

PACKAGE ID - 001296IBMPC00 NUCLEUS-CHART

KWIC TITLE - Chart of the Nuclides

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LIMITATION CODE -UNL **AUDIENCE CODE** - UNL

COMPLETION DATE - 05/05/1998 **PUBLICATION DATE** - 05/05/1998

DESCRIPTION - Nucleus is an interactive PC-based graphical viewer of NUBASE nuclear property data. NUBASE contains experimentally known nuclear properties, together with some values that have been estimated from extrapolation of experimental data for 3010 nuclides. NUBASE also contains data on those isomeric states that have half-lives greater than 1 millisecond; there are 669 such nuclides of which 58 have more than one isomeric state. The latest version of NUCLEUS-CHART has been corrected to include the names and the chemical symbols of the elements 104 to 109 that have been finally adopted by the Commission on Nomenclature of Inorganic Chemistry (CNIC) of the International Union of Pure and Applied Chemistry (IUPAC). They differ from those recommended by the same commission a few years before and that were widely used in the evaluations AME'95 and NUBASE'97. It results in some shuffling of the names and symbols, that may cause confusion in the near future. At AMDC we'll be as careful as possible to try to avoid such confusion. In advance we apologize if any will occur in the future and recommend the user to always double check these few names.

PACKAGE CONTENTS - Media Directory; Software Abstract; Media Includes Executables, Help Files;

SOURCE CODE INCLUDED? - No

MEDIA QUANTITY - 1 CD ROM

METHOD OF SOLUTION - For each nuclide in NUBASE, and for each state (Ground or isomeric), the following quantities have been compiled, and when necessary evaluated: mass excess, excitation energy of the isomeric state, half-life, spin and parity, decay modes and intensities for each mode, isotopic abundances of the stable nuclei, and references for all experimental values of the above items.

COMPUTER - IBM PC

OPERATING SYSTEMS - na

PROGRAMMING LANGUAGES - C-

SOURCE CODE AVAILABLE (Y/N) - N

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OTHER PROG/OPER SYS INFO - Old names, new names 104 Dubnium Db
Rutherfordium Rf 105 Joliotium J1 Dubnium Db 106 Rutherfordium Rf
Seaborgium Sg 108 Hahnium Hn Hassium Hs. Elements at z=107
Bohrium Bh, and z=109 Meitnerium (Mt) have their names unchanged.

ABSTRACT STATUS - Release Tested 3/29/1999. Tested by NEA.

SUBJECT CLASS CODE - Z

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
N CODES
ELEMENTS
DATA
NUCLEAR PROPERTIES
CHEMISTRY

EDB SUBJECT CATEGORIES -
990200

SPONSOR - NEA

PACKAGE TYPE - TESTED