About
The Department of Energy (DOE) Public Access Gateway for Energy and Science (PAGES) is a portal and search engine to ensure long-term preservation of and access to scholarly publications resulting from DOE-funded research. Scholarly publications include final published journal articles and final, peer-reviewed, accepted manuscripts. DOE PAGES was developed and is operated by the DOE Office of Scientific and Technical Information (OSTI), a unit of the DOE Office of Science.

Several XML data services are currently available from OSTI collections. This service searches DOE PAGES data.

The examples provided in this document were copied from XML results in Microsoft Internet Explorer. Results may appear slightly different in other browser windows.

Getting Started
The XML data service is available from the URL listed below.

<table>
<thead>
<tr>
<th>Data Service Name</th>
<th>XML Data Service URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOE PAGES Data</td>
<td><a href="http://www.osti.gov/pages/pagesxml">http://www.osti.gov/pages/pagesxml</a></td>
</tr>
</tbody>
</table>

The default number of records returned per page is 100 and the maximum number of records returned per page is 3000.

This service accepts the parameters discussed below.
Using the XML Data Services
The parameters for each service are: ?CriteriaKeyword= where CriteriaKeyword is replaced by one of the criteria keywords listed below. A blank query will return the entire result set for the given XML Service. Please note that criteria keywords are case-sensitive and must be entered as shown in the table below.

<table>
<thead>
<tr>
<th>Criteria Keyword</th>
<th>Data/Field Searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>searchFor</td>
<td>by all metadata fields and full text</td>
</tr>
<tr>
<td>osti_id</td>
<td>by the unique OSTI Identifier assigned to a record</td>
</tr>
<tr>
<td>FullText</td>
<td>by document full text only</td>
</tr>
<tr>
<td>Biblio</td>
<td>by all bibliographic metadata fields (Title, Author, Subject, etc.) only</td>
</tr>
<tr>
<td>Author</td>
<td>by author/creators</td>
</tr>
<tr>
<td>Title</td>
<td>by document titles</td>
</tr>
<tr>
<td>Identifier</td>
<td>by document identifying numbers (e.g., report number.)</td>
</tr>
<tr>
<td>SponsorOrg</td>
<td>by Sponsoring Organization (e.g. USDOE)</td>
</tr>
<tr>
<td>ResearchOrg</td>
<td>by Originating Research Organization</td>
</tr>
<tr>
<td>Type</td>
<td>AM = Accepted Manuscript, PA = Published Article, PM = Publisher’s Accepted Manuscript</td>
</tr>
<tr>
<td>PubDateFrom</td>
<td>limit results to documents published after the specified date (in MM/DD/YYYY format)</td>
</tr>
<tr>
<td>PubDateTo</td>
<td>limit results to documents published before the specified date (in MM/DD/YYYY format)</td>
</tr>
<tr>
<td>EntryDateFrom</td>
<td>limit results to documents entering or being updated in IB after the specified date (in MM/DD/YYYY format)</td>
</tr>
<tr>
<td>EntryDateTo</td>
<td>limit results to documents entering or being updated in IB before the specified date (in MM/DD/YYYY format)</td>
</tr>
<tr>
<td>Journal</td>
<td>by journal title (searches combined “relation” metadata field)</td>
</tr>
<tr>
<td>Publisher</td>
<td>by publisher of the journal in which the article was published</td>
</tr>
<tr>
<td>Subject</td>
<td>by subject or keyword</td>
</tr>
<tr>
<td>Language</td>
<td>by language</td>
</tr>
<tr>
<td>Country</td>
<td>by publication country</td>
</tr>
<tr>
<td>StartPubYear, StartPubMonth, StartPubDay</td>
<td>if provided a minimum of StartPubYear, limit results to documents published after the specified date</td>
</tr>
<tr>
<td>EndPubYear, EndPubMonth, EndPubDay</td>
<td>if provided a minimum of EndPubYear, limit results to documents published before the specified date</td>
</tr>
<tr>
<td>StartSysYear, StartSysMonth, StartSysDay</td>
<td>if provided a minimum of StartSysYear, limit results to documents updated after the specified date</td>
</tr>
<tr>
<td>EndSysYear, EndSysMonth, EndSysDay</td>
<td>if provided a minimum of EndSysYear, limit results to documents updated before the specified date</td>
</tr>
<tr>
<td>StartAddYear, StartAddMonth, StartAddDay</td>
<td>if provided a minimum of StartAddYear, limit results to documents added after the specified date</td>
</tr>
<tr>
<td>EndAddYear, EndAddMonth, EndAddDay</td>
<td>if provided a minimum of EndAddYear, limit results to documents added before the specified date</td>
</tr>
</tbody>
</table>
Example

The URL for a search on “photons” in all fields of PAGES data would be:

http://www.osti.gov/pages/pagesxml?searchFor=photons

The results would look similar to the example record below.

```
<?xml version="1.0" encoding="UTF-8"?>
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
  <rdf:Description>
    <dcterms:title>Jets and Photons</dcterms:title>
    <dcterms:creator>
      Ellis, Stephen D.; Roy, Tahsin S.; Scholtz, Jakub
    </dcterms:creator>
    <dcterms:publisher>American Physical Society</dcterms:publisher>
    <dcterms:isPartOf>Journal Article</dcterms:isPartOf>
    <dcterms:identifier>DOI: 10.1103/PhysRevLett.110.122003</dcterms:identifier>
    <dcterms:identifier>OSTI ID: 1103935</dcterms:identifier>
    <dcterms:identifier>Legacy ID: PAGES: jet/photons</dcterms:identifier>
  </rdf:Description>
</rdf:RDF>
```

Wildcards

Queries using wildcard operators can be performed. The asterisk (*) is used to search for words with spelling variations or contain a specified pattern of characters.

Example

The following URL will return all the items with “accelerat” and any words with “accelerat” as a stem in the title.

http://www.osti.gov/pages/pagesxml?Title=accelerat*
The following truncated results examples are returned.

<dc:title>Time dependence of particle creation from accelerating mirrors</dc:title>
<dc:title>Generating High-Brightness Electron Beams via Ionization Injection by Transverse Colliding Lasers in a Plasma-Wakefield Accelerator</dc:title>
<dc:title>Noninterceptive method to measure longitudinal Twiss parameters of a beam in a hadron linear accelerator using beam position monitors</dc:title>
<dc:title>Observation of Ion Acceleration and Heating during Collisionless Magnetic Reconnection in a Laboratory Plasma</dc:title>

**Multiple Search Terms**

Multiple search terms and terms that require spaces can be separated by the plus symbol (+) or using the Boolean AND operator.

**Example**

The URL for a search for “particle” and “accelerator” would be:

http://www.osti.gov/pages/pagesxml?searchFor=particle+accelerator

or:

http://www.osti.gov/pages/pagesxml?searchFor=particle%20AND%20accelerator

The characters, %20, must be added before and after the AND operator.

The following truncated results are returned.

<dc:title>Stable Charged-Particle Acceleration and Focusing in a Laser Accelerator Using Spatial Harmonics</dc:title>
<creator>Naranjo, B.; Valloni, A.; Potterman, S.; Rosenzweig, J. B.</creator>
<publisher>American Physical Society</publisher>

Searches using the Boolean OR operator can also be performed, retrieving records with one search term or the other.

**Example**

The URL for a search for “particle” or “accelerator” would be:

http://www.osti.gov/pages/pagesxml?searchFor=particle%20OR%20accelerator

Like the AND operator, the characters, %20, must be added before and after the OR operator.
Exact Phrase Search

Exact phrases can be searched by surrounding the search terms in double quotation marks (" ").

Example

The following URL searches records containing the exact phrase “top quark” in the title.

http://www.osti.gov/pages/pagesxml?Title="top quark"

OR

http://www.osti.gov/pages/pagesxml?Title=%22top%20quark%22

Note: In your search, use %22 in place of quotation marks and %20 in place of a space.

The following example of truncated results is returned.

<dc:title>Dark decay of Top quark</dc:title>

The default number of results per page is 100. The maximum number of records returned per page is 3000.

The following table lists various search options that can be used to display results.

<table>
<thead>
<tr>
<th><strong>Additional Criteria Keywords</strong></th>
<th><strong>Search Option</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>SortBy</td>
<td>Sort results by a field name. Valid field names include: publication_date, creator, title, date_entry, publisher_sponsor, publisher_research, and relv (relevance score). By default, searches are sorted by relevance.</td>
</tr>
<tr>
<td>SortOrder</td>
<td>Selects the direction of the sort, either ASC (ascending) or DESC (descending). The default is DESC.</td>
</tr>
<tr>
<td>nrows</td>
<td>Indicates the number of records desired per page of results.</td>
</tr>
<tr>
<td>page</td>
<td>Request a particular page of search results. The first page of results is returned by default.</td>
</tr>
<tr>
<td>format</td>
<td>xml (or blank) = output in xml format, csv = output in csv format</td>
</tr>
</tbody>
</table>

One or more search options may be specified in the URL. Specify each as with search criteria, separated by ampersands (“&”). The number of desired results per page and an option to request additional pages of information may also be specified.

Sorting

Results may be sorted by a number of specifications including: publication_date, creator, title, date_entry, and relv (relevance). Results can be sorted either in ascending (ASC) or descending (DESC) order. Results are sorted in descending order by default.
Example

The URL for a DOE PAGES data search for the exact phrase “carbon fiber” in the title field sorted by the date of publication would be:

http://www.osti.gov/pages/pagesxml?Title="carbon fiber"&SortBy=publication date

By default, results are sorted by relevance. While relevance sorting is helpful in some circumstances, sorting results by publication date might be more helpful in most other situations. This ensures the results viewed first are the most up-to-date records.

Requesting Additional Pages

By default, a search request returns the first page of results if additional pages are available. The page search option can return multiple pages of search results. The maximum records per page returned is 3000; to access additional records use the page parameter. Please note that the page count begins at zero (0).

Example

The second page of results for a search on plasma can be obtained with the following URL.

http://www.osti.gov/pages/pagesxml?searchFor=plasma&page=1

The number of records (count), starting record, and end record are found near the top of the XML results.

<records end="200" start="101" morepages="true" count="924">

The “morepages” tag indicates whether or not additional pages for a specific search are available. If additional pages are available, then the tag reads: morepages="true". If additional pages are not available, then the tag reads: morepages="false".

Helpful Tips

By default, results are sorted by relevance. While relevance sorting is helpful in some circumstances, sorting results by publication date might be more helpful in most other situations. This ensures the results viewed first are the most up-to-date records.

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