAMINO
2,6- BIS(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION. 7-1

PICRYLAMNO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-1

PICTURES
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-

PIEZORESISTIVE
PULSED PIEZORESISTIVE GAUGE BRIDGE. 18-

PIN
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PINCH
EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH. 10-

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-

LOW DENSITY LIMIT OF THE THETA PINCH. 10-

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRI L EQUALS ONE PINCH. 10-

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-

MODEL OF A STRAIGHT THETA PINCH. 10-

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-

DUCTION
ODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

VE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

L AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH NCE TO RADIOTHERAPY. 5-42

L AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN Y. 5-43

L AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN HERAPY. 21-43

AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT ALAMOS MESON PHYSICS FACILITY. 5-50

OW TEMPERATURE NUCLEAR PHYSICS. 8-24

OW TEMPERATURE NUCLEAR PHYSICS. 8-25

PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

RLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR IOD JULY 1 - SEPTEMBER 30, 1972. 16-31

LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR ION DAMAGE EXPERIMENTS. 21-25

AMOS MESON PHYSICS FACILITY (LAMPF). 21-28

AMOSSKAIA MEZONNAIA FABRIKA. (LOS ALAMOS MESON PHYSICS Y). 21-29

N PHYSICS LABORATORY (NPL). 21-37

AND HISTORY OF THE LOS ALAMOS MESON PHYSICS FACILITY. 21-39

D PARTICLE PHYSICS (P3). 21-44

ERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE ENDING APRIL 30, 1972. 21-51

ERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE ENDING JULY 31, 1972. 21-52

ERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR RIOD ENDING JANUARY 31, 1972. 21-53

OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

ZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR 24-111

OF DELAYED NEUTRONS: RECENT EXPERIMENTAL RESULTS. 25-24

ERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

ERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY EMBER 30, 1972. 27-12

ERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS AM JANUARY 1 - MARCH 31, 1972. 27-13

ERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS AM OCTOBER 1 - DECEMBER 31, 1971. 27-14

E OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

CROSS SECTION OF CALIFORNIUm -249 FROM PHYSICS-8, TABLE UES. 24-53

ATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND NDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

AL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN Y. 5-43

PI MINUS BEAMS IN RADIOTHERAPY. 5-44

PI-MINUS
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-43

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-80

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

PI-N
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

PI-PLUS
RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI 24-133

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-133

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-80

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

PICOSECOND
CALORIMETER FOR PICOSECOND LASER PULSES. 19-2

PICRYLAMINO
2,6- BIS(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION. 7-1

PICRYLAMNO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-15

PICTURES
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

PIEZORESISTIVE
PULSED PIEZORESISTIVE GAUGE BRIDGE. 18-15

PIN
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PINCH
EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH. 10-21

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-31

LOW DENSITY LIMIT OF THE THETA PINCH. 10-37

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

MODEL OF A STRAIGHT THETA PINCH. 10-46

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

2

PLASMA EXPERIMENTS ON L @ 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-65

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-69

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-89

PINCHES
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

MODELING OF LONG STRAIGHT THETA PINCHES. 10-47

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

TWO STAGE HEATING OF THETA PINCHES. 10-85

PINS
CELLS FOR NONDESTRUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

PION
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

RECENT NEGATIVE PION DOSE DISTRIBUTION CALCULATIONS. 5-47

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS). 21-20

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

LOW ENERGY PION CHANNEL. 21-30

PION AND PARTICLE PHYSICS (P3). 21-44

PION BEAMS AT LAMPF. 21-45

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24

PAULI PRINCIPLE AND PION SCATTERING. 2

PIONEER
SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRI GENERATORS. 18

PIONS
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AN SELECTED NUCLEI. 2

MULTIPLE SCATTERING OF PIONS BY CARBON -12. 2

PIPES
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 1

PLAINS
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBO AND NITRATE IN A GREAT PLAINS RESERVOIR.

PLAN
DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES.

PLANETARY
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-

PLANS
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-

PLANT
FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS.

PLUTONIUM PLANT SAFETY.

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 2

PLASMA
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1

MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL.

OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEATH

PLASMA SHEET VARIATIONS DURING SUBSTORMS.

SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES.

TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM.

COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA.

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM.

CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR.

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 1

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 1

ELECTRON BEAM/PLASMA FOCUS INTERACTION. 1

FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 1

FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN.

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN.

S ON L @ 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC
NCH TOROIDAL SECTOR. 10-61

S ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC
NCH TOROIDAL SECTOR. 10-62

S ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

TS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-65

USION REACTOR BASED ON THE THETA PINCH. 10-67

M THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT 10-69

NCH REACTOR (RTPR). A STUDY OF A PULSED HIGH
R BASED ON THE THETA PINCH. 10-70

NCH REACTOR (RTPR). A STUDY OF A PULSED HIGH
R BASED ON THE THETA PINCH. 10-70

OROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

OROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

UM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

A NEON SEEDED THETA PINCH. 10-89

URES AND THERMAL CONDUCTION IN HIGH ENERGY THETA 10-17

URES AND THERMAL CONDUCTION IN HIGH ENERGY THETA 10-18

TRAIGHT THETA PINCHES. 10-47

TS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z 10-58

OF THETA PINCHES. 10-85

RUCTIVE EXAMINATIONS OF IRRADIATED FUEL PINS. 12-3

SAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND
RES MANUAL. 25-5

OTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

ON DOSE DISTRIBUTION CALCULATIONS. 5-47

OR THE NEGATIVE PION RADIOTHERAPY FACILITY AT
ON PHYSICS FACILITY. 5-50

NNEL AND SPECTROMETER (EPICS). 21-20

IVE PION PRODUCTION BY PROTON - PROTON
UM ENERGIES. 21-3

HANNEL. 21-30

HYSICS (P3). 21-44

F. 21-45

FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO 24-136

P + NUCLEUS YIELDS PION + ... FOR 740 MEV 24-30

US SCATTERING FOR STUDIES OF THE NUCLEAR 24-39

US SCATTERING FOR STUDIES OF THE NUCLEAR 24-40

SCRIPTION OF (PION, PROTON) AND (PROTON,PION)
I. 24-52

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

PAULI PRINCIPLE AND PION SCATTERING. 26-24

PIONEER
SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-38

PIONS
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYOROGEN AND SELECTED NUCLEI. 21-47

MULTIPLE SCATTERING OF PIONS BY CARBON -12. 24-86

PIPES
INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

PLAINS
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

PLAN
DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

PLANETARY
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

PLANS
STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

PLANT
FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

PLUTONIUM PLANT SAFETY. 16-28

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

PLASMA
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1-14

MEASUREMENTS OF PLASMA FLOW IN THE EARTH'S MAGNETOTAIL. 1-15

OUTFLOW OF PLASMA FROM THE MAGNETOTAIL INTO THE MAGNETOSHEATH. 1-18

PLASMA SHEET VARIATIONS DURING SUBSTORMS. 1-21

SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES. 1-29

TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-1

CHARACTERISTICS OF CURRENT IN A PLASMA FOCUS ACCELERATOR. 10-10

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

ELECTRON BEAM/PLASMA FOCUS INTERACTION. 10-15

FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

2

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

MULTIPLE PASS LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: EFFECTIVE COLLISION FREQUENCY AND ELECTRON HEATING. 10-5

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

PLASMA PRESSURE PROFILES OF ZT-1A. 10-64

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-81

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

CURRENT IN THE COLD LASER PLASMA. 19-13

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

CHARACTERISTICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

MODEL FOR THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

PLASMAS
COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS. 10-12

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

PLASTIC
THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

PLATE
NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

PLATING
PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

PLUTONIA
DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

PLUTONIUM
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

ABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM MA. 10-28

MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-3

MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-4

ASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

T AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA ARGE. 10-41

TS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER CTOR. 10-42

S LASER HEATING OF A MAGNETICALLY CONFINED PLASMA. 10-48

MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY: OLLISION FREQUENCY AND ELECTRON HEATING. 10-5

RIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR 10-58

RIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

RIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

RIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC THETA PINCH TOROIDAL SECTOR. 10-61

RIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC THETA PINCH TOROIDAL SECTOR. 10-62

RIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

SURE PROFILES OF ZT-1A. 10-64

SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE US. 10-66

ELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z 10-68

FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE QUENCY. 10-81

UILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

L ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON QUENCY. 10-90

THE COLD LASER PLASMA. 19-13

, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA 19-21

MSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN OUS PLASMA. 19-26

YMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

STICS OF AN ELECTRON BEAM CONTROLLED PLASMA DISCHARGE. 19-3

OLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

THE INSTABILITY ABSORPTION IN A LASER HEATED PLASMA. 19-40

DITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON LASER. 19-50

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

COLLISIONAL ABSORPTION OF LASER LIGHT IN AN EXPANDING PLASMA. 19-7

PLASMAS

COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS. 10-12

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

PARAMETRIC INSTABILITIES AND ANOMALOUS HEATING OF PLASMAS NEAR THE LOWER HYBRID FREQUENCY. 19-48

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

PLASTIC

THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

PLATE

NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

PLATING

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

PLUTONIA

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

PLUTONIUM

DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

2

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS. 2-32

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION. 16-26

PLUTONIUM IN MAN. 16-27

PLUTONIUM PLANT SAFETY. 16-28

PROBLEMS OF PLUTONIUM MEASUREMENT IN THE ENVIRONMENT. 16-29

SIZE CHARACTERISTICS OF PLUTONIUM AEROSOLS. 16-36

SIZE SELECTIVE SAMPLING FOR PLUTONIUM -238. 16-37

HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

HOT PRESSING OF PLUTONIUM -238 OXIDE. 22-21

PLUTONIUM - SCANDIUM SYSTEM. 22-28

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-34

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-40

THERMAL EXPANSION OF PLUTONIUM DIOXIDE. 22-41

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-8

CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVZLUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FO PLUTONIUM -239 AND PLUTONIUM -240. 24-4

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-4

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-5

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-9

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-9

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-1

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-1

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUAR 1 TO MARCH 31, 1972. 27-1

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-1

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRA JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

PMC

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

POCO

HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-2

POINT

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-8

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-2

POINTS

RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

AURORAL INTENSITIES AT CONJUGATE POINTS. 1-3

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

COLLOCATION AT GAUSSIAN POINTS. 20-5

POISSON

APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

POISSON-BOLTZMANN

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

POLARIMETER

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-126

POLARIZATION

BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

Y ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION
RIC END-POINT DETECTION METHDD. 2-24

Y ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION
TRIC END-POINT DETECTION METHOD. 2-25

AND LIMITATIONS OF MASS SPECTROMETRY FOR THE
T OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND
ND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM
MATERIALS. 2-32

ON EXCHANGE SEPARATION AND MASS SPECTROMETRIC
ON OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED
FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS.
2-33

OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE
ON OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS.
2-6

OF PRECISE METHODS IN DETERMINING PLUTONIUM AND
NIRRADIATEO SINTERED MIXED OXIDE NUCLEAR FUEL.
2-7

HE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V)
PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS.
6-5

HE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V)
PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS.
6-5

AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238
1967 - JUNE 30, 1971. 7-16

ATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238
7-3

LF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80
XIDE. 9-11

LF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80
XIDE. 2. 9-12

HE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS
BORATORY, 1944-72. 16-14

MINATION OF THE LATE PHASE LUNG CLEARANCE OF
9 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

NCENTRATIDN IN TISSUES OF A GENERAL POPULATION.
16-26

MAN. 16-27

ANT SAFETY. 16-28

PLUTONIUM MEASUREMENT IN THE ENVIRONMENT.
16-29

ERISTICS OF PLUTONIUM AEROSOLS. 16-36

E SAMPLING FOR PLUTONIUM -238. 16-37

TION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL
22-16

OF PLUTONIUM -238 OXIDE. 22-21

CANDIUM SYSTEM. 22-28

THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF
S OXIDE FUELS. 22-34

NSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES
22-40

NSION OF PLUTONIUM DIOXIDE. 22-41

OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM.
22-8

S SECTION OF PLUTONIUM -238 FROM PERSIMMON.
F VALUES. 24-24

UTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR
9 AND PLUTONIUM -240. 24-43

EVZLUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-48

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE.
25-11

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS.
25-13

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

PMC

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

POCO

HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE.
22-24

POINT

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS.
10-86

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE.
23-26

POINTS

RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS.
1-25

AURORAL INTENSITIES AT CONJUGATE POINTS. 1-3

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

COLLOCATION AT GAUSSIAN POINTS. 20-5

POISSON

APPLICATION OF FAST POISSON SDLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

POISSON-BDLTZMANN

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

POLARIMETER

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS.
24-126

POLARIZATION

BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA.
19-38

2

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-126

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-128

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER. 24-34

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

POLARIZED
SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-150

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

POLICY
ENERGY CRISIS: SOME POLICY ALTERNATIVES. 29-3

POLLUTION
NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-18

POLONIUM
PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

POLYCHLOROTRIFLUOROE
EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUDROETHYLENE) UNDER SHOCK LOADING. 4-14

POLYCRYSTALLINE
ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-11

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY. 22-2

POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-3

POLYNUCLEOTIDES
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

POPULATED
STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-1

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-7

POPULATION
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION. 16-2

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-2

POPULATIONS
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

POROSITY
POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-3

POSITION
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

POSITIVE
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

POST
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

POTENTIAL
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-5

POTENTIALS
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIVE PIONS AND NEGATIVE MUONS. 5-30

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-6

POTTED
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-1

POWDERS
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-3

POWER
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-2

CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-1

ATION AND POLARIZATION TRANSFER IN THE REACTION TRITON
NEUTRON) HELIUM -3. 24-106

ATION AND POLARIZATION TRANSFER IN THE REACTION TRITON
NEUTRON) HELIUM -3. 24-108

ATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

ATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4
NG FROM 11.0 TO 30.3 MEV. 24-110

ATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR
24-111

ATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM
N AT THETA EQUALS ZERO DEGREES. 24-112

ATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM
ION. 24-113

ARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4
ON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS.
24-126

QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT.
24-128

POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON)
EN ELASTIC SCATTERING. 24-160

TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON
SCATTERING. 24-161

R DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON
NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV
PARISON TO POLARIZATION DATA. 24-17

CTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12
PROTON) CARBON -14 REACTION. 24-28

TION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4
ATION TRANSFER EXPERIMENTS. 24-33

N (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER.
24-34

SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID
UM AND TRITIUM. 24-41

4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION
R. 24-58

HOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR
NS. 24-90

BE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-150

SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON
EL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197.
24-42

ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239
ED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235
LEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS
31, 132, 133. 24-96

CHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

S REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

CRISIS: SOME POLICY ALTERNATIVES. 29-3

AL SIMULATION OF AIR POLLUTION IN THE VICINITY OF
S. 17-18

HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210
ALPHA) REACTION. 24-125

OTRIFLUOROE
E FOR A PHASE TRANSITION IN KEL-F
LOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

ALLINE
MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM.
22-11

POLYCRYSTALLINE GRAPHITE WITH CONTROLLED ELECTRICAL CONDUCTIVITY.
22-29

POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-30

POLYNUCLEOTIDES
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE.
5-52

POPULATED
STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

POPULATION
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION.
16-26

SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-22

POPULATIONS
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

POROSITY
POROSITY EFFECTS IN POLYCRYSTALLINE GRAPHITE. 22-30

POSITION
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

POSITIVE
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

POST
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

POTENTIAL
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.
2-19

POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

FOLDING MODEL FOR THE DEUTERON OPTICAL POTENTIAL. 24-56

POTENTIALS
LAMPF: EXPLORING THE MEDICAL POTENTIALS OF NEGATIV E PIONS AND NEGATIVE MUONS. 5-30

LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

POTTED
CEMENT POTTED COILS FOR MUON CHANNEL MAGNETS. 21-10

POWDERS
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS.
22-32

POWER
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION.
10-9

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING.
12-16

2

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-65

REACTOR POWER TRANSIENT STUDIES. 23-19

APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

POWERFUL
POWERFUL GOODNESS OF FIT TEST. 20-49

POWERS
ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

PRE-BUNCHING
PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

PRE-DNA
PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

PRE-EMPLOYMENT
PRE-EMPLOYMENT MEDICAL EVALUATION BY QUESTIONNAIRE. 5-45

PREAMPLIFIER
CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-6

PRECISION
PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-116

PRECURSOR
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

PREDATOR
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-

PREDICTIONS
PREDICTIONS FOR SUPERHEAVY NUCLEI. 2

PREIONIZATION
PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 1

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 1

PREPARATION
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-

2,6- BIS(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION. 7

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 2

PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS. 2

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 2

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 2

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 2

PREPARING
LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 2

PRESIDENT'S
PRESIDENT'S INTERN PROGRAM. 2

VICE PRESIDENT'S VIEW. 2

PRESSING
HOT PRESSING OF PLUTONIUM -238 OXIDE. 2

PRESSURE
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1

PLASMA PRESSURE PROFILES OF ZT-1A. 1

PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 1

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 1

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXID 1

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 1

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 1

PRESSURES
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 1

PREY
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-

AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

R E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

ROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED ES. 20-65

TRANSIENT STUDIES. 23-19

THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

ER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 ENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

ING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD PROTON) LEAD -209 REACTION. 24-159

BUTIONS OF THE ANALYZING POWER IN THE TRITON ON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV N TO POLARIZATION DATA. 24-17

THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ER AT LOW ENERGIES. 24-23

ER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION NEUTRON) HELIUM -3. 24-9

E ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

OM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON CE OF THE PADE APPROXIMANTS. 26-7

ORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR NG APRIL 30, 1972. 29-18

ORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR NG JULY 31, 1972. 29-19

ORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR NG OCTOBER 31, 1972. 29-20

NESS OF FIT TEST. 20-49

ERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 ERGIES LESS THAN 1.0 MEV. 24-13

AND ANALYZING POWERS IN DEUTERON ELASTIC 24-29

A LAMB SHIFT POLARIZED ION SOURCE. 26-25

LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS E PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

MEDICAL EVALUATION BY QUESTIONNAIRE. 5-45

E PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL S. 18-6

REMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 24-116

RSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

ADIATION ON DNA PRECURSOR METABOLISM AND DNA HINESE HAMSTER CELLS. 5-23

PREDATOR
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

PREDICTIONS
PREDICTIONS FOR SUPERHEAVY NUCLEI. 24-117

PREIONIZATION
PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-65

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

PREPARATION
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

2,6- BIS(PICRYLAMINO) -3,5-DINITROPYRIDINE AND A METHOD FOR ITS PREPARATION. 7-1

PREPARATION AND EVALUATION OF MEDICAL -GRADE PLUTONIUM -238 FUELS, JULY 1, 1967 - JUNE 30, 1971. 7-16

PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

PREPARATION OF FERROMAGNETIC NEUTRON ABSORBING MATERIALS. 22-31

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-35

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-36

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

PREPARING
LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

PRESIDENT'S
PRESIDENT'S INTERN PROGRAM. 29-16

VICE PRESIDENT'S VIEW. 29-27

PRESSING
HOT PRESSING OF PLUTONIUM -238 OXIDE. 22-21

PRESSURE
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

PLASMA PRESSURE PROFILES OF ZT-1A. 10-64

PRESSURE MEASUREMENTS FOR COMPOSITION B-3. 14-14

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

AMPLITUDE MODULATED MODE LOCKING IN HIGH PRESSURE CARBON DIOXIDE. 19-1

ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-51

PRESSURES
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

PREY
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

2

PRIMARY
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144. 24-101

PRIMATE
EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

PRINCIPLE
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

PAULI PRINCIPLE AND PION SCATTERING. 26-24

PRISM
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

PROBABILITIES
E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-35

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-36

PROBABLE
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

PROBE
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

PROBE VELOCITY TRANSDUCER. 18-14

PROBLEM
NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-52

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

PROCEDURE
DELTA T TURN-ON PROCEDURE. 21-17

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

PROCEDURES
TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-62

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

PROCEEDINGS
TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS. 21-27

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

PROCESSES
NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS.

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES.

PROCESSING
DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS.

PROCESSOR
GENRD: A FREE FORMAT CARD INPUT PROCESSOR.

MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR.

PRODUCED
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES.

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN.

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JU 1 THROUGH SEPTEMBER 30, 1972.

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASE PRODUCED PLASMAS.

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA.

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA.

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS.

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM.

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM.

PRODUCTION
APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE.

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTO BLANKET DESIGN.

RADIOISOTOPE PRODUCTION AT LAMPF.

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES.

LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF.

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION.

LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES.

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION.

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION.

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES.

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS.

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI.

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS.

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970.

PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS.

SFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS
ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

NSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN
44. 24-101

SE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND 5-21

N OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM
D4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

LE AND PION SCATTERING. 26-24

CY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR
F A THREE PRISM SPECTROGRAPH. 4-23

PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 24-35

PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 24-36

CURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

CKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF
E USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

ULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING
GE COIL. 8-26

TY TRANSDUCER. 18-14

LUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-52

HE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE
MPRESSIBLE IRROTATIONAL CASE STEADY-STATE 17-3

ROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS
NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

NAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

F ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY 26-1

ON PROCEDURE. 21-17

L INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE
TECHNICAL REPORTS AND PAPERS. 29-10

E OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON 20-62

252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND
CEDURES MANUAL. 25-5

AL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS
OCEEDINGS. 20-69

971. 5TH MEETING, LOS ALAMOS, NM. PROCEEDINGS. 21-27

ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. 21-50

PROCESSES
NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES. 24-64

PROCESSING
DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

PROCESSOR
GENRD: A FREE FORMAT CARD INPUT PROCESSOR. 20-20

MULTIMODE INTERFACE BETWEEN A PDP-9 COMPUTER AND A GEOSCIENCE ADC/PROCESSOR. 20-38

PRODUCED
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

STUDY OF LIGHT PRODUCED BY COLLISIONS OF LOW ENERGY HELIUM IONS WITH MOLECULAR NITROGEN. 4-43

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-142

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-143

PRODUCTION
APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

RADIOISOTOPE PRODUCTION AT LAMPF. 12-19

EXCITATION FUNCTIONS FOR THE PRODUCTION OF FISSION ISOMERS IN VARIOUS AMERICIUM ISOTOPES. 15-5

LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

MULTITABLE MULTIGROUP PHOTON PRODUCTION CROSS SECTION COMPUTATION. 17-12

LAPHAN: A CODE TO COMPUTE THE P-SUBZERO TO P-SUBFOUR MULTIGROUP PHOTON PRODUCTION MATRICES. 17-9

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-47

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-59

USE OF LAMPF FOR ISOTOPE PRODUCTION. BRIEFING TO THE AEC DIVISION OF ISOTOPES DEVELOPMENT, DECEMBER 15, 1970. 21-69

PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

2

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-118

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS FOR ALUMINUM. 24-119

PRELIMINARY EVALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS SECTIONS OF OXYGEN. 24-120

PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

PRODUCTION OF P-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN BURNING. 24-124

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-80

TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION. 29-25

PRODUCTS
MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

PROFILES
PLASMA PRESSURE PROFILES OF ZT-1A. 10-64

PROGENITORS
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

PROGRAM
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM 2

SPECIFICATION OF PROGRAM FLOW IN MADCAP VI. 2

TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 2

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 2

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 2

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 2

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM F THE PERIOD ENDING JANUARY 31, 1972. 2

BIOMEDICAL PROGRAM. 2

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA A FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 2

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 2

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 2

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 2

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REP JANUARY - APRIL 1972. 2

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REP MAY -AUGUST 1972. 2

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REP SEPTEMBER - DECEMBER 1971. 2

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 2

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JAN 1 TO MARCH 31, 1972. 2

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM AP 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 2

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JU 1 -SEPTEMBER 30, 1972. 2

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 2

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 2

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGR OCTOBER 1 TO DECEMBER 31, 1971. 2

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PRO JULY 1 TO SEPTEMBER 30, 1972. 2

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 2

PRESIDENT'S INTERN PROGRAM. 2

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FO THE PERIOD ENDING APRIL 30, 1972. 2

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FO THE PERIOD ENDING JULY 31, 1972. 2

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FO THE PERIOD ENDING OCTOBER 31, 1972. 2

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 2

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEA ROCKET ENGINE PROGRAM (ROVER). 2

PROGRAMMER'S
PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR TH PDP-11. 2

ALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS GEN. 24-118

ALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS UMINUM. 24-119

ALUATION OF THE NEUTRON AND PHOTON PRODUCTION CROSS GEN. 24-120

-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 24-123

-PROCESS NUCLEI DURING EXPLOSIVE CARBON AND OXYGEN 24-124

TRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR ND PLUTONIUM -240. 24-43

TRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR D URANIUM -238. 24-44

THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS 24-45

THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS 24-46

DUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON TH URANIUM -235 AND PLUTONIUM -239. 24-57

MENT TO MEASURE THE TRITIUM PRODUCTION FROM MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

UCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM 24-80

CONTACT DURING CONSONANT PRODUCTION. 29-25

F MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY TROMAGNETIC TECHNIQUE. 14-11

ERVATION OF MARKED MASS POINTS IN EXPLOSIVE 14-9

ATION STUDY OF THE DECAY OF NEPTUNIUM -239 CONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 RUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS 33. 24-96

E PROFILES OF ZT-1A. 10-64

TER AND REPRODUCTION CHARACTERISTICS OF MOUSE H X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF RS. 5-13

MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X 45 GENERATIONS OF MALE PROGENITORS. 5-33

N TESTING PROGRAM: PROGRESS REPORT ON TENSILE H OCTOBER 1970. 2-1

ESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS L MATERIALS. 2-35

HODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY MBER 30, 1972. 5-1

M FOR MONTE CARLO SIMULATION OF POPULATION A BIOME. 5-8

F THE LASL CONTROLLED THERMONUCLEAR RESEARCH 2-MONTH PERIOD ENDING OCTOBER 1971. 10-76

LUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS ATORY, 1944-72. 16-14

RT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR - SEPTEMBER 30, 1972. 16-31

VELOPMENT AND APPLICATIONS IN THE LOS ALAMOS PROGRAM. 20-35

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

SPECIFICATION OF PROGRAM FLOW IN MADCAP VI. 20-56

TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

BIOMEDICAL PROGRAM. 21-8

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-20

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

DERIVATION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

PRESIDENT'S INTERN PROGRAM. 29-16

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-22

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

PROGRAMMER'S

PROGRAMMER'S GUIDE TO THE MICROPROGRAMMED BRANCH DRIVER FOR THE PDP-11. 20-51

2

PROGRAMMING
FOCAL LSL PROGRAMMING MANUAL. 20-19

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-53

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-70

PROGRAMS
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

FUTURE DEVELOPMENTS IN AEROSPACE NUCLEAR PROGRAMS. 29-6

PROGRESS
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

PROGRESSION
USE OF FLOW MICROFLUOROMETRY IN DETAILED ANALYSIS OF EFFECTS OF CHEMICAL AGENTS ON CELL CYCLE PROGRESSION. 5-57

PROJECT
EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

PROJECTILE
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

PROJECTILES
FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

PROPAGATION
LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-34

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 10-51

PROPER
REDUCED PROPER MOTION DIAGRAMS. 3-10

REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

PROPERTIES
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES O WATER CLATHRATES. 7-

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETR L EQUALS ONE PINCH. 10-

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-

THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-

SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-

PROPORTIONAL
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-

CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-

USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS. 20-

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-

PROPOSAL
PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-

PROPOSALS
STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-

PROPOSED
EXPERIMENTS PROPOSED FOR LAMPF. 21-

PROPOSED FAST ELECTRONICS FOR EPICS. 21-

PROPULSION
RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-

PROSPECTS
SOME IDEAS AND PROSPECTS IN MATHEMATICS. 20-

PROTACTINIUM
SUPERCONDUCTIVITY OF PROTACTINIUM. 8-21

PROTEIN
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

PROTOCOLS
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

NG MANUAL. 20-19

ME PROGRAMMING SYSTEM FOR MULTICHANNEL
DP-15 COMPUTER. 20-28

SIONAL PROGRAMMING LANGUAGES. 20-53

NGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

GRAMMING LANGUAGES. 20-70

OF CRYSTALLOGRAPHY COMMISSION ON
MPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC
1. CALCULATIONS COMMONLY USED IN CRYSTAL 9-13

S IN AEROSPACE NUCLEAR PROGRAMS. 29-6

STING PROGRAM: PROGRESS REPORT ON TENSILE
OBER 1970. 2-1

HE LARGE SCALE SKID SENSITIVITY TEST. 14-16

ARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF
TO JULY 31, 1971. 22-3

AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM
0, 1972. 22-33

ARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF
T 1 TO OCTOBER 31, 1971. 22-4

ARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF
BER 1, 1971 TO JANUARY 31, 1972. 22-5

ARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF
ARY 1 TO APRIL 30, 1972. 22-6

N MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

ORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED
TION GROUP, LOS ALAMOS SCIENTIFIC
971 THROUGH JUNE 30, 1972. 24-18

HE LASL POLARIZED ION SOURCE. 26-27

REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM
0, 1972. 27-8

REPORT ON THE ADVANCED PLUTONIUM FUELS
JNE 30, 1972. 27-9

OROMETRY IN DETAILED ANALYSIS OF EFFECTS OF
ELL CYCLE PROGRESSION. 5-57

DS FOR THE DETERMINATION OF MERCURY. LASL
RLY REPORT JULY 1 THROUGH SEPTEMBER 30, 16-10

AMPLING TECHNIQUES. LASL PROJECT R-059,
Y 16 THROUGH SEPTEMBER 15, 1972. 16-5

ZED, ROTATING SLIT SHUTTERED DRUM FIELD
LE IN FLIGHT PHOTOGRAPHY. 12-9

PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES 12-8

ION THROUGH IONIZABLE MEDIA. 19-34

HIGH PRESSURE CARBON DIOXIDE LASER 19-51

N DIAGRAMS. 3-10

N DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

PROPERTIES
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

CHARACTERIZATION AND PROPERTIES OF MEDICAL GRADE PLUTONIUM -238 FUELS. 7-3

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

GROUP INVARIANCE PROPERTIES OF THE POISSON-BOLTZMANN AND OTHER NONLINEAR FIELD EQUATIONS. 20-22

THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-65

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-34

SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

PROPORTIONAL
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-6

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

USING MULTIWIRE PROPORTIONAL CHAMBER DECODERS. 20-73

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

PROPOSAL
PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-48

PROPOSALS
STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-65

PROPOSED
EXPERIMENTS PROPOSED FOR LAMPF. 21-21

PROPOSED FAST ELECTRONICS FOR EPICS. 21-49

PROPULSION
RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-22

PROSPECTS
SOME IDEAS AND PROSPECTS IN MATHEMATICS. 20-55

PROTACTINIUM
SUPERCONDUCTIVITY OF PROTACTINIUM. 8-21

PROTEIN
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

PROTOCOLS
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

2

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

PROTON

CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

HIGH RESOLUTION PROTON SPECTROMETER (HRS). 21-23

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

ASYMMETRY IN POSITIVE PION PRODUCTION BY PROTON - PROTON COLLISIONS AT MEDIUM ENERGIES. 21-3

OPERATION AND PERFORMANCE OF THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-38

BEAM MEASUREMENTS ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

PROTON LINEAR ACCELERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. PROCEEDINGS. 21-50

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-114

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-126

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

ANALYZING POWERS IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24-13

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-133

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION.

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50.

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION.

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION.

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS.

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION.

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING.

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING.

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA.

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES.

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES.

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES.

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION.

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRAN

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI.

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI.

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION.

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION.

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES.

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES.

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION.

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI.

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING.

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON.

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3.

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION.

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF.

PROTON-FISSION

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI.

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI.

ING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS
CYCLE TRAVERSE: THE TRAVERSE PERTURBATION 5-38

LAR WIND PROTON ANISOTROPY FROM BULK VELOCITY 1-7

YDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

OTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

MEDIUM ENERGY, INTENSE, PROTON STORAGE RING 21-18

OTON SPECTROMETER (HRS) AT LAMPF. 21-22

OTON SPECTROMETER (HRS). 21-23

VE PION PRODUCTION BY PROTON - PROTON
M ENERGIES. 21-3

VE PION PRODUCTION BY PROTON - PROTON
M ENERGIES. 21-3

ORMANCE OF THE HIGH INTENSITY PROTON INJECTOR 21-38

ON THE HIGH INTENSITY PROTON INJECTOR OF LAMPF. 21-5

LERATOR. 1972. CONFERENCE, LOS ALAMOS, NM. 21-50

DIES ON THE PROTON BEAM LINE IN THE INJECTOR 21-6

EACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM
E -54. 24-1

EACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM
E -54. 24-1

ILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

OUPLING STATES SEEN IN INELASTIC PROTON
DD TIN ISOTOPES. 24-107

LARIZATION TRANSFER IN THE REACTION TRITON
LIUM -3. 24-108

ILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

ER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM
UALS ZERO DEGREES. 24-112

ER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM 24-113

NTERACTION IN MUON - PROTON SCATTERING AT 24-114

THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3
OF MASS FROM 1.5 TO 12 MEV. 24-12

BISMUTH -209 FROM THE POLONIUM -210
ON. 24-125

DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-126

OSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT,
TALUM, AND BISMUTH TARGETS. 24-127

THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4
LESS THAN 1.0 MEV. 24-13

RESULTS FOR (PI-PLUS, 2PROTON) AND
TIONS ON LIGHT NUCLEI. 24-133

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-149

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES. 24-2

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES. 24-2

CALIBRATION OF THE HELIUM -3 (DEUTERON, PROTON) HELIUM -4 ANALYZING POWER AT LOW ENERGIES. 24-23

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER. 24-34

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION. 24-59

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION. 24-59

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES. 24-64

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES. 24-64

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

MODEL FOR PRODUCTION OF PI-PLUS AND PI-MINUS BY PROTON FROM NUCLEI. 24-80

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

PROTON-FISSION
RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

PROTON-X-NEUTRON
STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

PROTONS
NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

PRODUCTION OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND SELECTED NUCLEI. 21-47

PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-129

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-142

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-143

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

ISOTOPIC CARBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

PROTOTYPE
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

MAGNETIC MEASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

PROTRACTED
COMPARATIVE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60 IRRADIATION IN BEAGLES AND MONKEYS. 5-11

PROTRACTION
COMPARATIVE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY CONTINUOUS EXPOSURE. 5-12

EFFECTS OF DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND DOG. 5-21

PROVISIONAL
PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

PROXIMITY
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

NANOSECOND GATING OF PROXIMITY FOCUSED CHANNEL PLATE INTENSIFIERS. 12-14

NANOSECOND FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE INTENSIFIERS. 18-13

PSEUDO
PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

PSEUDOPOTENTIAL
LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND METALS. 4-35

PSEUDOSCALAR
NEUTRON - PROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR MESON. 24-89

PUBLICATIONS
PUBLICATIONS OF LASL RESEARCH 1970. 29-17

PULSATING
CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

PULSATIONS
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

RANDOM PULSATIONS OF CYGNUS X-1. 3-9

PULSE
PULSE NMR RELAXATION STUDY OF LIQUID ARSINE. 13-1

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-1

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-

LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER AMPLIFIERS. 19-

CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-

PULSED
FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-

TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-

PULSED PIEZORESISTIVE GAUGE BRIDGE. 18-

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-

PULSES
CALORIMETER FOR PICOSECOND LASER PULSES. 19-

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-

PUMPING
ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-

INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING. 19-

PURIFIED
SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-

PURITY
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 2-

TRON
(ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON)
IN HEAVY ELEMENT TARGETS. 24-147

RODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL 21-35

N OF CHARGED PIONS BY 730 MEV PROTONS FROM HYDROGEN AND
UCLEI. 21-47

N OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 24-123

SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM 24-129

DF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-142

DF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-143

IONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV 24-30

RBON ANALYSIS WITH LOW ENERGY PROTONS. 25-12

EACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT
ETRATORS. 11-5

EASUREMENTS ON THE LASL PROTOTYPE MAGNET. 21-31

NAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON
RBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE
RS. 22-42

VE BIOLOGICAL EFFECTS OF PROTRACTED COBALT -60
N IN BEAGLES AND MONKEYS. 5-11

VE EFFECTS OF DOSE PROTRACTION BY FRACTIONATION AND BY
S EXPOSURE. 5-12

DOSE PROTRACTION ON HEMATOPOIESIS IN THE PRIMATE AND 5-21

L SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE
US. 10-66

ONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO
ITY OF THE EARTH'S BOW SHOCK. 1-17

D GATING OF PROXIMITY FOCUSED CHANNEL PLATE
S. 12-14

D FRAMING CAMERAS USING PROXIMITY FOCUSED IMAGE
S. 18-13

EN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND 4-35

IAL
D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION
ALINE EARTH METALS. 4-22

EN'S FUNCTIONS AND THE PSEUDOPOTENTIAL THEORY OF D-BAND 4-35

ROTON EXCHANGE CURRENT DUE TO A CHARGED PSEUDOSCALAR 24-89

IS OF LASL RESEARCH 1970. 29-17

D PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION
CS. 14-1

CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY
TIONS. 16-33

CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

RANDOM PULSATIONS OF CYGNUS X-1. 3-9

PULSE
PULSE NMR RELAXATION STUDY OF LIQUID ARSINE. 13-11

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA
PRODUCTION. 19-21

LASER PULSE PROPAGATION THROUGH IONIZABLE MEDIA. 19-34

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-35

PULSE PROPAGATION IN HIGH PRESSURE CARBON DIOXIDE LASER
AMPLIFIERS. 19-51

CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND
GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT
FROM A COMPLEX PULSE. 26-34

PULSED
FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER
INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH
BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER
LASER. 10-84

PULSED PIEZORESISTIVE GAUGE BRIDGE. 18-15

CHEMICAL EFFICIENCY IN A PULSED HYDROGEN FLUORIDE LASER. 19-4

PEC: A PULSED EDDY CURRENT DATA ACQUISITION AND ANALYSIS PROGRAM. 20-48

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE
TO CARBON CROSS SECTIONS. 23-20

PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT. 24-128

PULSES
CALORIMETER FOR PICOSECOND LASER PULSES. 19-2

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH
ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

PUMPING
ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF
PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH
PRESSURE. 19-19

INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING. 19-24

PURIFIED
SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH
RECYCLED, PURIFIED ATMOSPHERES. 22-35

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH
RECYCLED, PURIFIED ATMOSPHERES. 22-36

PURITY
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

PYRENOIDOSA
KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

PYRIDAZINE
STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANDPYRIDINE. 9-22

PYRIDINES
PICRYLAMINO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-15

PYROLYTIC
APPARATUS FOR COATING MICROSPHERES WITH PYROLYTIC CARBON. 22-2

P3
PION AND PARTICLE PHYSICS (P3). 21-44

QSOS
ORIGIN OF QSOS (QUASISTELLAR OBJECTS). 3-7

QUADRATURE
NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-41

NUMERICAL QUADRATURE BY THE EPSILON ALGORITHM. 20-42

QUADRUPOLE
SUPERCONDUCTING QUADRUPDLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

PERMISSIBLE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS. 21-41

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

QUADRUPOLES
HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS. 21-19

QUANTIFICATION
QUANTIFICATION OF SOCIAL VALUES. 16-30

QUANTITATIVE
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

QUANTITIES
PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

QUANTUM
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

QUARTERLY
ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972.

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972.

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM F THE PERIOD ENDING JANUARY 31, 1972.

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FR JULY 1 TO SEPTEMBER 30, 1972.

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JAN 1 TO MARCH 31, 1972.

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM A 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972.

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM J 1 -SEPTEMBER 30, 1972.

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972.

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971.

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROG OCTOBER 1 TO DECEMBER 31, 1971.

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PR JULY 1 TO SEPTEMBER 30, 1972.

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM F THE PERIOD ENDING APRIL 30, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM F THE PERIOD ENDING JULY 31, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM F THE PERIOD ENDING OCTOBER 31, 1972.

QUASIFREE
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCI -40.

QUASIPARTICLE
ONE AND THREE QUASIPARTICLE STATES IN TIN -121.

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES.

QUASISTELLAR
ORIGIN OF QSOS (QUASISTELLAR OBJECTS).

QUEEN
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE.

QUENCH
PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT.

QUESTIONNAIRE
PRE-EMPLOYMENT MEDICAL EVALUATION BY QUESTIONNAIRE.

QUESTIONS
SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG.

QUIET
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE.

R
R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FO THE PERIOD ENDING APRIL 30, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FO THE PERIOD ENDING JULY 31, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FO THE PERIOD ENDING OCTOBER 31, 1972.

A
TUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON
N DIOXIDE. 5-29

S FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH
T CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE
ON SOURCE. 5-4

ES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE
4- CYANOPYRIDINE. 9-22

INO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2).
7-15

S FOR COATING MICROSPHERES WITH PYROLYTIC CARBON.
22-2

PARTICLE PHYSICS (P3). 21-44

QSOS (QUASISTELLAR OBJECTS). 3-7

E
L QUADRATURE BY THE EPSILON ALGORITHM. 20-41

L QUADRATURE BY THE EPSILON ALGORITHM. 20-42

E
DUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM
12-22

LE MULTIPOLE FIELD COMPONENTS IN QUADRUPOLE MAGNETS.
21-41

EMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC
DLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED
GERMANIUM -72 BY COULOMB EXCITATION. 24-137

NON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES
9. 24-152

ES
D GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT
URE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

ECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM
OPTICAL ABERRATIONS. 21-19

ION
CATION OF SOCIAL VALUES. 16-30

E
TIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS:
G PEAK TRANSMITTANCES. 2-27

R PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM
AEROSOL MAN TESTS. 16-34

ION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS
IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE.
5-46

ATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM
AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV.
4-5

ECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH
ENSITY AND QUANTUM EFFICIENCY. 19-55

TOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY
SEPTEMBER 30, 1972. 5-1

ON OF METHODS FOR THE DETERMINATION OF MERCURY. LASL
-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30,
16-10

Y REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR
D JULY 1 - SEPTEMBER 30, 1972. 16-31

ENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059,
Y REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

QUASIFREE
QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-129

QUASIPARTICLE
ONE AND THREE QUASIPARTICLE STATES IN TIN -121. 24-103

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEORIES. 24-26

QUASISTELLAR
ORIGIN OF QSOS (QUASISTELLAR OBJECTS). 3-7

QUEEN
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

QUENCH
PULSED QUENCH METHOD FOR BEAM POLARIZATION MEASUREMENT.
24-128

QUESTIONNAIRE
PRE-EMPLOYMENT MEDICAL EVALUATION BY QUESTIONNAIRE. 5-45

QUESTIONS
SOME BASIC QUESTIONS IN NUCLEON - NUCLEON BREMSSTRAHLUNG.
24-141

QUIET
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

R
R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM.
24-130

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

2

R-059
DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

R-060
EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

RADIAL
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

RADIANT
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

RADIANTLY
OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

RADIATION
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

W VIRGINIS MODEL USING RADIATION TRANSFER. 3-15

EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

HIGH INTENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

IONIZING RADIATION. 16-20

LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

ANGULAR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-14

RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

RADIATIONS
PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

RADIATIVE
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

RADIATIVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

RADII
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-3

RADIO
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-1

RADIOACTIVE
RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-

RADIOBIOLOGICAL
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-4

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-4

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-

RADIOGRAPHIC
SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-

CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT. 20-

RADIOISOTOPE
ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JUL 1 THROUGH SEPTEMBER 30, 1972. 5-1

RADIOISOTOPE PRODUCTION AT LAMPF. 12-

RADIOISOTOPIC
SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-

RADIOLYSIS
RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-1

RADIOMETER
FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER. 18-

RADIOTHERAPY
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-4

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

PI MINUS BEAMS IN RADIOTHERAPY. 5-44

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-

RADIUS
ON THE METALLIC RADIUS OF ACTINIUM. 4-32

RAMAN
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-2

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

RAMAN SPECTRA OF SINGLE CRYSTALS. 4-36

RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-37

RANDOM
CAN THE OPTICAL FLUCTUATIONS OF 3C 273 BE RANDOM 3-1

RANDOM PULSATIONS OF CYGNUS X-1. 3-9

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-

MENT OF AIR SAMPLING TECHNIQUES, LASL PROJECT R-059, RLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

TION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 16-10

OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED 4-42

AL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT PENETRATORS. 11-5

ENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN TLY HEATED TARGET PLASMAS. 19-45

ENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN TLY HEATED TARGET PLASMAS. 19-46

ONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY MEDIUM. 19-8

NCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

RD MONTE CARLO CALCULATIONS OF THE POLARIZATION TERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL HERES. 1-4

NIS MODEL USING RADIATION TRANSFER. 3-15

N OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN S. 4-10

OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF EN MOLECULAR ION. 4-46

ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. ONDRIAL AND NUCLEAR CHANGES. 5-19

ION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

TENSITY ELECTRON ACCELERATOR RADIATION HAZARDS. 16-13

G RADIATION. 16-20

AMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

IUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER ION. 19-14

(LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR ION DAMAGE EXPERIMENTS. 21-25

AR CORRELATIONS OF RADIATION EMITTED FROM ORIENTED NUCLEI. 24-34

ION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

NS
AL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH ENCE TO RADIOTHERAPY. 5-42

AR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS D FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL LATIONS. 24-16

AR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS D FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL LATIONS. 24-16

E
ORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR EMS WITH STEEP SOURCE GRADIENTS. 20-66

IVE CAPTURE OF ENERGETIC NEUTRONS BY LEAD -208. 24-131

RADII
VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN ASPHERICAL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

RADIO
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

RADIOACTIVE
RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

RADIOBIOLOGICAL
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-43

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-43

RADIOGRAPHIC
SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

CONCEPTS OF RADIOGRAPHIC IMAGE ENHANCEMENT. 20-8

RADIOISOTOPE
ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

RADIOISOTOPE PRODUCTION AT LAMPF. 12-19

RADIOISOTOPIC
SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-38

DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

RADIOLYSIS
RADIOLYSIS OF MIXTURES OF CARBON DIOXIDE AND HYDROGEN. 6-11

RADIOMETER
FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER. 18-10

RADIOTHERAPY
NEGATIVE PION RADIOTHERAPY: PHYSICAL AND RADIOBIOLOGICAL ASPECTS. 5-40

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

PI MINUS BEAMS IN RADIOTHERAPY. 5-44

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI-MINUS MESONS IN RADIOTHERAPY. 21-43

RADIUS
ON THE METALLIC RADIUS OF ACTINIUM. 4-32

RAMAN
INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

RAMAN SPECTRA OF SINGLE CRYSTALS. 4-36

RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-37

RANDOM
CAN THE OPTICAL FLUCTUATIONS OF 3C 273 BE RANDOM 3-1

RANDOM PULSATIONS OF CYGNUS X-1. 3-9

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

2

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

RANGE
X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

BERYLLIUM -9 (DEUTERON,NEUTRON) BORON -10 CROSS SECTION IN THE RANGE 0 TO 2.8 MEV. 24-21

RAPID
RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

RAPID SEPARATION AND DETERMINATION OF MERCURY. 2-29

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

RARE
CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

ELECTRON TRANSFER IN COLLISIONS OF DDUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

RAREFACTIONS
COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1-6

RATE
SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY. 6-12

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

RATES
PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES. 6-10

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

RATIO
DETERMINATION OF OXYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM DIOXIDE ENRICHED IN OXYGEN -16. 2-11

MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

ACOUSTIC DEVICE FOR DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3 - HELIUM -4 GAS. 18-2

RATIONAL
RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

RATIOS
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES.

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS.

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KE GAMMA TRANSITION OF HAFNIUM -180.

RAY
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS.

PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4.

MEASUREMENTS OF FILTERED X RAY SPECTRA.

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV.

COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS.

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS.

X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS.

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER.

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIOE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS.

X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS.

ACOUSTIC RAY TRACING IN UNSTEADY FLOWS.

USE OF LAPHANO FDR GAMMA RAY SHIELDING STUDIES.

ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES.

SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER.

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASE PRODUCED PLASMAS.

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144.

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS.

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROG OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN.

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS PLUTONIUM -239 AND PLUTONIUM -240.

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS URANIUM -235 AND URANIUM -238.

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTI FOR NITROGEN.

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTI FOR NITROGEN.

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239.

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WAS

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF.

RROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF
LS. 25-26

ANDOM SOURCE INTERROGATION SYSTEM (RANDOM
IDGE Y-12 PLANT. PRELIMINARY RESULTS.
25-3

ANDOM SOURCE INTERROGATION SYSTEM (RANDOM
IDGE Y-12 PLANT. PRELIMINARY RESULTS.
25-3

EQUAL AND UNEQUAL SPHERES IN TWO AND THREE
26-28

RRORS (NOISE) IN THE TERMS OF A POWER SERIES ON
THE PADE APPROXIMANTS. 26-7

RIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE
300 KV. 4-54

RON,NEUTRON) BORON -10 CROSS SECTION IN THE
24-21

ETRIC DETERMINATION OF BORON ISOTOPIC
ON CARBIDE. 2-28

D DETERMINATION OF MERCURY. 2-29

QUE FOR DETERMINATION OF THE EFFECTS OF
AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE.
5-49

DNVERSION OF NITRIC OXIDE TO NITROGEN AND
7-17

D IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS
FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-4

IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-7

IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-7

TIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE
ION. 24-156

AREFACTIONS IN THE SOLAR WIND: VELA 3.
1-6

ATION OF RATE CONSTANTS BY SCANNING
6-12

TOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND
IT FOR O + H(2) YIELDS OH + H. 6-14

TS OF DIATOMIC DISSOCIATION RATES IN SHOCK
6-10

CAL TRAJECTORY CALCULATION OF THE RATES OF
RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM
6-7

CAL TRAJECTORY CALCULATION OF THE RATES OF
ERIUM - ATOM VIBRATIONAL RELAXATION OF
AND DEUTERIUM FLUORIDE. 6-8

XYGEN -18/OXYGEN -16 ATOM RATIO IN PLUTONIUM
OXYGEN -16. 2-11

E OXYGEN TO HEAVY METAL ATOM RATIO IN
OXIDE FUELS. 2-15

DETERMINING THE ISOTOPIC RATIO OF A HELIUM -3
18-2

NTS FOR INVERSE FUNCTIONS OF TWO VARIABLES.
26-29

RATIOS
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

RAY
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS.
3-16

PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4.
3-8

MEASUREMENTS OF FILTERED X RAY SPECTRA. 4-25

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS.
5-58

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-41

ACOUSTIC RAY TRACING IN UNSTEADY FLOWS. 17-2

USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-25

ELIMINATION OF RAY EFFECTS IN CURVED GEOMETRIES. 17-B

SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER.
18-16

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

OBSERVATION OF THE 7120 KEV, 3- TO 2+1 PRIMARY GAMMA RAY IN NEODYMIUM -144. 24-101

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-116

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN.
24-27

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR PLUTONIUM -239 AND PLUTONIUM -240. 24-43

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR URANIUM -235 AND URANIUM -238. 24-44

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-45

EVALUATION OF THE NEUTRON AND GAMMA RAY PRODUCTION CROSS SECTIONS FOR NITROGEN. 24-46

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE.
25-11

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF.
25-28

2

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

RAYLEIGH-TAYLOR
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

RAYMATH
RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

RAYS
PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

RDX
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

REACTING
NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

REACTION
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

STUDY OF THE KINETICS OF THE REACTION BETWEEN HYDROGEN AND FLUORINE BY EPR METHODS. 13-15

HYDROGEN CHLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE AZIDE REACTION. 19-23

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

ANALYZING POWERS IN THE HELIUM-3 (DEUTERON, PROTON) HELIUM-4 REACTION AT ENERGIES LESS THAN 1.0 MEV. 24- 13

STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION. 24-

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-

REACTIONS
NUCLEAR REACTIONS OF IMPORTANCE IN ASTROPHYSICS. 3-

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES. 24-

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-

REACTIVE
2DE: A TWO DIMENSIONAL CONTINUDUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONEN REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-

REACTOR
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-1

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-3

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-3

MBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE 25-30

OR
THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE OMPRESSIBLE IRROTATIONAL CASE STEADY-STATE 17-3

COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM OSS SECTION EXPERIMENTS. 24-132

SCALING LAWS FOR NEUTRONS AND X RAYS IN A OENSE S. 10-66

OLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

NETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND FROM A NUCLEAR EXPLOSION. 23-11

OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 24-123

TION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE 25-8

TION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE 25-8

OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE DRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING TWO DIMENSIONS. 19-44

OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION CROFLUOROMETRY. 5-2

OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN FOR FLOW MICROFLUOROMETRY. 5-3

EACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM OMINE SYSTEMS. 6-3

THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) O PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

EACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT ETRATORS. 11-5

E KINETICS OF THE REACTION BETWEEN HYDROGEN AND EPR METHODS. 13-15

HLORIDE CHEMICAL LASER FROM HYDROGEN ATOM: CHLORINE TION. 19-23

ON AND POLARIZATION TRANSFER IN THE REACTION TRITON TRON) HELIUM -3. 24-108

ON TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM THETA EQUALS ZERO DEGREES. 24-112

ON TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM 24-113

CITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 ES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

E STATES IN BISMUTH -209 FROM THE POLONIUM -210 HA) REACTION. 24-125

POWERS IN THE HELIUM-3 (DEUTERON, PROTON) HELIUM-4 ENERGIES LESS THAN 1.0 MEV. 24- 13

LUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) 24-144

XCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 ROTON) SCANDIUM -48,50. 24-145

YPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-149

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION. 24-28

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-48

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

HELIUM -4 (PROTON,PROTON) HELIUM -4 REACTION. 24-59

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION. 24-71

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION. 24-72

LEVELS OF NEODYMIUM -151 FROM THE NEODYMIUM -150 (NEUTRON,GAMMA) REACTION. 24-74

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-75

MULTIPLE REACTION CORRECTION TO THE CAPTURE CROSS SECTION. 24-85

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

REACTIONS
NUCLEAR REACTIONS OF IMPORTANCE IN ASTROPHYSICS. 3-5

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

(HELIUM -3,PROTON) REACTIONS ON CHROMIUM. 3. CHROMIUM -52 (HELIUM -3,PROTON) MANGANESE -54. 24-1

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

RECENT EXPERIMENTAL RESULTS FOR (PI-PLUS, 2PROTON) AND (PI-PLUS,PROTON). REACTIONS ON LIGHT NUCLEI. 24-133

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES. 24-2

FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

REACTIVE
2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

REACTOR
DETERMINATION OF OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-12

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

2

STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL. 2-9

FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

FUSION REACTOR SYSTEMS. 10-29

GAS DYNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

PARAMETER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-15

NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

PAJARITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

REACTOR POWER TRANSIENT STUDIES. 23-19

NONDESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

REACTORS
FACILITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER REACTORS. 10-22

TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

LASER BEAM TRANSPORT IN FUSION REACTORS. 19-31

RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

READOUT
FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

REAL
MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

REAL PROBLEMS, REAL SOLUTIONS. 25-27

REAL PROBLEMS, REAL SOLUTIONS. 25-27

REALISTIC
LAMBDA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF NUCLEAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON POTENTIALS. 24-67

RECOIL
MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS.

RECTANGULAR
TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D.

RECURRENCES
LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENEF BY LINEAR RECURRENCES.

RECYCLED
SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES.

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES.

RED
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS.

REDUCED
REDUCED PROPER MOTION DIAGRAMS.

REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATA

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENEF BY LINEAR RECURRENCES.

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION.

REDUCTION
PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD.

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATI METHOD.

NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION.

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FRO NEUTRON CROSS SECTION EXPERIMENTS.

REEXAMINATION
REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C.

REFERENCE
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS.

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY.

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIG BETA FUSION REACTOR BASED ON THE THETA PINCH.

NUCLEAR ROCKET REFERENCE DATA SUMMARY.

REFLECTED
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0. MEGABARS.

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODU PLASMA.

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES.

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPAR WITH EXPERIMENT.

REFLECTION
LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHAN IN SURFACE MORPHOLOGY.

REFLECTOMETRY
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SEN

REFRACTORY
CRYSTAL CHEMISTRY OF REFRACTORY CARBIDES.

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES.

REGIMES
OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FL AND THE SATURATION OF FLUCTUATION DISSIPATION.

STICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS ACTOR FUEL MATERIALS. 2-35

MINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED REACTOR FUEL. 2-9

WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

N REACTOR SYSTEMS. 10-29

YNAMIC FUEL CYCLING IN A PULSED FUSION REACTOR. 10-30

RONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER ATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

METER STUDY OF A PULSED HIGH BETA FUSION REACTOR. 10-54

D HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

RENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH FUSION REACTOR BASED ON THE THETA PINCH. 10-70

RENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH FUSION REACTOR BASED ON THE THETA PINCH. 10-70

UM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR KET DESIGN. 10-83

RON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-15

RONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

RITO DYNAMICS CODE WITH APPLICATION TO REACTOR EXPERIMENTS. 23-18

TOR POWER TRANSIENT STUDIES. 23-19

ESTRUCTIVE ASSAY OF POWER REACTOR FUEL ASSEMBLIES. 25-18

TERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL NE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

TERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY TEMBER 30, 1972. 27-12

TERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS RAM JANUARY 1 - MARCH 31, 1972. 27-13

TERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS RAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

CT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS MPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

VED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

AGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

EAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

RS
LITY FOR DUPLICATING 14 MEV NEUTRON EFFECTS IN FUSION POWER TORS. 10-22

NOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

R BEAM TRANSPORT IN FUSION REACTORS. 19-31

ATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

T
TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL BERS. 20-18

FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL YSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

PROBLEMS, REAL SOLUTIONS. 23-27

PROBLEMS, REAL SOLUTIONS. 25-27

C
DA-00 AND LAMBDA-10 CALCULATIONS OF THE BINDING ENERGY OF EAR MATTER WITH REALISTIC HARD CORE NUCLEON - NUCLEON TIALS. 24-67

RECOIL
MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

RECTANGULAR
TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

RECURRENCES
LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

RECYCLED
SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-35

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-36

RED
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

REDUCED
REDUCED PROPER MOTION DIAGRAMS. 3-10

REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

REDUCTION
PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

NONUNIFORM CONCENTRATION: A MECHANISM FOR DRAG REDUCTION. 17-13

RAYMATH, A COMPUTER LANGUAGE FOR THE REDUCTION OF DATA FROM NEUTRON CROSS SECTION EXPERIMENTS. 24-132

REEXAMINATION
REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C. 9-19

REFERENCE
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

PHYSICAL AND BIOLOGICAL ASPECTS OF HIGH LET RADIATIONS WITH REFERENCE TO RADIOTHERAPY. 5-42

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

NUCLEAR ROCKET REFERENCE DATA SUMMARY. 29-13

REFLECTED
REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

CALCULATIONS OF REFLECTED FAST CRITICAL ASSEMBLIES AND COMPARISON WITH EXPERIMENT. 23-5

REFLECTION
LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

REFLECTOMETRY
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

REFRACTORY
CRYSTAL CHEMISTRY OF REFRACTORY CARBIDES. 9-2

PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

REGIMES
OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

2

REGION
TRANSITION REGION. 21-67

COUPLED REGION KINETICS FORMULATIONS. 23-6

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

REGIONS
TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

REGRESSION
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

REGULATION
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

RELATION
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

RELATIONS
EXTENSION OF BOUNDARY DISPERSION RELATIONS. 24-51

RELATIONSHIPS
PHASE RELATIONSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY CARBIDES AND NITRIDES. 22-27

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS. 26-11

RELATIVE
RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

RELATIVISTIC
INTENSE RELATIVISTIC E-BEAMS FOR LASER PUMPING. 19-24

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

RELAXATION
MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

PULSE NMR RELAXATION STUDY OF LIQUID ARSINE. 13-11

ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE. 13-9

RELEASE
HIGH ALTITUDE IRON VAPOR RELEASE. 1-12

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

HELIUM MIGRATION AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL FORMS. 22-16

RELEVANCE
RELEVANCE OF LINACS. 2

REMEASUREMENT
REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION.

REMOTE
REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 2

IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 2

REMOTIZED
REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTO FUELS AND CLADDING MATERIALS. 2

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTO FUELS AND CLADDING MATERIALS. 2

REPAIR
LAMPF KLYSTRON REPAIR FACILITY. 2

REPLICATION
EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5

REPLICATIVE
PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5

REPORT
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-

ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JU 1 THROUGH SEPTEMBER 30, 1972. 5-

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22

EGION. 21-67

DN KINETICS FORMULATIONS. 23-6

RITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS ACTINIDE REGION. 24-139

TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE TH REGION. 24-156

CTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC STRUCTURE AND TWO LIQUID REGIONS. 7-25

N OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS TO THE WIENER THEORY. 20-10

F 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

NERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND 1-24

SURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

OUNDARY DISPERSION RELATIONS. 24-51

NSHIPS AND ELECTRICAL PROPERTIES OF REFRACTORY NITRIDES. 22-27

RMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS ORT COEFFICIENTS. 26-11

N OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

VISTIC E-BEAMS FOR LASER PUMPING. 19-24

ODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO 24-136

HARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM AND MAGNETIC FIELDS. 26-30

R HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF ONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM 6-7

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF RIDE AND DEUTERIUM FLUORIDE. 6-8

XATION STUDY OF LIQUID ARSINE. 13-11

E PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

IN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

ELAXATION IN LIQUID ARSINE. 13-9

RON VAPOR RELEASE. 1-12

S, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

ON AND RELEASE IN PLUTONIUM -238 DIOXIDE FUEL 22-16

RELEVANCE
RELEVANCE OF LINACS. 21-54

REMEASUREMENT
REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

REMOTE
REMOTE DISPLAY CONTROL FOR A PDP-9,9/L COMPUTER. 20-52

IMPROVEMENTS IN REMOTE METALLOGRAPHY IN INERT ATMOSPHERES. 22-22

REMOTIZED
REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-30

REMOTIZED APPARATUS FOR DETERMINING OXYGEN IN IRRADIATED REACTOR FUELS AND CLADDING MATERIALS. 2-31

REPAIR
LAMPF KLYSTRON REPAIR FACILITY. 21-26

REPLICATION
EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

REPLICATIVE
PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

REPORT
ANALYSIS OF AIRCRAFT EXHAUST IN THE ARCTIC ATMOSPHERE. FINAL REPORT FOR FEBRUARY 1971 TO FEBRUARY 1972. 1-1

ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 21-51

QUARTERLY REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 21-52

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-65

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

2

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-20

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

QUARTERLY REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 1 TO MARCH 31, 1972. 27-10

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, APRIL 1 TO JUNE 30, 1972. 27-9

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

DART TECHNOLOGY DEVELOPMENT FINAL REPORT. 29-2

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

REPORTS
MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

REPOSITORY
TRANSURANIC WASTE REPOSITORY STUDIES. 29-26

REPRODUCTION
COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 4b GENERATIONS OF MALE PROGENITORS. 5-13

RESEARCH
BIOLOGICAL AND MEDICAL RESEARCH GROUP (H-4) OF THE LASL HEALTH DIVISION, ANNUAL REPORT, JANUARY THROUGH DECEMBER 1971. 5-7

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-55

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-65

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY O
PROGRESS FROM MAY 1 TO JULY 31, 1971.

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FR
JULY 1 TO SEPTEMBER 30, 1972.

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY O
PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY O
PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972.

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY O
PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972.

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF.

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REP
JANUARY - APRIL 1972.

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REP
MAY -AUGUST 1972.

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REP
SEPTEMBER - DECEMBER 1971.

PUBLICATIONS OF LASL RESEARCH 1970.

RESERVES
WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY.

RESERVOIR
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBO
AND NITRATE IN A GREAT PLAINS RESERVOIR.

RESERVOIRS
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS.

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS.

RESIDUAL
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS.

RESISTANCE
RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FIL

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAM
INSTABILITIES.

AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT.

RESISTIVITY
WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRO
PLASMA FREQUENCY.

RESOLUTION
SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER.

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LAS
PRODUCED PLASMAS.

HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF.

HIGH RESOLUTION PROTON SPECTROMETER (HRS).

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS.

HIGH RESOLUTION NEUTRON CROSS SECTIONS.

RESONANCE
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS.

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -1
ENRICHED CHLOROPHYLLS A AND B.

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES.

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE.

ON AND GRAPHITE. REPORT NO. 21, SUMMARY OF
Y 1 TO APRIL 30, 1972. 22-6

T OF THE DEFENSE NUCLEAR AGENCY SPONSORED
N GROUP, LOS ALAMOS SCIENTIFIC
THROUGH JUNE 30, 1972. 24-18

RCH AND DEVELOPMENT, PROGRAM STATUS REPORT 25-19

RCH AND DEVELOPMENT, PROGRAM STATUS REPORT 25-20

RCH AND DEVELOPMENT, PROGRAM STATUS REPORT,
71. 25-21

LASL POLARIZED ION SOURCE. 26-27

HE ADVANCED PLUTONIUM FUELS PROGRAM, JANUARY 27-10

HE THEORETICAL REACTOR PHYSICS PROGRAM APRIL
UAL REPORT, FY 1972. 27-11

HE THEORETICAL REACTOR PHYSICS PROGRAM APRIL
UAL REPORT, FY 1972. 27-11

HE THEORETICAL REACTOR PHYSICS PROGRAM JULY 27-12

RT ON THE THEORETICAL REACTOR PHYSICS
RCH 31, 1972. 27-13

RT ON THE THEORETICAL REACTOR PHYSICS
CEMBER 31, 1971. 27-14

RT ON THE ADVANCED PLUTONIUM FUELS PROGRAM,
31, 1971. 27-15

EPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM
1972. 27-8

EPORT ON THE ADVANCED PLUTONIUM FUELS
E 30, 1972. 27-9

THE SPACE ELECTRIC POWER R AND D PROGRAM FOR
L 30, 1972. 29-18

THE SPACE ELECTRIC POWER R AND D PROGRAM FOR
31, 1972. 29-19

ELOPMENT FINAL REPORT. 29-2

THE SPACE ELECTRIC POWER R AND D PROGRAM FOR
OBER 31, 1972. 29-20

CATIONS. A SELECTION OF LASL INTERNAL 26-15

ATION GUIDE: MANUAL OF PROCEDURE AND STYLE
AL REPORTS AND PAPERS. 29-10

POSITORY STUDIES. 29-26

D REPRODUCTION CHARACTERISTICS OF MOUSE
Y EXPOSURE, INCLUDING 45 GENERATIONS OF 5-13

L RESEARCH GROUP (H-4) OF THE LASL HEALTH
T, JANUARY THROUGH DECEMBER 1971. 5-7

IN HIGH BETA PLASMA RESEARCH ON THETA AND Z 10-68

LASL CONTROLLED THERMONUCLEAR RESEARCH
TH PERIOD ENDING OCTOBER 1971. 10-76

N CONTROL AT THE LOS ALAMOS CHEMISTRY AND
RCH BUILDING. 16-39

ICLE SYSTEMS AT LAMPF. 21-55

F RESEARCH PROPOSALS. 21-65

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -23B OXIDE FUELS. 22-34

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-138

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-20

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

PUBLICATIONS OF LASL RESEARCH 1970. 29-17

RESERVES
WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

RESERVOIR
COMPARTMENTED AQUATIC MODEL OF THE RELATIONSHIP BETWEEN CARBONATE AND NITRATE IN A GREAT PLAINS RESERVOIR. 7-6

RESERVOIRS
INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

NEW METHOD FOR EXTRACTING ENERGY FROM 'DRY' GEOTHERMAL RESERVOIRS. 11-7

RESIDUAL
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

RESISTANCE
RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. B-17

ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

RESISTIVITY
WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

RESOLUTION
SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

HIGH RESOLUTION PROTON SPECTROMETER (HRS). 21-23

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

HIGH RESOLUTION NEUTRON CROSS SECTIONS. 24-60

RESONANCE
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

INVERSE BREMSSTRAHLUNG ABSORPTION BY OPTICAL RESONANCE IN INHOMOGENEOUS PLASMA. 19-26

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58. 24-49

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

RESONANCES
SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES. 15-13

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

RESONANT
RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

RESONATORS
MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

RESOURCES
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

RESPIRATOR
RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE. 16-6

RESPONSE
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

RESTORATION
IMAGE RESTORATION BY CONSTRAINED LEAST-SQUARES ESTIMATION. 20-23

RETRIEVAL
PREPARATION OF DATA LIBRARIES FOR EFFICIENT RETRIEVAL BY CONTINUOUS ENERGY MONTE CARLO CODES. 20-50

REVERSAL
TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

REVERSIBLE
REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

REVIEW
ANALYSIS OF NUCLEAR FUELS. A REVIEW. 2-4

CHEMICAL LASERS: A LIGHT REVIEW. 19-5

BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-53

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

RF
COMPUTER CONTROL OF LAMPF'S 201.25 MHZ RF. 21-14

RHENIUM
NUCLEAR LEVELS IN RHENIUM -188. 24-92

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-9

RHODIUM
STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

RIBO-
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

RIBONUCLEIC
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

RICH
STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-1

RIDGE
APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

RING
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-16

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-1

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-1

RIORDAN
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN. 20-4

RIPPLE
RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS. 21-5

RISING
TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-3

RISK
RISK VS BENEFIT: SOLUTION OR DREAM. 16-3

RMS
RMS EMITTANCE AND THE LAMPF BEAM. 21-5

RNA
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES. 5-28

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

RNAS
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

ROCK
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 11-3

URE IN (TRITON,PROTON-FISSION) AND
-FISSION) ON ACTINIDE NUCLEI. 15-12

AHLUNG ABSORPTION BY OPTICAL RESONANCE IN
ASMA. 19-26

PARENT ANALOGS OF THE NICKEL -58 GIANT M1
REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT
24-49

SCATTERING CALCULATION OF PI-MINUS NUCLEUS
THE 3-3 RESONANCE. 26-6

CE OF THE S-11 INELASTICITY PARAMETER OF PI-N
IS THE NATURE OF THE S-11 (1535) RESONANCE.
26-8

N RESONANCES IN THORIUM ISOTOPES. 15-13

ON OF THE PARENT ANALOGUES OF M1 RESONANCES IN
TON,NEUTRON) COBALT -58 REACTION.
24-115

FT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE
IC BARYON RESONANCES. 24-83

TION OF LASER LIGHT BY PLASMA TARGETS.
19-52

D CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT
RS. 26-14

URCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY
11-2

IDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY
16-32

IDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY
16-33

RMANCE MEASUREMENT USING QUANTITATIVE SODIUM
L MAN TESTS. 16-34

HAIR ON RESPIRATOR PERFORMANCE. 16-6

Y EQUATIONS SIMULATING AN IMMUNE RESPONSE.
5-41

N BY CONSTRAINED LEAST-SQUARES ESTIMATION.
20-23

ATA LIBRARIES FOR EFFICIENT RETRIEVAL BY
GY MONTE CARLO CODES. 20-50

VARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON
UTERON,PROTON) TRITON REACTIONS. 24-154

TIC ENERGY TRANSFER AND STORAGE SYSTEMS.
10-73

EAR FUELS. A REVIEW. 2-4

A LIGHT REVIEW. 19-5

BINATORIAL IDENTITIES, BY J. RIORDAN.
20-4

ENSIONAL PROGRAMMING LANGUAGES. 20-53

ENT GENERALIZATIONS OF THE PADE APPROXIMANT.
26-31

L OF LAMPF'S 201.25 MHZ RF. 21-14

RHENIUM -188. 24-92

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-95

RHODIUM
STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES.
9-20

RIBO-
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE.
5-52

RIBONUCLEIC
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN.
5-27

RICH
STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-149

RIDGE
APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS.
25-3

ASSAY EXPERIENCE WITH MONAL AT OAK RIDGE. 25-4

RING
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

RIORDAN
BOOK REVIEW: COMBINATORIAL IDENTITIES, BY J. RIORDAN.
20-4

RIPPLE
RIPPLE CURRENT AND FLUX IN MINERAL INSULATED MAGNETS.
21-56

RISING
TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

RISK
RISK VS BENEFIT: SOLUTION OR DREAM. 16-35

RMS
RMS EMITTANCE AND THE LAMPF BEAM. 21-57

RNA
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN.
5-27

INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES. 5-28

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

RNAS
LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

ROCK
GEOTHERMAL RESOURCES CREATED BY HYDRAULIC FRACTURING IN HOT DRY ROCK. 11-2

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK. 11-3

2

INDUCTION AND GROWTH OF FRACTURES IN HOT ROCK: ARTIFICIAL GEOTHERMAL RESERVOIRS. 11-4

ROCKET
EMP IN THE IONOSPHERE: ROCKET TEST 152-133. 1-9

FAR INFRARED FILTERS FOR A ROCKET BORNE RADIOMETER. 18-10

SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

MONTE CARLO DEVELOPMENT AND APPLICATIONS IN THE LOS ALAMOS NUCLEAR ROCKET PROGRAM. 20-35

NUCLEAR ROCKET REFERENCE DATA SUMMARY. 29-13

RADIATION ENVIRONMENT OF REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-22

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

ROD
PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

RODS
TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

ROENTGENS
X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-41

ROLE
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

ROLLE
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

ROTATING
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

ROTATION
FARADAY ROTATION MEASUREMENTS ON A DENSE PLASMA FOCUS. 10-23

ROTATOR
VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

ROUGH
CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

ROUGHNESS
EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

ROUTE
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

ROUTINE
MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

ROVER
NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR.

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCL ROCKET ENGINE PROGRAM (ROVER).

RTPR
REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH.

RUBIDIUM
STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION.

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88.

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86.

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION.

RULES
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNIT GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*

RUTHENIUM
VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE.

S
MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT.

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA.

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHE (1962) TO AN ALTITUDE OF 90 KILOMETERS.

S-11
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE.

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE.

SAFEGUARDS
NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICAT

RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT

SAFETY
PLUTONIUM PLANT SAFETY.

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM F THE PERIOD JULY 1 - SEPTEMBER 30, 1972.

CMB-5 HEALTH AND SAFETY MANUAL.

NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR.

SAMARIUM
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AN SAMARIUM SESQUIOXIDE CUBIC.

ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC.

SAMPLE
THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES.

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES.

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES.

SAMPLER
MONTE CARLO SAMPLER.

SAMPLES
ELEMENTAL ANALYSIS OF BIOLOGICAL SAMPLES.

MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES.

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION.

RACTURES IN HOT ROCK: ARTIFICIAL 11-4

:ET TEST 152-133. 1-9

ROCKET BORNE RADIOMETER. 18-10

ICKET BORNE X RAY SPECTROMETER. 18-16

AND APPLICATIONS IN THE LOS ALAMOS 20-35

DATA SUMMARY. 29-13

REACTORS FOR NUCLEAR ROCKET PROPULSION. 29-21

:ET PROPULSION PROGRAM. 29-22

RMOCOUPLE DEVELOPMENT FOR THE NUCLEAR VER). 29-8

-PELLET CALIFORNIUM -252 FUEL ROD ASSAY 25-23

SAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

S, MULTICOMPONENT EULERIAN CALCULATIONS ITH V NOTCHES, VOIDS, AND RODS IN 17-24

TEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

URCE SYSTEMS FOR THE ASSAY OF URANIUM 25-7

S IN ROENTGENS. 16-41

R CHEMISCHEN KINETIK IN DER SPHAERE. (STUDY OF THE ROLE OF ATOSPHERE AND MESOSPHERE.) 1-34

TTER INSTABILITIES IN LASER PLASMA 19-53

R CHEMISCHEN KINETIK IN DER SPHAERE. (STUDY OF THE ROLE OF ATOSPHERE AND MESOSPHERE.) 1-34

TATING SLIT SHUTTERED DRUM FIELD IGHT PHOTOGRAPHY. 12-9

RELAXATION IN VISCOUS GLYCEROL. 13-12

IENTS ON A DENSE PLASMA FOCUS. 10-23

NTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

IAL FLOWS AROUND STRUCTURES AND OVER 17-4

INDUCTIVITY AND ROUGHNESS ON THE DUE IMPACT. 14-7

LY CLUSTERED ORGANOMETALLIC SULFUR ATION OF THEIR STRUCTURES AND BONDING. 7-13

TINE FOR THE U. S. STANDARD ATMOSPHERE OMETERS. 26-18

ROVER
NEUTRONIC BEHAVIOR OF THE ROVER NUCLEAR FURNACE REACTOR. 23-17

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

RTPR
REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

RUBIDIUM
STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86. 24-73

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-75

RULES
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)* 20-45

RUTHENIUM
VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

S
MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

S-11
ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

SAFEGUARDS
NEUTRON COINCIDENCE COUNTERS FOR NUCLEAR SAFEGUARDS APPLICATIONS. 25-16

RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

SAFETY
PLUTONIUM PLANT SAFETY. 16-28

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

CMB-5 HEALTH AND SAFETY MANUAL. 16-4

NUCLEAR SAFETY OF AN AIRBORNE FAST REACTOR. 27-7

SAMARIUM
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

SAMPLE
THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-65

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-35

SAMPLE PREPARATION AND EQUIPMENT PROBLEMS ASSOCIATED WITH RECYCLED, PURIFIED ATMOSPHERES. 22-36

SAMPLER
MONTE CARLO SAMPLER. 20-36

SAMPLES
ELEMENTAL ANALYSIS OF BIOLOGICAL SAMPLES. 2-13

MERCURY LOSSES DURING THE ANALYSIS OF BIOLOGICAL SAMPLES. 16-23

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

SAMPLING
STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

SIZE SELECTIVE SAMPLING FOR PLUTONIUM -238. 16-37

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

SATURATED
PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM. 8-10

DIRECT MEASUREMENT OF THE DISSIPATION FUNCTION OF THE FLOWING SATURATED HELIUM II FILM. 8-8

DISSIPATION IN SATURATED SUPERFLUID FILM FLOW. 8-9

SATURATION
OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

SCALAR
INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

SCALE
RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

SCALING
PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

SCANDIUM
PLUTONIUM - SCANDIUM SYSTEM. 22-28

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3, PROTON) REACTION. 24-98

SCANNERS
TRANSVERSE BEAM MATCHING USING WIRE SCANNERS. 21-68

SCANNING
NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY. 6-12

DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

SCATTERING
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-1

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-1

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-3

LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM. 5-3

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-

QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-

SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-1

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-1

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-2

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-2

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-3

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-4

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-4

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-4

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-8

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-8

MULTIPLE SCATTERING OF PIONS BY CARBON -12. 24-8

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-8

PAULI PRINCIPLE AND PION SCATTERING. 26-24

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

SCATTERINGS
DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS
EL MATERIALS. 2-35

SAMPLING FOR PLUTONIUM -238. 16-37

OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059,
PORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

NG PLAN FOR COMPARING TWO VARIANCES. 20-13

AMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS
PATHS. 20-37

ON OF OLEFINS IN AIR SATURATED WITH HYDROGEN
R. 7-14

THE FLOWING SATURATED SUPERFLUID FILM. 8-10

EMENT OF THE DISSIPATION FUNCTION OF THE FLOWING
IUM II FILM. 8-8

ATURATED SUPERFLUID FILM FLOW. 8-9

F DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW
ATION OF FLUCTUATION DISSIPATION. 8-16

FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

Y OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC
ITY. 19-10

ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

ERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND 1-24

ES IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

ALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

ALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE 10-66

NDIUM SYSTEM. 22-28

ED ONE PLUS STATES IN THE REACTION CALCIUM -46,48
ON) SCANDIUM -48,50. 24-145

IOSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM
TION. 24-98

AM MATCHING USING WIRE SCANNERS. 21-68

GAMMA SCANNING FUEL ELEMENTS. 2-16

GAMMA SCANNING FUEL ELEMENTS. 2-17

OF DIFFERENTIAL TEMPERATURE CALIBRATION AND
UREMENTS IN SCANNING CALORIMETRY. 2-34

RMINATION OF RATE CONSTANTS BY SCANNING 6-12

ANNING CALORIMETRIC DETERMINATION OF KINETICS
YSTEMS THAT MELT WITH DECOMPOSITION. 6-2

OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES
N ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

NNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

TION OF THE BOLTZMANN EQUATION FOR ENERGY
F ELECTRONS WITH INELASTIC SCATTERING ON 4-29

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

DIFFERENTIAL LIGHT SCATTERING: A POSSIBLE METHOD OF MAMMALIAN CELL IDENTIFICATION. 5-16

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

LIGHT SCATTERING PHOTOMETER USING PHOTOGRAPHIC FILM. 5-32

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

ANTISOTROPIC SCATTERING EFFECTS IN REFLECTED FAST CRITICAL ASSEMBLIES. 23-2

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

POLARIZATION MEASUREMENTS AND ANALYSIS IN NEUTRON HELIUM -4 SCATTERING FROM 11.0 TO 30.3 MEV. 24-110

POSSIBLE ANOMALOUS INTERACTION IN MUON - PROTON SCATTERING AT LOW ENERGIES. 24-114

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

QUASIFREE SCATTERING OF 1 GEV PROTONS FROM CARBON -12 AND CALCIUM -40. 24-129

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-150

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

COMPLETE SCATTERING MATRIX DETERMINATION IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4. 24-25

CROSS SECTIONS AND ANALYZING POWERS IN DEUTERON ELASTIC SCATTERING. 24-29

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

ACCURATE DEUTERON - DEUTERON ELASTIC SCATTERING CROSS SECTIONS. 24-6

MODELS FOR PI-PLUS OXYGEN -16 SCATTERING AT 270 MEV. 24-81

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

MULTIPLE SCATTERING OF PIONS BY CARBON -12. 24-86

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-88

PAULI PRINCIPLE AND PION SCATTERING. 26-24

DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-9

SCATTERINGS
DETAILED MULTIPLE SCATTERING CALCULATION OF PI-MINUS NUCLEUS SCATTERINGS NEAR THE 3-3 RESONANCE. 26-6

2

SCF
SCF DIRAC-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

SCHEME
LEVEL SCHEME OF URANIUM-235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

SCIENTIFIC
CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8-6

HISTORY OF THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS SCIENTIFIC LABORATORY, 1944-72. 16-14

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

SCIENTIST
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST. 16-18

SCOPE
SCOPE DISPLAY INTERFACE TO A PDP-9 COMPUTER. 20-54

SCREENING
MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

SCREWWORM
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

SCYLLA
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

SCYLLAC
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

SURVEY OF SCYLLAC EXPERIMENTS. 10-77

SURVEY OF SCYLLAC EXPERIMENTS. 10-78

SEALED
SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS. 2-32

SEALS
EFFECT OF FAST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL SEALS. 27-3

SEARCH
TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-7[illegible]

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

SEARCH FOR ISOMERISM IN OSMIUM-193.

SECOND
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARA THE SECOND AND THIRD SPECTRA OF CHLORINE.

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXC ED STATES OF GERMANIUM-72 BY COULOMB EXCITATION.

SECONDARY
SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEA LINES.

SECTIONING
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES.

SECTOR
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR.

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH.

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR.

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR.

SECURITY
DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY.

SEDIMENTATION
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION.

SEEDED
VUV EMISSION FROM A NEON SEEDED THETA PINCH.

SELECTION
MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS.

SELECTIVE
SIZE SELECTIVE SAMPLING FOR PLUTONIUM-238.

SELF
EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM-238 (80 PERCENT) DIOXIDE.

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM-238 (80 PERCENT) DIOXIDE. 2.

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS.

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA.

LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WA ON A SQUARE LATTICE.

SELF CONSISTENT BILOCAL FIELD THEORY.

SEMI-EMPIRICAL
SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES.

SENSING
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENS

SENSITIVE
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES.

CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS.

SENSITIVITY
RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST.

-SLATER CALCULATIONS FOR AN ION IN A DIELECTRIC MEDIUM. 4-39

EME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE STRENGTH IN ITS EXCITED STATES. 24-70

CS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC RY. 8-6

F THE PLUTONIUM BIOASSAY PROGRAM AT THE LOS ALAMOS LABORATORY, 1944-72. 16-14

ENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

UTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS LABORATORY. 24-164

IOGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED TION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC RY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

L HYGIENIST AS A SOCIAL SCIENTIST. 16-18

LAY INTERFACE TO A PDP-9 COMPUTER. 20-54

DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL IONS. 24-84

GING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA 10-24

PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

ENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER SECTOR. 10-42

ERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR H. 10-58

ERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

ERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

ERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC THETA PINCH TOROIDAL SECTOR. 10-61

ERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC THETA PINCH TOROIDAL SECTOR. 10-62

ERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

SCYLLAC EXPERIMENTS. 10-77

SCYLLAC EXPERIMENTS. 10-78

E DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM MATERIALS. 2-32

AST NEUTRON IRRADIATION ON CERAMICS AND CERAMIC METAL 27-3

IONAL SEARCH AND INTERPOLATION ON A DISTORTED AR GRID. PROGRAM SI-PH1-G2D. 20-71

(TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS HE ACTINIDE REGION. 24-139

SEARCH FOR ISOMERISM IN OSMIUM -193. 24-140

SECOND
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

SECONDARY
SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

SECTIONING
MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

SECTOR
MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

SECURITY
DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

SEDIMENTATION
THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

SEEDED
VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-89

SELECTION
MEGAGAUSS FIELD APPLICATIONS. A SELECTION OF LASL INTERNAL REPORTS. 26-15

SELECTIVE
SIZE SELECTIVE SAMPLING FOR PLUTONIUM -238. 16-37

SELF
EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 9-11

EFFECTS OF SELF IRRADIATION ON THE LATTICE OF PLUTONIUM -238 (80 PERCENT) DIOXIDE. 2. 9-12

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

SELF CONSISTENT BILOCAL FIELD THEORY. 26-32

SEMI-EMPIRICAL
SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

SENSING
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

SENSITIVE
BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-3

BIFILAR HELICAL MULTIWIRE PROPORTIONAL CHAMBER FOR POSITION SENSITIVE DETECTION OF MINIMUM IONIZING PARTICLES. 18-4

CHARGE SENSITIVE PREAMPLIFIER FOR USE WITH LARGE PROPORTIONAL COUNTER ARRAYS. 18-6

SENSITIVITY
RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

SEPARATE
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

SEPARATED
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

SEPARATING
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

SEPARATION
RAPID SEPARATION AND DETERMINATION OF MERCURY. 2-29

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

SEPTEMBER
ACCELERATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 5-1

EVALUATION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL PROJECT R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1972. 16-10

QUARTERLY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR THE PERIOD JULY 1 - SEPTEMBER 30, 1972. 16-31

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

RESEARCH ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM JULY 1 TO SEPTEMBER 30, 1972. 22-33

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-2

QUARTERLY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM JULY 1 TO SEPTEMBER 30, 1972. 27-8

SEQUENTIAL
SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

SERIES
OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

NONLINEAR PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

EFFECT OF RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON THE CONVERGENCE OF THE PADE APPROXIMANTS. 26-7

SESQUIOXIDE
ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

ENTHALPIES OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SAMARIUM SESQUIOXIDE CUBIC. 7-8

ENTHALPY OF FORMATION OF EUROPIUM SESQUIOXIDE. 7-9

SETS
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-11

SETTING
HUMAN VALUES IN STANDARD SETTING. 16-15

SEVERAL
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS.

EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS.

SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES.

SEX
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE.

SHAFT
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGUL MOTOR SHAFT VELOCITY.

SHAPES
LASER PULSE SHAPES FOR IGNITION OF DT SPHERES.

SHEATH
PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR.

SHEET
PLASMA SHEET VARIATIONS DURING SUBSTORMS.

SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES.

SHEETS
DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL.

SHELL
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES.

ONE PLUS STATES AND THE 1F-2P SHELL MODEL.

SHELLS
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS.

SHIELDING
USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES.

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS.

SHIFT
CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES.

WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI

MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16.

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION.

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING.

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES.

PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE.

SHIRX
SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER.

SHOCK
MICROSTRUCTURE OF THE EARTH'S BOW SHOCK.

MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE T THE PROXIMITY OF THE EARTH'S BOW SHOCK.

POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES.

EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4

REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4

SHOCK WAVE DATA AND EQUATIONS OF STATE. 4

DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6

OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR 14-5

ITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE ON CROSS SECTIONS. 23-20

ITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

SE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE OND AND THIRD SPECTRA OF CHLORINE. 2-18

AL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC ED JET FLOWS. 17-17

G
FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

N
PARATION AND DETERMINATION OF MERCURY. 2-29

IAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC NATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED ELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

ATOR PRODUCED RADIOISOTOPE PROGRAM, QUARTERLY REPORT JULY GH SEPTEMBER 30, 1972. 5-1

ION OF METHODS FOR THE DETERMINATION OF MERCURY. LASL R-060. QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 16-10

LY REPORT ON THE PHYSICS FOR SAFETY ANALYSIS PROGRAM FOR DD JULY 1 - SEPTEMBER 30, 1972. 16-31

MENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, LY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

ON CARBON AND GRAPHITE, QUARTERLY PROGRESS REPORT FROM SEPTEMBER 30, 1972. 22-33

ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, R - DECEMBER 1971. 25-21

LY PROGRESS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM SEPTEMBER 30, 1972. 27-8

AL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC ATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED ELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

7 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX 13-10

R PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-19

R PADE APPROXIMANTS FOR LEGENDRE SERIES. 26-20

RANDOM ERRORS (NOISE) IN THE TERMS OF A POWER SERIES ON ERGENCE OF THE PADE APPROXIMANTS. 26-7

S OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SESQUIOXIDE CUBIC. 7-8

S OF FORMATION OF SAMARIUM SESQUIOXIDE MONOCLINIC AND SESQUIOXIDE CUBIC. 7-8

OF FORMATION OF EUROPIUM SESQUIOXIDE. 7-9

GING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC 20-11

LUES IN STANDARD SETTING. 16-15

CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

SOME PROPERTIES OF SEVERAL HIGH DENSITY COMPOSITES. 22-37

SEX
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

SHAFT
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

SHAPES
LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-35

SHEATH
PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

SHEET
PLASMA SHEET VARIATIONS DURING SUBSTORMS. 1-21

SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES. 1-29

SHEETS
DATA SHEETS FOR PMC (PLUTONIA MOLYBDENUM CERMET) RADIOISOTOPIC FUEL. 22-7

SHELL
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

ONE PLUS STATES AND THE 1F-2P SHELL MODEL. 24-104

SHELLS
LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

SHIELDING
USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-25

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

SHIFT
CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-103

MEASUREMENT OF THE LAMB SHIFT IN OXYGEN -16. 24-75

MEASUREMENT OF THE LAMB SHIFT IN THE OXYGEN -16 7+ ION. 24-77

MODIFIED PHASE SHIFT ANALYSIS FOR PROTON HELIUM -3 ELASTIC SCATTERING. 24-82

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

SHIRX
SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-18

SHOCK
MICROSTRUCTURE OF THE EARTH'S BOW SHOCK. 1-16

MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

REFLECTED SHOCK HUGONIOT FOR LIQUID ARGON BETWEEN 0.26 AND 0.74 MEGABARS. 4-38

SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 8-1

2

PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES. 6-10

PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-69

NUMERICAL CALCULATIONS OF DETONATION FAILURE AND SHOCK INITIATION. 14-12

PRESSURE OBSERVATIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 GRAMS PER CUBIC CENTIMETER PETN. 14-15

EFFECT OF INTERSTITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR PETN. 14-5

NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

SHOCKED
DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE. 14-3

SHOCKS
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

SHORT
HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

MEASUREMENTS AND CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT HELICAL RESONATORS. 26-14

SHOT
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

SHUTTERED
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

SI-PH1-G2D
TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

SIGMA
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

SILICON
ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

ANALYZING POWER IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

COUPLED NEUTRON GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, OXYGEN, SILICON, ALUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

SILVER
TOTAL ENERGY OF COPPER, SILVER AND GOLD. 4-49

SIMPLIFICATION
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

SIMPLIFIED
SIMPLIFIED DETERMINATION OF RATE CONSTANTS BY SCANNING CALORIMETRY. 6-12

SIMULATING
ON PREDATOR - PREY EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

SIMULATION
BIOTA2, A PROGRAM FOR MONTE CARLO SIMULATION OF POPULATION INTERACTIONS IN A BIOME. 5-8

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS

COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS.

NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIO

TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION.

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISION PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS.

NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS.

MODULAR SIMULATION APPROACH TO SYSTEM TESTING.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATIO THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATIO THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

SINGLE
RAMAN SPECTRA OF SINGLE CRYSTALS.

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS.

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES.

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT.

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LE -208 (DEUTERON,PROTON) LEAD -209 REACTION.

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS.

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES.

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE.

SINGLY
NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE.

SINTERED
APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL.

SIZE
FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY.

AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS.

SIZE CHARACTERISTICS OF PLUTONIUM AEROSOLS.

SIZE SELECTIVE SAMPLING FOR PLUTONIUM -238.

SKID
RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST.

SLAB
NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES.

SLIGHTLY
COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS.

SLIT
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY.

SLOWING
SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA.

SMALL
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404.

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES.

ENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK 6-10

BILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

ROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT 10-69

LATIONS OF DETONATION FAILURE AND SHOCK 14-12

TIONS ON THE SHOCK INDUCED DECOMPOSITION OF 1.75 ENTIMETER PETN. 14-15

ITIAL GASES ON THE SHOCK SENSITIVITY OF GRANULAR 14-5

GATION OF THE STABILITY OF A SHOCK ACCELERATED N TWO FLUIDS. 17-16

A SHOCKED SOLID EXPLOSIVE. 14-3

RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF ING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS F SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN 17-24

RT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA 19-21

TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

D CALCULATIONS OF FIELD DISTRIBUTIONS IN SHORT RS. 26-14

FTER OF CYGNUS X-1 PULSATIONS. 3-13

IONIZED, ROTATING SLIT SHUTTERED DRUM FIELD ECTILE IN FLIGHT PHOTOGRAPHY. 12-9

EARCH AND INTERPOLATION ON A DISTORTED D. PROGRAM SI-PH1-G2D. 20-71

MBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND ROXYL AND HEAVY HYDROXYL. 4-1

IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-10

IN SILICON (PROTON, PROTON) BELOW 15 MEV. 24-11

GAMMA RAY MULTIGROUP CROSS SECTIONS FOR NITROGEN, LUMINUM, CARBON, IRON, AND HYDROGEN. 24-27

COPPER, SILVER AND GOLD. 4-49

DIFFERENTIAL TEMPERATURE CALIBRATION AND EMENTS IN SCANNING CALORIMETRY. 2-34

INATION OF RATE CONSTANTS BY SCANNING 6-12

Y EQUATIONS SIMULATING AN IMMUNE RESPONSE. 5-41

FOR MONTE CARLO SIMULATION OF POPULATION IOME. 5-8

TION OF A SPACE PROBE MODEL, SUPERCONDUCTING OIL. 8-26

COMPARISON OF SOME PARTICLE IN CELL PLASMA SIMULATION METHODS. 10-11

COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS. 10-12

NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-18

MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-34

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

SINGLE
RAMAN SPECTRA OF SINGLE CRYSTALS. 4-36

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

SINGLY
NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

SINTERED
APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

SIZE
FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-11

AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-2

SIZE CHARACTERISTICS OF PLUTONIUM AEROSOLS. 16-36

SIZE SELECTIVE SAMPLING FOR PLUTONIUM -238. 16-37

SKID
RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

SLAB
NEUTRON DISTRIBUTION IN A SLAB REACTOR WITH MOVING BOUNDARIES. 23-15

SLIGHTLY
COMPUTER SIMULATION OF SLIGHTLY COLLISIONAL PLASMAS. 10-12

SLIT
FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGR PHY. 12-9

SLOWING
SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

SMALL
EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

2

FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

SMOOTH
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

SMOOTHED
SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-18

SN
TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

SOCIAL
INDUSTRIAL HYGIENIST AS A SOCIAL SCIENTIST. 16-18

QUANTIFICATION OF SOCIAL VALUES. 16-30

SODIUM
SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

SOFT
APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-19

SOFTWARE
PROPOSAL FOR EPICS DATA ACQUISITION SOFTWARE. 21-48

SOIL
EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

SOLAR
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

INTERPENETRATING ION BEAMS IN THE SOLAR WIND. 1-13

POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

THERMAL ENERGY TRANSPORT IN THE SOLAR WIND. 1-31

VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1-6

CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES.

CANADIAN TOTAL SOLAR ECLIPSE FLIGHT.

IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET.

LASER ACTIVATION OF SOLAR CELLS.

SOLID
RECENT ADVANCES IN THE STUDY OF SOLID SURFACES.

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGUL MOTOR SHAFT VELOCITY.

DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE.

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS.

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION.

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS.

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONI MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN.

SOLUTION
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES.

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT.

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM.

RISK VS BENEFIT: SOLUTION OR DREAM.

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. TH INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION.

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION.

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS.

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION.

SOLUTIONS
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS.

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES.

REAL PROBLEMS, REAL SOLUTIONS.

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONI MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.

SOLVENT
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE.

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.

SOLVERS
APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS.

SOLVING
GENERAL METHOD FOR SOLVING THE P-L EQUATIONS.

AY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON ATION. 25-10

RY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

AGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

ENTS OF CONVECTIV E HEAT TRANSFER COEFFICIENTS FOR THE LOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE ND FLUID TEMPERATURES. 12-13

VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM 7-18

SIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 ON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC 23-27

, HYGIENIST AS A SOCIAL SCIENTIST. 16-18

TION OF SOCIAL VALUES. 16-30

STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM EROSOL MAN TESTS. 16-34

OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - EMSSTRAHLUNG. 24-19

OR EPICS DATA ACQUISITION SOFTWARE. 21-48

OIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

OR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP UTLETS. 29-1

MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

IC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME PRESSURE. 1-11

RATING ION BEAMS IN THE SOLAR WIND. 1-13

DENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR ATED WITH INTERPLANETARY SHOCK WAVES. 1-22

ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND 1-24

ES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1-27

ES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1-27

SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

ERGY TRANSPORT IN THE SOLAR WIND. 1-31

ID FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

NS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1-6

N TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY ITIES. 1-7

AL SOLAR LINE BLANKETING. 2. THE RESULTS OF IN SOLAR MODEL ATMOSPHERES. 3-12

SEMI-EMPIRICAL SOLAR LINE BLANKETING. 2. THE RESULTS OF BLANKETING IN SOLAR MODEL ATMOSPHERES. 3-12

CANADIAN TOTAL SOLAR ECLIPSE FLIGHT. 3-2

IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET. 3-4

LASER ACTIVATION OF SOLAR CELLS. 19-30

SOLID
RECENT ADVANCES IN THE STUDY OF SOLID SURFACES. 9-18

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

DECOMPOSITION OF A SHOCKED SOLID EXPLOSIVE. 14-3

SOLID ANGLE CORRECTION FACTORS FOR COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS. 18-17

MOTION OF SOLID DEUTERIUM UNDER LASER IRRADIATION. 19-41

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

SOLUTION
NUMERICAL SOLUTION OF THE BOLTZMANN EQUATION FOR ENERGY DISTRIBUTIONS OF ELECTRONS WITH INELASTIC SCATTERING ON MOLECULES. 4-29

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

NUMERICAL SOLUTION OF A NONLINEAR DIFFUSION PROBLEM. 10-52

RISK VS BENEFIT: SOLUTION OR DREAM. 16-35

ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

EIGENVALUE PROBLEM FOR A PAIR OF COUPLED INTEGRAL EQUATIONS ARISING IN THE NUMERICAL SOLUTION OF LAPLACE'S EQUATION. 20-14

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

SOLUTIONS
KINETICS OF THE REACTION BETWEEN THE CHROMIUM(III) - PLUTONIUM(V) COMPLEX AND PLUTONIUM(III) IN AQUEOUS PERCHLORATE SOLUTIONS. 6-5

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

REAL PROBLEMS, REAL SOLUTIONS. 25-27

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

SOLVENT
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

SOLVERS
APPLICATION OF FAST POISSON SOLVERS TO THE NUMERICAL APPROXIMATION OF PARABOLIC PROBLEMS. 20-2

SOLVING
GENERAL METHOD FOR SOLVING THE P-L EQUATIONS. 23-12

SOUND
INVESTIGATION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-5

SOURCE
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

APPARATUS FOR THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH 94 PERCENT CARBON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE AS A CARBON SOURCE. 5-4

LASL INTENSE 14 MEV NEUTRON SOURCE. 10-35

SOURCE TERM CALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-38

LAPHANO: A P-0 MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE CODE FOR ENDF. 17-10

COLD GLOW DISCHARGE LASER ENERGY SOURCE. 19-6

TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

LAMPF (LOS ALAMOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR RADIATION DAMAGE EXPERIMENTS. 21-25

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

LASL INTENSE 14 MEV NEUTRON SOURCE. 24-68

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

PRE-BUNCHING IN A LAMB SHIFT POLARIZED ION SOURCE. 26-25

PROGRESS REPORT ON THE LASL POLARIZED ION SOURCE. 26-27

SOURCES
CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

RADIOACTIVE SOURCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

SOUTHWESTERN
IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

SPACE
VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

CRYOGENICS IN SPACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC LABORATORY. 8-6

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE
GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAX
NULL SPACE.

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGI
THE PERIOD ENDING APRIL 30, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGI
THE PERIOD ENDING JULY 31, 1972.

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGI
THE PERIOD ENDING OCTOBER 31, 1972.

SPALL
PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL
HYDRODYNAMICS CODES.

SPALLATION
PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, C
ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS.

SPEAKING
INTERNATIONALLY SPEAKING.

SPECIES
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATION
SPECTRA OF ISOTOPIC SPECIES.

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE
DIMENSIONAL VLASOV PLASMAS.

SPECIFIC
X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICAT

MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF
CRYSTALLINE COPPER -63.

FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZ
BY LITHIUM CONDENSATION.

SPECIFICALLY
CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVI
CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBOI
SUBSTRATE.

SPECIFICATION
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL F
CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED
OXIDE FUEL AND SOURCE MATERIALS.

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MI
OXIDE REACTOR FUEL.

SPECIFICATION OF PROGRAM FLOW IN MADCAP VI.

SPECIFICATIONS
SPECIFICATIONS FOR CAMAC SUBROUTINES.

SPECIMEN
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY
INJECTION OF ATOMS.

SPECTRA
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEP
THE SECOND AND THIRD SPECTRA OF CHLORINE.

CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF UR

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TA

INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLU
IONS.

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE AN
DISPERSIONS OF A THREE PRISM SPECTROGRAPH.

MEASUREMENTS OF FILTERED X RAY SPECTRA.

NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AN
ISOELECTRONIC SPECTRA.

OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION
BEAMS.

OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

ERATED OPTICAL SOUND TRACKS. 12-5

AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE D THIRD SPECTRA OF CHLORINE. 2-18

ND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE FICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED D SOURCE MATERIALS. 2-26

THE MASS PRODUCTION OF CHLORELLA PYRENOIDOSA WITH BON -13 DIOXIDE AND 6 PERCENT CARBON -12 DIOXIDE URCE. 5-4

MEV NEUTRON SOURCE. 10-35

ALCULATIONS FOR PIONEER RADIOISOTOPIC THERMOELECTRIC 16-38

MULTIGROUP PHOTON PRODUCTION MATRIX AND SOURCE 17-10

CHARGE LASER ENERGY SOURCE. 19-6

ON OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR STEEP SOURCE GRADIENTS. 20-66

MOS MESON PHYSICS FACILITY) AS A NEUTRON SOURCE FOR AGE EXPERIMENTS. 21-25

E OF THE SPHERICAL HARMONICS, FIRST COLLISION RIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT 23-24

AL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

AL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 OURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC 23-27

BUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON ON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

MEV NEUTRON SOURCE. 24-68

ON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF TERIALS. 25-26

THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

2 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM IN FUEL RODS. 25-7

ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

A LAMB SHIFT POLARIZED ION SOURCE. 26-25

T ON THE LASL POLARIZED ION SOURCE. 26-27

TAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED ECTORS WITH SMALL DISC SOURCES. 18-5

URCES FOR SAFEGUARDS AND MATERIALS MANAGEMENT. 25-25

OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES N ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

LATION OF A SPACE PROBE MODEL, SUPERCONDUCTING E COIL. 8-26

PACE EXPERIMENTATION AT LOS ALAMOS SCIENTIFIC 8-6

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING APRIL 30, 1972. 29-18

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING JULY 31, 1972. 29-19

QUARTERLY REPORT ON THE SPACE ELECTRIC POWER R AND D PROGRAM FOR THE PERIOD ENDING OCTOBER 31, 1972. 29-20

SPALL
PARAMETER STUDY OF SPALL CALCULATIONS IN ONE DIMENSIONAL HYDRODYNAMICS CODES. 17-20

SPALLATION
PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

SPEAKING
INTERNATIONALLY SPEAKING. 29-9

SPECIES
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

SPECIFIC
X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

MANIFESTATIONS OF ANHARMONICITY IN THE SPECIFIC HEAT OF CRYSTALLINE COPPER -63. 28-2

FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

SPECIFICALLY
CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LAB' .ED CARBON -13 SUBST.ATE. 13-5

SPECIFICATION
PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

DETERMINATION OF NON-METALLIC SPECIFICATION IMPURITIES IN MIXED OXIDE REACTOR FUEL. 2-9

SPECIFICATION OF PROGRAM FLOW IN MADCAP VI. 20-56

SPECIFICATIONS
SPECIFICATIONS FOR CAMAC SUBROUTINES. 20-57

SPECIMEN
ELECTRON MICROSCOPY: ENHANCEMENT OF SPECIMEN CONTRAST BY INJECTION OF ATOMS. 5-25

SPECTRA
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-2

INFRARED AND LASER RAMAN SPECTRA OF THE GROUP III-A HEXAFLUORIDE IONS. 4-21

LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

MEASUREMENTS OF FILTERED X RAY SPECTRA. 4-25

NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

2

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

RAMAN SPECTRA OF SINGLE CRYSTALS. 4-36

VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

DYNAMICS OF DPF (DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF LASER SCATTERING SPECTRA. 10-14

CARBON -13 NUCLEAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 ENRICHED CHLOROPHYLLS A AND B. 13-3

MINIMUM DETECTABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM DETECTOR SPECTRA. 18-12

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

MONTE CARLO CALCULATION OF RECOIL SPECTRA IN HELIUM -4 PROPORTIONAL COUNTERS. 26-17

EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

SPECTRAL
RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-37

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-41

SPECTRAL MEASUREMENT OF LIGHT REFLECTED FROM A LASER PRODUCED PLASMA. 19-54

SPECTROGRAPH
LOW FREQUENCY RAMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR DISPERSIONS OF A THREE PRISM SPECTROGRAPH. 4-23

SPECTROMETER
AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

SPECTROMETER DESIGN AT LASL. 18-18

COMPUTER CONTROL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

ENERGETIC PION CHANNEL AND SPECTROMETER (EPICS). 21-20

HIGH RESOLUTION PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

HIGH RESOLUTION PROTON SPECTROMETER (HRS). 21-23

SPECTROMETRIC
DETERMINATION OF NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION MASS SPECTROMETRIC MEASUREMENTS. 2-10

RAPID MASS SPECTROMETRIC DETERMINATION OF BORON ISOTOPIC DISTRIBUTION IN BORON CARBIDE. 2-28

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

SPECTROMETRY
ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

SPECTROSCOPY
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-

SPECTRUM
EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-11

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-12

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

SPECULATIONS
WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-9

SPEED
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-1

SPENT
MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-1

SPHERE
SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-2

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-6

DERIVA ION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

SPHERES
COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-3

RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-2

SPHERICAL
BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

SPHERICAL EXPLOSIONS IN WATER. 14-1

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-3

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-8

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-2

F ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION 4-31

TANTS OF IRON PENTACARBONYL FROM VIBRATIONAL OPIC SPECIES. 4-34

DF SINGLE CRYSTALS. 4-36

CTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) 4-50

(DENSE PLASMA FOCUS) DETERMINED FROM ANALYSIS OF G SPECTRA. 10-14

EAR MAGNETIC RESONANCE (NMR) SPECTRA OF CARBON -13 OPHYLLS A AND B. 13-3

ABLE PHOTOPEAK AREAS IN LITHIUM DRIFTED GERMANIUM A. 18-12

ALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE SECTIONS. 23-20

LCULATION OF RECOIL SPECTRA IN HELIUM -4 UNTERS. 26-17

ON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS S FOR THERMIONIC REACTOR DESIGN. 27-4

STUDIES OF HTO IN WATER. 4-37

DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE TO 300 KV. 4-54

DISTRIBUTIONS IN ROENTGENS. 16-41

EMENT OF LIGHT REFLECTED FROM A LASER PRODUCED 19-54

AMAN SPECTRA OF ORGANIC LIQUIDS AT LARGE ANGULAR THREE PRISM SPECTROGRAPH. 4-23

MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE METER. 16-1

OLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

SIGN AT LASL. 18-18

OL OF EPICS BEAM LINE AND SPECTROMETER. 21-13

HANNEL AND SPECTROMETER (EPICS). 21-20

PROTON SPECTROMETER (HRS) AT LAMPF. 21-22

PROTON SPECTROMETER (HRS). 21-23

F NUCLEAR FUEL BURN-UP BASED ON ISOTOPE DILUTION RIC MEASUREMENTS. 2-10

ROMETRIC DETERMINATION OF BORON ISOTOPIC ORON CARBIDE. 2-28

XCHANGE SEPARATION AND MASS SPECTROMETRIC F NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED URNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

RIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

LIMITATIONS OF MASS SPECTROMETRY FOR THE THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLICATION TO NUCLEAR FUEL BURN-UP. 2-3

OTOPE DILUTION MASS SPECTROMETRY TO THE F URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

ECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

NUCLEAR SPECTROSCOPY OF SCANDIUM -48 FROM THE CALCIUM -46 (HELIUM -3,PROTON) REACTION. 24-98

SPECTRUM

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-11

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-12

NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-142

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-143

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

SPECULATIONS

WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

SPEED

ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

HIGH SPEED, INEXPENSIVE PHOTODIODE ASSEMBLY. 18-11

SPENT

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

SPHERE

SENSITIVITY OF CALCULATED PULSED SPHERE SPECTRA AND NEUTRON AGE TO CARBON CROSS SECTIONS. 23-20

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

DERIVA ION OF THE BOLTZMANN DISTRIBUTION LAW WITH ILLUSTRATIONS FROM A HARD SPHERE MODEL COMPUTER PROGRAM. 26-5

SPHERES

COMPUTER ANALYSIS OF DIFFERENTIAL LIGHT SCATTERING FROM COATED SPHERES. 5-14

LIGHT SCATTERING FROM COATED SPHERES: MODEL FOR BIOLOGICAL CELLS. 5-31

LASER PULSE SHAPES FOR IGNITION OF DT SPHERES. 19-35

RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

SPHERICAL

BACKWARD MONTE CARLO CALCULATIONS OF THE POLARIZATION CHARACTERISTICS OF THE RADIATION EMERGING FROM SPHERICAL SHELL ATMOSPHERES. 1-4

SPHE EXPLOSIONS IN WATER. 14-17

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

DEVELOPMENT OF A PLUTONIUM -238 DIOXIDE SPHERICAL FUEL FORM. 22-8

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

2

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI. 24-157

SPILL
NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

SPIN
ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

NITROGEN -15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

NUCLEAR SPIN RELAXATION IN LIQUID ARSINE. 13-9

PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-59

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

SPINOR
METHOD FOR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF INVARIANTS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

SPIRAL
AEROSOL DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE AEROSOL SPECTROMETER. 16-1

SPLINE
ERROR BOUNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

SPLITTING
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)* 20-45

SPONSORED
ANNUAL PROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED CROSS SECTION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC LABORATORY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

SPONTANEOUS
KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-8

KINETIC ENERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM -250 AND CALIFORNIUM -250. 15-9

SQUARE
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

SQUARES
WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

STABILITY
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

MHD STABILITY OF DIFFUSE TORDIDAL EQUILIBRIA. 10-43

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA. 10-45

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.

STABILITY OF A FINITE BETA, L = 2 STELLERATOR.

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.

NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERAT INTERFACE BETWEEN TWO FLUIDS.

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - B NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS.

STABILIZATION
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN.

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN.

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN.

STAGE
TWO STAGE HEATING OF THETA PINCHES.

STANDARD
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGR COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS.

HUMAN VALUES IN STANDARD SETTING.

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPH (1962) TO AN ALTITUDE OF 90 KILOMETERS.

LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACE

STANDARDS
NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEA REACTIONS.

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY.

STATE
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN.

LOW TEMPERATURE EQUATION OF STATE FOR METALS.

SHOCK WAVE DATA AND EQUATIONS OF STATE.

THEORETICAL EQUATION OF STATE FOR DEUTERIUM.

TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS.

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGU MOTOR SHAFT VELOCITY.

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF TH STEADY STATE APPROXIMATION.

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS.

STATES
LOCALIZED D STATES FOR PSEUDDPOTENTIAL CALCULATIONS: APPLICATIO TO THE ALKALINE EARTH METALS.

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES O NITROGEN MOLECULAR ION.

ND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION
ND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT 23-24

EON TRANSFER AND SPHERICAL NUCLEI. 24-157

SPILL CONTROL SYSTEM FOR LAMPF. 16-24

SPILL CONTROL SYSTEM FOR LAMPF. 16-25

FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

-15 SPIN - LATTICE RELAXATION IN DEUTEROAMMONIA. 13-7

SPIN RELAXATION IN LIQUID ARSINE. 13-9

DUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

N-BOSON PRODUCTION VIA MUON BEAMS. 21-59

TION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR 24-111

N OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY 24-158

OR EXPRESSING DIRAC SPINOR AMPLITUDES IN TERMS OF
TS AND APPLICATION TO THE CALCULATION OF CROSS SECTIONS. 26-16

AVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR
RTICLE EXCHANGE. 26-23

DENSITY MEASUREMENTS USING A MODIFIED SPIRAL CENTRIFUGE
PECTROMETER. 16-1

UNDS FOR SPLINE AND L-SPLINE INTERPOLATION. 20-16

RUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY
AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE
L SPLITTING IN U(3)* 20-45

ROGRESS REPORT OF THE DEFENSE NUCLEAR AGENCY SPONSORED
TION EVALUATION GROUP, LOS ALAMOS SCIENTIFIC
RY, JULY 1, 1971 THROUGH JUNE 30, 1972. 24-18

S
IERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM
ALIFORNIUM -250. 15-8

IERGY DISTRIBUTIONS IN THE SPONTANEOUS FISSION OF CURIUM
ALIFORNIUM -250. 15-9

PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS
) 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000
ER SQUARE METER. 12-23

UND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK
RE LATTICE. 20-27

BER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

YDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC
ONE PINCH. 10-38

YDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO
CH. 10-39

LITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-43

LITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

LITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL
L. 10-45

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-74

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

STABILIZATION
FEEDBACK STABILIZATION EXPERIMENTS ON THE SCYLLA IV-3 PLASMA COLUMN. 10-24

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

STAGE
TWO STAGE HEATING OF THETA PINCHES. 10-85

STANDARD
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

HUMAN VALUES IN STANDARD SETTING. 16-15

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

LINKAGE OF REACTOR PHYSICS CODES THROUGH STANDARD INTERFACES. 27-6

STANDARDS
NEW METHOD FOR DETERMINING POLARIZATION STANDARDS IN NUCLEAR REACTIONS. 24-90

ACTIVE ASSAY OF FISSIONABLE MATERIALS AT THE LOS ALAMOS NONDESTRUCTIVE ASSAY STANDARDS LABORATORY. 25-1

STATE
EQUATION OF STATE AND PHASE DIAGRAM OF DENSE HYDROGEN. 4-13

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

THEORETICAL EQUATION OF STATE FOR DEUTERIUM. 4-47

TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

INTERMEDIATE STATE, SINGLE PARTICLE ENERGIES IN MANY - FERMION ENERGY CALCULATIONS. 24-63

STATES
LOCALIZED D STATES FOR PSEUDOPOTENTIAL CALCULATIONS: APPLICATION TO THE ALKALINE EARTH METALS. 4-22

STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

2

EMISSION FROM LONG LIVED STATES OF THE NITRIC OXIDE ION. 4-9

IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

ONE AND THREE QUASIPARTICLE STATES IN TIN -121. 24-103

ONE PLUS STATES AND THE 1F-2P SHELL MODEL. 24-104

OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206. 24-153

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-35

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-36

JPI = 7/2+ AND 11/2+, T = 1/2 STATES OF MASS 19. 24-65

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

STATIC
INTERACTION OF ISOVECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

STATION
CENTRAL STATION POWER GENERATION BY LASER DRIVEN FUSION. 10-9

STATISTICAL
STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

STATISTICALLY
STATISTICALLY DESIGNED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS OF REACTOR FUEL MATERIALS. 2-35

STATISTICS
EXTENSION OF SOME GRUBBS TYPE STATISTICS FOR THE DETECTION OF SEVERAL OUTLIERS. 20-17

STATUS
STATUS OF BURNUP MEASUREMENT METHODOLOGY. 2-36

ANALYTICAL METHODS FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL CYCLE. PROGRAM STATUS REPORT JUNE 1971 TO JUNE 1972. 2-5

CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-7

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-5

STATUS AND PERFORMANCE OF LAMPF. 21-6

STATUS OF LAMPF. 21-6

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-6

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-6

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-6

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-1

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-2

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-2

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-1

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-1

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-1

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-2

STEADY
TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-7

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-3

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-3

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-3

STEADY-STATE
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

STEEL
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

STEEP
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

STELLAR
ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

STELLERATOR
STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-74

STEPPING
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

STIMULATED
ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

STIRRED
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

LIVED STATES OF THE NITRIC OXIDE ION. 4-9

EROSOLS IN THE SOUTHWESTERN UNITED STATES
ALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

IPARTICLE STATES IN TIN -121. 24-103

THE 1F-2P SHELL MODEL. 24-104

AYING STATES, AND PERTURBATION THEORY. 24-105

COUPLING STATES SEEN IN INELASTIC PROTON
DD TIN ISOTOPES. 24-107

IN BISMUTH -209 FROM THE POLONIUM -210
TION. 24-125

THE REDUCED MATRIX ELEMENTS FOR ELECTRIC
TION BETWEEN THE FIRST AND SECOND EXCITED
M -72 BY COULOMB EXCITATION. 24-137

PROTON) TRANSITIONS TO EXCITED ZERO PLUS
DE REGION. 24-139

-19 POPULATED BY THE NEON -20 (TRITON,ALPHA) 24-144

NE PLUS STATES IN THE REACTION CALCIUM -46,48
CANDIUM -48,50. 24-145

URY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

POLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES 24-152

NG VIBRATION STATES IN LEAD -206. 24-153

ARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND
BIDIUM -88. 24-155

ITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE
GION. 24-156

POWER OF THE SINGLE PARTICLE STATES IN THE LEAD
TON) LEAD -209 REACTION. 24-159

TIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE 24-162

ABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 24-35

ABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 24-36

T = 1/2 STATES OF MASS 19. 24-65

ANIUM -235 AND THE DISTRIBUTION OF SINGLE
IN ITS EXCITED STATES. 24-70

VECTOR SCALAR MESONS WITH A STATIC SOURCE. 26-12

WER GENERATION BY LASER DRIVEN FUSION. 10-9

ANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

NED PROGRAM FOR SAMPLING AND CHEMICAL ANALYSIS
TERIALS. 2-35

GRUBBS TYPE STATISTICS FOR THE DETECTION OF 20-17

EASUREMENT METHODOLOGY. 2-36

S FOR FISSIONABLE MATERIALS IN THE NUCLEAR FUEL
TUS REPORT JUNE 1971 TO JUNE 1972. 2-5

CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

STATUS AND PLANS FOR THE NEGATIVE PION RADIOTHERAPY FACILITY AT THE LOS ALAMOS MESON PHYSICS FACILITY. 5-50

STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

QUARTERLY STATUS REPORT ON THE MEDIUM ENERGY PHYSICS PROGRAM FOR THE PERIOD ENDING JANUARY 31, 1972. 21-53

STATUS AND PERFORMANCE OF LAMPF. 21-61

STATUS OF LAMPF. 21-62

STATUS OF LOS ALAMOS MESON PHYSICS FACILITY. 21-63

STATUS OF THE LAMPF NEGATIVE HYDROGEN ION INJECTOR. 21-64

STATUS REPORT ON LAMPF RESEARCH PROPOSALS. 21-65

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT JANUARY - APRIL 1972. 25-19

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT MAY -AUGUST 1972. 25-20

NUCLEAR ANALYSIS RESEARCH AND DEVELOPMENT, PROGRAM STATUS REPORT, SEPTEMBER - DECEMBER 1971. 25-21

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

QUARTERLY STATUS REPORT ON THE ADVANCED PLUTONIUM FUELS PROGRAM, OCTOBER 1 TO DECEMBER 31, 1971. 27-15

STATUS OF THE NUCLEAR ROCKET PROPULSION PROGRAM. 29-22

STEADY
TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER CYCLIC AND STEADY FLOW CONDITIONS. 16-32

RESPIRATOR CARTRIDGE FILTER EFFICIENCY UNDER PULSATING AND STEADY FLOW CONDITIONS. 16-33

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

STEADY-STATE
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

STEEL
PERTURBATIONS FROM STEEL ENVIRONMENT CLOSE TO A C MAGNET. 12-15

EFFECTS OF AIR INTENSE FLUX OF FAST AND SLOW NEUTRONS ON THE MAGNETIC PROPERTIES OF STEEL. 12-7

STEEP
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

STELLAR
ON THE CONTRIBUTION OF AUTOIONIZATION LINES TO STELLAR OPACITIES. 3-6

STELLERATOR
STABILITY OF A FINITE BETA, L = 2 STELLERATOR. 10-74

STEPPING
SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

STIMULATED
ROLE OF STIMULATED BACKSCATTER INSTABILITIES IN LASER PLASMA IRRADIATION. 19-53

STIRRED
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

STOCHASTIC
SOME IMPLICATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH FEEDBACK. 23-22

STOPPED
STOPPED MUON CHANNEL. 21-66

STORAGE
ENERGY STORAGE AND SWITCHING WITH SUPERCONDUCTORS. 8-11

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

EFFECTS OF LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL CYLINDERS OF PBX 9404. 14-8

DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

STRAIGHT
MODEL OF A STRAIGHT THETA PINCH. 10-46

MODELING OF LONG STRAIGHT THETA PINCHES. 10-47

STRAIN
TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

INFLUENCE OF CREEP STRAIN ON THE ELASTIC MODULUS, CRYSTALLOGRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

STRATOSPHAERE
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

STRATOSPHERE
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

STREAMING
ON ANOMALOUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING INSTABILITIES. 10-53

STREAMS
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

STRENGTH
TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

STRESS
AFFECT OF HUMIDITY STRESS ON THE AERODYNAMIC SIZE OF NON-HYGROSCOPIC AEROSOLS. 16-2

STRING
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

STRONG
NOTE ON INVERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

STRONGLY
STRONGLY EXCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 (HELIUM -3, PROTON) SCANDIUM -48,50. 24-145

EFFECTS OF STRONGLY ABSORPTIVE INTERACTIONS. 24-38

STRONTIUM
RESONANCE RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AN
DECAY OF 17.8 MIN RUBIDIUM -88.

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION.

STRUCTURAL
STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN C

STRUCTURE
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVE ACTIVITY EQUATIONS AND LIQUID STRUCTURE.

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLI SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE.

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGR COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS.

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS.

REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C.

STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES.

STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE.

STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMON PENTAFLUOROANTIMONATE(III).

THORIUM CYANIDE CRYSTAL STRUCTURE.

CRYSTAL STRUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V).

CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6).

CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENO ACID, THE SEX PHEROMONE OF THE HONEYBEE.

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)).

DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIO CRYSTAL STRUCTURE.

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI.

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENE BY LINEAR RECURRENCES.

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UN GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*.

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNI GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIM NULL SPACE.

UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI.

STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205.

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE O LEAD -210.

LEAST - STRUCTURE UNFOLDING CODE.

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133.

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENT TANTALUM -182.

PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY.

CATIONS OF A STOCHASTIC NEUTRON POPULATION MODEL WITH 23-22

ON CHANNEL. 21-66

DRAGE AND SWITCHING WITH SUPERCONDUCTORS. 8-11

UCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

UCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING DRAGE COIL. 8-26

E MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

LONG TERM STORAGE AT 60 DEGREES CENTIGRADE ON SMALL OF PBX 9404. 14-8

DY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING 21-18

STRAIGHT THETA PINCH. 10-46

OF LONG STRAIGHT THETA PINCHES. 10-47

N REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

OF CREEP STRAIN ON THE ELASTIC MODULUS, GRAPHIC ORIENTATION AND DENSITY OF A POCO GRAPHITE. 22-24

IE
UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER ERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF INETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER ERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF INETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

OUS RESISTANCE DUE TO CROSS FIELD ELECTRON ION STREAMING ES. 10-53

MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

F ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND . 1-24

GLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

ME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE RENGTH IN ITS EXCITED STATES. 24-70

UMIDITY STRESS ON THE AERODYNAMIC SIZE OF COPIC AEROSOLS. 16-2

D OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

ERSE BREMSSTRAHLUNG IN A STRONG ELECTROMAGNETIC FIELD. 26-21

XCITED ONE PLUS STATES IN THE REACTION CALCIUM -46,48 ROTON) SCANDIUM -48,50. 24-145

STRONGLY ABSORPTIVE INTERACTIONS. 24-38

RADIATION IN ARTIFICIAL STRONTIUM AND BARIUM CLOUDS. 1-26

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION. 24-75

STRUCTURAL
STRUCTURAL MODIFICATION OF HISTONES IN CULTURED MAMMALIAN CELLS. 5-51

STRUCTURE
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

REEXAMINATION OF THE CRYSTAL STRUCTURE OF B4C. 9-19

STRUCTURE AND BONDING OF THE LITHIUM - RHODIUM HYDRIDES. 9-20

STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE. 9-21

STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

THORIUM CYANIDE CRYSTAL STRUCTURE. 9-24

CRYSTAL STRUCTURE OF CESIUM OXOTETRAFLUOROIODATE(V). 9-3

CRYSTAL STRUCTURE OF CHROMIUM(23) CARBIDE(6). 9-4

CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

DICERIUM MONOANTIMONY DIOXIDE AND DICERIUM MONOBISMUTH DIOXIDE CRYSTAL STRUCTURE. 9-9

RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI. 20-72

STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF LEAD -210. 24-50

LEAST - STRUCTURE UNFOLDING CODE. 24-69

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

PHONON STRUCTURE FACTORS IN BISMUTH AND ANTIMONY. 28-5

STRUCTURES
POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

STRUCTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE AND WITH 4- CYANOPYRIDINE. 9-22

STRUCTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM PENTAFLUOROANTIMONATE(III). 9-23

DETERMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON DIFFRACTION. 9-7

NUMERICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND PARTICULATES ABOUT STRUCTURES. 17-15

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

DATA STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL ENHANCEMENT. 20-9

STUDIES
RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-37

STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

FLOW MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO CULTURED MAMMALIAN CELLS. 5-26

KINETIC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON -13 CARBON DIOXIDE. 5-29

MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA. 10-45

CARBON -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF THE 1,1' DIMETHYLMETALLOCENES. 13-4

USE OF LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-25

PARAMETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN CARBON DIOXIDE LASER MEDIA. 19-49

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

COMPUTER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

COMPARATIVE STUDIES OF SOME TESTS OF NORMALITY. 20-6

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

REACTOR POWER TRANSIENT STUDIES. 23-19

APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-

PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-

TRANSURANIC WASTE REPOSITORY STUDIES. 29-

STUDYING
VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-

STYLE
LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-

SUB-N
MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-

SUBBARRIER
SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES. 15-

SUBMICROSECOND
SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-

SUBNANOSECOND
SUBNANOSECOND HIGH VOLTAGE ATTENUATOR. 18-

SUBROUTINES
SPECIFICATIONS FOR CAMAC SUBROUTINES. 20-

SUBSONIC
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-

SUBSTANCE
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

SUBSTITUTED
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-2

MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-1

PICRYLAMINO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-1

SUBSTOICHIOMETRIC
THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-

SUBSTORM
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES. 1-2

SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE. 1-3

TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-3

COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT O A SUBSTORM. 1-8

SUBSTORMS
PLASMA SHEET VARIATIONS DURING SUBSTORMS. 1-21

RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

SUBSTRATE
CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

JRES
VE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

TION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND CTURES. 1-24

YNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR LEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

E TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

E TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

CTURES OF THE 1:1 COMPLEXES OF COPPER CYANIDE WITH PYRIDAZINE WITH 4- CYANOPYRIDINE. 9-22

CTURES OF THE MF(5)E TYPE. THE CRYSTAL STRUCTURE OF AMMONIUM AFLUOROANTIMONATE(III). 9-23

RMINATION OF THE CRYSTAL STRUCTURES OF DEUTERIUM BY NEUTRON ACTION. 9-7

RICAL CALCULATION OF THREE DIMENSIONAL FLOWS OF AIR AND CULATES ABOUT STRUCTURES. 17-15

IENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE CTURES. 17-22

ULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER H TERRAIN. 17-4

STRUCTURES AND COMPUTATIONAL ORGANIZATION IN DIGITAL NCEMENT. 20-9

N SPECTRAL STUDIES OF HTO IN WATER. 4-37

ES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED S. 4-42

MICROFLUOROMETRIC (FMF) STUDIES OF PLANT LECTIN BINDING TO IRED MAMMALIAN CELLS. 5-26

IC STUDIES OF CHLORELLA PYRENOIDOSA USING 94 PERCENT CARBON RBON DIOXIDE. 5-29

TABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL IBRIA. 10-45

N -13 NUCLEAR MAGNETIC RESONANCE CONTACT SHIFT STUDIES OF I' DIMETHYLMETALLOCENES. 13-4

LAPHANO FOR GAMMA RAY SHIELDING STUDIES. 17-25

IETRIC STUDIES OF THE ELECTRON BEAM CONTROLLED DISCHARGE IN N DIOXIDE LASER MEDIA. 19-49

IETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DE LASER FOR LASER PRODUCED PLASMAS. 19-57

TER STUDIES OF DIFFRACTION EFFECTS IN LASERS. 19-9

RATIVE STUDIES OF SOME TESTS OF NORMALITY. 20-6

TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR EX OF LAMPF. 21-6

OR POWER TRANSIENT STUDIES. 23-19

ATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-3

N, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: C STUDIES. 23-4

S OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) IONS IN HEAVY ELEMENT TARGETS. 24-147

IC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR CE. 24-39

IC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR CE. 24-40

AR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF M -171 AND YTTERBIUM -169, 175. 24-94

NUCLEAR ORIENTATION STUDIES OF THE DECAYS OF RHENIUM -183, 184G, 184M. 24-95

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

NEUTRON DIFFRACTION STUDIES ON DYSPROSIUM ANTIMONIDE, NEODYMIUM ANTIMONIDE, AND CERIUM ANTIMONIDE. 28-3

PRELIMINARY MISSION STUDIES FOR A SMALL NUCLEAR ENGINE. 29-15

TRANSURANIC WASTE REPOSITORY STUDIES. 29-26

STUDYING
VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

STYLE
LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

SUB-N
MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

SUBBARRIER
SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES. 15-13

SUBMICROSECOND
SUBMICROSECOND PULSES FROM A HYDROGEN FLUORINE LASER WITH HIGH ENERGY DENSITY AND QUANTUM EFFICIENCY. 19-55

SUBNANOSECOND
SUBNANOSECOND HIGH VOLTAGE ATTENUATOR. 18-19

SUBROUTINES
SPECIFICATIONS FOR CAMAC SUBROUTINES. 20-57

SUBSONIC
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS. 17-17

SUBSTANCE
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

SUBSTITUTED
HUGONIOT CURVES FOR SEVERAL SUBSTITUTED METHANE LIQUIDS. 4-20

MASS SPECTROMETRIC STUDY OF SUBSTITUTED FURFURYL COMPOUNDS. 1. 7-12

PICRYLAMINO SUBSTITUTED HETEROCYCLES. 5. PYRIDINES (1,2). 7-15

SUBSTOICHIOMETRIC
THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

SUBSTORM
SUBSTORM BEHAVIOR OF PLASMA SHEET PARTICLES. 1-29

SUBSTORM PHENOMENA IN THE DISTANT MAGNETOSPHERE. 1-30

TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

COORDINATED OBSERVATIONS OF THE MAGNETOSPHERE: THE DEVELOPMENT OF A SUBSTORM. 1-8

SUBSTORMS
PLASMA SHEET VARIATIONS DURING SUBSTORMS. 1-21

RELATIVE MOTION OF AURORAL CONJUGATE POINTS DURING SUBSTORMS. 1-25

SUBSTRATE
CARBON -13 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF LIVING CELLS AND THEIR METABOLISM OF A SPECIFICALLY LABELED CARBON -13 SUBSTRATE. 13-5

SUBTERRENE
INTERNAL REACTION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT HEATER PENETRATORS. 11-5

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

SUBTHRESHOLD
FISSILE ASSAY OF SMALL SAMPLES BY SUBTHRESHOLD NEUTRON INTERROGATION. 25-10

SUCCESSFUL
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

SULFATE
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

SULFOLANE
ACID - BASE TITRATIONS IN SULFOLANE. 7-2

SULFUR
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

SUMMARY
FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF PROGRESS FROM MAY 1 TO JULY 31, 1971. 22-3

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF PROGRESS FROM AUGUST 1 TO OCTOBER 31, 1971. 22-4

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF PROGRESS FROM NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CMB-13 RESEARCH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF PROGRESS FROM FEBRUARY 1 TO APRIL 30, 1972. 22-6

NUCLEAR ROCKET REFERENCE DATA SUMMARY. 29-13

SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-23

SUMP
ANALYSES FOR RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP EFFLUENT OUTLETS. 29-1

SUPERCONDUCTING
CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL.

RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES.

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BE LINES.

SUPERCONDUCTIVITY
SUPERCONDUCTIVITY OF PROTACTINIUM.

SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS.

DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM.

SUPERCONDUCTORS
ENERGY STORAGE AND SWITCHING WITH SUPERCONDUCTORS.

SUPERCUBE
SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS.

SUPERFLUID
DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM.

FURTHER INVESTIGATIONS ON THE FLOWING SUPERFLUID FILM.

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM.

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FL AND THE SATURATION OF FLUCTUATION DISSIPATION.

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW.

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM.

DISSIPATION IN SATURATED SUPERFLUID FILM FLOW.

SUPERHEAVY
NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI.

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUC

PREDICTIONS FOR SUPERHEAVY NUCLEI.

CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI.

SUPERPERIOD
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM.

SUPERPOSED
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION.

SUPERRADIANCE
LASER SUPERRADIANCE.

SUPERSONIC
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION.

SUPPLY
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT.

WATER SUPPLY AT LOS ALAMOS DURING 1971.

SURFACE
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM TH CELL SURFACE.

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODER SURFACE AND FLUID TEMPERATURES.

SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AN METALLURGICAL RESEARCH BUILDING.

TION PHENOMENA IN PROTOTYPE SUBTERRENE RADIANT ATORS. 11-5

C STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON N SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE 22-42

F SMALL SAMPLES BY SUBTHRESHOLD NEUTRON . 25-10

L GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT HOD. 2-20

A PERCHLORIC ACID OXIDATION - FERROUS SULFATE HOD. 2-21

A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE HOD. 2-22

A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION 2-23

ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION C END-POINT DETECTION METHOD. 2-24

ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION C END-POINT DETECTION METHOD. 2-25

ENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE 5-10

ATIONS IN SULFOLANE. 7-2

ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

HE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY 24-158

APHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES . 12-8

CH ON CARBON AND GRAPHITE. REPORT NO. 18, SUMMARY OF MAY 1 TO JULY 31, 1971. 22-3

CH ON CARBON AND GRAPHITE. REPORT NO. 19, SUMMARY OF AUGUST 1 TO OCTOBER 31, 1971. 22-4

CH ON CARBON AND GRAPHITE. REPORT NO. 20, SUMMARY OF NOVEMBER 1, 1971 TO JANUARY 31, 1972. 22-5

CH ON CARBON AND GRAPHITE. REPORT NO. 21, SUMMARY OF FEBRUARY 1 TO APRIL 30, 1972. 22-6

ET REFERENCE DATA SUMMARY. 29-13

S ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 29-23

RESIDUAL EXPLOSIVES IN DRAINAGE DITCH SOIL AT SUMP ETS. 29-1

CTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION 7-4

DIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT ORE SUPERCONDUCTING QUADRUPOLES. 8-14

ERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

NG MAGNETIC ENERGY STORAGE AND TRANSFER. 8-19

NG MAGNETIC ENERGY STORAGE AND TRANSFER. 8-20

VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

SUPERCONDUCTING QUADRUPOLE DOUBLET FOR LAMPF SECONDARY BEAM LINES. 12-22

SUPERCONDUCTIVITY
SUPERCONDUCTIVITY OF PROTACTINIUM. 8-21

SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS. 8-22

DIRECT EVIDENCE FOR THE COEXISTENCE OF SUPERCONDUCTIVITY AND FERROMAGNETISM. 8-7

SUPERCONDUCTORS
ENERGY STORAGE AND SWITCHING WITH SUPERCONDUCTORS. 8-11

SUPERCUBE
SUPERCUBE SCATTERING CHAMBER FOR POLARIZED BEAMS. 24-150

SUPERFLUID
DISSIPATION IN THE FLOWING SATURATED SUPERFLUID FILM. 8-10

FURTHER INVESTIGATIONS ON THE FLOWING SUPERFLUID FILM. 8-12

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

OBSERVATION OF DIFFERENT REGIMES IN SUPERFLUID HELIUM FILM FLOW AND THE SATURATION OF FLUCTUATION DISSIPATION. 8-16

SATURATION OF FLUCTUATION DISSIPATION IN SUPERFLUID FLOW. 8-18

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

DISSIPATION IN SATURATED SUPERFLUID FILM FLOW. 8-9

SUPERHEAVY
NEW CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-10

CALCULATION OF FISSION BARRIERS FOR HEAVY AND SUPERHEAVY NUCLEI. 15-2

PREDICTIONS FOR SUPERHEAVY NUCLEI. 24-117

CALCULATION OF HALF LIVES FOR SUPERHEAVY NUCLEI. 24-22

SUPERPERIOD
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

SUPERPOSED
ANALYSIS OF THE RAYLEIGH-TAYLOR PROBLEM OF SUPERPOSED FLUIDS. THE INVISCID INCOMPRESSIBLE IRROTATIONAL CASE STEADY-STATE SOLUTION. 17-3

SUPERRADIANCE
LASER SUPERRADIANCE. 19-36

SUPERSONIC
FEASIBILITY OF INCREASING SPECIFIC IMPULSE OF SUPERSONIC NOZZLES BY LITHIUM CONDENSATION. 29-5

SUPPLY
REGULATION OF 2.5 MW DC POWER SUPPLY TO 0.01 PERCENT. 12-20

WATER SUPPLY AT LOS ALAMOS DURING 1971. 29-29

SURFACE
CELL CYCLE DEPENDENT DESQUAMATION OF HEPARAN SULFATE FROM THE CELL SURFACE. 5-10

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

SURFACE CONTAMINATION CONTROL AT THE LOS ALAMOS CHEMISTRY AND METALLURGICAL RESEARCH BUILDING. 16-39

DETONATIONS NEAR THE WATER SURFACE. 17-6

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE. 22-13

IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-39

ELASTIC PION NUCLEUS SCATTERING FOR STUDIES OF THE NUCLEAR SURFACE. 24-40

SURFACES
RECENT ADVANCES IN THE STUDY OF SOLID SURFACES. 9-18

SURVEY
SURVEY OF SCYLLAC EXPERIMENTS. 10-77

SURVEY OF SCYLLAC EXPERIMENTS. 10-78

LOS ALAMOS LAND AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

SURVEY OF RADIOGRAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

SUSCEPTIBILITY
DIVALENT AMERICIUM: THE CRYSTAL STRUCTURE AND MAGNETIC SUSCEPTIBILITY OF AMERICIUM IODIDE. 9-10

SUSPENSION
ADAPTATION OF FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-2

ADAPTATION OF THE FLUORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION FOR FLOW MICROFLUOROMETRY. 5-3

SUSPENSIONS
CARBON -13 NMR SPECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

SWELLING
EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

SWITCHING
ENERGY STORAGE AND SWITCHING WITH SUPERCONDUCTORS. 8-11

SYMMETRIC
STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC L EQUALS ONE PINCH. 10-38

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

SYMMETRIZABILITY
ON COMPLETELY NORMAL (0,1) MATRICES AND SYMMETRIZABILITY. 20-43

SYMMETRY
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

SYMPOSIUM
TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

SYNCHRONIZED
PREPARATION OF LARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS IN LATE G1 IN THE PRE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY.

SYNCHRONIZING
METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTO ON MAMMALIAN CELL CYCLE TRAVERSE.

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTO ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX.

SYNERGY
SYNERGY AND ARTIFICIAL INTELLIGENCE.

SYNTHESIS
EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS.

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS.

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN.

INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES.

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE.

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION.

SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERAS

SYNTHETIC
NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING

SYSTEM
NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS.

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS.

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBO MONOXIDE ION.

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM.

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNIT FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER.

PETN-DIPEHN-TRI-PEON SYSTEM.

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF.

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF.

SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBER

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION.

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION.

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONA CHAMBERS.

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER.

MODULAR SIMULATION APPROACH TO SYSTEM TESTING.

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM.

PLUTONIUM - SCANDIUM SYSTEM.

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS.

THE WATER SURFACE. 17-6

GH ENERGY ELECTRONS AND SURFACE EXPANSION IN D TARGET PLASMAS. 19-45

GH ENERGY ELECTRONS AND SURFACE EXPANSION IN D TARGET PLASMAS. 19-46

ESTIGATION OF CORNERS IN THE YIELD SURFACE. 22-13

RIUM METAL: AUGER STUDY OF BULK TO SURFACE 22-23

AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES OLOGY. 22-25

EUS SCATTERING FOR STUDIES OF THE NUCLEAR 24-39

EUS SCATTERING FOR STUDIES OF THE NUCLEAR 24-40

IN THE STUDY OF SOLID SURFACES. 9-18

C EXPERIMENTS. 10-77

C EXPERIMENTS. 10-78

AREAS ENVIRONMENTAL RADIATION SURVEY 1972. 16-21

RAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-59

RAPHIC IMAGE ENHANCEMENT EXPERIENCE. 20-60

UM: THE CRYSTAL STRUCTURE AND MAGNETIC AMERICIUM IODIDE. 9-10

UORESCENT FEULGEN REACTION TO CELLS IN SUSPENSION LUOROMETRY. 5-2

E FLUORESCENT FEULGEN REACTION TO CELLS IN LOW MICRO-LUOROMETRY. 5-3

ECTROSCOPY OF RED BLOOD CELL SUSPENSIONS. 13-2

N SPECTRA ON THE SWELLING OF CERAMIC INSULATORS FOR THERMIONIC REACTOR DESIGN. 27-4

AND SWITCHING WITH SUPERCONDUCTORS. 8-11

RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF ING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

YNAMIC STABILITY PROPERTIES OF A HELICALLY SYMMETRIC CH. 10-38

MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY ROMAGNETIC TECHNIQUE. 14-11

ORMAL (0,1) MATRICES AND SYMMETRIZABILITY. 20-43

ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN OPES. 16-11

MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS EEDINGS. 20-69

ARGE QUANTITIES OF SYNCHRONIZED MAMMALIAN CELLS RE-DNA REPLICATIVE PHASE OF THE CELL CYCLE. 5-46

FILM IMAGE SYNCHRONIZED, ROTATING SLIT SHUTTERED DRUM FIELD CAMERAS FOR PROJECTILE IN FLIGHT PHOTOGRAPHY. 12-9

SYNCHRONIZING

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

SYNERGY

SYNERGY AND ARTIFICIAL INTELLIGENCE. 20-61

SYNTHESIS

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

EFFECTS OF ISOLEUCINE DEFICIENCY ON NUCLEIC ACID AND PROTEIN METABOLISM IN CULTURED CHINESE HAMSTER CELLS. CONTINUED RIBONUCLEIC ACID (RNA) AND PROTEIN SYNTHESIS IN THE ABSENCE OF DEOXYRIBONUCLEIC ACID (DNA) SYNTHESIS. 5-22

INHIBITION OF RIBONUCLEIC ACID (RNA) SYNTHESIS BY MYXIN. 5-27

INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES. 5-28

METABOLISM OF HISTONE FRACTIONS. 4. SYNTHESIS OF HISTONES DURING THE G1 PHASE OF THE MAMMALIAN LIFE CYCLE. 5-35

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

SYNTHETIC

NEW SYNTHETIC ROUTE TO HIGHLY CLUSTERED ORGANOMETALLIC SULFUR COMPLEXES AND CHARACTERIZATION OF THEIR STRUCTURES AND BONDING. 7-13

SYSTEM

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-16

NEW SYSTEM FOR GAMMA SCANNING FUEL ELEMENTS. 2-17

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

500 KJ, 50 KV DENSE PLASMA FOCUS SYSTEM. 10-1

TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

PETN-DIPEHN-TRI-PEON SYSTEM. 14-13

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-24

NEW BEAM SPILL CONTROL SYSTEM FOR LAMPF. 16-25

SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

HIGH ENERGY, SHORT PULSE CARBON DIOXIDE LASER SYSTEM FOR PLASMA PRODUCTION. 19-21

LARGE NEODYMIUM : GLASS LASER SYSTEM FOR PLASMA PRODUCTION. 19-29

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-34

PERFORMANCE OF LAMPF COMPUTER CONTROL SYSTEM. 21-40

PLUTONIUM - SCANDIUM SYSTEM. 22-28

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

2

ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE. 22-43

R MATRIX ANALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

MODIFIED PHASE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXISTENCE OF EXOTIC BARYON RESONANCES. 24-83

GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

ISOTOPIC NEUTRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

PERFORMANCE OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM. 25-23

RANDOM SOURCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF FISSIONABLE MATERIALS. 25-26

APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

CALIFORNIUM -252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OPERATING PROCEDURES MANUAL. 25-5

CALIFORNIUM -252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

FASTER LASL LENS DESIGN SYSTEM. 26-9

TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

SYSTEMATICS
NUCLEAR AND COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

SYSTEMS
DIFFERENTIAL SCANNING CALORIMETRIC DETERMINATION OF KINETICS CONSTANTS OF SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

HOT ATOM REACTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM BROMIDE -BROMINE SYSTEMS. 6-3

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

FUSION REACTOR SYSTEMS. 10-29

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

INTRACAVITY BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER SYSTEMS. 19-25

KINETICS OF ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER SYSTEMS. 19-27

DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

DESIGN CONSIDERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 21-55

POLARIZATION EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

RESEARCH ON FEW PARTICLE SYSTEMS AT LAMPF. 24-138

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-7

LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

T
DELTA T TURN-ON PROCEDURE. 21-17

STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

J-PI = 7/2+ AND 11/2+, T = 1/2 STATES OF MASS 19. 24-65

T-111
EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

TABLE
FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-

TABLES
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-

TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-

TABULATION
CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-

TAGGING
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES 16-

TAIL
TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-

TANKS
INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 2

TANTALUM
EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24

TAPE
AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 2

TARGET
EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 1

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 1

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 2

TARGETS
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 1

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24

BEAM HEATING IN GAS TARGETS. 24

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26

TRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE. 22-43

ALYSIS OF REACTIONS IN THE OXYGEN -17 SYSTEM. 24-130

SE SHIFT ANALYSIS OF THE I = 0 K-N SYSTEM AND THE EXOTIC BARYON RESONANCES. 24-83

CANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

TRON SOURCE SYSTEM FOR THE ASSAY OF PLUTONIUM RODS. 25-13

E OF A PELLET-TO-PELLET CALIFORNIUM -252 FUEL ROD ASSAY 25-23

RCE INTERROGATION SYSTEM FOR NONDESTRUCTIVE ASSAY OF MATERIALS. 25-26

OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM HE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

-252 ASSAY SYSTEM FOR FBR FUEL PINS: DESCRIPTION AND OCEDURES MANUAL. 25-5

-252 FUEL ROD ASSAY SYSTEM: IN-PLANT PERFORMANCE. 25-6

LENS DESIGN SYSTEM. 26-9

EMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

COULOMB PAIRING ENERGY SYSTEMATICS IN LIGHT NUCLEI. 24-91

SCANNING CALORIMETRIC DETERMINATION OF KINETICS SYSTEMS THAT MELT WITH DECOMPOSITION. 6-2

CTION IN THE HYDROGEN BROMIDE - BROMINE, DEUTERIUM MINE SYSTEMS. 6-3

AL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC LECULE SYSTEMS. 6-9

TOR SYSTEMS. 10-29

AGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-73

BREAKDOWN IN CARBON MONOXIDE AND CARBON DIOXIDE LASER 19-25

LECTRON BEAM CONTROLLED CARBON DIOXIDE LASER 19-27

ON OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS TO THE WIENER THEORY. 20-10

DERATIONS FOR CIRCUITS AND SYSTEMS SECURITY. 20-12

FEW PARTICLE SYSTEMS AT LAMPF. 21-55

EXPERIMENTS AND FEW NUCLEON SYSTEMS. 24-109

FEW PARTICLE SYSTEMS AT LAMPF. 24-138

-252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM M IN FUEL RODS. 25-7

OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

-ON PROCEDURE. 21-17

F MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

11/2+, T = 1/2 STATES OF MASS 19. 24-65

YGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

TABLE
FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-53

TABLES
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

TABLES FOR USE OF THE MAXIMUM F-RATIO IN MULTIPLE COMPARISON PROCEDURES. 20-62

TABULATION
CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

TAGGING
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

TAIL
TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

TANKS
INSTALLATION AND ALIGNMENT OF LAMPF 201 MHZ AND 805 MHZ LINAC TANKS. 21-24

TANTALUM
EFFECT OF OXYGEN CONTENT ON THE IMPACT BEHAVIOR OF THE TANTALUM BASED ALLOY T-111 AT 2400 DEGREES FAHRENHEIT. 22-10

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

NUCLEAR STRUCTURE AND PARITY MIXING IN THE DECAYS FROM ORIENTED TANTALUM -182. 24-99

TAPE
AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

TARGET
EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-45

OCCURRENCE OF HIGH ENERGY ELECTRONS AND SURFACE EXPANSION IN RADIANTLY HEATED TARGET PLASMAS. 19-46

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

TARGETS
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-2

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

OPTICAL MECHANISM FOR ENHANCED ABSORPTION OF LASER ENERGY INCIDENT ON SOLID TARGETS. 19-47

RESONANT ABSORPTION OF LASER LIGHT BY PLASMA TARGETS. 19-52

NEUTRON PRODUCTION BY MEDIUM ENERGY PROTONS ON HEAVY METAL TARGETS. 21-35

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

BEAM HEATING IN GAS TARGETS. 24-20

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

2

TEA
TEA LASER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

TECHNICAL
LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

LASL TECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE FOR PREPARING TECHNICAL REPORTS AND PAPERS. 29-10

TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

TECHNIQUE
SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

MEASUREMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY SYMMETRIC ELECTROMAGNETIC TECHNIQUE. 14-11

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

LASER REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES IN SURFACE MORPHOLOGY. 22-25

MEASUREMENT OF THE URANIUM-235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

TECHNIQUES
CHEMICAL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION TECHNIQUES. 7-4

FIELD PHOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES AND EQUIPMENT. 12-8

DEVELOPMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059, QUARTERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

ALIGNMENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

SOME HIGH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

FABRICATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

PROBLEMS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS SECTIONS. 24-122

NONDESTRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR FUEL CYCLE. 25-17

TECHNOLOGICAL
TECHNOLOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

TECHNOLOGY
DART TECHNOLOGY DEVELOPMENT FINAL REPORT. 29-2

TELL
WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

TEMPERATURE
SIMPLIFICATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND EMITTANCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

LOW TEMPERATURE EQUATION OF STATE FOR METALS. 4-24

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY. 8-1

HIGH FIELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT TEMPERATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-24

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-25

CRYOGENIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN TEMPERATURE: PRESENT AND FUTURE. 8-5

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS.

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS.

HIGH TEMPERATURE CREEP OF A POCO GRAPHITE.

HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMI

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNI NEUTRON IRRADIATION AT HIGH TEMPERATURE.

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FU

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONI MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLE ROCKET ENGINE PROGRAM (ROVER).

TEMPERATURES
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY T PINCHES.

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY T PINCHES.

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERAT SURFACE AND FLUID TEMPERATURES.

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION.

TEMPORAL
TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION.

TEN
BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES.

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES.

TENSILE
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970.

TENSOR
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITA GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*.

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITA GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE.

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITA GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE.

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING.

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRA

HELIUM-4 (DEUTERON,DEUTERON) HELIUM-4 TENSOR POLARIZATION TRANSFER.

TERMINAL
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFER

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGU

TERNARY
SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS.

SER POWER E/P FOR ATMOSPHERIC AND HIGHER PRESSURES. 19-56

L
ECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE
EPARING TECHNICAL REPORTS AND PAPERS. 29-10

ECHNICAL INFORMATION GUIDE: MANUAL OF PROCEDURE AND STYLE
EPARING TECHNICAL REPORTS AND PAPERS. 29-10

CAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

E
RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF
THERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

EMENT OF MASS MOTION IN DETONATION PRODUCTS BY AN AXIALLY
TRIC ELECTROMAGNETIC TECHNIQUE. 14-11

UOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT
VE COMPRESSIBLE FLOW CALCULATIONS. 17-5

ZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF
NING FOR DIGITAL FILTERING OF PICTURES. 20-32

REFLECTION AS A TECHNIQUE FOR THE STUDY OF DYNAMIC CHANGES
FACE MORPHOLOGY. 22-25

EMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL
T USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

ES
AL ASPECTS OF NEW SUPERCONDUCTING MATERIALS AND FABRICATION
QUES. 7-4

HOTOGRAPHY OF PROJECTILES IN FLIGHT. SUMMARY OF TECHNIQUES
UIPMENT. 12-8

PMENT OF AIR SAMPLING TECHNIQUES. LASL PROJECT R-059,
ERLY REPORT MAY 16 THROUGH SEPTEMBER 15, 1972. 16-5

ENT PHILOSOPHY, DESIGN AND TECHNIQUES USED AT LAMPF. 21-2

GH RESOLUTION TECHNIQUES FOR USE WITH NEGATIVE ION BEAMS. 21-58

ATION TECHNIQUES FOR LIQUID HYDROGEN ACCELERATOR TARGETS. 22-14

MS AND TECHNIQUES IN COMPUTATION OF MULTIGROUP CROSS
S. 24-122

TRUCTIVE ANALYTICAL TECHNIQUES FOR MATERIALS IN THE NUCLEAR
CLE. 25-17

GICAL
LOGICAL ASPECTS OF STEADY STATE AND PULSED REACTORS. 10-79

GY
ECHNOLOGY DEVELOPMENT FINAL REPORT. 29-2

AN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

URE
CATION OF DIFFERENTIAL TEMPERATURE CALIBRATION AND
NCE MEASUREMENTS IN SCANNING CALORIMETRY. 2-34

PERATURE EQUATION OF STATE FOR METALS. 4-24

PENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A
ATURE GRADIENT. 7-24

TION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE
METRY. 8-1

ELD GRADIENT MAGNETS, 15 AND 25 CENTIMETER AMBIENT
ATURE BORE SUPERCONDUCTING QUADRUPOLES. 8-14

OW TEMPERATURE NUCLEAR PHYSICS. 8-24

OW TEMPERATURE NUCLEAR PHYSICS. 8-25

NIC INSTRUMENTATION AT AND ABOVE LIQUID HYDROGEN
ATURE: PRESENT AND FUTURE. 8-5

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

DETERMINATION OF TEMPERATURE AND DENSITY IN LOW TEMPERATURE DENSE PLASMAS USING LINE TO CONTINUUM INTENSITY RATIOS. 10-13

HIGH TEMPERATURE CREEP OF A POCO GRAPHITE. 22-17

HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

HIGH TEMPERATURE CORE THERMOCOUPLE DEVELOPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

TEMPERATURES
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

TEMPORAL
TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

TEN
BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-4

TENSILE
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

TENSOR
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER. 24-34

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

TERMINAL
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-52

TERMINAL CONTROL LANGUAGE FOR THE MADCAP PROGRAMMING LANGUAGE. 20-63

TERNARY
SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS. 8-22

2

TERRAIN
CALCULATING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER ROUGH TERRAIN. 17-4

TEST
EMP IN THE IONOSPHERE: ROCKET TEST 152-133. 1-9

TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

RECENT PROGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

POWERFUL GOODNESS OF FIT TEST. 20-49

TEST OF SINGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

TESTING
ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

ACOUSTIC EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE TESTING THROUGH OCTOBER 1970. 2-1

MODULAR SIMULATION APPROACH TO SYSTEM TESTING. 20-34

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-19

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-20

TESTS
ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

RESPIRATOR PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM CHLORIDE AEROSOL MAN TESTS. 16-34

COMPARATIVE STUDIES OF SOME TESTS OF NORMALITY. 20-6

THREE KOLMOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED POWER PROPERTIES. 20-65

DEVELOPMENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND INTEGRAL TESTS. 23-8

TETRACHLORIDE
TORSIONAL MODE OF DIBORON TETRACHLORIDE. 4-48

TETRACYANOAURATE
DI-AQUO PROTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

TETRAFLUOROHYDRAZINE
LASER INDUCED DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

TETRAHEDRA
ON THE CONSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

TETRANITRATE
THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

TETROXIDE
VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

THALLIUM
STRUCTURE OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

THEOREM
THEOREM ON THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 20-64

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUC
NUCLEON BREMSSTRAHLUNG.

THEORETIC
FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION
REACTIONS IN NUCLEI.

THEORETICAL
THEORETICAL EQUATION OF STATE FOR DEUTERIUM.

THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION.

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON
DIOXIDE LASER FOR LASER PRODUCED PLASMAS.

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTUR
LEAD -210.

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRA
1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972.

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRA
1 -SEPTEMBER 30, 1972.

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS
PROGRAM JANUARY 1 - MARCH 31, 1972.

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS
PROGRAM OCTOBER 1 - DECEMBER 31, 1971.

THEORIES
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM.

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONO
COUPLING THEO IES.

THEORY
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THE R

EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES.

PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTI L THEORY OF D
METALS.

THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION.

TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VA
EQUILIBRATION.

HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY
CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN.

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA
FOCUS DISCHARGE.

TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION.

DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION A
RELATIONSHIP TO THE WIENER THEORY.

THEORY AND USE O THE SPHERICAL HARMONICS, FIRST COLLISION
SOURCE, AND VARIABLE WEIGHT ERSIONS OF THE TWOTRAN TRANSPORT
PROGRAM.

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS.

OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY.

SELF CONSISTENT BILOCAL FIELD THEORY.

SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY.

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER.

THERAPY
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY.

THERMAL
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DU
THE PROXIMITY OF THE EARTH'S BOW SHOCK.

ING THREE DIMENSIONAL FLOWS AROUND STRUCTURES AND OVER RRAIN. 17-4

IONOSPHERE: ROCKET TEST 152-133. 1-9

MERMODYNAMIC THEOR Y USING EMF CELLS UNDERGOING VAPOR TION. 7-20

OGRESS IN THE LARGE SCALE SKID SENSITIVITY TEST. 14-16

GOODNESS OF FIT TEST. 20-49

NGLE CHANNEL STRENGTH FUNCTION LIMIT. 24-151

ICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE HROUGH OCTOBER 1970. 2-1

EMISSION TESTING PROGRAM: PROGRESS REPORT ON TENSILE HROUGH OCTOBER 1970. 2-1

IMULATION APPROACH TO SYSTEM TESTING. 20-34

NESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-19

NESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-20

CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ATED FUEL PIN IRRADIATION TESTS. 2-2

ONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON OGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL ANALYSIS. 9-13

R PERFORMANCE MEASUREMENT USING QUANTITATIVE SODIUM AEROSOL MAN TESTS. 16-34

VE STUDIES OF SOME TESTS OF NORMALITY. 20-6

MOGOROV-SMIRNOV TYPE ONE SAMPLE TESTS WITH IMPROVED PERTIES. 20-65

ENT OF ENDF/B SHIELDING DATA, PROCESSING CODES, AND TESTS. 23-8

DE
MODE OF DIBORON TETRACHLORIDE. 4-48

AURATE
OTON IN HYDROGEN TETRACYANOAURATE(III) DIHYDRATE. 9-8

DHYDRAZINE
UCED DISSOCIATION OF TETRAFLUOROHYDRAZINE. 19-33

NSTRUCTION OF TETRAHEDRA WITH GIVEN EDGE LENGTHS. 20-44

E
ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL ATE. 7-21

T OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE HYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

AL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

AL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

OF MERCURY -205 FROM T = 45/2 STATES IN THALLIUM -205. 24-146

N THE DIFFICULTY OF NUMERICAL DECONVOLUTION. 20-64

APPLICATION OF THE BURNETT-KROLL SOFT PHOTON THEOREM TO NUCLEON - NUCLEON BREMSSTRAHLUNG. 24-19

THEORETIC
FIELD THEORETIC DESCRIPTION OF (PION, PROTON) AND (PROTON,PION) REACTIONS IN NUCLEI. 24-52

THEORETICAL
THEORETICAL EQUATION OF STATE FOR DEUTERIUM. 4-47

THEORETICAL STUDY OF GEOTHERMAL ENERGY EXTRACTION. 11-8

THEORETICAL STUDIES OF THE ELECTRON BEAM CONTROLLED CARBON DIOXIDE LASER FOR LASER PRODUCED PLASMAS. 19-57

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE STRUCTURE OF LEAD -210. 24-50

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM APRIL 1 - JUNE 30, 1972 AND ANNUAL REPORT, FY 1972. 27-11

QUARTERLY REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JULY 1 -SEPTEMBER 30, 1972. 27-12

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM JANUARY 1 - MARCH 31, 1972. 27-13

QUARTERLY STATUS REPORT ON THE THEORETICAL REACTOR PHYSICS PROGRAM OCTOBER 1 - DECEMBER 31, 1971. 27-14

THEORIES
CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

COULOMB EXCITATION OF GERMANIUM -73 AND QUASIPARTICLE PHONON COUPLING THEO IES. 24-26

THEORY
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THE RY. 3-14

EXTENDED HUCKEL THEORY BETA FORMULAS APPLIED TO DIATOMIC MOLECULES. 4-17

PSEUDO GREEN'S FUNCTIONS AND THE PSEUDOPOTENTI L THEORY OF D-BAND METALS. 4-35

THEORY OF SEDIMENTATION FOR LIGAND MEDIATED DIMERIZATION. 5-53

TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

HYDRODYNAMIC THEORY CORRELATION FOR 72 HELIUM EVAPORATORS. 8-15

CORRECTED AND NEW COMPARISONS OF A HYDRODYNAMICAL THEORY OF CHANNEL BOILING AND DATA ON NITROGEN AND HYDROGEN. 8-3

MEASUREMENT AND THEORY FOR THE INVERSE PINCH PHASE OF A PLASMA FOCUS DISCHARGE. 10-41

TEMPORAL CYCLOTRON DAMPING: THEORY AND SIMULATION. 10-80

DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

THEORY AND USE O THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT ERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-29

OPTICAL MODELS, DECAYING STATES, AND PERTURBATION THEORY. 24-105

SELF CONSISTENT BILOCAL FIELD THEORY. 26-32

SOME IMPLICATIONS OF A RECENT TEST OF MUONIC ATOM THEORY. 26-33

GROUP THEORY OF LATTICE DYNAMICS BY COMPUTER. 28-1

THERAPY
PHYSICAL AND RADIOBIOLOGICAL ASPECTS OF PI MINUS MESONS IN THERAPY. 5-43

THERMAL
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES DUE TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

2

THERMAL ENERGY TRANSPORT IN THE SOLAR WIND. 1-31

THERMAL ACTINOMETER FOR FLASH PHOTOLYSIS. 6-13

THERMAL ANALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL TETRANITRATE. 7-21

THERMAL CHARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

ELECTRON TMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

CALCULATIONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

EFFECT OF TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE INITIATION OF PBX 9404 BY OBLIQUE IMPACT. 14-7

THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

THERMAL DIFFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE STEADY STATE APPROXIMATION. 22-39

THERMAL EXPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES CENTIGRADE. 22-40

THERMAL EXPANSION OF PLUTONIUM DIOXIDE. 22-41

THERMIONIC
EFFECT OF NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS AND IMPLICATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

THERMOCHEMICAL
RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 OXIDE FUELS. 22-34

THERMOCOUPLE
HIGH TEMPERATURE CORE THERMOCOUPLE DEVE OPMENT FOR THE NUCLEAR ROCKET ENGINE PROGRAM (ROVER). 29-8

THERMODYNAMIC
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

THERMODYNAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON NITRIDE - CARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE PENETRATORS. 22-42

THERMOELECTRIC
SOURCE TERM CALCULATIONS F R PIONEER RADIOISOTOPIC THERMOELECTRIC GENERATORS. 16-38

THERMOLUMINESCENT
FACTORS AFFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS CONTAINING LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

THERMOMETER
THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMTER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

AMORPHOUS ALLOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

THERMOMETRY
APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY. 8-1

RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

THERMOMETRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE MOSSBAUER EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY THERMOMETER. 8-23

THERMONUCLEAR
STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 1

ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 2

THERMOPHYSICAL
RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 O IDE FUELS. 22

THETA
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY TH PINCHES. 1

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY TH PINCHES. 10

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 1

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 1

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 1

LOW DENSITY LIMIT OF THE THETA PINCH. 10

MODEL OF A STRAIGHT THETA PINCH. 10

MODELING OF LONG STRAIGHT THETA PINCHES. 10

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 1

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 1

TWO STAGE HEATING OF THETA PINCHES. 1

VUV EMISSION FROM A NEON SEEDED THETA PINCH. 1

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 2

THICK
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4

NERGY TRANSPORT IN THE SOLAR WIND. 1-31

CTINOMETER FOR FLASH PHOTOLYSIS. 6-13

NALYSIS OF SOME CRYSTAL HABITS OF PENTAERYTHRITOL ATE. 7-21

HARACTERIZATION OF THE PLASTIC CRYSTALLINE PHASE. 7-22

T OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE YDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

MPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA 10-17

EMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA 10-18

ONS OF THERMAL CONDUCTIVITY FOR DENSE PLASMAS. 10-8

TARGET THERMAL CONDUCTIVITY AND ROUGHNESS ON THE OF PBX 9404 BY OBLIQUE IMPACT. 14-7

ONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

FFUSIVITY OF HETEROGENEOUS MATERIALS. 2. LIMITS OF THE ATE APPROXIMATION. 22-39

XPANSION OF PLUTONIUM DIOXIDE FROM 25 TO 1420 DEGREES E. 22-40

XPANSION OF PLUTONIUM DIOXIDE. 22-41

NEUTRON SPECTRA ON THE SWELLING OF CERAMIC INSULATORS ATIONS FOR THERMIONIC REACTOR DESIGN. 27-4

CAL
ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF -238 OXIDE FUELS. 22-34

LE
ERATURE CORE THERMOCOUPLE DEVE OPMENT FOR THE NUCLEAR GINE PROGRAM (ROVER). 29-8

MIC
ERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR TION. 7-20

NTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF THRATES. 7-26

NAMIC STABILITY CONSIDERATIONS IN THE MOLYBDENUM - BORON ARBON SYSTEM. APPLICATION TO PROTOTYPE SUBTERRENE DRS. 22-42

TRIC
RM CALCULATIONS F R PIONEER RADIOISOTOPIC THERMOELECTRIC RS. 16-38

NESCENT
FFECTING THE DESIGN OF ALBEDO NEUTRON DOSIMETERS G LITHIUM FLUORIDE THERMOLUMINESCENT DOSIMETERS. 18-9

R
TRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE R EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY TER. 8-23

TRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE R EFFECT THERMOMTER AND THE GAMMA RAY ANISOTROPY TER. 8-23

US ALLOY RESISTANCE THERMOMETER DEVELOPMENT. 12-1

Y
ON OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE TRY. 8-1

E THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

TRY BELOW 0.1 DEGREES KELVIN: A COMPARISON OF THE R EFFECT THERMOMETER AND THE GAMMA RAY ANISOTROPY TER. 8-23

THERMONUCLEAR
STATUS REPORT OF THE LASL CONTROLLED THERMONUCLEAR RESEARCH PROGRAM FOR A 12-MONTH PERIOD ENDING OCTOBER 1971. 10-76

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

LASER DRIVEN IMPLOSION OF SPHERICAL DT SHELLS TO THERMONUCLEAR BURN CONDITIONS. 19-32

ANALYTIC FORMS OF THE THERMONUCLEAR FUNCTION. 24-8

THERMOPHYSICAL
RESEARCH ON THERMOPHYSICAL AND THERMOCHEMICAL PROPERTIES OF PLUTONIUM -238 O IDE FUELS. 22-34

THETA
ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-17

ELECTRON TEMPERATURES AND THERMAL CONDUCTION IN HIGH ENERGY THETA PINCHES. 10-18

FEEDBACK STABILIZATION ON A THETA PINCH PLASMA COLUMN. 10-25

FEEDBACK STABILIZATION ON AN L = 1 THETA PINCH PLASMA COLUMN. 10-26

HELICAL FIELD EXPERIMENTS ON A THREE METER THETA PINCH. 10-31

LOW DENSITY LIMIT OF THE THETA PINCH. 10-37

MODEL OF A STRAIGHT THETA PINCH. 10-46

MODELING OF LONG STRAIGHT THETA PINCHES. 10-47

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-59

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER, LINEAR THETA PINCH. 10-60

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

PLASMA EXPERIMENTS ON THE SCYLLAC FIVE METER LINEAR THETA PINCH. 10-63

PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-67

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

REFERENCE THETA PINCH REACTOR (RTPR). A STUDY OF A PULSED HIGH BETA FUSION REACTOR BASED ON THE THETA PINCH. 10-70

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

TWO STAGE HEATING OF THETA PINCHES. 10-85

VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-89

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

THICK
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS. 4-10

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS. 4-2

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

2

THIN
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

RESISTANCE THERMOMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

PREPARATION OF THIN TARGETS ON THIN GRAPHITE BACKINGS BY MOLECULAR PLATING. 26-26

THIRD
ON THE USE OF AN ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE THE SECOND AND THIRD SPECTRA OF CHLORINE. 2-18

THORIUM
THORIUM NITROGEN OXYGEN PHASE DIAGRAM. 7-23

SUPERCONDUCTIVITY OF VARIOUS TERNARY THORIUM COMPOUNDS. 8-22

AXIAL CHANNELING IN THORIUM DIOXIDE. 9-1

THORIUM CYANIDE CRYSTAL STRUCTURE. 9-24

SUBBARRIER FISSION RESONANCES IN THORIUM ISOTOPES. 15-13

IMPURITIES ON THORIUM METAL: AUGER STUDY OF BULK TO SURFACE EQUILIBRIA. 22-23

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

NITRIDE LAYERS FORMED ON THORIUM AND THORIUM - CARBON ALLOYS IN NITROGEN. 22-26

THRESHOLD
THRESHOLD FOR ONSET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE PLASMA FREQUENCY. 10-81

NEUTRON - DEUTERON ELASTIC SCATTERING ABOVE THE BREAKUP THRESHOLD. 24-88

THULIUM
HIGH TEMPERATURE EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

TIME
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

TIME HISTORY OF PLASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL DURING A SUBSTORM. 1-32

X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

TIME DEPENDENT SOLUTION TO INTERSTITIAL DIFFUSION IN A TEMPERATURE GRADIENT. 7-24

TIME DOMAIN REFLECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

MCA FOCAL: A REAL TIME PROGRAMMING SYSTEM FOR MULTICHANNEL ANALYSIS ON A PDP-9/ PDP-15 COMPUTER. 20-28

MINIMIZING THE COMPUTATION TIME FOR USING THE TECHNIQUE OF SECTIONING FOR DIGITAL FILTERING OF PICTURES. 20-32

ELECTROMAGNETIC PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND GAMMA RAYS FROM A NUCLEAR EXPLOSION. 23-11

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

SPACE AND TIME DEPENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

TIME CORRELATION METHOD FOR EXTRACTING A FAST RISING COMPONENT FROM A COMPLEX PULSE. 26-34

TIMEX
TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FO THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS.

TIN
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVEN ACTIVITY EQUATIONS AND LIQUID STRUCTURE.

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS.

ONE AND THREE QUASIPARTICLE STATES IN TIN -121.

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES.

DECAY OF 100,000-YEAR TIN -126.

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IR -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197.

TISSUES
PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION.

TITANIUM
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES.

TITANOUS
PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD.

TITIUS-BODE
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY.

TITRATION
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD.

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD.

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD.

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATIO METHOD.

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRAT - AMPEROMETRIC END-POINT DETECTION METHOD.

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRAT -POTENTIOMETRIC END-POINT DETECTION METHOD.

TITRATIONS
ACID - BASE TITRATIONS IN SULFOLANE.

TOLERANCE
ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES THE BEAM OPTICAL ABERRATIONS.

TONGUE
TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION.

TOOL
NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS.

TOROIDAL
EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH.

MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR.

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR.

MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA.

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH.

MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA.

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH.

1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE
DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

OMETRY WITH THIN SUPERCONDUCTING ALUMINUM FILMS. 8-17

HIN TARGETS ON THIN GRAPHITE BACKINGS BY
NG. 26-26

HIN TARGETS ON THIN GRAPHITE BACKINGS BY
NG. 26-26

ELECTRODELESS RING DISCHARGE SOURCE TO SEPARATE
HIRD SPECTRA OF CHLORINE. 2-18

N OXYGEN PHASE DIAGRAM. 7-23

Y OF VARIOUS TERNARY THORIUM COMPOUNDS. 8-22

IN THORIUM DIOXIDE. 9-1

CRYSTAL STRUCTURE. 9-24

N RESONANCES IN THORIUM ISOTOPES. 15-13

RIUM METAL: AUGER STUDY OF BULK TO SURFACE 22-23

RMED ON THORIUM AND THORIUM - CARBON ALLOYS IN 22-26

RMED ON THORIUM AND THORIUM - CARBON ALLOYS IN 22-26

SET OF ANOMALOUS MICROWAVE ABSORPTION NEAR THE
Y. 10-81

ON ELASTIC SCATTERING ABOVE THE BREAKUP 24-88

E EVALUATION OF MOLYBDENUM THULIUM OXIDE CERMET. 22-18

D VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME
URE. 1-11

LASMA OBSERVATIONS IN THE GEOMAGNETIC TAIL
M. 1-32

NS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

OLUTION TO INTERSTITIAL DIFFUSION IN A
DIENT. 7-24

ECTOMETRY FOR STRAIN AND MANGANIN GAUGE SENSING. 18-21

TIME PROGRAMMING SYSTEM FOR MULTICHANNEL
9/ PDP-15 COMPUTER. 20-28

MPUTATION TIME FOR USING THE TECHNIQUE OF
GITAL FILTERING OF PICTURES. 20-32

PULSE AND TIME DEPENDENT ESCAPE OF NEUTRONS AND
A NUCLEAR EXPLOSION. 23-11

NDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR
ULTIGROUP TRANSPORT EQUATIONS. 23-25

VARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON
UTERON,PROTON) TRITON REACTIONS. 24-154

ME OF FLIGHT FACILITY AT THE LOS ALAMOS
TORY. 24-164

PENDENT SLOWING DOWN IN HEAVY MEDIA. 25-29

METHOD FOR EXTRACTING A FAST RISING COMPONENT
ULSE. 26-34

TIMEX
TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

TIN
STIRRED H-CELL MEASUREMENTS ON GOLD - TIN LIQUID ALLOYS: SOLVENT ACTIVITY EQUATIONS AND LIQUID STRUCTURE. 7-19

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

ONE AND THREE QUASIPARTICLE STATES IN TIN -121. 24-103

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

DECAY OF 100,000-YEAR TIN -126. 24-31

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

TISSUES
PLUTONIUM CONCENTRATION IN TISSUES OF A GENERAL POPULATION. 16-26

TITANIUM
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

TITANOUS
PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

TITIUS-BODE
TITIUS-BODE LAW OF PLANETARY DISTANCES: ITS HISTORY AND THEORY. 3-14

TITRATION
PLUTONIUM BY A CERIC SULFATE TITRATION -PHOTOMETRIC END-POINT DETECTION METHOD. 2-20

PLUTONIUM BY A PERCHLORIC ACID OXIDATION - FERROUS SULFATE TITRATION METHOD. 2-21

PLUTONIUM BY A TITANOUS CHLORIDE REDUCTION - CERIC SULFATE TITRATION METHOD. 2-22

PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION - AMPEROMETRIC END-POINT DETECTION METHOD. 2-24

PLUTONIUM BY ARGENTIC OXIDE OXIDATION, FERROUS SULFATE TITRATION -POTENTIOMETRIC END-POINT DETECTION METHOD. 2-25

TITRATIONS
ACID - BASE TITRATIONS IN SULFOLANE. 7-2

TOLERANCE
ELECTRO-MECHANICAL TOLERANCE REQUIREMENTS FOR QUADRUPOLES FROM THE BEAM OPTICAL ABERRATIONS. 21-19

TONGUE
TONGUE PALATE CONTACT DURING CONSONANT PRODUCTION. 29-25

TOOL
NITROGEN -15 NMR AS A TOOL FOR STUDYING INTERMOLECULAR INTERACTIONS AND DYNAMIC PROCESSES IN LIQUIDS. 13-6

TOROIDAL
EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH. 10-21

MEASURED PLASMA PARAMETERS IN THE SCYLLAC TOROIDAL SECTOR. 10-40

MEASUREMENTS OF PLASMA PARAMETERS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR. 10-42

MHD STABILITY OF DIFFUSE TOROIDAL EQUILIBRIA. 10-43

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

MHD STABILITY STUDIES OF NUMERICALLY OBTAINED TOROIDAL EQUILIBRIA. 10-45

PLASMA EXPERIMENTS IN THE SCYLLAC FIVE METER TOROIDAL SECTOR THETA PINCH. 10-58

2

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER THETA PINCH TOROIDAL SECTOR. 10-61

PLASMA EXPERIMENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC FIVE METER, THETA PINCH TOROIDAL SECTOR. 10-62

RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-69

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

TOROIDAL EQUILIBRIUM FOR A HIGH BETA THETA PINCH PLASMA. 10-82

TORSIONAL
TORSIONAL MODE OF DIBORON TETRACHLORIDE. 4-48

TOTAL
CANADIAN TOTAL SOLAR ECLIPSE FLIGHT. 3-2

TOTAL ENERGY OF COPPER, SILVER AND GOLD. 4-49

CALCULATED TOTAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED GERMANIUM DETECTORS WITH SMALL DISC SOURCES. 18-5

FAST TOTAL INFORMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL CHAMBERS. 20-18

EVALUATION OF THE TOTAL CROSS SECTION FOR TUNGSTEN. 24-47

MODEL DEPENDENCE OF PION - NUCLEUS TOTAL CROSS SECTIONS. 24-79

MOMENTUM DEPENDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL CROSS SECTIONS. 24-84

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

TOWARD
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

TRACING
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

ACOUSTIC RAY TRACING IN UNSTEADY FLOWS. 17-2

TRACKS
INVESTIGATION OF COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-12

COMPUTER GENERATED OPTICAL SOUND TRACKS. 12-5

TRAIN
TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

TRAJECTORY
MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

TRANS-2-
CRYSTAL STRUCTURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC ACID, THE SEX PHEROMONE OF THE HONEYBEE. 9-5

TRANSDUCER
PROBE VELOCITY TRANSDUCER. 18-14

TRANSFER
W VIRGINIS MODEL USING RADIATION TRANSFER. 3-15

CHARGE TRANSFER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-4

ELECTRON TRANSFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS AND RARE GAS ATOMS FOR PRIMARY ION ENERGIES BELOW 100 EV. 4-7

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-3

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-1

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-1

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-1

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER. 8-2

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS. 10-

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-

TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS. 24-

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI. 24-

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFE 24-

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-

TRANSFERASE
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE. 5-

TRANSFORMATION
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-

TRANSIENT
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-1

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-

REACTOR POWER TRANSIENT STUDIES. 23-

APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES. 23-

TRANSITION
EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-1

ENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC
A PINCH TOROIDAL SECTOR. 10-61

ENTS ON L = 1,0 HELICAL EQUILIBRIA IN THE SCYLLAC
TA PINCH TOROIDAL SECTOR. 10-62

FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT
10-69

HE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

HE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

IBRIUM FOR A HIGH BETA THETA PINCH PLASMA.
10-82

E OF DIBORON TETRACHLORIDE. 4-48

L SOLAR ECLIPSE FLIGHT. 3-2

F COPPER, SILVER AND GOLD. 4-49

TAL EFFICIENCIES OF COAXIAL LITHIUM DRIFTED
ECTORS WITH SMALL DISC SOURCES. 18-5

RMATION READOUT SYSTEM FOR MULTIWIRE PROPORTIONAL
20-18

THE TOTAL CROSS SECTION FOR TUNGSTEN. 24-47

NCE OF PION - NUCLEUS TOTAL CROSS SECTIONS.
24-79

NDENCE OF SCREENING IN NEUTRON - DEUTERON TOTAL
24-84

F TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE
NEUTRON INDUCING FISSION. 25-15

V ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN
TOPES. 15-11

L GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS.
1-33

RACING IN UNSTEADY FLOWS. 17-2

DF COMPUTER GENERATED OPTICAL SOUND TRACKS.
12-12

RATED OPTICAL SOUND TRACKS. 12-5

F A TRAIN OF SHORT, INTENSE LASER PULSES.
19-58

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF
DNAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM
6-7

LASSICAL TRAJECTORY CALCULATION OF THE RATES OF
DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF
RIDE AND DEUTERIUM FLUORIDE. 6-8

TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC
CULE SYSTEMS. 6-9

TURE OF QUEEN SUBSTANCE, 9- KETO TRANS-2- DECENOIC
EROMONE OF THE HONEYBEE. 9-5

TRANSDUCER. 18-14

L USING RADIATION TRANSFER. 3-15

ER AND IONIZATION IN COLLISIONS BETWEEN ATOMIC IONS
TOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-4

SFER IN COLLISIONS OF DOUBLY CHARGED RARE GAS IONS
TOMS FOR PRIMARY ION ENERGIES BELOW 100 EV.
4-7

LOW MOLECULAR WEIGHT RNAS OF POST -RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

ON A CLASSICAL TRAJECTORY STUDY OF ENERGY TRANSFER IN SOME ATOMIC DIATOMIC MOLECULE SYSTEMS. 6-9

HEAT TRANSFER WITH THE HELIUM II SUPERFLUID FILM. 8-13

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER.
8-19

SUPERCONDUCTING MAGNETIC ENERGY STORAGE AND TRANSFER.
8-20

REVERSIBLE MAGNETIC ENERGY TRANSFER AND STORAGE SYSTEMS.
10-73

MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES. 12-13

TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POLARIZATION TRANSFER AND SPIN CORRELATION EXPERIMENTS IN NUCLEAR PHYSICS. 24-111

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

POLARIZATION TRANSFER IN THE HELIUM -3 (DEUTERON,PROTON) HELIUM -4 REACTION. 24-113

PRELIMINARY MEASUREMENTS OF POLARIZATION TRANSFER IN HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 ELASTIC SCATTERING. 24-121

PROTON POLARIMETER DESIGN FOR POLARIZATION TRANSFER EXPERIMENTS.
24-126

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI. 24-157

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

DESCRIPTION OF HELIUM -4 (DEUTERON, DEUTERON) HELIUM -4 POLARIZATION TRANSFER EXPERIMENTS. 24-33

DEUTERON (PROTON,DEUTERON) HYDROGEN TENSOR POLARIZATION TRANSFER.
24-34

HELIUM -4 (DEUTERON,DEUTERON) HELIUM -4 TENSOR POLARIZATION TRANSFER. 24-58

TRANSFERASE
SYNTHESIS OF MIXED POLYNUCLEOTIDES CONTAINING RIBO- AND DEOXYRIBONUCLEOTIDES BY TERMINAL DEOXYNUCLEOTIDYL TRANSFERASE.
5-52

TRANSFORMATION
TRANSFORMATION OF THE RADIATIVE TRANSFER EQUATION USEFUL FOR PROBLEMS WITH STEEP SOURCE GRADIENTS. 20-66

TRANSIENT
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

REACTOR POWER TRANSIENT STUDIES. 23-19

APPLICATION OF THE PAD CODE TO LMFBR POWER TRANSIENT STUDIES.
23-3

TRANSITION
EVIDENCE FOR A PHASE TRANSITION IN KEL-F (POLYCHLOROTRIFLUOROETHYLENE) UNDER SHOCK LOADING. 4-14

2

ELECTRONIC TRANSITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON MONOXIDE ION. 4-8

OXYGEN -17 NMR OF FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX IONS. 13-10

TRANSITION REGION. 21-67

PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

REMEASUREMENT OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC QUADRUPOLE TRANSITION BETWEEN THE FIRST AND SECOND EXCITED STATES OF GERMANIUM -72 BY COULOMB EXCITATION. 24-137

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188. 24-165

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-35

E1 TRANSITION PROBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) AND 1/2- (541). 24-36

E1-M2-E3 MIXING OF THE 1159.3 KEV TRANSITION IN HAFNIUM -176. 24-37

TRANSITIONS
STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

PHASE TRANSITIONS AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

SODIUM NMR STUDY OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

TURBULENCE TRANSITIONS IN CONVECTIVE FLOW. 17-23

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

TRANSMISSION
TRANSMISSION OF A TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

TRANSMITTANCES
QUANTITATIVE PHOTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: OPTIMIZING PEAK TRANSMITTANCES. 2-27

TRANSPORT
THERMAL ENERGY TRANSPORT IN THE SOLAR WIND. 1-31

PARTICULATE TRANSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW FIELDS. 17-21

EFFECTS OF PHOTON EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

LASER BEAM TRANSPORT IN FUSION REACTORS. 19-31

COLLISIONAL TRANSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY HEATED MEDIUM. 19-8

BEAM TRANSPORT STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR COMPLEX OF LAMPF. 21-6

STATISTICAL BEAM TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

AIR TRANSPORT CALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR FLUX TAPE AND THE NWEF COMPUTER PROGRAM CDR. 23-1

EFFECTIVENESS OF CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT CALCULATIONS. 23-10

GENERALIZED, FINITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TRANSPORT COMPUTATIONS. 23-13

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO.

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATI FROM DISCRETE ORDINATE CODES.

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM.

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS.

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE.

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN PROGRAM.

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM.

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS.

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION.

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS.

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHE (1962) TO AN ALTITUDE OF 90 KILOMETERS.

TRANSURANIC
TRANSURANIC WASTE REPOSITORY STUDIES.

TRANSURANIUM
BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN.

TRANSVERSE
TRANSVERSE BEAM MATCHING USING WIRE SCANNERS.

TRAVERSE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE.

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROT ON MAMMALIAN CELL CYCLE TRAVERSE.

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROT ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX.

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROT ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX.

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE.

TREATMENT
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN.

TREND
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY THE FERMIUM ISOTOPES.

TRIAMINO
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY.

TRIAZINE
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITR AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX).

ITION MOMENT FOR THE COMET TAIL SYSTEM OF CARBON 4-8

F FIRST TRANSITION AND LANTHANIDE SERIES COMPLEX 13-10

N. 21-67

AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV N OF HAFNIUM -180. 24-106

OF THE REDUCED MATRIX ELEMENTS FOR ELECTRIC NSITION BETWEEN THE FIRST AND SECOND EXCITED NIUM -72 BY COULOMB EXCITATION. 24-137

O PLUS BETA TRANSITION OF TUNGSTEN -188. 24-165

OBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 24-35

OBABILITIES BETWEEN THE NILSSON STATES 1/2+ (411) 24-36

F THE 1159.3 KEV TRANSITION IN HAFNIUM -176. 24-37

O X TRANSITIONS IN MOLECULAR IONS OF CARBON TROGEN. 4-45

F TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM N IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

S AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-16

S AND CRYSTAL STRUCTURES OF DEUTERIUM. 9-17

Y OF PHASE TRANSITIONS IN SODIUM CYANIDE. 13-14

SITIONS IN CONVECTIVE FLOW. 17-23

ON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS TINIDE REGION. 24-139

ANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE REGION. 24-156

A TRAIN OF SHORT, INTENSE LASER PULSES. 19-58

OTOMETRIC ANALYSIS USING ABSORBANCE RATIOS: TRANSMITTANCES. 2-27

TRANSPORT IN THE SOLAR WIND. 1-31

NSPORT IN HIGHLY DISTORTED THREE DIMENSIONAL FLOW 17-21

N EMISSION ANISOTROPY ON TRANSPORT CALCULATIONS. 17-7

SPORT IN FUSION REACTORS. 19-31

NSPORT OF ENERGETIC ELECTRONS IN A RADIANTLY 19-8

STUDIES ON THE PROTON BEAM LINE IN THE INJECTOR F. 21-6

TRANSPORT FOR HIGH INTENSITY ION CURRENTS. 21-60

ALCULATIONS USING THE LASL-NWEF NEUTRON GAMMA AIR E NWEF COMPUTER PROGRAM CDR. 23-1

F CONVERGENCE ACCELERATION OPTIONS IN TRANSPORT 23-10

ITE DIFFERENCED, DIFFUSION EQUATION FOR NEUTRON TATIONS. 23-13

MULTIGROUP MONTE CARLO AND S/SUB-N METHODS FOR AIR TRANSPORT. 23-14

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

SIMULATION OF LOW ENERGY PHOTON TRANSPORT AND THE SIMULATION OF THE ADJOINT NEUTRON TRANSPORT EQUATION WITH MONTE CARLO. 23-21

SPHERICAL HARMONIC SOLUTIONS OF THE NEUTRON TRANSPORT EQUATION FROM DISCRETE ORDINATE CODES. 23-23

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

TIMEX: A TIME DEPENDENT EXPLICIT DISCRETE ORDINATES PROGRAM FOR THE SOLUTION OF MULTIGROUP TRANSPORT EQUATIONS. 23-25

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-29

DISCRETE ORDINATES METHODS FOR THE NUMERICAL SOLUTION OF THE TRANSPORT EQUATION. 23-9

GREEN-KUBO FORMALISM AND CONDITIONS FOR LINEAR RELATIONSHIPS AMONG TRANSPORT COEFFICIENTS. 26-11

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

TRANSURANIC
TRANSURANIC WASTE REPOSITORY STUDIES. 29-26

TRANSURANIUM
BIOLOGICAL IMPLICATIONS OF THE TRANSURANIUM ELEMENTS FOR MAN. 16-3

TRANSVERSE
TRANSVERSE BEAM MATCHING USING WIRE SCANNERS. 21-68

TRAVERSE
EFFECTS OF CYTOSINE ARABINOSIDE, DAUNOMYCIN, MITHRAMYCIN, AZACYTINIDE, ADRIAMYCIN, AND CAMPTOTHECIN ON MAMMALIAN CELL CYCLE TRAVERSE. 5-20

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-37

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

METHOD FOR COMPARING EFFECTS OF DIFFERENT SYNCHRONIZING PROTOCOLS ON MAMMALIAN CELL CYCLE TRAVERSE: THE TRAVERSE PERTURBATION INDEX. 5-38

SIMPLE, RAPID TECHNIQUE FOR DETERMINATION OF THE EFFECTS OF CHEMOTHERAPEUTIC AGENTS ON MAMMALIAN CELL CYCLE TRAVERSE. 5-49

TREATMENT
ARREST OF CHINESE HAMSTER CELLS IN G2 FOLLOWING TREATMENT WITH THE ANTITUMOR DRUG BLEOMYCIN. 5-6

TREND
NEW LOOK IN LOW ENERGY FISSION: THE TREND TOWARD MASS SYMMETRY IN THE FERMIUM ISOTOPES. 15-11

TRIAMINO
IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6 TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

TRIAZINE
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

2

TRICK
HELIUM INJECTION BY THE TRITIUM TRICK. 22-15

TRILOGY
TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-67

TRILOGY ON ERRORS IN THE HISTORY OF COMPUTING. 20-68

TRINITRO
COEFFICIENT OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE AND HEXAHYDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

TRIPLE
ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

TRITIUM
FUEL BURNUP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM TRITIUM PLASMA. 10-28

NEUTRONIC CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER INITIATED (DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

TRITIUM PRODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR BLANKET DESIGN. 10-83

DEUTERIUM - TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY MEANS OF ION - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER RADIATION. 19-14

HELIUM INJECTION BY THE TRITIUM TRICK. 22-15

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

ELASTIC SCATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID DEUTERIUM AND TRITIUM. 24-41

INTEGRAL EXPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM LITHIUM -7 BY 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE. 24-62

TRITON
RESONANCE STRUCTURE IN (TRITON,PROTON-FISSION) AND (DEUTERON,PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

FISSION INDUCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA), (HELIUM -3,TRITON) AND (TRITON,ALPHA) REACTIONS. 15-6

POLARIZATION AND POLARIZATION TRANSFER IN THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3. 24-108

POSSIBLE EXCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN THE NICKEL -58 (TRITON,NEUTRON) COBALT -58 REACTION. 24-115

ANALYZING POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3 AT 45 DEGREES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

PROTON HOLE STATES IN BISMUTH -209 FROM THE POLONIUM -210 (TRITON,ALPHA) REACTION. 24-125

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

STATES OF FLUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA) REACTION. 24-144

STUDY OF KRYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION. 24-148

STUDY OF THE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE (TRITON,PROTON) REACTION. 24-149

ANGULAR DISTRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON (PROTON,NEUTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

TIME REVERSAL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON AND DEUTERON (DEUTERON,PROTON) TRITON REACTIONS. 24-154

ANGULAR DISTRIBUTIONS OF THE ANALYZING POWER IN THE TRITON (PROTON,NEUTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV AND COMPARISON TO POLARIZATION DATA. 24-17

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES.

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM ISOTOPES.

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12 (TRITON, PROTON) CARBON -14 REACTION.

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1 RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT -58. -58.

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON) PROCESSES.

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON, PROTON) BERYLLIUM -11 REACTION.

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM -3) REACTION.

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON -86.

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA) REACTION.

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION TRITON (PROTON, NEUTRON) HELIUM -3.

TUBE
SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM CONTAINING MATERIALS.

ALL METAL DISCHARGE TUBE.

TUBES
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE SURFACE AND FLUID TEMPERATURES.

TUNGSTEN
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN TARGETS.

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS.

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV.

STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE.

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188.

EVALUATION OF THE TOTAL CROSS SECTION FOR TUNGSTEN.

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER NEUTRON IRRADIATION AT HIGH TEMPERATURE.

TUNING
CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC.

TUNNELING
METHOD AND APPARATUS FOR TUNNELING BY MELTING.

TURBULENCE
ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE.

TURBULENCE TRANSITIONS IN CONVECTIVE FLOW.

TURBULENT
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC SEPARATED JET FLOWS.

TURN-ON
DELTA T TURN-ON PROCEDURE.

TURNOVER
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS.

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS OF CULTURED MAMMALIAN CELLS.

ECTION BY THE TRITIUM TRICK. 22-15

N ERRORS IN THE HISTORY OF COMPUTING. 20-67

N ERRORS IN THE HISTORY OF COMPUTING. 20-68

T OF THERMAL EXPANSION OF PENTAERYTHRITOL TETRANITRATE
YDRO -1,3,5- TRINITRO -S- TRIAZINE (RDX). 7-5

STRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM
UCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS
OM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL
ONS. 24-16

UP AND DIRECT CONVERSION OF ENERGY IN A DEUTERIUM
ASMA. 10-28

CHARACTERISTICS OF A PULSED FUSION REACTOR USING LASER
DEUTERIUM PLUS TRITIUM) PELLETS. 10-49

ODUCTION MEASUREMENT WITH APPLICATION TO FUSION REACTOR
ESIGN. 10-83

- TRITIUM HEATING TO THERMONUCLEAR TEMPERATURES BY
ON - ION COLLISIONS IN THE PRESENCE OF INTENSE LASER
19-14

ECTION BY THE TRITIUM TRICK. 22-15

ON TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM
T THETA EQUALS ZFRO DEGREES. 24-112

ATTERING AND POLARIZATION OF FAST NEUTRONS BY LIQUID
AND TRITIUM. 24-41

XPERIMENT TO MEASURE THE TRITIUM PRODUCTION FROM
Y 14 MEV NEUTRONS IN A LITHIUM DEUTERIDE SPHERE.
24-62

STRUCTURE IN (TRITON,PROTON-FISSION) AND
PROTON-FISSION) ON ACTINIDE NUCLEI. 15-12

UCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA),
RITON) AND (TRITON,ALPHA) REACTIONS. 15-6

UCED BY (HELIUM -3,DEUTERON), (HELIUM -3,ALPHA),
RITON) AND (TRITON,ALPHA) REACTIONS. 15-6

ON AND POLARIZATION TRANSFER IN THE REACTION TRITON
UTRON) HELIUM -3. 24-108

XCITATION OF THE PARENT ANALOGUES OF M1 RESONANCES IN
-58 (TRITON,NEUTRON) COBALT -58 REACTION.
24-115

POWER OF THE REACTION TRITON (PROTON,NEUTRON) HELIUM -3
EES CENTER OF MASS FROM 1.5 TO 12 MEV. 24-12

LE STATES IN BISMUTH -209 FROM THE POLONIUM -210
HA) REACTION. 24-125

(TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS
HE ACTINIDE REGION. 24-139

LUORINE -19 POPULATED BY THE NEON -20 (TRITON,ALPHA)
24-144

RYPTON -86 WITH RUBIDIUM -87 (TRITON,ALPHA) REACTION.
24-148

HE NEUTRON RICH ISOTOPES NEAR A = 100 BY MEANS OF THE
TON) REACTION. 24-149

STRIBUTIONS AND ABSOLUTE CROSS SECTIONS FOR THE TRITON
UTRON) HELIUM -3 NEUTRON SOURCE REACTION. 24-15

AL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON
ION (DEUTERON,PROTON) TRITON REACTIONS. 24-154

AL INVARIANCE IN THE TRITON (PROTON,DEUTERON) DEUTERON
ION (DEUTERON,PROTON) TRITON REACTIONS. 24-154

STRIBUTIONS OF THE ANALYZING POWER IN THE TRITON
UTRON) HELIUM -3 REACTION AT 6.00, 9.95, AND 13.55 MEV
RISON TO POLARIZATION DATA. 24-17

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM
ISOTOPES. 24-2

(TRITON,PROTON) AND (PROTON,TRITON) REACTIONS ON EVEN CERIUM
ISOTOPES. 24-2

CROSS SECTION AND POLARIZATION MEASUREMENTS FOR THE CARBON -12
(TRITON, PROTON) CARBON -14 REACTION. 24-28

EXCITATION OF THE PARENT ANALOGS OF THE NICKEL -58 GIANT M1
RESONANCE BY THE REACTION NICKEL -58 (TRITON,HELIUM -3) COBALT
-58. -58. 24-49

ISOSPIN CONSERVATION IN (TRITON,PROTON) AND (HELIUM -3,PROTON)
PROCESSES. 24-64

LEVELS OF BERYLLIUM -11 FROM A STUDY OF THE BERYLLIUM -9 (TRITON,
PROTON) BERYLLIUM -11 REACTION. 24-71

LEVELS OF COBALT -64 POPULATED BY THE NICKEL -64 (TRITON,HELIUM
-3) REACTION. 24-72

LEVELS OF KRYPTON -86 FROM RUBIDIUM -87 (TRITON,ALPHA) KRYPTON
-86. 24-73

LEVELS OF RUBIDIUM -85 FROM THE STRONTIUM -86 (TRITON,ALPHA)
REACTION. 24-75

ANALYZING POWER AT 45 DEGREES FROM 1.5 TO 12 MEV FOR THE REACTION
TRITON (PROTON, NEUTRON) HELIUM -3. 24-9

TUBE
SEALED TUBE DISSOLUTION METHOD WITH APPLICATIONS TO PLUTONIUM
CONTAINING MATERIALS. 2-32

ALL METAL DISCHARGE TUBE. 10-2

TUBES
MEASUREMENTS OF CONVECTIVE HEAT TRANSFER COEFFICIENTS FOR THE
SUBSONIC FLOW OF HYDROGEN AND HELIUM IN SMOOTH TUBES AT MODERATE
SURFACE AND FLUID TEMPERATURES. 12-13

TUNGSTEN
EMISSION OF CHARACTERISTIC L AND K RADIATION FROM THICK TUNGSTEN
TARGETS. 4-10

CALCULATED BREMSSTRAHLUNG SPECTRA FROM THICK TUNGSTEN TARGETS.
4-2

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE
ENERGY RANGE 12 TO 300 KV. 4-54

STRUCTURE OF TUNGSTEN OXYTETRAFLUORIDE. 9-21

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188.
24-165

EVALUATION OF THE TOTAL CROSS SECTION FOR TUNGSTEN. 24-47

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER
NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

TUNING
CAVITY TUNING FOR THE LAMPF 805 MHZ LINAC. 21-9

TUNNELING
METHOD AND APPARATUS FOR TUNNELING BY MELTING. 11-6

TURBULENCE
ELECTRON CYCLOTRON DRIFT INSTABILITY AND TURBULENCE.
10-16

TURBULENCE TRANSITIONS IN CONVECTIVE FLOW. 17-23

TURBULENT
NUMERICAL METHOD FOR DESCRIBING TURBULENT, COMPRESSIBLE, SUBSONIC
SEPARATED JET FLOWS. 17-17

TURN-ON
DELTA T TURN-ON PROCEDURE. 21-17

TURNOVER
DISTRIBUTION AND TURNOVER OF LABELED METHYL GROUPS IN HISTONE
FRACTIONS OF CULTURED MAMMALIAN CELLS. 5-17

TURNOVER OF HISTONE ACETYL GROUPS IN CULTURED MAMMALIAN CELLS.
5-54

TURNOVER OF LABELED METHYL AND ACETYL GROUPS IN HISTONE FRACTIONS
OF CULTURED MAMMALIAN CELLS. 5-55

2

TWO
TWO SUCCESSFUL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

IDENTIFICATION OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE IMPURITIES BY TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

TIN SOLVENT ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC SOLUTION FINE STRUCTURE AND TWO LIQUID REGIONS. 7-25

NUMERICAL SIMULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

STABILITY OF TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

TWO DIMENSIONAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER LASER. 10-84

TWO STAGE HEATING OF THETA PINCHES. 10-85

TWO DIMENSIONAL DETONATIONS. 14-18

2DE: A TWO DIMENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR COMPUTING MULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

NUMERICAL INVESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED INTERFACE BETWEEN TWO FLUIDS. 17-16

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

CONTINUOUS TWO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT REACTIVE COMPRESSIBLE FLOW CALCULATIONS. 17-5

NUMERICAL CALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING MIXTURES IN TWO DIMENSIONS. 19-44

DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

META LANGUAGE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL LANGUAGES. 20-30

PATRICIA II. TWO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

REVIEW OF TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-53

TWO DIMENSIONAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS ALAMOS, NM. PROCEEDINGS. 20-69

TWO DIMENSIONAL PROGRAMMING LANGUAGES. 20-70

TWO DIMENSIONAL SEARCH AND INTERPOLATION ON A DISTORTED RECTANGULAR GRID. PROGRAM SI-PH1-G2D. 20-71

TWO DIMENSIONAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

TWO DIMENSIONAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

RELATIVISTIC MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO PION EXCHANGE. 24-136

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

TWO HOLE AND TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND DECAY OF 17.8 MIN RUBIDIUM -88. 24-155

TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

TWO NUCLEON TRANSFER AND SPHERICAL NUCLEI. 24-157

ANGULAR DISTRIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM ORIENTED NUCLEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS EMITTED FROM ORIENTED NUCLEI AND TRIPLE DIRECTIONAL CORRELATIONS. 24-16

RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLE

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMAN

TWOTRAN
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPO PROGRAM.

TWOTRAN-FC
TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRA PROGRAM.

U
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UN GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*.

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UN GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIM NULL SPACE.

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA.

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSP (1962) TO AN ALTITUDE OF 90 KILOMETERS.

ULTRAHIGH
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWD

ULTRALOW
APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY.

ULTRALOW TEMPERATURE NUCLEAR PHYSICS.

ULTRALOW TEMPERATURE NUCLEAR PHYSICS.

ULTRASTRUCTURAL
EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES.

ULTRASTRUCTURE
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN MESENCHYME (HLM15) IN VITRO.

ULTRAVIOLET
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLE

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER.

UND
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.)

UNDERGOING
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VA EQUILIBRATION.

UNDULAR
NUMERICAL STUDY OF UNDULAR BORES.

UNEMPLOYMENT
TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM.

UNEQUAL
RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THRE DIMENSIONS.

UNFOLDING
LEAST - STRUCTURE UNFOLDING CODE.

UNIFIED
UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI.

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS.

UNIFORM
RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS.

UL GEOMAGNETIC FIELD LINE TRACING EXPERIMENTS. 1-33

N OF 1,2,3- TRIAMINO -2,4,6-TRINITROBENZENE
TWO DIMENSIONAL THIN LAYER CHROMATOGRAPHY. 2-14

ACTIVITY COMPOSITION EQUATIONS IN LIGHT OF METALLIC
E STRUCTURE AND TWO LIQUID REGIONS. 7-25

MULATION OF THE HARRIS INSTABILITY IN TWO DIMENSIONS. 10-51

TWO DIMENSIONAL MAGNETOHYDRODYNAMIC EQUILIBRIA. 10-75

NAL INTERFEROMETRY WITH A PULSED 10.6 MICROMETER 10-84

ATING OF THETA PINCHES. 10-85

NAL DETONATIONS. 14-18

MENSIONAL CONTINUOUS EULERIAN HYDRODYNAMIC CODE FOR
ULTICOMPONENT REACTIVE HYDRODYNAMIC PROBLEMS. 17-1

VESTIGATION OF THE STABILITY OF A SHOCK ACCELERATED
TWEEN TWO FLUIDS. 17-16

NAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS
ONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN 17-24

WO DIMENSIONAL EULERIAN TECHNIQUE FOR MULTICOMPONENT
PRESSIBLE FLOW CALCULATIONS. 17-5

ALCULATION OF TRANSIENT FLOWS OF CHEMICALLY REACTING
WO DIMENSIONS. 19-44

LING PLAN FOR COMPARING TWO VARIANCES. 20-13

GE FOR DESCRIBING KEYBOARD BASED TWO DIMENSIONAL 20-30

WO OVERLAYED INDEXES FOR LARGE LIBRARIES. 20-47

O DIMENSIONAL PROGRAMMING LANGUAGES. 20-53

NAL MAN - MACHINE COMMUNICATION. 1972. SYMPOSIUM, LOS
ROCEEDINGS. 20-69

NAL PROGRAMMING LANGUAGES. 20-70

NAL SEARCH AND INTERPOLATION ON A DISTORTED
R GRID. PROGRAM SI-PH1-G2D. 20-71

NAL AIR TRANSPORT FROM A POINT, ANISOTROPIC SOURCE. 23-26

NAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1
SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC 23-27

NAL MULTIGROUP TRANSPORT BENCHMARK PROBLEM. 23-28

MODEL FOR NUCLEON - NUCLEON SCATTERING INCLUDING TWO
E. 24-136

TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND
MIN RUBIDIUM -88. 24-155

TWO PARTICLE FOUR HOLE STATES IN STRONTIUM -88 AND
MIN RUBIDIUM -88. 24-155

TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE
TH REGION. 24-156

TRANSFER AND SPHERICAL NUCLEI. 24-157

RIBUTIONS AND CORRELATIONS OF RADIATIONS EMITTED FROM
LEI. III. DIRECTIONAL CORRELATIONS OF TWO RADIATIONS
ORIENTED NUCLEI AND TRIPLE DIRECTIONAL
S. 24-16

NG OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE 26-28

RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

REVIEW OF TWO RECENT GENERALIZATIONS OF THE PADE APPROXIMANT. 26-31

TWOTRAN
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

TWOTRAN-FC
TWO DIMENSIONAL COUPLED NEUTRON GAMMA SN TRANSPORT FROM A 14.1 MEV NEUTRON SOURCE IN AIR OVER GROUND USING THE LASL TWOTRAN-FC PROGRAM. 23-27

U
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

RECENT U.S. PROGRESS IN MEETING THE NEEDS FOR NUCLEAR DATA. 24-135

MONTE CARLO TRANSPORT ROUTINE FOR THE U. S. STANDARD ATMOSPHERE (1962) TO AN ALTITUDE OF 90 KILOMETERS. 26-18

ULTRAHIGH
PRODUCTION SCALE FORMATION OF ULTRAHIGH PURITY CARBIDE POWDERS. 22-32

ULTRALOW
APPLICATION OF NUCLEAR ORIENTATION TO ULTRALOW TEMPERATURE THERMOMETRY. 8-1

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-24

ULTRALOW TEMPERATURE NUCLEAR PHYSICS. 8-25

ULTRASTRUCTURAL
EARLY ULTRASTRUCTURAL EFFECTS OF IONIZING RADIATION. 1. MITOCHONDRIAL AND NUCLEAR CHANGES. 5-19

ULTRASTRUCTURE
ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

ULTRAVIOLET
IMPORTANCE OF IRON OPACITIES IN THE SOLAR BALLOON ULTRAVIOLET. 3-4

PLASMA CONDITIONING BY ULTRAVIOLET PREIONIZATION IN A CARBON DIOXIDE GAS LASER. 19-50

UND
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UNDERGOING
TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

UNDULAR
NUMERICAL STUDY OF UNDULAR BORES. 17-19

UNEMPLOYMENT
TECHNICAL UNEMPLOYMENT AND CONVERSION TO METRIC SYSTEM. 29-24

UNEQUAL
RANDOM PACKING OF EQUAL AND UNEQUAL SPHERES IN TWO AND THREE DIMENSIONS. 26-28

UNFOLDING
LEAST - STRUCTURE UNFOLDING CODE. 24-69

UNIFIED
UNIFIED DATA STRUCTURE CAPABILITY IN MADCAP VI. 20-72

UNIFIED THEORY OF MULTIGROUP TRANSPORT CROSS SECTIONS. 23-29

UNIFORM
RELATIVISTIC CHARGED PARTICLE BALLISTICS IN CONSTANT, UNIFORM ELECTROSTATIC AND MAGNETIC FIELDS. 26-30

UNION
INTERNATIONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON CRYSTALLOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC COMPUTER PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL STRUCTURE ANALYSIS. 9-13

UNIQUE
CAN NEGATIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC INFORMATION 5-9

UNIRRADIATED
MEASUREMENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN UNIRRADIATED MIXED OXIDE FUELS. 2-15

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

UNITARY
ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 1. AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE CANONICAL SPLITTING IN U(3)*. 20-45

ON THE STRUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY GROUPS. 2. THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL NULL SPACE. 20-46

APPLICATION OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY PROBLEM. 26-1

UNITED
IDENTIFICATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES USING ACTIVATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY. 16-16

UNITS
TABLES OF PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS FROM 20 TO 3000 DEGREES KELVIN AT PRESSURES TO 35,000,000 NEWTONS PER SQUARE METER. 12-23

UNSTEADY
ACOUSTIC RAY TRACING IN UNSTEADY FLOWS. 17-2

UNTERSUCHUNG
UNTERSUCHUNG DER ROLLE DER CHEMISCHEN KINETIK IN DER STRATOSPHAERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF CHEMICAL KINETICS IN THE STRATOSPHERE AND MESOSPHERE.) 1-34

UPSTREAM
MODIFICATIONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES D E TO THE PROXIMITY OF THE EARTH'S BOW SHOCK. 1-17

URANIUM
PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

PLUTONIUM AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE MIXED OXIDES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD. 2-19

ADVANCED CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN ENCAPSULATED FUEL PIN IRRADIATION TESTS. 2-2

PREPARATION AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE CHEMICAL SPECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED OXIDE FUEL AND SOURCE MATERIALS. 2-26

ADVANTAGES AND LIMITATIONS OF MASS SPECTROMETRY FOR THE MEASUREMENT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND PLUTONIUM AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

SEQUENTIAL ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC DETERMINATION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED OXIDE FUELS FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS. 2-33

APPLICATION OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE DETERMINATION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS. 2-6

APPLICATION OF PRECISE METHODS IN DETERMINING PLUTONIUM AND URANIUM IN UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL. 2-7

CURRENT STATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM. 2-8

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-1

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261 MILLIMETERS. 4-12

SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-1

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-2

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-2

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-2

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS. 15-7

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM. 22-1

EVALUATION OF URANIUM ALLOYS. 22-1

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-1

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS. 22-2

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY: KINETIC STUDIES. 23-

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238 DAUGHTERS. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM. 24-1

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FO URANIUM -235 AND URANIUM -238. 24-

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FO URANIUM -235 AND URANIUM -238. 24-

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON) PLUTONIUM -236 REACTION. 24-

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-5

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE PARTICLE STRENGTH IN ITS EXCITED STATES. 24-7

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-1

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM AND PLUTONIUM IN FUEL RODS. 25-

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDE NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-

US
WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-1

USERS
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS. 21-2

UTILIZATION
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-1

IONAL UNION OF CRYSTALLOGRAPHY COMMISSION ON
LOGRAPHIC COMPUTING. STANDARD TESTS FOR CRYSTALLOGRAPHIC
PROGRAMS. 1. CALCULATIONS COMMONLY USED IN CRYSTAL
E ANALYSIS. 9-13

TIVE NUONS PROVIDE UNIQUE OR BETTER DIAGNOSTIC
ION 5-9

ED
ENT OF THE OXYGEN TO HEAVY METAL ATOM RATIO IN
ATED MIXED OXIDE FUELS. 2-15

ON OF PRECISE METHODS IN DETERMINING PLUTONIUM AND
N UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL.
2-7

RUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY
AN EXTENSION OF THE PATTERN CALCULUS RULES AND THE
L SPLITTING IN U(3)*. 20-45

RUCTURE OF THE CANONICAL TENSOR OPERATORS IN THE UNITARY
THE TENSOR OPERATORS IN U(3) CHARACTERIZED BY MAXIMAL
E. 20-46

ON OF ORTHOGONAL AND UNITARY GROUP METHODS TO THE N BODY
26-1

ATION OF AEROSOLS IN THE SOUTHWESTERN UNITED STATES
VATION ANALYSIS AND SCANNING ELECTRON MICROSCOPY.
16-16

PARA-HYDROGEN DATA IN THE INTERNATIONAL SYSTEM OF UNITS
3000 DEGREES KELVIN AT PRESSURES TO 35,000,000
ER SQUARE METER. 12-23

RAY TRACING IN UNSTEADY FLOWS. 17-2

G
UNG DER ROLLE DER CHEMISCHEN KINETIK IN DER
AERE UND DER MESOSPHAERE. (STUDY OF THE ROLE OF
KINETICS IN THE STRATOSPHERE AND MESOSPHERE.)
1-34

ONS OF THE UPSTREAM ELECTRON THERMAL PROPERTIES D E TO
ITY OF THE EARTH'S BOW SHOCK. 1-17

AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE
ES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.
2-19

AND URANIUM IN URANIUM DIOXIDE - PLUTONIUM DIOXIDE
ES BY A CONTROLLED POTENTIAL COULOMETRIC METHOD.
2-19

CHARACTERIZATION OF (URANIUM, PLUTONIUM) DIOXIDE USED IN
TED FUEL PIN IRRADIATION TESTS. 2-2

N AND CHARACTERIZATION OF REFERENCE MATERIAL FOR THE
ECIFICATION ANALYSIS OF URANIUM -PLUTONIUM MIXED
AND SOURCE MATERIALS. 2-26

S AND LIMITATIONS OF MASS SPECTROMETRY FOR THE
NT OF THE ISOTOPIC DISTRIBUTIONS OF URANIUM AND
AND APPLICATION TO NUCLEAR FUEL BURN-UP. 2-3

ION EXCHANGE SEPARATION AND MASS SPECTROMETRIC
TION OF NEODYMIUM, URANIUM, AND PLUTONIUM IN MIXED
FOR BURNUP AND ISOTOPIC DISTRIBUTION MEASUREMENTS.
2-33

OF ISOTOPE DILUTION MASS SPECTROMETRY TO THE
TION OF URANIUM AND PLUTONIUM IN NUCLEAR FUELS.
2-6

OF PRECISE METHODS IN DETERMINING PLUTONIUM AND
UNIRRADIATED SINTERED MIXED OXIDE NUCLEAR FUEL.
2-7

ATUS OF THE ANALYSIS OF THE OPTICAL SPECTRA OF URANIUM.
2-8

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261
MILLIMETERS. 4-11

EMISSION SPECTRUM OF URANIUM BETWEEN 19,080 AND 30,261
MILLIMETERS. 4-12

SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM
DIOXIDE. 7-18

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE -
URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE -
URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE -
URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE -
URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE.
9-25

FISSION OF URANIUM -238 WITH 140 MEV HELIUM -4 IONS.
15-7

ELASTIC MODULI OF ALPHA, BETA AND GAMMA POLYCRYSTALLINE URANIUM.
22-11

EVALUATION OF URANIUM ALLOYS. 22-12

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS.
22-19

HOT HARDNESS TESTING OF URANIUM -PLUTONIUM CERAMICS.
22-20

BIG TEN, A TEN PERCENT ENRICHED URANIUM CRITICAL ASSEMBLY:
KINETIC STUDIES. 23-4

PRECISION MEASUREMENT OF GAMMA RAY ENERGIES FROM URANIUM -238
DAUGHTERS. 24-116

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM.
24-142

SPECTRUM OF NEUTRONS PRODUCED BY 800 MEV PROTONS ON URANIUM.
24-143

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR
URANIUM -235 AND URANIUM -238. 24-44

EVALUATED NEUTRON INDUCED GAMMA RAY PRODUCTION CROSS SECTIONS FOR
URANIUM -235 AND URANIUM -238. 24-44

EXCITATION FUNCTION FOR THE URANIUM -235 (ALPHA,3 NEUTRON)
PLUTONIUM -236 REACTION. 24-48

GAMMA RAY PRODUCTION CROSS SECTIONS FOR 1- AND 2- MEV NEUTRON
INTERACTIONS WITH URANIUM -235 AND PLUTONIUM -239. 24-57

LEVEL SCHEME OF URANIUM -235 AND THE DISTRIBUTION OF SINGLE
PARTICLE STRENGTH IN ITS EXCITED STATES. 24-70

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL
ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

CALIFORNIUM -252 NEUTRON SOURCE SYSTEMS FOR THE ASSAY OF URANIUM
AND PLUTONIUM IN FUEL RODS. 25-7

BEHAVIOR OF TUNGSTEN CLAD MOLYBDENUM - URANIUM DIOXIDE FUEL UNDER
NEUTRON IRRADIATION AT HIGH TEMPERATURE. 27-1

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION.
28-6

US
WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

USERS
LAMPF USERS. 1971. 5TH MEETING. LOS ALAMOS, NM. PROCEEDINGS.
21-27

UTILIZATION
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC
II. 20-11

2

UV
STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

VALENCE
CRYSTAL STRUCTURE OF THE MIXED VALENCE COPPER CYANIDE ETHYLENEDIAMINE COMPLEX: AQUOBIS(EN)COPPER(II) DI-(CATENA-DI-MU-CYANOCUPRATE(I)). 9-6

VALUES
CALCULATION OF ATOMIC ENERGY LEVEL VALUES. 4-3

WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

SMOOTHED VALUES OF THE ENTHALPY AND HEAT CAPACITY OF URANIUM DIOXIDE. 7-18

HUMAN VALUES IN STANDARD SETTING. 16-15

QUANTIFICATION OF SOCIAL VALUES. 16-30

CAPTURE CROSS SECTION OF PLUTONIUM -238 FROM PERSIMMON. TABULATION OF VALUES. 24-24

FISSION CROSS SECTION OF CALIFORNIUM -249 FROM PHYSICS-8, TABLE OF VALUES. 24-53

VAN
SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

VANADIUM
NEW CLASSIFICATIONS IN HIGHLY IONIZED CHROMIUM, VANADIUM AND ISOELECTRONIC SPECTRA. 4-27

PROTON SPALLATION CROSS SECTIONS AT 600 MEV FOR VANADIUM, COBALT, ARSENIC, NIOBIUM, TANTALUM, AND BISMUTH TARGETS. 24-127

VAPOR
HIGH ALTITUDE IRON VAPOR RELEASE. 1-12

PHOTO-OXIDATION OF OLEFINS IN AIR SATURATED WITH HYDROGEN PEROXIDE VAPOR. 7-14

TEST OF THERMODYNAMIC THEORY USING EMF CELLS UNDERGOING VAPOR EQUILIBRATION. 7-20

INCOMPRESSIBLE LAMINAR VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

VARIABILITY
DNA CONSTANCY DESPITE VARIABILITY IN CHROMOSOME NUMBER. 5-18

VARIABLE
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

VARIABLES
RATIONAL APPROXIMANTS FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

VARIANCES
DOUBLE SAMPLING PLAN FOR COMPARING TWO VARIANCES. 20-13

VARIATION
VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

VARIATIONAL
LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

VARIATIONAL ALGORITHMS FOR NUMERICAL SIMULATION OF COLLISIONLESS PLASMA WITH POINT PARTICLES INCLUDING MAGNETIC INTERACTIONS. 10-86

VARIATIONS
GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

PLASMA SHEET VARIATIONS DURING SUBSTORMS.

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1

VARYING
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20

VECTOR
VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 2

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 2

VECTORS
LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20

VELA
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1

VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN SPHERI AL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1

COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1

VELOCITIES
PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10

VELOCITY
VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE

CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES.

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM.

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULA MOTOR SHAFT VELOCITY.

FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY.

PROBE VELOCITY TRANSDUCER.

VERDET
VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT

VERSIONS
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM.

VERSUS
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLI

VIBRATION
VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL.

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES.

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206.

VIBRATIONAL
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES.

VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES.

AR UV RADIATION FROM LONG LIVED STATES OF
. 4-46

HE MIXED VALENCE COPPER CYANIDE
EX: AQUOBIS(EN)COPPER(III)
UPRATE(I)). 9-6

ENERGY LEVEL VALUES. 4-3

ON FROM LEAST SQUARES LEVEL VALUES. 4-53

ENTHALPY AND HEAT CAPACITY OF URANIUM 7-18

RD SETTING. 16-15

L VALUES. 16-30

F PLUTONIUM -238 FROM PERSIMMON. 24-24

CALIFORNIUM -249 FROM PHYSICS-8, TABLE 24-53

BILITY LIMITS FOR ELEMENTAL ANALYSIS BY
FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

GHLY IONIZED CHROMIUM, VANADIUM AND 4-27

S SECTIONS AT 600 MEV FOR VANADIUM, COBALT,
LUM, AND BISMUTH TARGETS. 24-127

R RELEASE. 1-12

INS IN AIR SATURATED WITH HYDROGEN 7-14

THEORY USING EMF CELLS UNDERGOING VAPOR 7-20

VAPOR FLOW IN CYLINDRICAL HEAT PIPES. 12-10

VARIABILITY IN CHROMOSOME NUMBER. 5-18

PHERICAL HARMONICS, FIRST COLLISION
EIGHT VERSIONS OF THE TWOTRAN TRANSPORT 23-24

FOR INVERSE FUNCTIONS OF TWO VARIABLES. 26-29

R COMPARING TWO VARIANCES. 20-13

-32 COMPOUND NUCLEUS WIDTH WITH ENERGY 24-153

AMETER OF URANIUM MONOCARBIDE - ZIRCONIUM
TIONS WITH TEMPERATURE AND COMPOSITION 28-6

ANALYSIS OF SINGLE SPECIES, ONE
MAS. 10-36

FOR NUMERICAL SIMULATION OF COLLISIONLESS
LES INCLUDING MAGNETIC INTERACTIONS. 10-86

TIONS CAUSED BY CHANGES IN THE QUIET TIME 1-11

PLASMA SHEET VARIATIONS DURING SUBSTORMS. -21

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

VARYING
MONTE CARLO SAMPLING WITH CONTINUOUSLY VARYING CROSS SECTIONS ALONG FLIGHT PATHS. 20-37

VECTOR
VECTOR ANALYZING POWER OF THE SINGLE PARTICLE STATES IN THE LEAD -208 (DEUTERON,PROTON) LEAD -209 REACTION. 24-159

VECTOR POLARIZATION TRANSFER IN DEUTERON (PROTON,DEUTERON) HYDROGEN ELASTIC SCATTERING. 24-160

VECTOR TO TENSOR POLARIZATION TRANSFER IN PROTON - DEUTERON ELASTIC SCATTERING. 24-161

VECTORS
LATTICE STRUCTURE AND REDUCED BASIS OF RANDOM VECTORS GENERATED BY LINEAR RECURRENCES. 20-26

VELA
MEASUREMENTS OF MAGNETOTAIL PLASMA FLOW MADE WITH VELA 4B. 1-14

VELA 4 LYMAN ALPHA OBSERVATIONS: EVIDENCE FOR AN SPHERI AL HYDROGEN GEOCORONA AT 18 EARTH RADII. 1-35

COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1-6

VELOCITIES
PEAK CURRENT AND SHEATH VELOCITIES FOR A COAXIAL ACCELERATOR. 10-57

VELOCITY
VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

CRITICAL LOOK AT A CLASS OF CRITICAL VELOCITY THEORIES FOR SUPERFLUID HELIUM. 8-4

SOLID STATE STEPPING MOTOR CONTROLLER PROVIDING CONSTANT ANGULAR MOTOR SHAFT VELOCITY. 12-21

FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-11

PROBE VELOCITY TRANSDUCER. 18-14

VERDET
VERDET CONSTANT MEASUREMENTS FOR FARADAY ROTATOR DEVELOPMENT. 19-59

VERSIONS
THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

VERSUS
INSECT TAGGING: NATURAL VERSUS LABORATORY GROWN SCREWWORM FLIES. 16-19

VIBRATION
VIBRATION SIMULATION OF A SPACE PROBE MODEL, SUPERCONDUCTING ENERGY STORAGE COIL. 8-26

PARTICLE VIBRATION COUPLING STATES SEEN IN INELASTIC PROTON SCATTERING ON THE ODD TIN ISOTOPES. 24-107

THREE PHONON PAIRING VIBRATION STATES IN LEAD -206. 24-153

VIBRATIONAL
POTENTIAL CONSTANTS OF IRON PENTACARBONYL FROM VIBRATIONAL SPECTRA OF ISOTOPIC SPECIES. 4-34

VIBRATIONAL SPECTRA AND BONDING IN PENTACYANOHALOPLATINATE(IV) COMPLEXES. 4-50

2

VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

VIBRATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM COLLISIONS. 6-15

MECHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF F-ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-7

MONTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF HYDROGEN -AND DEUTERIUM- ATOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

THREE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES IN LEAD -209. 24-152

VICE
VICE PRESIDENT'S VIEW. 29-27

VICINITY
ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

ENVIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS SCIENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

NUMERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF BUILDINGS. 17-18

TRANSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE STRUCTURES. 17-22

VIEW
CLOCK PARADOX - MAJORITY VIEW. 26-2

VICE PRESIDENT'S VIEW. 29-27

VIOLATING
PARITY VIOLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV GAMMA TRANSITION OF HAFNIUM -180. 24-106

VIRGINIS
W VIRGINIS MODEL USING RADIATION TRANSFER. 3-15

VISCOSITY
DENSITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

VISCOUS
ROTATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

SELF DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

NMR MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

VISIBILITY
VISIBILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

VISIBLE
STUDY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF NITROGEN MOLECULAR ION. 4-46

VITRO
INITIATION OF IN VITRO RNA SYNTHESIS WITH OLIGODEOXYRIBONUCLEOTIDES. 5-28

ULTRASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB MESENCHYME (HLM15) IN VITRO. 5-56

VIVO
IN VIVO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF PLUTONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

VLASOV
EMPIRICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

LINEARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE DIMENSIONAL VLASOV PLASMAS. 10-36

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY.

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS.

VLF
PARAMETRIC INSTABILITIES OF VLF WAVES.

VOIDS
TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATION OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER.

VOLTAGE
SUBNANOSECOND HIGH VOLTAGE ATTENUATOR.

VOLUMES
ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE.

VS
ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE.

FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY.

RISK VS BENEFIT: SOLUTION OR DREAM.

VUV
VUV EMISSION FROM A NEON SEEDED THETA PINCH.

W
W VIRGINIS MODEL USING RADIATION TRANSFER.

W-BOSON
SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS.

W-BOSONS
PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES.

WALK
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE.

WALL
FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR.

WASTE
GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE.

TRANSURANIC WASTE REPOSITORY STUDIES.

WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY.

WATER
RAMAN SPECTRAL STUDIES OF HTO IN WATER.

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER.

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES.

SPHERICAL EXPLOSIONS IN WATER.

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER.

DETONATIONS NEAR THE WATER SURFACE.

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS.

WATER SUPPLY AT LOS ALAMOS DURING 1971.

WAVE
SHOCK WAVE DATA AND EQUATIONS OF STATE.

RATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETROXIDE. 4-51

RATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

RATIONAL ENERGY TRANSFER IN DEUTERIUM MOLECULE HELIUM ATOM LLISIONS. 6-15

CHANISMS FOR HYDROGEN HALIDE VIBRATIONAL RELAXATION. 6-6

NTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF TOM VIBRATIONAL RELAXATION OF HYDROGEN FLUORIDE AND DEUTERIUM UORIDE. 6-7

NTE CARLO CLASSICAL TRAJECTORY CALCULATION OF THE RATES OF DROGEN -AND DEUTERIUM - ATOM VIBRATIONAL RELAXATION OF DROGEN FLUORIDE AND DEUTERIUM FLUORIDE. 6-8

REE PHONON MONOPOLE AND QUADRUPOLE PAIRING VIBRATIONAL STATES LEAD -209. 24-152

E PRESIDENT'S VIEW. 29-27

TY
VIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS ENTIFIC LABORATORY JANUARY THROUGH JUNE, 1971. 16-7

VIRONMENTAL MONITORING IN THE VICINITY OF THE LOS ALAMOS ENTIFIC LABORATORY, JULY THROUGH DECEMBER 1971. 16-8

MERICAL SIMULATION OF AIR POLLUTION IN THE VICINITY OF LDINGS. 17-18

NSIENT THREE DIMENSIONAL FLUID FLOW IN THE VICINITY OF LARGE UCTURES. 17-22

CK PARADOX - MAJORITY VIEW. 26-2

E PRESIDENT'S VIEW. 29-27

TING
TY VIDLATING AND NORMAL MULTIPOLE MIXING RATIOS OF THE 57 KEV MA TRANSITION OF HAFNIUM -180. 24-106

IS
RGINIS MODEL USING RADIATION TRANSFER. 3-15

ITY
SITY AND VISCOSITY OF LIQUID DEUTERATED AMMONIA. 7-7

S
ATING FRAME PROTON SPIN RELAXATION IN VISCOUS GLYCEROL. 13-12

F DIFFUSION IN VISCOUS LIQUIDS: PULSE NMR MEASUREMENTS. 13-13

MEASUREMENT OF SELF DIFFUSION IN VISCOUS MEDIA. 13-8

ITY
BILITY AND MASS CONCENTRATION IN A NONURBAN ENVIRONMENT. 16-40

E
DY OF VISIBLE AND NEAR UV RADIATION FROM LONG LIVED STATES OF OGEN MOLECULAR ION. 4-46

ATION OF IN VITRO RNA SYNTHESIS WITH ODEOXYRIBONUCLEOTIDES. 5-28

ASTRUCTURE, GROWTH AND CYCLE CHARACTERISTICS OF HUMAN LIMB ENCHYME (HLM15) IN VITRO. 5-56

VO DETERMINATION OF THE LATE PHASE LUNG CLEARANCE OF ONIUM -239 FOLLOWING ACCIDENTAL EXPOSURE. 16-17

V
RICAL CLOSURE RELATION FOR THE VLASOV MOMENT EQUATIONS. 10-19

ARIZED VARIATIONAL ANALYSIS OF SINGLE SPECIES, ONE NSIONAL VLASOV PLASMAS. 10-36

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-6

APPLICATION OF THE VLASOV FLUID MODEL TO HIGH BETA STABILITY. 10-7

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-87

VLASOV FLUID MODEL FOR STUDYING GROSS STABILITY OF HIGH BETA PLASMAS. 10-88

VLF
PARAMETRIC INSTABILITIES OF VLF WAVES. 1-20

VOIDS
TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

VOLTAGE
SUBNANOSECOND HIGH VOLTAGE ATTENUATOR. 18-19

VOLUMES
ELECTRON BEAM CONTROLLED ELECTRICAL DISCHARGE AS A METHOD OF PUMPING LARGE VOLUMES OF CARBON DIOXIDE LASER MEDIA AT HIGH PRESSURE. 19-19

VS
ISOTOPE EXCHANGE VS. ABSTRACTION FOR HYDROGEN ATOM PLUS DEUTERIUM CHLORIDE. 6-4

FILTER EFFICIENCY VS PARTICLE SIZE AND VELOCITY. 16-11

RISK VS BENEFIT: SOLUTION OR DREAM. 16-35

VUV
VUV EMISSION FROM A NEON SEEDED THETA PINCH. 10-89

W
W VIRGINIS MODEL USING RADIATION TRANSFER. 3-15

W-BOSON
SPIN ONE W-BOSON PRODUCTION VIA MUON BEAMS. 21-59

W-BOSONS
PHOTOPRODUCTION OF SINGLE SPIN ONE W-BOSONS AT HIGH ENERGIES. 21-42

WALK
LOWER BOUND FOR THE CONNECTIVE CONSTANT OF A SELF AVOIDING WALK ON A SQUARE LATTICE. 20-27

WALL
FIRST WALL MATERIALS PROBLEMS IN A PULSED FUSION REACTOR. 10-27

WASTE
GAMMA RAY SCANNING SYSTEM FOR BARRELS CONTAINING PLUTONIUM WASTE. 25-11

TRANSURANIC WASTE REPOSITORY STUDIES. 29-26

WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

WATER
RAMAN SPECTRAL STUDIES OF HTO IN WATER. 4-37

RAPID, CONTINUOUS CONVERSION OF NITRIC OXIDE TO NITROGEN AND WATER. 7-17

USE OF MONTE CARLO IN CALCULATING THE THERMODYNAMIC PROPERTIES OF WATER CLATHRATES. 7-26

SPHERICAL EXPLOSIONS IN WATER. 14-17

TWO DIMENSIONAL, CONTINUOUS, MULTICOMPONENT EULERIAN CALCULATIONS OF INTERACTIONS OF SHOCKS WITH V NOTCHES, VOIDS, AND RODS IN WATER. 17-24

DETONATIONS NEAR THE WATER SURFACE. 17-6

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

WATER SUPPLY AT LOS ALAMOS DURING 1971. 29-29

WAVE
SHOCK WAVE DATA AND EQUATIONS OF STATE. 4-40

2

WAVE NUMBER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

NUMERICAL CALCULATION OF INTERNAL WAVE MOTION. 17-14

LOCALIZATION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

PARTIAL WAVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR SINGLE PARTICLE EXCHANGE. 26-23

LONG PERIOD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN NUCLEAR EXPLOSIONS. 29-11

WAVEFUNCTIONS
STUDIES OF ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED MOVIES. 4-42

WAVELENGTHS
NEW WAVELENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY IONIZED CHLORINE. 4-28

WAVENUMBERS
ACCURATE WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND (1,0) BANDS OF HYDROXYL AND HEAVY HYDROXYL. 4-1

WAVES
PARAMETRIC EXCITATION OF ELECTROMAGNETIC WAVES. 1-19

PARAMETRIC INSTABILITIES OF VLF WAVES. 1-20

POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

STUDY OF SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF BORON CARBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

DENSITY GRADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION IN SHOCK WAVES. 6-1

PRECISE MEASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK WAVES. 6-10

PARAMETRIC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

CURRENT DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

WEAK
WEAK FIELD ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON PLASMA FREQUENCY. 10-90

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

WEAKLY
COMPUTER STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC DECAY INSTABILITY. 19-10

WEATHER
EFFECT OF SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

WEIGHT
LOW MOLECULAR WEIGHT RNAS OF POST-RIBOSOMAL PARTICLES: EVIDENCE THAT THE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION OF TRANSFER RNA. 5-34

THEORY AND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION SOURCE, AND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT PROGRAM. 23-24

WEIGHTED
SUPERPERIOD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

WELDING
POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

POWER DENSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

COMPUTER CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

WELL
SUMMARY OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 1947-1971. 29-23

WHAT
WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE.

WHITE
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALO

WIDELY
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUN

WIDTH
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION.

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN.

WIENER
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND RELATIONSHIP TO THE WIENER THEORY.

WIND
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS.

GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIM SOLAR WIND PRESSURE.

INTERPENETRATING ION BEAMS IN THE SOLAR WIND.

POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES.

RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIN STRUCTURES.

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967.

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS.

THERMAL ENERGY TRANSPORT IN THE SOLAR WIND.

VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDAN

COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA.

COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3.

CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCIT INHOMOGENEITIES.

WING
HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY.

WIRE
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBE

TRANSVERSE BEAM MATCHING USING WIRE SCANNERS.

WIRES
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES.

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FU

WNR
DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING).

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY.

WORKING
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II.

WORLD
WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY.

BER CALCULATION FROM LEAST SQUARES LEVEL VALUES. 4-53

L CALCULATION OF INTERNAL WAVE MOTION. 17-14

TION OF ELECTRON WAVE FUNCTIONS IN DISORDERED SYSTEMS. 26-13

AVE ANALYSIS OF SPINOR BETHE-SALPETER EQUATIONS FOR ATICLE EXCHANGE. 26-23

OD WATER WAVE MEASUREMENTS FOR THE MILROW AND CANNIKIN EXPLOSIONS. 29-11

ONS
F ATOMIC RADIAL WAVEFUNCTIONS VIA COMPUTER PRODUCED 4-42

S
LENGTHS AND ENERGY LEVELS IN THE SPECTRUM OF SINGLY HLORINE. 4-28

S
WAVENUMBERS OF THE DOUBLET SIGMA TO DOUBLET PI (0,0) AND S OF HYDROXYL AND HEAVY HYDROXYL. 4-1

IC EXCITATION OF ELECTROMAGNETIC WAVES. 1-19

IC INSTABILITIES OF VLF WAVES. 1-20

VIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR CIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

SHOCKS, RELEASE WAVES AND THE HUGONIOT ELASTIC LIMIT OF RBIDE USING THE AXIALLY SYMMETRIC MAGNETIC PROBE. 4-44

RADIENT MEASUREMENTS OF HYDROGEN CHLORIDE DISSOCIATION WAVES. 6-1

EASUREMENTS OF DIATOMIC DISSOCIATION RATES IN SHOCK 6-10

IC INSTABILITY OF OBLIQUE COLLISION FREE SHOCK WAVES. 10-56

DRIVEN ELECTROMAGNETIC ION CYCLOTRON WAVES. 19-12

D ELECTRICAL RESISTIVITY OBSERVATIONS NEAR THE ELECTRON REQUENCY. 10-90

CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE 24-162

STUDY OF THE SATURATION OF THE WEAKLY DRIVEN PARAMETRIC TABILITY. 19-10

SOIL AND WEATHER ON THE DECOMPOSITION OF EXPLOSIVES. 14-6

CULAR WEIGHT RNAS OF POST-RIBOSOMAL PARTICLES: EVIDENCE PARTICULATE 4-S RNAS COMPRISE A DIFFERENTIAL POPULATION FER RNA. 5-34

ND USE OF THE SPHERICAL HARMONICS, FIRST COLLISION ND VARIABLE WEIGHT VERSIONS OF THE TWOTRAN TRANSPORT 23-24

OD OF THE NONLINEAR WEIGHTED STRING (FPU) PROBLEM. 20-58

NSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-16

NSITY AS A CONTROL PARAMETER IN ELECTRON BEAM WELDING. 12-17

CONTROLLED ELECTRON BEAM WELDING FACILITY AT LASL. 12-4

OF LOS ALAMOS MUNICIPAL WELL FIELD CHARACTERISTICS, 29-23

WHAT
WHAT CAN THE ISOMER SHIFT TELL US ABOUT NUCLEI 24-163

ENERGY DEPENDENCE OF THE S-11 INELASTICITY PARAMETER OF PI-N SCATTERING: WHAT IS THE NATURE OF THE S-11 (1535) RESONANCE. 26-8

WHITE
REDUCED PROPER MOTION DIAGRAMS. 2. LUYTEN'S WHITE DWARF CATALOG. 3-11

WIDELY
WASTE MANAGEMENT IN A SMALL, WIDELY DISPERSED MOUNTAIN COMMUNITY. 29-28

WIDTH
CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

VARIATION OF THE SULFUR -32 COMPOUND NUCLEUS WIDTH WITH ENERGY AND SPIN. 24-158

WIENER
DECONVOLUTION OF LINEAR SYSTEMS BY CONSTRAINED REGRESSION AND ITS RELATIONSHIP TO THE WIENER THEORY. 20-10

WIND
ENERGY AND MASS CONTENT OF HIGH SPEED SOLAR WIND STREAMS. 1-10

GEOMAGNETIC FIELD VARIATIONS CAUSED BY CHANGES IN THE QUIET TIME SOLAR WIND PRESSURE. 1-11

INTERPENETRATING ION BEAMS IN THE SOLAR WIND. 1-13

POSITIVE EVIDENCE FOR CLOSED MAGNETIC STRUCTURES IN THE SOLAR WIND ASSOCIATED WITH INTERPLANETARY SHOCK WAVES. 1-22

RELATION OF ENERGETIC PARTICLE STREAMS TO LARGE SCALE SOLAR WIND STRUCTURES. 1-24

SOLAR FLARES AND SOLAR WIND HELIUM ENRICHMENTS: JULY 1965 - JULY 1967. 1-27

SOLAR WIND SPEED VARIATIONS 1964-1967. AUTOCORRELATION ANALYSIS. 1-28

THERMAL ENERGY TRANSPORT IN THE SOLAR WIND. 1-31

VELOCITY AND FLUX DEPENDENCE OF THE SOLAR WIND HELIUM ABUNDANCE. 1-36

COMPOSITION AND DYNAMICS OF THE SOLAR WIND PLASMA. 1-5

COMPRESSIONS AND RAREFACTIONS IN THE SOLAR WIND: VELA 3. 1-6

CONTRIBUTION TO SOLAR WIND PROTON ANISOTROPY FROM BULK VELOCITY INHOMOGENEITIES. 1-7

WING
HEALTH PHYSICS AT THE LOS ALAMOS WING 9 HOT CELL FACILITY. 16-12

WIRE
SYSTEM FOR SEPARATING AMPLIFIERS FROM WIRE PROPORTIONAL CHAMBERS. 18-20

TRANSVERSE BEAM MATCHING USING WIRE SCANNERS. 21-68

WIRES
RADIATION DAMAGE IN NIOBIUM - TITANIUM SUPERCONDUCTING WIRES. 12-18

GROOVED MELT WIRES FOR TEMPERATURE MEASUREMENT OF REACTOR FUEL. 27-5

WNR
DESIGN STUDY FOR A MEDIUM ENERGY, INTENSE, PROTON STORAGE RING (WNR RING). 21-18

WNR: A NEUTRON TIME OF FLIGHT FACILITY AT THE LOS ALAMOS SCIENTIFIC LABORATORY. 24-164

WORKING
DEMAND PAGING THROUGH UTILIZATION OF WORKING SETS ON THE MANIAC II. 20-11

WORLD
WORLD ENERGY RESERVES AND SOME SPECULATIONS ON THE FUTURE OF NUCLEAR FUSION ENERGY. 10-91

2

X
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

MEASUREMENTS OF FILTERED X RAY SPECTRA. 4-25

STUDY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON MONOXIDE AND NITROGEN. 4-45

X RAY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE ENERGY RANGE 12 TO 300 KV. 4-54

COMPARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE POPULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF MALE PROGENITORS. 5-13

EFFECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA REPLICATION IN CHINESE HAMSTER CELLS. 5-23

EFFECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION IN CULTURED MAMMALIAN CELLS. 5-24

LONGEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X RAY EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

METABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN HISTONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

X RAY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

X RAY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - URANIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

PROVISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE PLASMA FOCUS. 10-66

FLASH X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE PRODUCTS. 14-9

X RAY SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-41

SHIRX: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

HIGH RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER PRODUCED PLASMAS. 19-22

MEASURED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

PRODUCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 MEV. 24-123

SENSITIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY PROTON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

TARGET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE STUDIES. 25-30

DIFFERENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE MATERIAL. 25-8

X-NEUTRON
STUDIES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) REACTIONS IN HEAVY ELEMENT TARGETS. 24-147

X-0242
X-0242: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

X-1
SHOT NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

RANDOM PULSATIONS OF CYGNUS X-1. 3-9

X-3
X RAY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

XENON
PHOTOABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, OXYGEN, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

EFFICIENCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

XR-4
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4.

XV
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV.

XVI
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV.

Y-12
APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS.

YEAR
14.6 PLUS OR MINUS 0.5 YEAR HALF-LIFE OF METASTABLE CADMIUM -113.

YET
YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER.

YIELD
EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE.

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE.

YIELDS
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H.

CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION.

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS.

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION.

YTTERBIUM
NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175.

YTTRIA
ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE.

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA.

YTTRIUM
ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS.

Z
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS.

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH.

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES.

RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1.

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1.

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1.

ZEEMAN
OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS.

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS.

ZERO
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH.

ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT.

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES.

AY OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

OBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

ASUREMENTS OF FILTERED X RAY SPECTRA. 4-25

DY OF THE A TO X TRANSITIONS IN MOLECULAR IONS OF CARBON NOXIDE AND NITROGEN. 4-45

AY SPECTRAL DISTRIBUTIONS FROM THICK TUNGSTEN TARGETS IN THE RGY RANGE 12 TO 300 KV. 4-54

PARATIVE LITTER AND REPRODUCTION CHARACTERISTICS OF MOUSE ULATIONS WITH X RAY EXPOSURE, INCLUDING 45 GENERATIONS OF LE PROGENITORS. 5-13

ECTS OF X IRRADIATION ON DNA PRECURSOR METABOLISM AND DNA LICATION IN CHINESE HAMSTER CELLS. 5-23

ECTS OF X IRRADIATION ON HISTONE ACETYLATION AND METHYLATION ULTURED MAMMALIAN CELLS. 5-24

GEVITY AND MORTALITY DISTRIBUTIONS OF MICE WITH AND WITHOUT X EXPOSURE TO 45 GENERATIONS OF MALE PROGENITORS. 5-33

ABOLISM OF HISTONE FRACTIONS. 5. THE RELATIONSHIP BETWEEN ONE AND DNA SYNTHESIS FOLLOWING X IRRADIATION. 5-36

AY FLUORESCENCE AND SEVERAL SPECIFIC BIOLOGICAL APPLICATIONS. 5-58

AY DIFFRACTION OF HIGH TEMPERATURE URANIUM MONOCARBIDE - NIUM DICARBIDE AND URANIUM MONOCARBIDE - URANIUM NITRIDE. 9-25

VISIONAL SCALING LAWS FOR NEUTRONS AND X RAYS IN A DENSE MA FOCUS. 10-66

H X RAY OBSERVATION OF MARKED MASS POINTS IN EXPLOSIVE DUCTS. 14-9

Y SPECTRAL DISTRIBUTIONS IN ROENTGENS. 16-41

X: A HIGH RESOLUTION ROCKET BORNE X RAY SPECTROMETER. 18-16

RESOLUTION X RAY SPECTROSCOPY OF BREMSSTRAHLUNG FROM LASER UCED PLASMAS. 19-22

URED POLARIZATION OF X RAYS FROM A LASER PRODUCED PLASMA. 19-38

UCTION OF K-ALPHA AND L-ALPHA X RAYS BY PROTONS OF 1.0 TO 3.7 24-123

TIVITY AND DETECTABILITY LIMITS FOR ELEMENTAL ANALYSIS BY ON - INDUCED X RAY FLUORESCENCE WITH A 3 MV VAN DE GRAAFF. 25-28

ET CHAMBER FOR CHARGED PARTICLE INDUCED X RAY FLUORESCENCE ES. 25-30

RENTIATION BETWEEN X RAYS AND GAMMA RAYS IN RADIOACTIVE RIAL. 25-8

ON
ES OF (ALPHA,X-NEUTRON) AND (ALPHA, PROTON-X-NEUTRON) TIONS IN HEAVY ELEMENT TARGETS. 24-147

: A HIGH ENERGY PLASTIC BONDED EXPLOSIVE. 14-19

NOISE CHARACTER OF CYGNUS X-1 PULSATIONS. 3-13

M PULSATIONS OF CYGNUS X-1. 3-9

OBSERVATIONS OF CYG X-3 NEAR THE TIME OF RADIO OUTBURSTS. 3-16

ABSORPTION CROSS SECTION OF HYDROGEN, DEUTERIUM, NITROGEN, N, ARGON, KRYPTON, XENON FOR GAS DENSITOMETRY. 4-33

TIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE. 4-52

NCY OF XENON IONIZATION CHAMBERS FROM 10 TO 80 KEV. 18-8

R ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 ZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 CLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS -131, 132, 133. 24-96

XR-4
PROBABLE PRECURSOR TO THE X RAY NOVA CENTAURUS XR-4. 3-8

XV
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

XVI
CLASSIFICATION OF TRANSITIONS BETWEEN LEVELS OF PRINCIPLE QUANTUM NUMBERS 3 AND 4 IN IRON IX TO XVI AND MANGANESE VIII TO XV. 4-5

Y-12
APPLICATION OF THE RANDOM SOURCE INTERROGATION SYSTEM (RANDOM DRIVER) AT THE OAK RIDGE Y-12 PLANT. PRELIMINARY RESULTS. 25-3

YEAR
14.6 PLUS OR MINUS 0.5 YEAR HALF LIFE OF METASTABLE CADMIUM -113. 24-3

YET
YET ANOTHER PHOTOPEAK ANALYSIS PROGRAM FOR THE PDP-9 COMPUTER. 20-74

YIELD
EXPERIMENTAL INVESTIGATION OF CORNERS IN THE YIELD SURFACE. 22-13

MEASUREMENT OF THE URANIUM -235 CONTENT IN A SPENT MTR TYPE FUEL ELEMENT USING THE DELAYED NEUTRON YIELD TECHNIQUE. 25-14

YIELDS
TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

TRANSIENT OXYGEN ATOM YIELDS IN HYDROGEN - OXYGEN IGNITION AND THE RATE COEFFICIENT FOR O + H(2) YIELDS OH + H. 6-14

CIRCUIT YIELDS LINEAR PULSE WIDTH MODULATION. 21-11

CROSS SECTIONS FOR P + NUCLEUS YIELDS PION + ... FOR 740 MEV PROTONS. 24-30

MEASUREMENT OF TOTAL DELAYED NEUTRON YIELDS AS A FUNCTION OF THE ENERGY OF THE NEUTRON INDUCING FISSION. 25-15

YTTERBIUM
NUCLEAR ORIENTATION AND PARITY MIXING STUDIES OF THE DECAYS OF ERBIUM -171 AND YTTERBIUM -169, 175. 24-94

YTTRIA
ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE. 22-43

EFFECT OF FAST NEUTRON IRRADIATION ON ALUMINA AND YTTRIA. 27-2

YTTRIUM
ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

Z
FITS TO NEW CALCULATIONS OF PHOTOIONIZATION CROSS SECTIONS FOR LOW Z ELEMENTS. 4-18

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

RECENT DEVELOPMENTS IN HIGH BETA PLASMA RESEARCH ON THETA AND Z PINCHES. 10-68

RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-69

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

ZEEMAN
OBSERVATION OF ZEEMAN EFFECT IN OPTICAL SPECTRA OF FAST ION BEAMS. 4-30

OBSERVATIONS OF ZEEMAN EFFECT IN THE OPTICAL SPECTRA OF FAST ION BEAMS. 4-31

ZERO
MAGNETOHYDRODYNAMIC STABILITY PROPERTIES OF THE L EQUALS ZERO BUMPY PINCH. 10-39

ASYMPTOTIC NUMBER OF (0,1) MATRICES WITH ZERO PERMANENT. 20-3

POLARIZATION TRANSFER IN THE DEUTERIUM (DEUTERON,PROTON) TRITIUM REACTION AT THETA EQUALS ZERO DEGREES. 24-112

2

SEARCH FOR (TRITON,PROTON) TRANSITIONS TO EXCITED ZERO PLUS STATES IN THE ACTINIDE REGION. 24-139

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188. 24-165

ZERO PLUS TO ZERO PLUS BETA TRANSITION OF TUNGSTEN -188. 24-165

ZERO MOMENTUM LIBRATIONAL SPECTRUM FOR ALPHA PHASE OF SOLID NITROGEN. 28-7

ZERO-PLUS
TWO NEUTRON TRANSITIONS EXCITING ZERO-PLUS STATES IN THE ACTINIDE AND RARE EARTH REGION. 24-156

WEAK PAIR CORRELATIONS IN EXCITED ZERO-PLUS STATES OF ACTINIDE NUCLEI. 24-162

ZINC
PLUTONIUM BY A ZINC AMALGAM REDUCTION -CERIC SULFATE TITRATION METHOD. 2-23

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

ON THE STRUCTURE OF YTTRIUM -2 ZINC -9 (APPROX), GADOLINIUM -2 ZINC -9 (APPROX), AND RELATED COMPOUNDS. 9-15

ZIRCONIA
ZIRCONIA - YTTRIA SYSTEM ABOVE 2000 DEGREES CENTIGRADE. 22-43

ZIRCONIUM
THERMAL CONDUCTIVITY OF SUBSTOICHIOMETRIC ZIRCONIUM CARBIDE. 22-38

ELASTIC SCATTERING OF POLARIZED DEUTERONS FROM CHROMIUM -5, IRON -56, NICKEL -60, ZIRCONIUM -90, TIN -122, AND GOLD -197. 24-42

NUCLEAR ORIENTATION STUDY OF THE DECAY OF NEPTUNIUM -239 POLARIZED IN ZIRCONIUM -IRON -2: PARITY MIXING IN PLUTONIUM -235 AND NUCLEAR STRUCTURE OF PLUTONIUM -239 AND FISSION PRODUCTS XENON -131, 132, 133. 24-96

VARIATION OF LATTICE PARAMETER OF URANIUM MONOCARBIDE - ZIRCONIUM MONOCARBIDE SOLID SOLUTIONS WITH TEMPERATURE AND COMPOSITION. 28-6

ZONE
CALCULATED PULSATING ONE DIMENSIONAL DETONATIONS WITH INDUCTION ZONE KINETICS. 14-1

ZT-1
EXPERIMENTAL RESULTS FROM THE ZT-1 TOROIDAL PINCH. 10-21

MHD STABILITY OF THE ZT-1 TOROIDAL Z PINCH. 10-44

RECENT RESULTS FROM THE SHOCK HEATED TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-69

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-71

RESULTS FROM THE TOROIDAL Z PINCH EXPERIMENT ZT-1. 10-72

ZT-1A
PLASMA PRESSURE PROFILES OF ZT-1A. 10-64

PREIONIZATION AND ITS EFFECTS ON PINCH FORMATION IN ZT-1A. 10-65

☆ US GOVERNMENT PRINTING OFFICE: 1974 — 784-527/24