

# DOE PAGES XML Data Service Query Parameters and Options

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## About

The Department of Energy (DOE) Public Access Gateway for Energy and Science Beta (PAGES<sup>Beta</sup>) 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<sup>Beta</sup> 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.

<i>Data Service Name</i>	<i>XML Data Service URL</i>
DOE PAGES Data	<a href="http://www.osti.gov/pages/pagesxml">http://www.osti.gov/pages/pagesxml</a>

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.**

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

## 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"?>
- <rdf:RDF xmlns:dcq="http://purl.org/dc/terms/" xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
  - <records end="100" start="1" morepages="true" count="2081">
    - <record rownumber="1">
      <dc:title>Jets and Photons</dc:title>
      <dc:creator>Ellis, Stephen D.; Roy, Tuhin S.; Scholtz, Jakub</dc:creator>
      <dc:subject/>
      <dc:subjectRelated/>
      <dc:description/>
      <dcq:publisher>American Physical Society</dcq:publisher>
      <dcq:publisherAvailability/>
      <dcq:publisherResearch>None</dcq:publisherResearch>
      <dcq:publisherSponsor>USDOE</dcq:publisherSponsor>
      <dcq:publisherCountry>United States</dcq:publisherCountry>
      <dc:date>2013-03-01</dc:date>
      <dc:language>English</dc:language>
      <dc:type>Journal Article</dc:type>
      <dcq:typeQualifier/>
      <dc:relation>Journal Name: Physical Review Letters; Journal Volume: 110; Journal Issue: 12</dc:relation>
      <dc:coverage/>
      <dc:format>Medium: X</dc:format>
      <dc:identifier>OSTI ID: 1103935, Legacy ID: OSTI ID: 1103935</dc:identifier>
      <dc:identifierReport>None</dc:identifierReport>
      <dcq:identifierDOEcontract>None</dcq:identifierDOEcontract>
      <dc:identifierOther>Journal ID: ISSN 0031-9007; PRLTA0; Other: 122003</dc:identifierOther>
      <dc:doi>10.1103/PhysRevLett.110.122003</dc:doi>
      <dc:rights/>
      <dc:dateEntry>2014-08-01</dc:dateEntry>
      <dc:ostiId>1103935</dc:ostiId>
      <dcq:identifier-purl type=""/>
      <dcq:identifier-citation>http://www.osti.gov/pages/biblio/1103935</dcq:identifier-citation>
    </record>
  </records>
</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\\*](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.

```
- <record rownumber="5">
  <dc:title>Stable Charged-Particle Acceleration and Focusing in a Laser Accelerator Using Spatial Harmonics</dc:title>
  <dc:creator>Naranjo, B.; Valloni, A.; Putterman, S.; Rosenzweig, J. B.</dc:creator>
  <dc:subject/>
  <dc:subjectRelated/>
  <dc:description/>
  <dcq:publisher>American Physical Society</dcq: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"](http://www.osti.gov/pages/pagesxml?Title=)

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.

<b><i>Additional Criteria Keywords</i></b>	<b><i>Search Option</i></b>
SortBy	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.
SortOrder	Selects the direction of the sort, either ASC (ascending) or DESC (descending). The default is DESC.
nrows	Indicates the number of records desired per page of results.
page	Request a particular page of search results. The first page of results is returned by default.
format	xml (or blank) = output in xml format, csv = output in csv format

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](http://www.osti.gov/pages/pagesxml?Title=)

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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