

crossref

‘Journal article tag suite (JATS) XML, CrossRef XML, and Science Central’ 2nd Asian Science Editors’ Preconference Workshop 2015

Rachael Lammey – Product Manager, CrossRef

crossref

Practical session

Examples of CrossRef XML

- From CrossRef Help documentation:
http://help.crossref.org/deposit_schema
- <http://www.crossref.org/help/samples/>
- <http://www.crossref.org/help/samples/journals/14.3.4.xml>

```
<?xml version='1.0' encoding='UTF-8'?>
<doi_batch version="4.3.4"
  xmlns="http://www.crossref.org/schema/4.3.4"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:ai="http://www.crossref.org/AccessIndicators.xsd"
  xmlns:fr="http://www.crossref.org/fundref.xsd"
  xsi:schemaLocation="http://www.crossref.org/schema/4.3.4
    http://www.crossref.org/schema/deposit/crossref4.3.4.xsd">
```

```
<timestamp>200810021422</timestamp>
<depositor>
  <depositor_name>Sample Master</depositor_name>
  <email_address>support@crossref.org</email_address>
</depositor>
<registrant>CrossRef</registrant>
</head>
```

Timestamp: YYYYMMDDHHMM (ex: 200810021422)

```
</head>
▼<body>
  ▼<journal>
    ▼<journal_metadata language="en">
      <full_title>Applied Physics Letters</full_title>
      <abbrev_title>Appl. Phys. Lett.</abbrev_title>
      <issn media_type="print">0003-6951</issn>
      <coden>applab</coden>
    </journal_metadata>
    ▼<journal_issue>
      ▼<publication_date media_type="print">
        <year>1999</year>
      </publication_date>
      ▼<journal_volume>
        <volume>74</volume>
      </journal_volume>
      <issue>16</issue>
    </journal_issue>
```

```
</journal_issue>
▼<journal_article publication_type="full_text">
  ▼<titles>
    ▼<title>
      Sub-5-fs visible pulse generation by pulse-front-matched noncollinear optical parametric amplification
    </title>
  </titles>
  ▼<contributors>
    ▼<person_name sequence="first" contributor_role="author">
      <given_name>Ann P.</given_name>
      <surname>Shirakawa</surname>
    </person_name>
    <organization sequence="additional" contributor_role="author">Sample Organization</organization>
  </contributors>
  ▼<publication_date media_type="print">
    <year>1999</year>
  </publication_date>
  ▼<pages>
    <first_page>2268</first_page>
  </pages>
  ▼<publisher_item>
    <identifier id_type="pii">S000369519903216</identifier>
  </publisher_item>

```

```
<contributors>
  <person_name sequence="first" contributor_role="author">
    <given_name>Josiah</given_name>
    <surname>Carberry</surname>
    <ORCID authenticated="true">http://orcid.org/0000-0002-1825-0097</ORCID>
  </person_name>
</contributors>

```

```
<ai:program name="AccessIndicators">
  <ai:license_ref applies_to="vor" start_date="2014-05-02">
http://publisher.com/licenses/license_v1.html
  </ai:license_ref>
  <ai:license_ref applies_to="am">
http://publisher.com/licenses/open_license_v1.html
  </ai:license_ref>
  <ai:license_ref applies_to="tdm" start_date="2014-12-02">
http://publisher.com/licenses/tdm_license_v1.html
  </ai:license_ref>
</ai:program>
```

```
<archive_locations>
  <archive name="CLOCKSS"/>
</archive_locations>
```

```
<doi_data>
  <doi>10.5555/12345678</doi>
  <resource>http://psychoceramics.labs.crossref.org/10.5555-12345678.html</resource>
  <collection property="text-mining">
    <item>
      <resource content_version="vor" mime_type="application/pdf">
        http://publisher.com/vor/12345678.pdf
      </resource>
    </item>
    <item>
      <resource content_version="am">http://publisher.com/am/12345678</resource>
    </item>
    <item>
      <resource content_version="tdm" mime_type="application/pdf">
        http://publisher.com/tdm/12345678.pdf
      </resource>
    </item>
  </collection>
</doi_data>
</journal_article>
</journal>
</body>
</doi_batch>
```


Depositing Abstracts

Schema declaration:

```
<doi_batch version="4.3.2" xmlns="http://www.crossref.org/schema/4.3.2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-  
instance" xsi:schemaLocation="http://www.crossref.org/schema/4.3.2 http://www.crossref.org/schemas/crossref4.3.2.xsd" xmlns:jats="http://www.ncbi.nlm.nih.
```

Deposit example:

```
. . .  
  </person_name>  
</contributors>  
<jats:abstract><jats:p>We describe a method for cloning nucleic acid molecules onto the surfaces of 5- $\mu$ m microbeads rather than in biological  
hosts. A unique tag sequence is attached to each molecule, and the tagged library is amplified. Unique tagging of the molecules is achieved by  
sampling a small fraction (1%) of a very large repertoire of tag sequences. The resulting library is hybridized to microbeads that each carry  
106 strands complementary to one of the tags. About 105 copies of each molecule are collected on  
each microbead. Because such clones are segregated on microbeads, they can be operated on simultaneously and then assayed separately. To demonstrate  
the utility of this approach, we show how to label and extract microbeads bearing clones differentially expressed between two libraries by using a  
fluorescence-activated cell sorter (FACS). Because no prior information about the cloned molecules is required, this process is obviously useful where  
sequence databases are incomplete or nonexistent. More importantly, the process also permits the isolation of clones that are expressed only in given  
tissues or that are differentially expressed between normal and diseased states. Such clones then may be spotted on much more cost-effective, tissue-  
or disease-directed, low-density planar microarrays.</jats:p></jats:abstract>  
<publication_date media_type="print">  
  <year>2000</year>  
</publication_date>
```



Reference Deposit

Current elements for citation deposits

The current elements for citation tagging are :

<issn>: ISSN of a series (print or electronic)

<journal_title>

<author>: first author of an article or other publication

<volume>: volume number (journal or book set)

<issue>: journal issue

<first_page>

<cYear>: year of publication

<article_title>: journal article, conference paper, or book chapter title

<isbn>

<series_title>: title of a book or conference series

<volume_title>: book or conference proceeding title

<edition_number>

<component_number>: the chapter, section, part, etc. number for a content item in a book.

<unstructured_citation>: citations for which no structured data is available. CrossRef's ability to process unstructured citations is limited ([more info](#))

<doi>: include the DOI wherever possible

```
<citation key="ref2">
  <doi>10.5555/small_md_0001</doi>
</citation>
</citation>
</citation_list>
</doi_citations>
</body>
</doi_batch>
```



<http://help.crossref.org/#depositing-reference>

<http://www.crossref.org/help/samples/references.xml>

Resource-only Deposits

DOI resource deposits

Some ancillary metadata may be deposited separately from metadata deposits as resource deposits. These deposits append the included metadata to the citation metadata already stored in the CrossRef system, and do not need to be included in citation metadata updates. Resource deposits use the [doi_resources4.3.2.xsd](#) schema ([documentation](#)) with the exception of stand-alone components which use the [main deposit schema](#).

- **Reference deposits**
- **URLs:** A primary URL must be included in all DOI deposits. Additional URLs may also be included, for:
 - [as-crawled URLs](#) (used for CrossCheck)
 - [Multiple Resolution](#) secondary URLs
 - content version or text mining URLs
- [Components](#)
- [FundRef](#)
- [CrossMark](#)
- [Access Indicators](#)

Resource-only Deposit

```
1 <?xml version='1.0' encoding='UTF-8'?>
2 <doi_batch version="4.3.2"
3     xmlns="http://www.crossref.org/doi_resources_schema/4.3.2"
4     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5     xsi:schemaLocation="http://www.crossref.org/doi_resources_schema/4.3.2
6         http://www.crossref.org/schema/deposit/doi_resources4.3.2.xsd">
7   <head>
8     <doi_batch_id>123456</doi_batch_id>
9     <depositor>
10      <name>Karl Ward</name>
11      <email_address>kward@crossref.org</email_address>
12    </depositor>
13  </head>
14  <body>
15    <doi_resources>
16      <doi>10.5555/12345678</doi>
17      <collection property="text-mining">
18        <item>
19          <resource content_version="vor" mime_type="application/pdf">
20            http://publisher.com/vor/12345678.pdf
21          </resource>
22        </item>
23        <item>
24          <resource content_version="am">http://publisher.com/am/12345678</resource>
25        </item>
26        <item>
27          <resource content_version="tdm" mime_type="application/pdf">
28            http://publisher.com/tdm/12345678.pdf
29          </resource>
30        </item>
31      </collection>
32    </doi_resources>
33  </body>
34 </doi_batch>
```



<https://github.com/CrossRef/rest-api-doc/blob/master/examples/partial-resources.xml>

Depositing As-Crawled URLs

```
<doi_batch version="4.3.0" xmlns="http://www.crossref.org/doi_resources_schema/4.3.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.crossref.org/doi_resources_schema/4.3.0
http://www.crossref.org/schemas/doi_resources4.3.0.xsd">
  <head>
    <doi_batch_id>123456</doi_batch_id>
    <depositor>
      <name>your name</name>
      <email_address>support@crossref.org</email_address>
    </depositor>
  </head>
  <body>
    <doi_resources>
      <doi>10.5555/sampledoi</doi>
      <collection property="crawler-based">
        <item crawler="iParadigms">
          <resource>http://www.yoururl.org/article1.html</resource>
        </item>
        <item crawler="google">
          <resource>http://www.yoururl.org/article1.html</resource>
        </item>
        <item crawler="msn">
          <resource>http://www.yoururl.org/article1.html</resource>
        </item>
        <item crawler="scirus">
          <resource>http://www.yoururl.org/article1.html</resource>
        </item>
      </collection>
    </doi_resources>
  </body>
</doi_batch>
```

CSV Upload Options (to populate older files without XM)

License information: [http://help.crossref.org/csv-upload\\$license](http://help.crossref.org/csv-upload$license)

For CrossCheck: <http://help.crossref.org/as-crawled-csv-upload>

Special Characters

1. **Use a UTF-8 editor or tool** when creating the XML and insert characters directly into the file, which results in a one or more byte sequence per character in the file.

For example, an "S" with a háček (Š) has a decimal value of 352 which is 160hex. This value converts to the UTF-8 sequence C5,A0 in hex. You can create a small XML file in which you insert this two-byte sequence (shown here between the <UTF_encoded> tags).

```
<?xml version="1.0" encoding="utf-8" ?>
<start>
<UTF_encoded>Š</UTF_encoded>
</start>
```

The character displays properly in a browser but if you save the XML source and try to view it in certain editors, it will not display correctly.

2. **Encode the special character using a numerical representation.** This is the preferred approach and is implemented by constructing an entity reference in the XML that is the numerical value of the character. For example, <surname>Šumbera</surname> includes the special character "S" with a háček (Š).

Where to find help:

- Help documentation: <http://help.crossref.org>
- CrossRef support: email support@crossref.org or visit <http://support.crossref.org>
- Webinars: <http://www.crossref.org/01company/webinars.html>

Staying up to date:

- Announcements forum: <http://support.crossref.org/forums/147622-announcements>
subscribe via [RSS](#) or email
- [CrossRef Quarterly](#): CrossRef newsletter
- [CrossRef Labs](#): new and experimental tools and initiatives