Crossref

Strengthening the Scholarly Record: A Workshop on Crafting Metadata Records & DOIs with Crossref

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@SaysJKemp

Library Publishing Forum, May 23rd 2018

CC BY

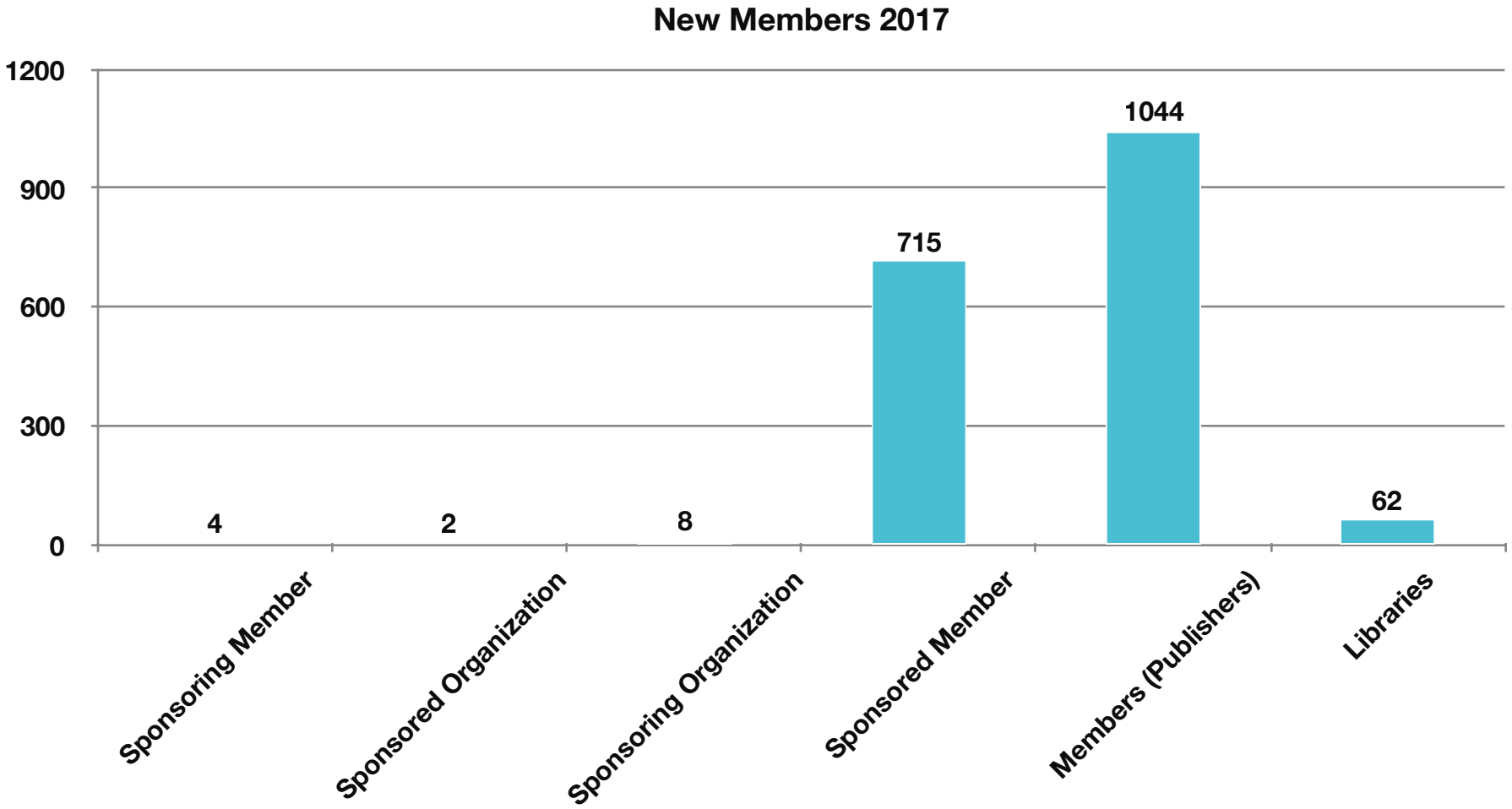
Crossref makes research outputs easy to find, cite, link, and assess.

We’re a not-for-profit membership organization that exists to make scholarly communications better. We rally the community; tag and share metadata; run an open infrastructure; play with technology; and make tools and services—all to help put scholarly content in context.

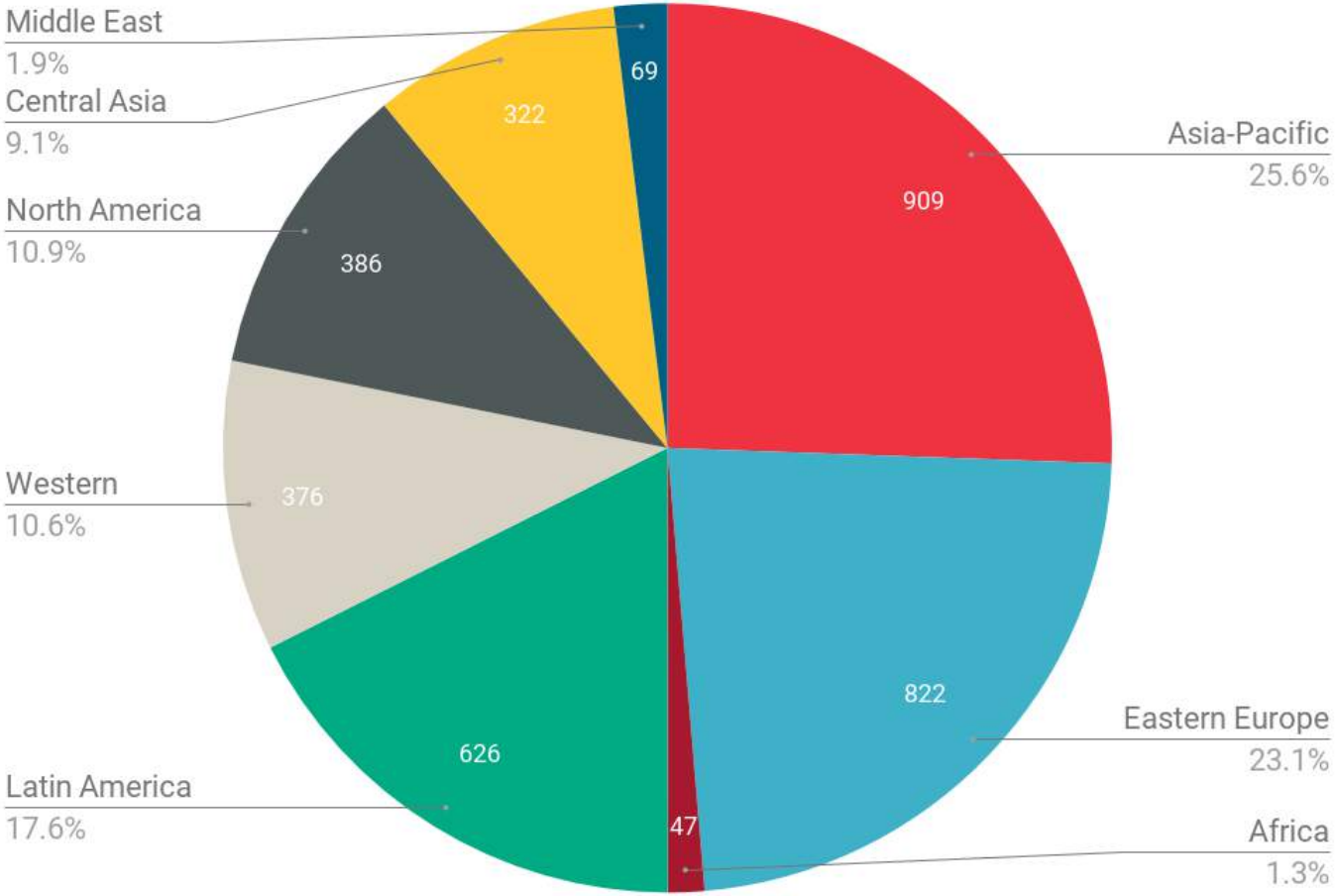
It’s as simple—and as complicated—as that.

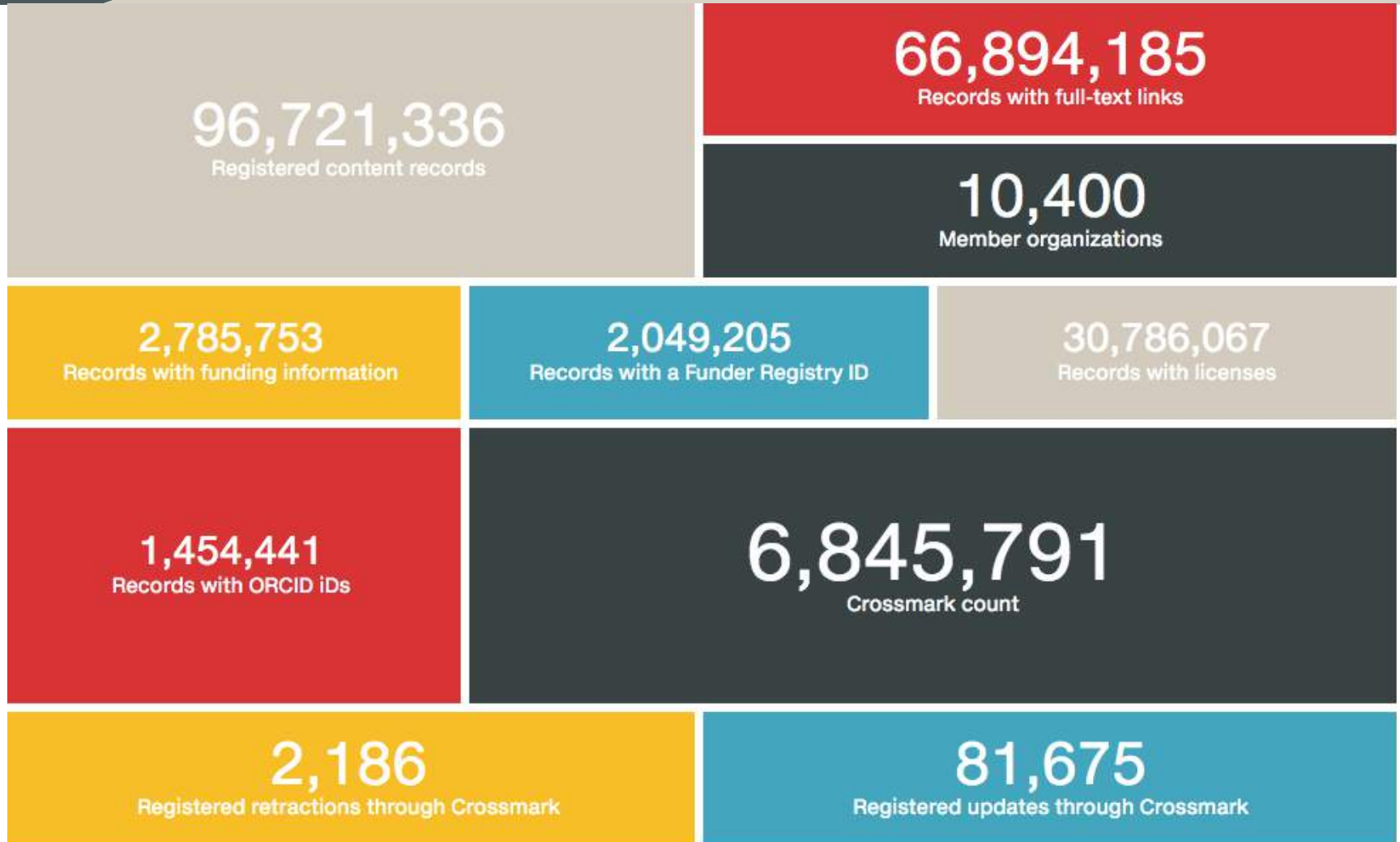
Why do publishers join Crossref?

- Content discoverability
- Show people where content is located including if/when the content moves
- Drive more traffic to publications
- Link references
- Participate in other collaborative services

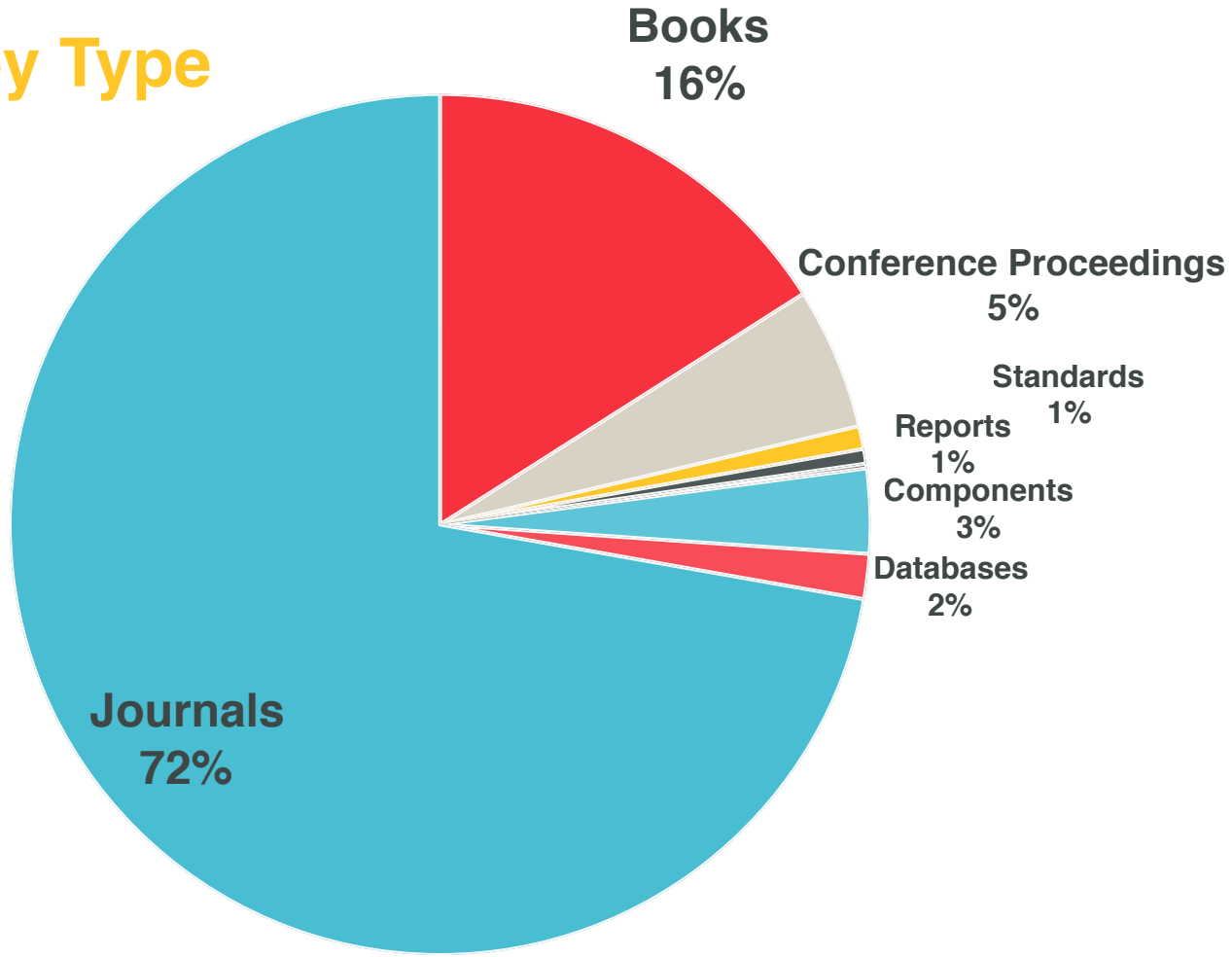

New Members 2017
1200
900
600
300
0
4
2
8
715
1044
62
Sponsoring Member
Sponsored Organization
Sponsoring Organization
Sponsored Member
Members (Publishers)
Libraries

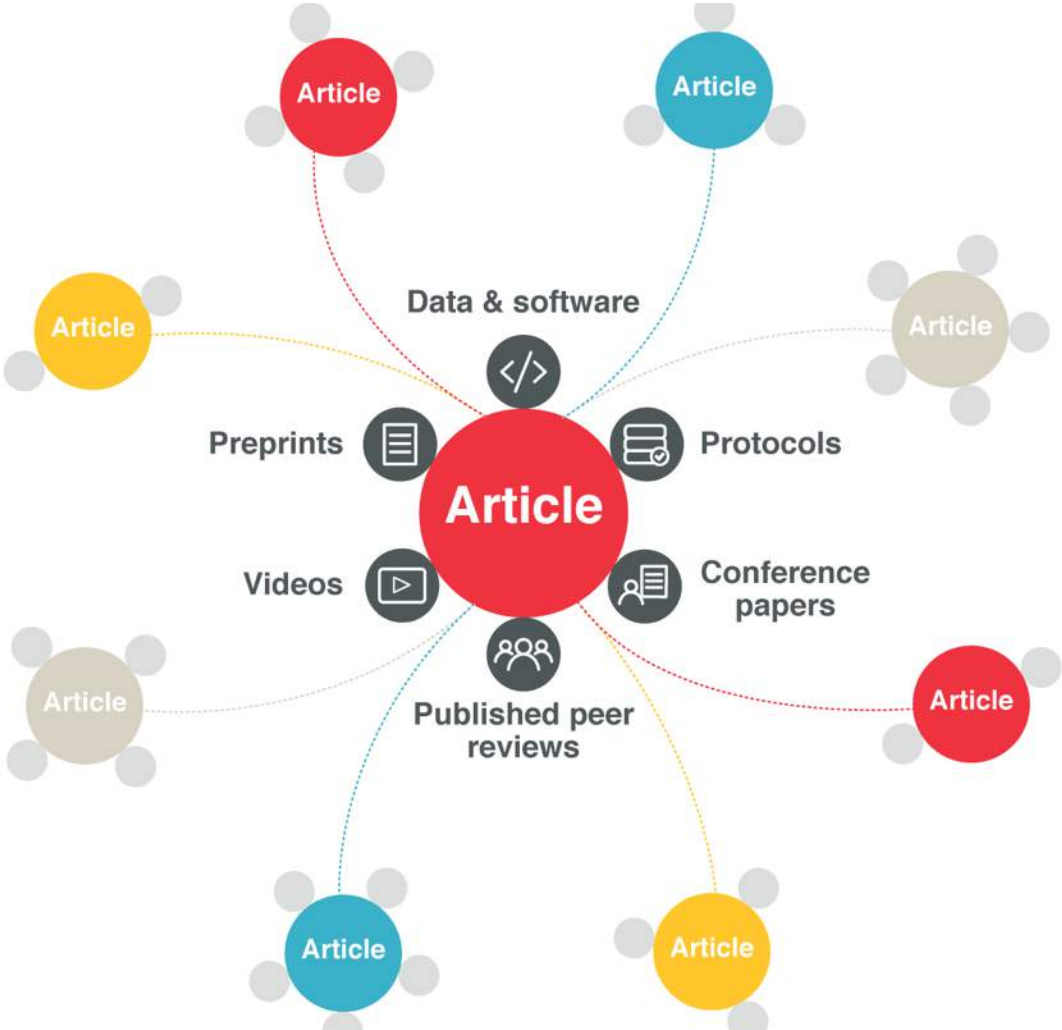
Number of new Crossref members per region joining between 1st Jan 2016 - 31st December 2017




96,721,336
Registered content records
66,894,185
Records with full-text links
10,400
Member organizations
2,785,753
Records with funding information
2,049,205
Records with a Funder Registry ID
30,786,067
Records with licenses
1,454,441
Records with ORCID iDs
6,845,791
Crossmark count
2,186
Registered retractions through Crossmark
81,675
Registered updates through Crossmark

Content by Type




Article
Article
Article
Article
Article
Article
Article
Article
Article
Data & software
Preprints
Protocols
Article
Videos
Conference papers
Published peer reviews

New

Peer Review Reports Reference Distribution Policy

Soon

Pending Publication

Event Data

Publisher Participation Reports

Metadata Manager Deposit Tool

Also on the way

OrgIDs

Grant IDs

Metadata for (almost) any occasion

- Literature discovery
- Research integrity tracking
- Reproducibility
- Reporting to funders and institutions
- Funder policy compliance
- &tc…

Metadata for research integrity

- Updates (corrections, retraction, update, expressions of concern, etc.): Crossmark
- Peer review history, type, assets
- Funding data (COI)
- ORCIDs (authors, reviewers, editors, etc.)
- Affiliation (authors, reviewers, editors, etc.)
- License data (full text, abstract, etc.)

Metadata for discoverability

- ORCID, Funder ID & Award No.
- Abstracts
- References
- Links to data & software
- Links to preprints
- Links to conference papers and posters
- Links to research resource IDs (identifiers for assays, materials, etc.)
- Links to post-publication events (reviews, comments & discussions, bookmarks, shares, recommendations, etc.) Event Data
- Access indicators (publication license for text & data mining, machine mining URLs)

Metadata for reproducibility

- Updates (corrections, retraction, update, expressions of concern, etc.)
- Funding data (COI) & ORCIDs (authors, reviewers, editors, etc.)
- License data (full text, abstract, etc.)
- Links to peer review assets
- Links to underlying data & software
- Links to protocols
- Links to versions
- Links to videos/audio and other supporting information
- Links to research resource IDs (identifiers for assays, materials, etc.)
- Links to clinical trial registry and trial number

Metadata for reporting and assessment

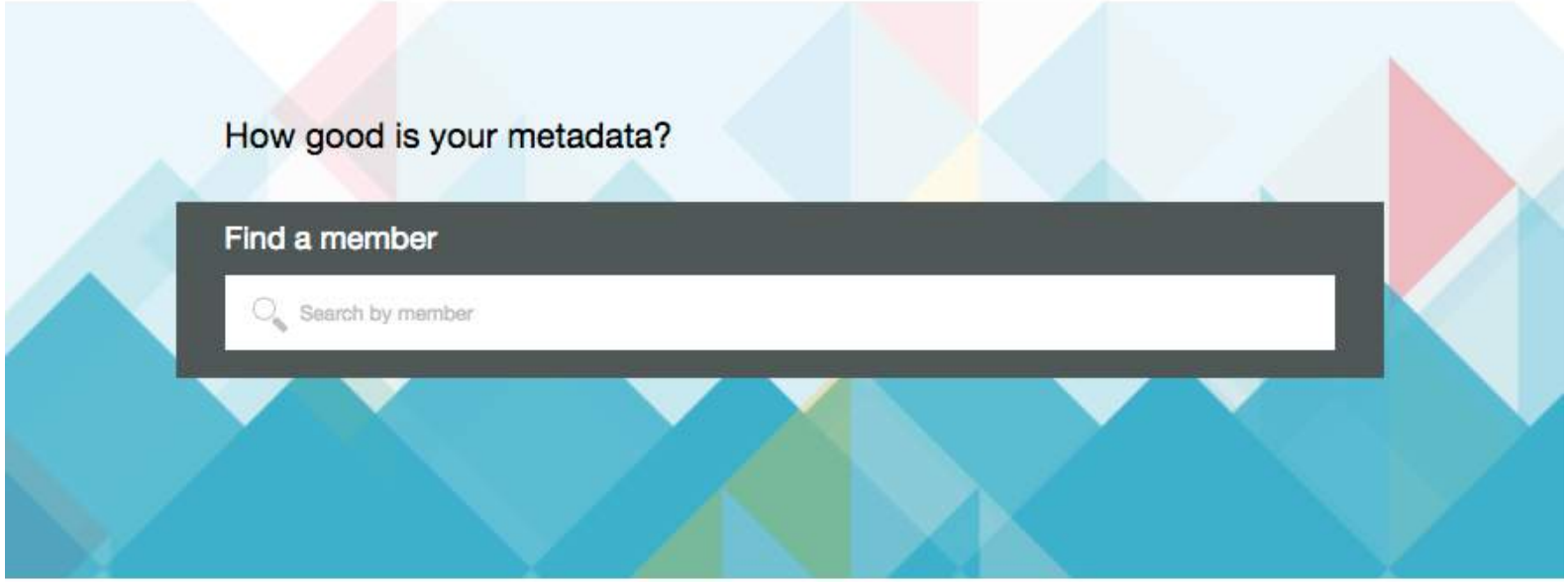
- ORCID, Funder ID, Grant ID & Award No.
- Abstracts
- References: Cited-by
- Peer review description & assets
- Links to data & software
- Links to preprints
- Links to conference papers and posters
- Links to research resource IDs (identifiers for assays, materials, etc.)
- Links to post-publication events (reviews, comments & discussions, bookmarks, shares, recommendations, references, media coverage)
- Access indicators (publication license for text & data mining, machine mining URLs)

Your metadata content reaches:

- Funders
- Institutions
- Archives & repositories
- Research councils
- Data centres
- Professional networks
- Patent offices
- Indexing services
- Publishing vendors
- Metrics providers
- Reference manager systems
- Lab & diagnostics suppliers
- Sharing platforms
- Data analytics systems
- Literature discovery services
- Educational tools
- PID providers, registration agencies

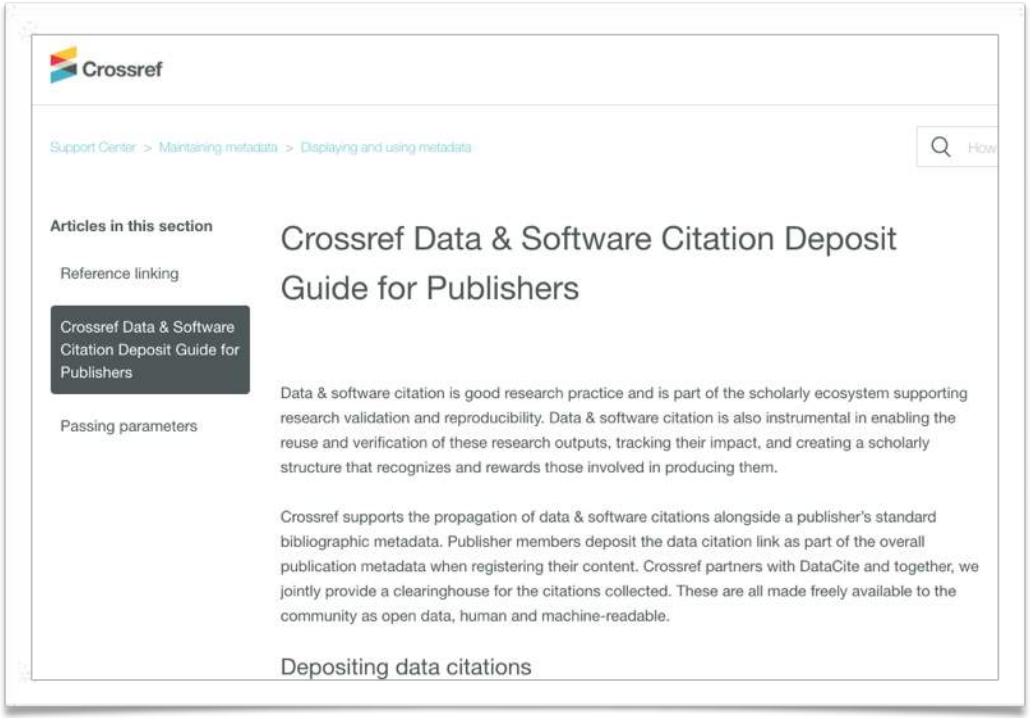
Participation Reports BETA

Crossref



Richer metadata makes content useful.
Make sure your work can be found.

Learn more



https://support.crossref.org

Thank you

Jennifer Kemp
jkemp@crossref.org
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Crossref

Strengthening the scholarly record:

A Workshop on Crafting Metadata Records and DOIs with Crossref

Shayn Smulyan
Product Support Associate
support@crossref.org
@CrossrefSupport

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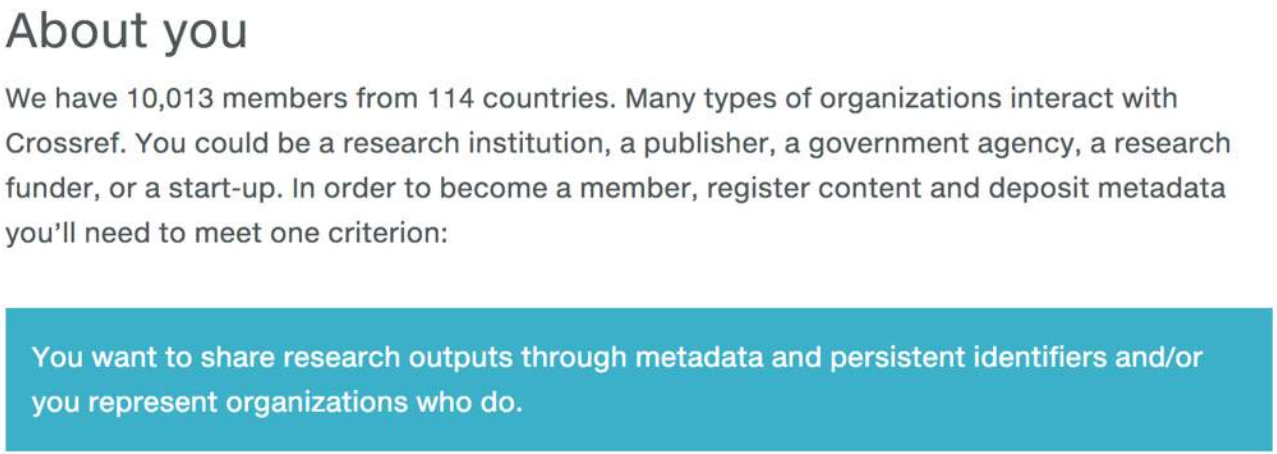
Library Publishing Forum, May 23,2018

Who registers content with Crossref?



If you can commit to creating and maintaining a metadata record for your published content, in the long-term, then Crossref membership is for you.

What can you register? Content Types.

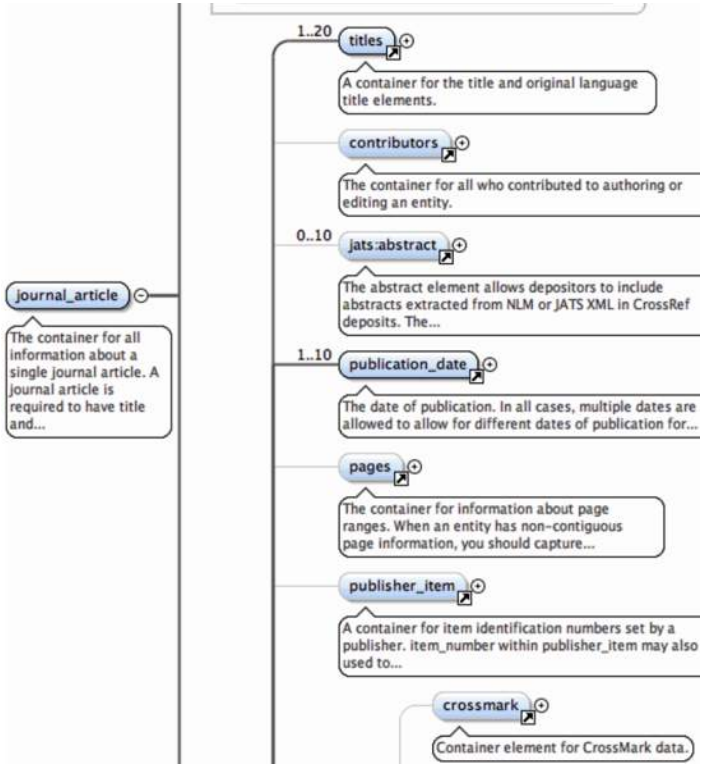
- Journals
- Books
- Conference Proceedings
- Dissertations
- Data Sets
- Reports
- Standards
- Preprints
- Peer Reviews

Status Page: Updated on Apr 29, 2018

MetaData Deposit	
Total Records in Database	96,481,720
Total Prefixes	10,649
Number of Journals	58,645
Number of Books	1,269,875
Number of Conference Proceedings	58,855
Number of Journal DOIs	71,852,542
Number of Book DOIs	13,454,498
Number of Conference DOIs	5,252,705
Number of Components	3,204,641
Number of Standards Titles	338,742
Number of Standards DOIs	255,247
Number of Databases	12,770
Number of Database DOIs	1,670,337

Content Registration Overview

- Construct DOIs
- Prepare XML metadata
- Submit metadata to Crossref
- Confirm Success



Then What?

- Outbound Reference Linking
- Reports
- Updating/Maintaining DOIs
  - URLs
  - adding/correcting/editing metadata
- Title Transfers

What you need before you begin

- A DOI assigned to your content item
  - DOI = Prefix / Suffix
  - We assign you the prefix, you create the suffix
  - Allowed characters: a-z, 0-9, and - . _ ; ( ) /
- A URL for that item's landing page which includes
  - Some means for users to access the full text content
  - The DOI displayed as a link: https://doi.org/{DOI}
  - A citation or basic bibliographic data displayed
- Metadata that describes the item you're registering

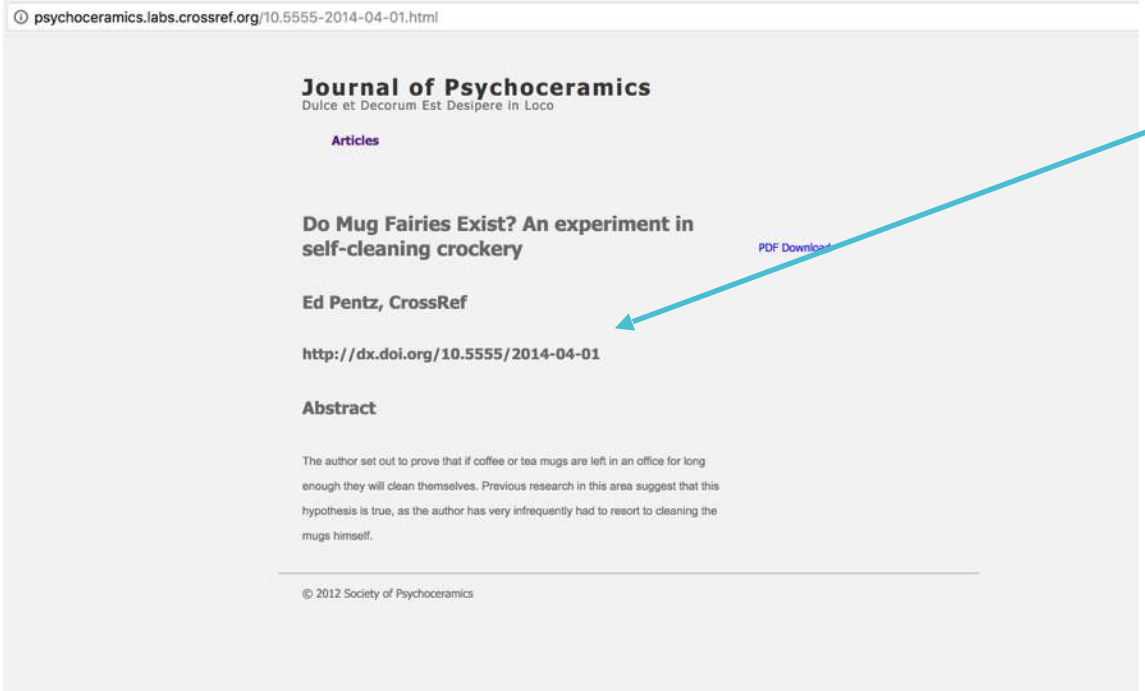
Demo: Content Registration

Pentz, Ed. Do Mug Fairies Exist? An experiment in self-cleaning crockery. (2014). Journal of Psychoceramics, 5(11).

10.5555/2014-04-01

http://psychoceramics.labs.crossref.org/10.5555-2014-04-01.html

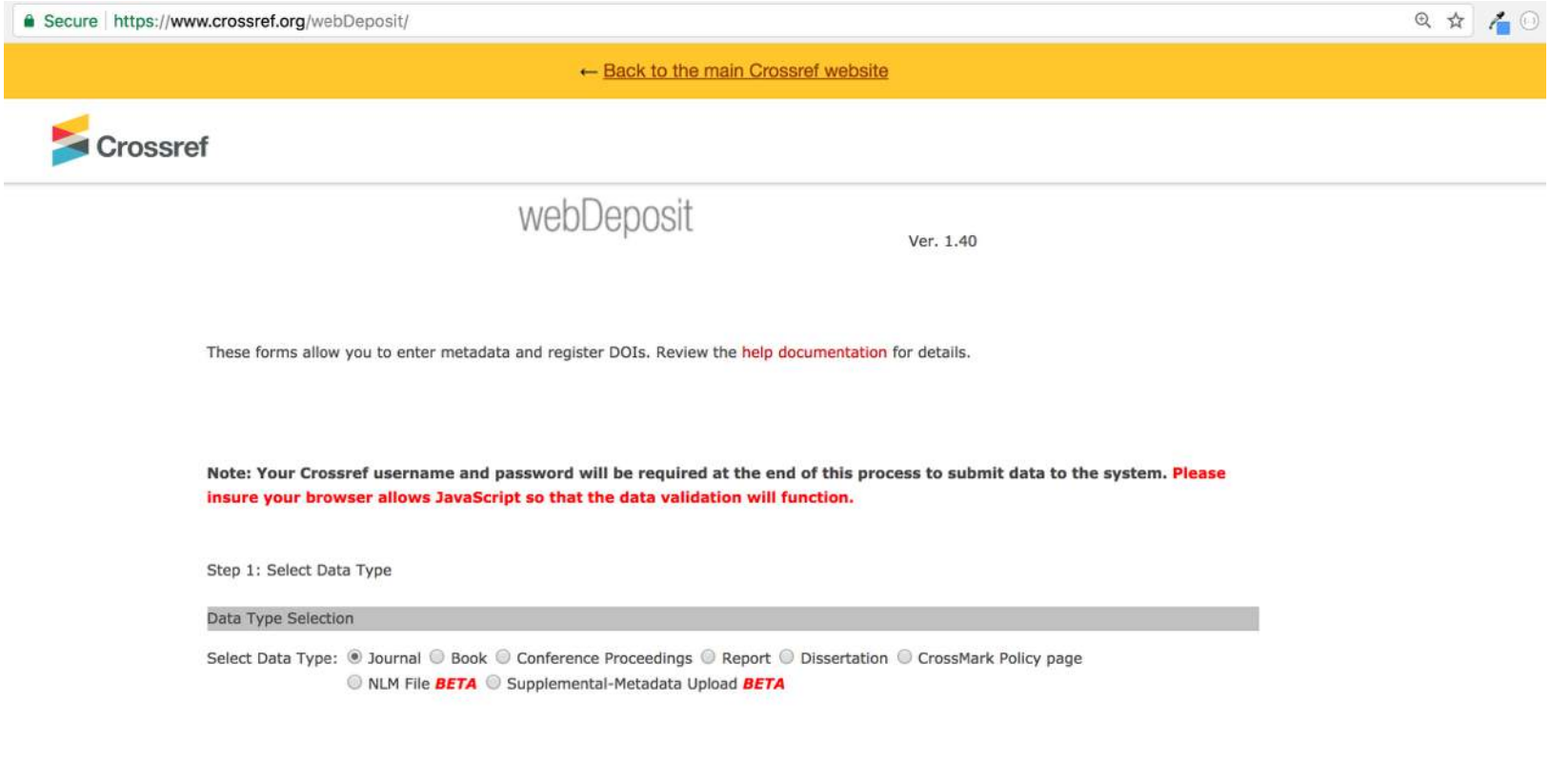
Do Mug Fairies Exist? Article Landing Page



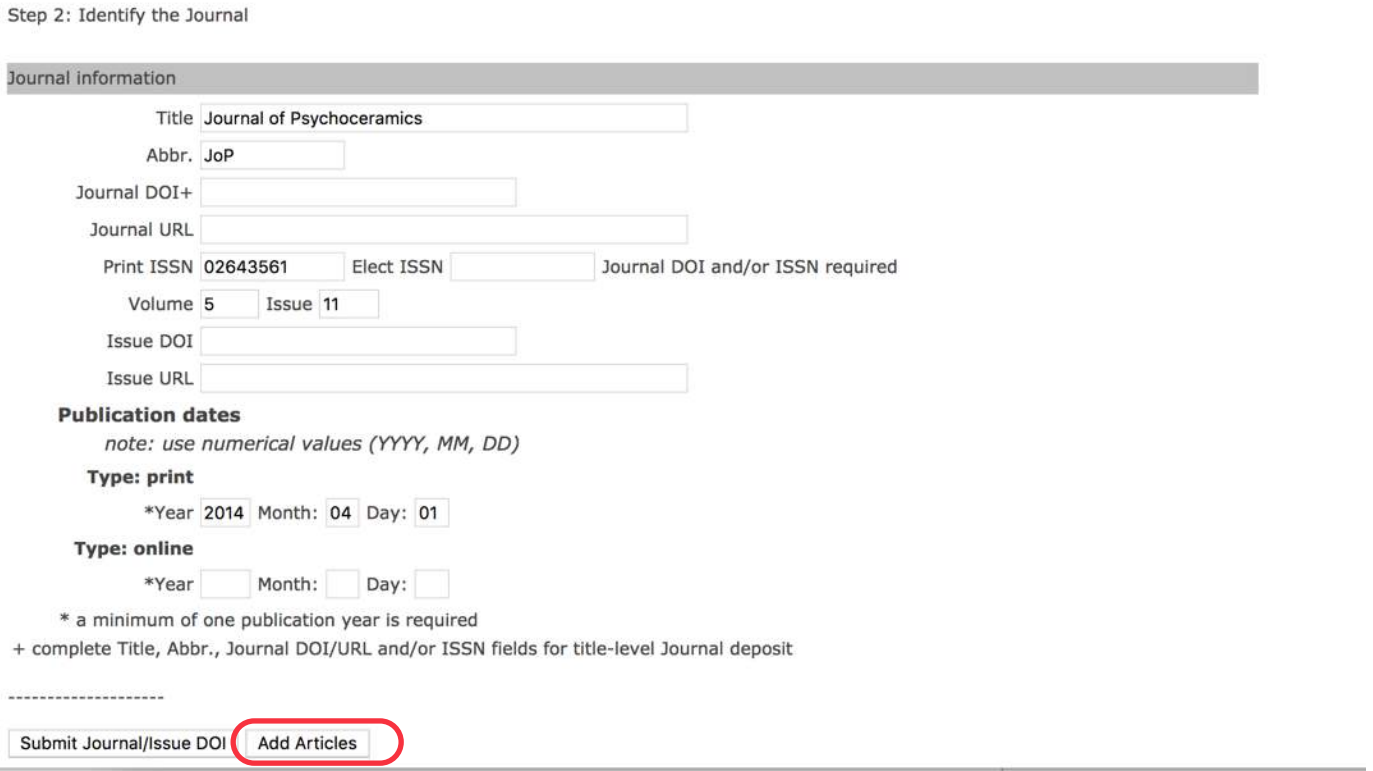
Note, outdated DOI display format.

"dx" and "http"

Web Deposit Form - Select Content Type



Journal- and Issue-level Metadata



Step 2: Identify the Journal

Journal information

Title: Journal of Psychoceramics

Abbr.: JoP

Journal DOI+:

Journal URL:

Print ISSN: 02643561 Elect ISSN: Journal DOI and/or ISSN required

Volume: 5 Issue: 11

Issue DOI:

Issue URL:

Publication dates

note: use numerical values (YYYY, MM, DD)

Type: print

*Year: 2014 Month: 04 Day: 01

Type: online

*Year: Month: Day:

* a minimum of one publication year is required

+ complete Title, Abbr., Journal DOI/URL and/or ISSN fields for title-level Journal deposit

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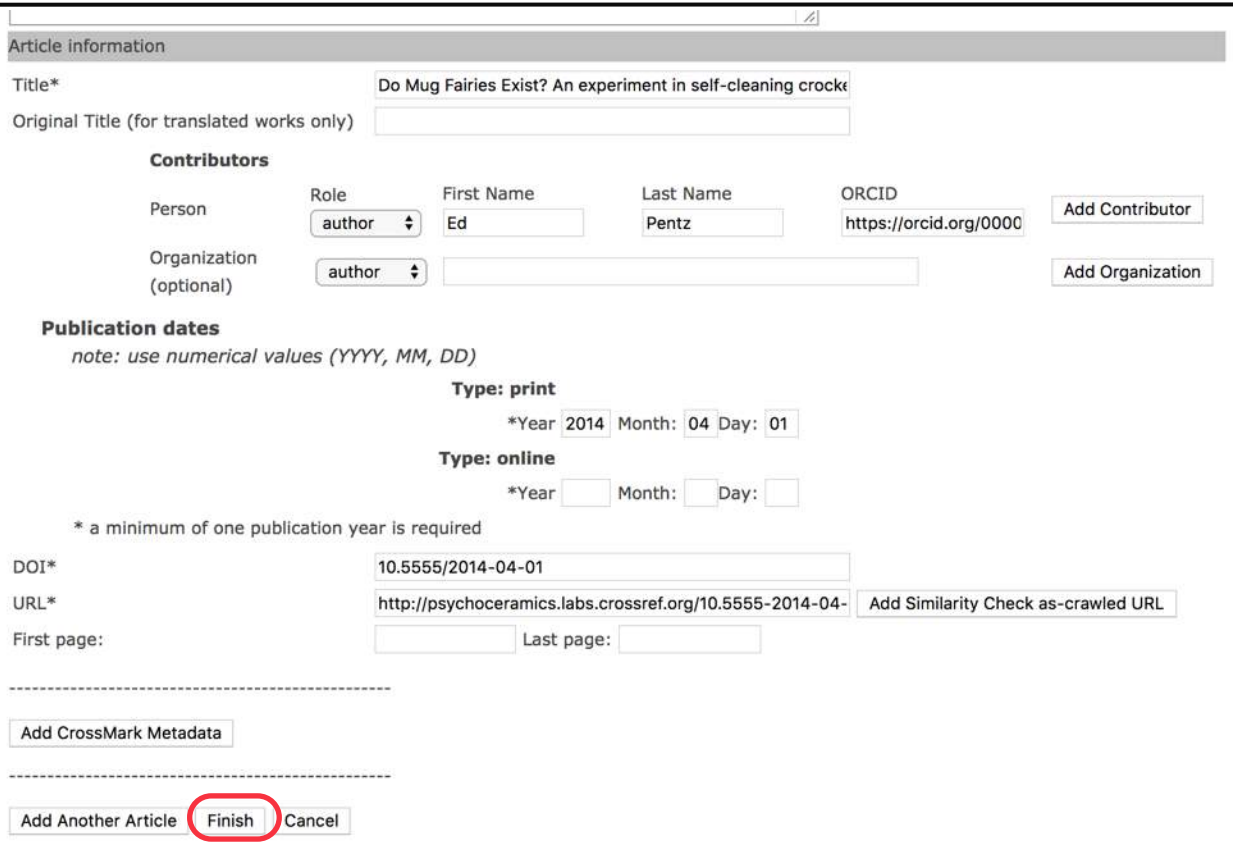
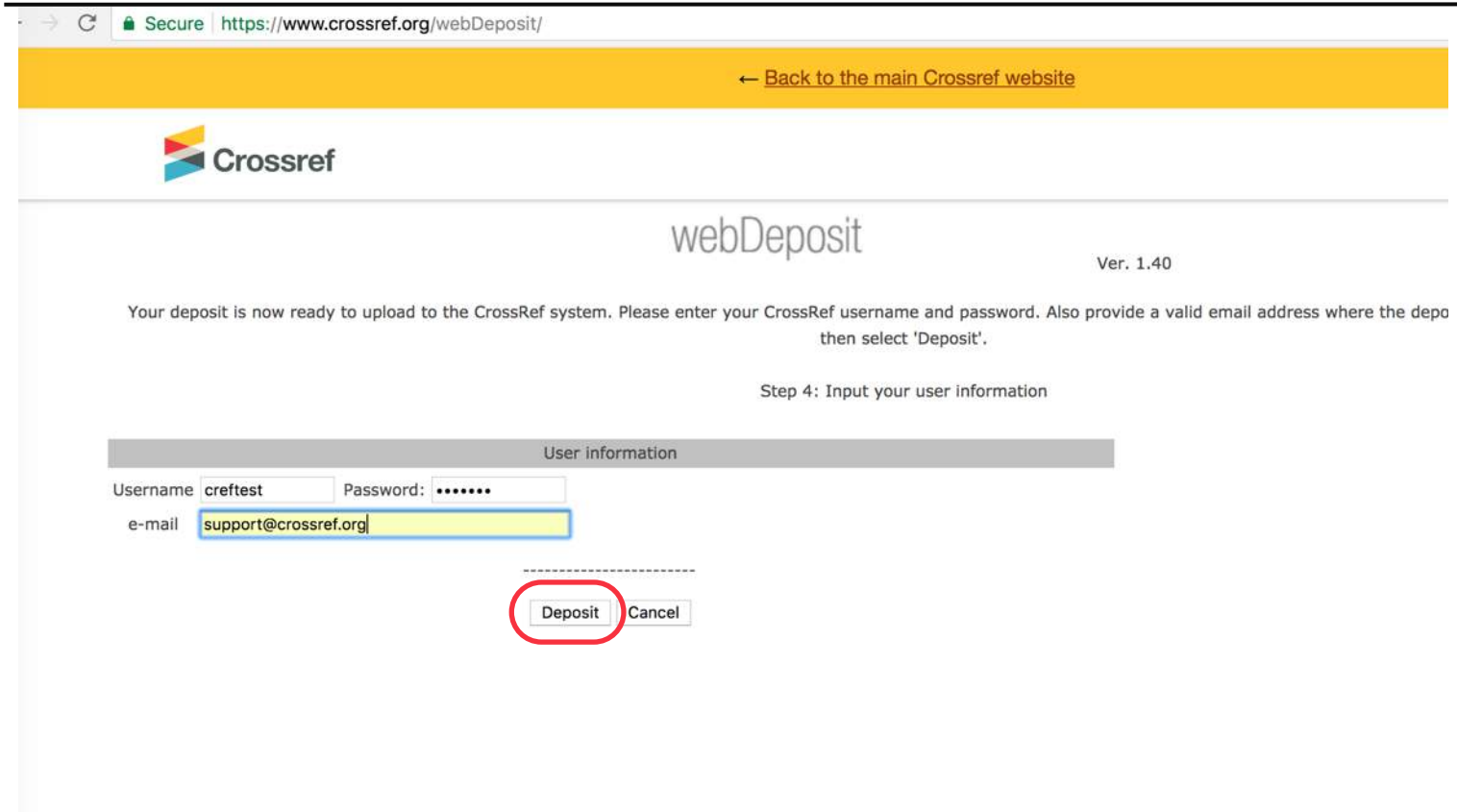
Submit Journal/Issue DOI | Add Articles

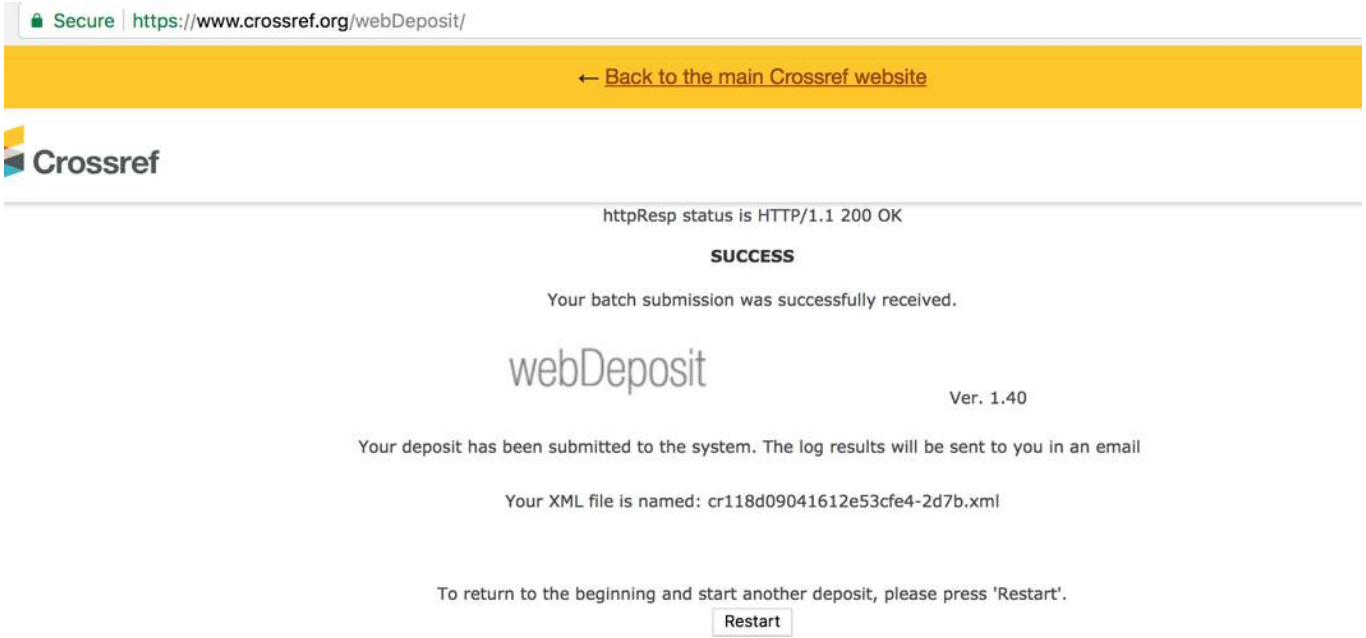
Article Metadata



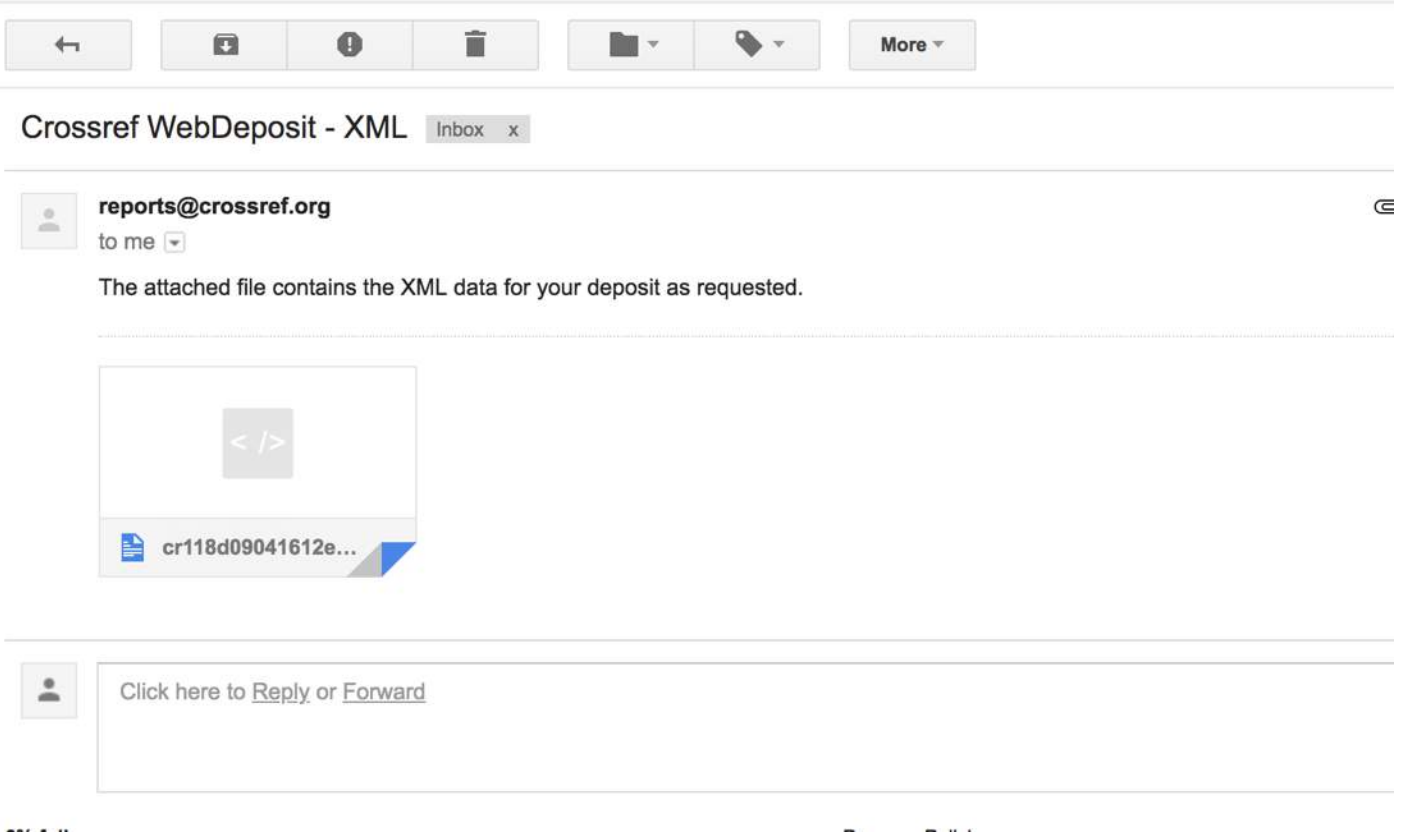
Enter credentials and submit



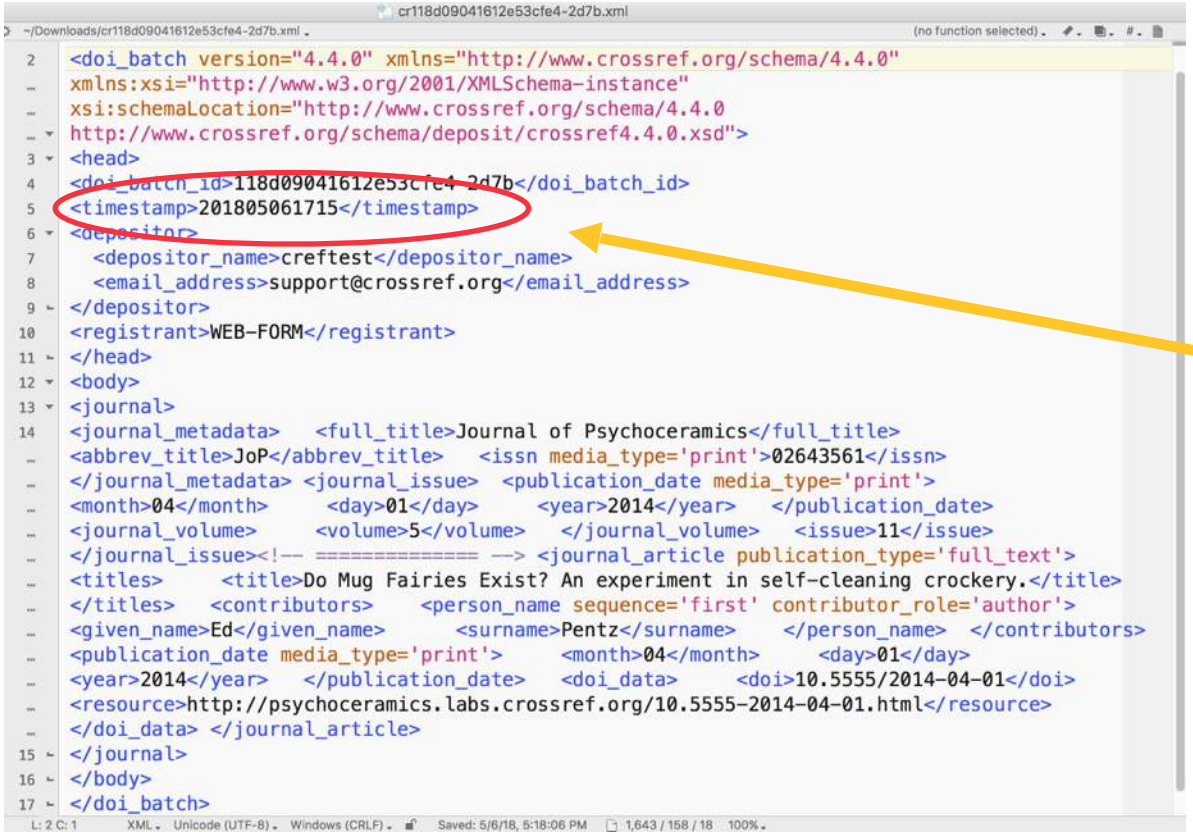
Confirmation Message



First email - contains deposited XML



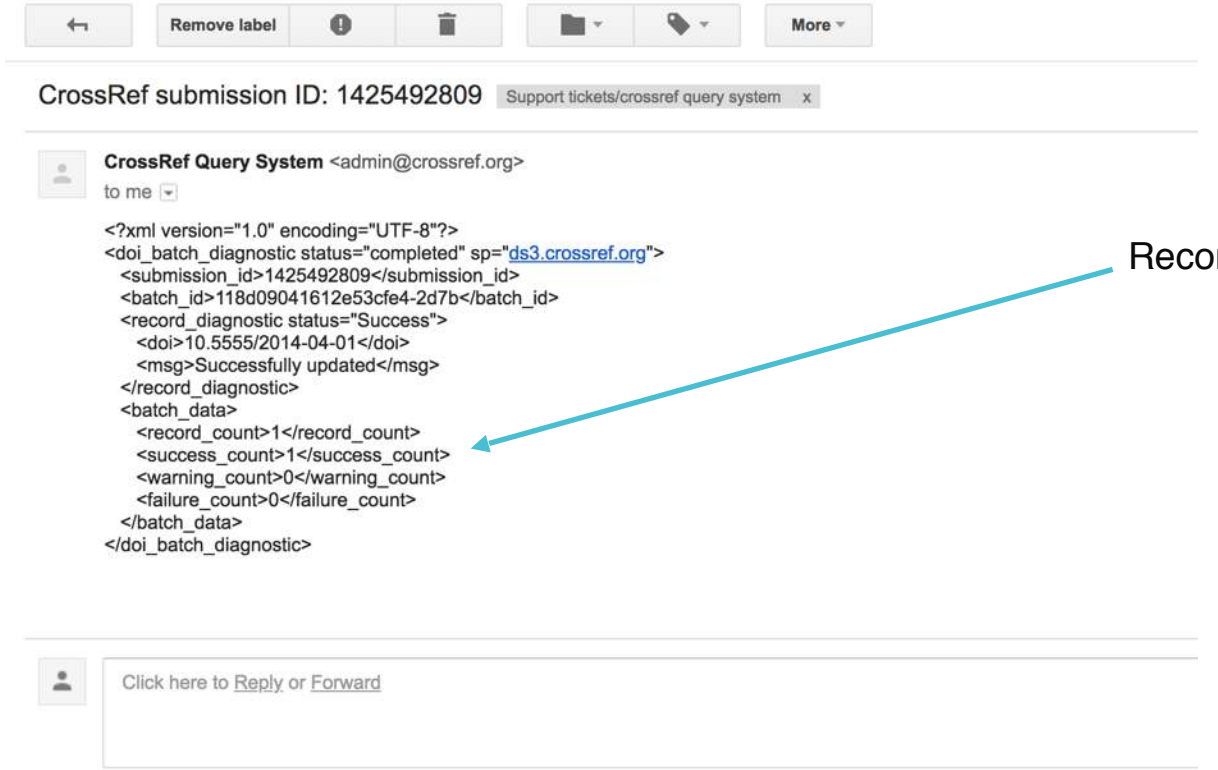
Deposited XML File



If you need to edit or correct any metadata, you can resubmit this XML file with changes.

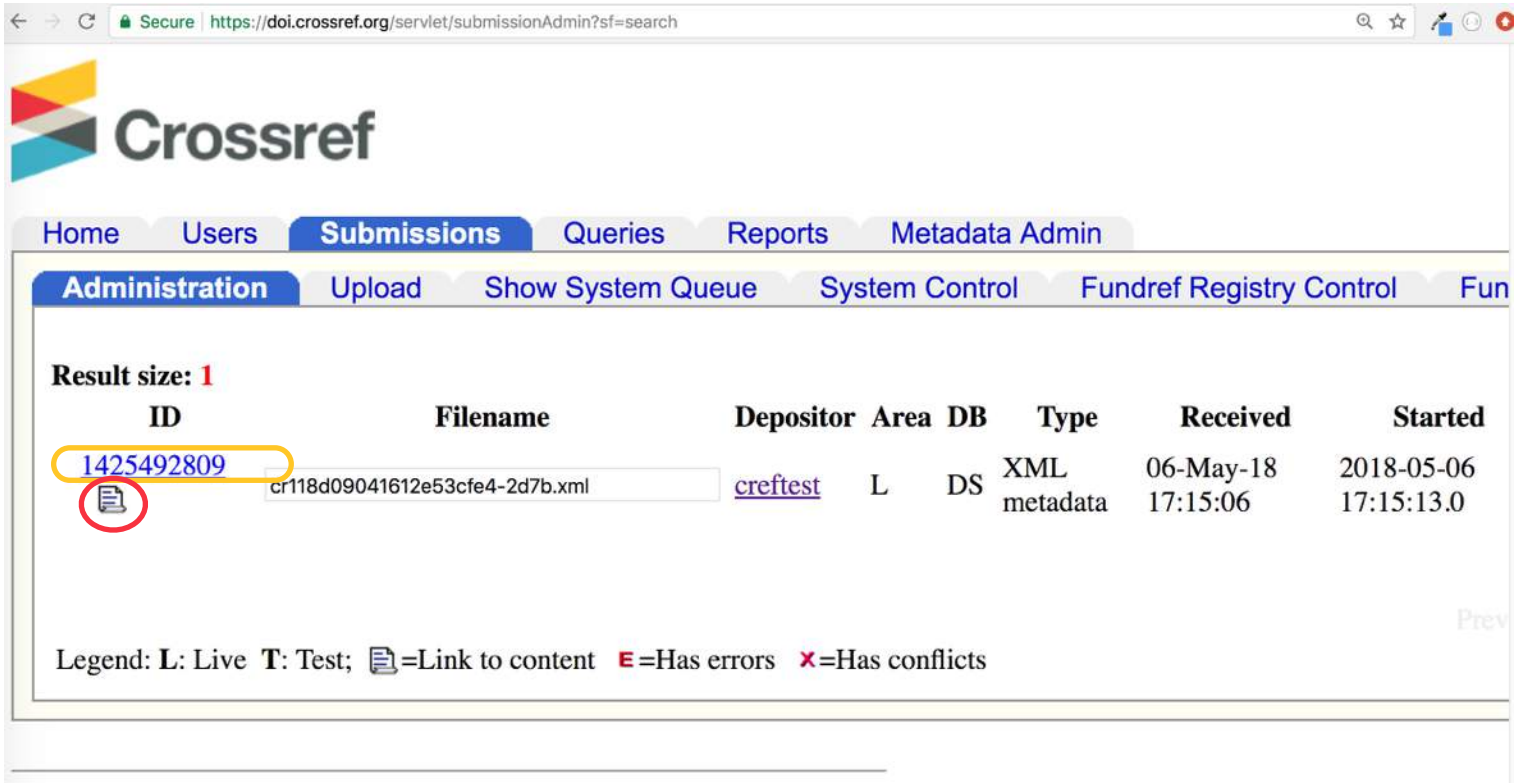
Be sure to update the <timestamp> element to a higher number.

Second email - Submission log



Record count = Success count

Submission on our admin system



Record on Metadata Search Interface

Once registered, the item appears in our APIs and Metadata Search Interface

Demo: Simple Text Query

Simple Text Query

https://doi.crossref.org/simpleTextQuery

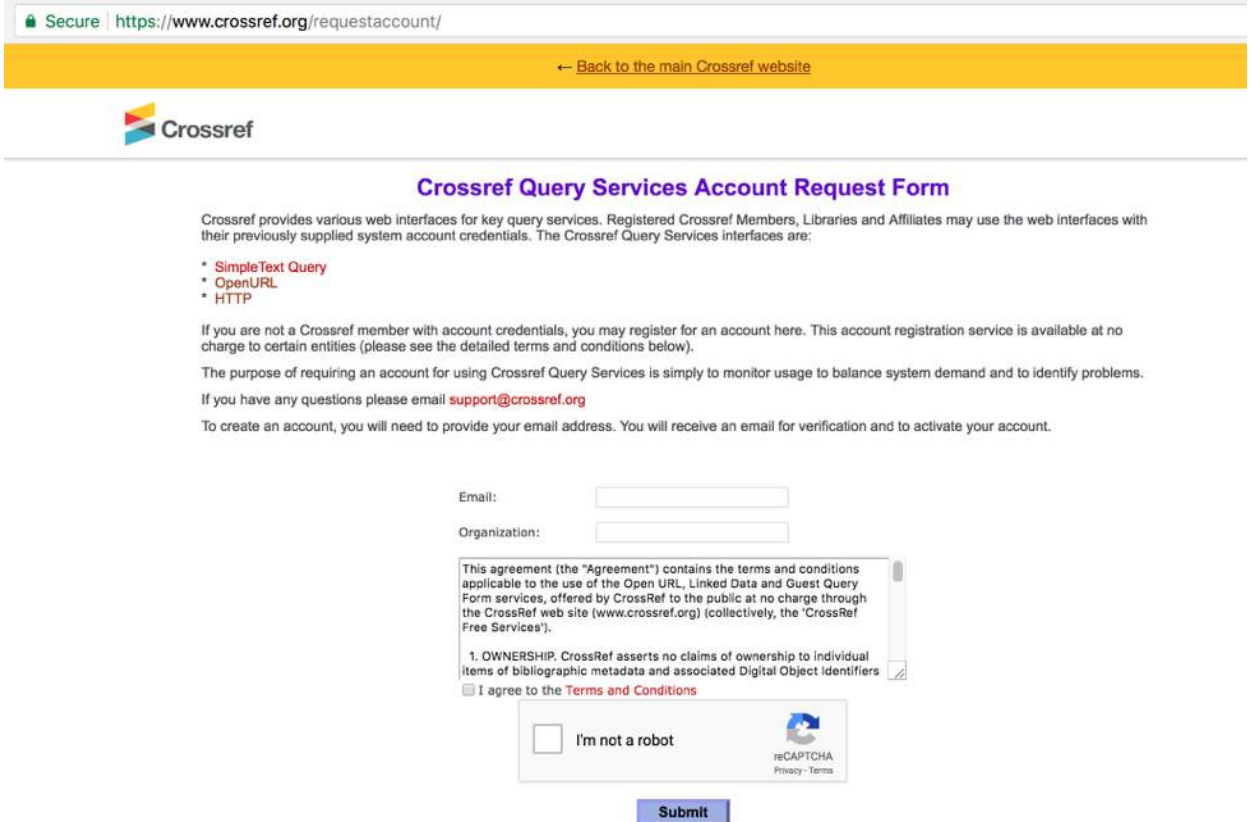
- Query DOIs for a reference list to comply with our outbound reference linking display requirement
- Deposit references into a DOI's metadata record

Demo: Simple Text Query cont'd

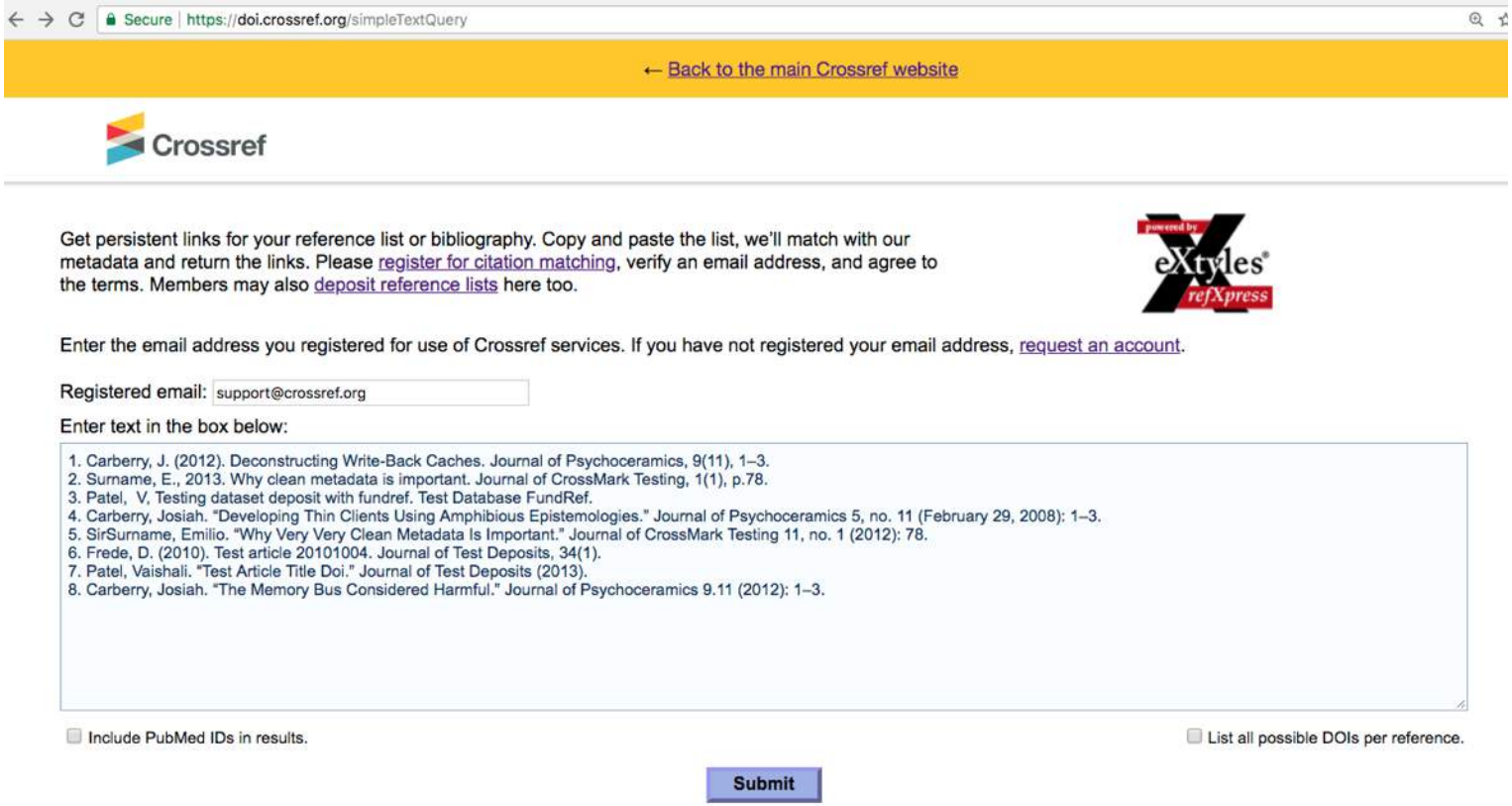
Example Reference list

1. Carberry, J. (2012). Deconstructing Write-Back Caches. Journal of Psychoceramics, 9(11), 1–3.
2. Surname, E., 2013. Why clean metadata is important. Journal of CrossMark Testing, 1(1), p.78.
3. Patel, V, Testing dataset deposit with fundref. Test Database FundRef.
4. Carberry, Josiah. "Developing Thin Clients Using Amphibious Epistemologies." Journal of Psychoceramics 5, no. 11 (February 29, 2008): 1–3.
5. SirSurname, Emilio. "Why Very Very Clean Metadata Is Important." Journal of CrossMark Testing 11, no. 1 (2012): 78.
6. Frede, D. (2010). Test article 20101004. Journal of Test Deposits, 34(1).
7. Patel, Vaishali. "Test Article Title Doi." Journal of Test Deposits (2013).
8. Carberry, Josiah. "The Memory Bus Considered Harmful." Journal of Psychoceramics 9.11 (2012): 1–3.

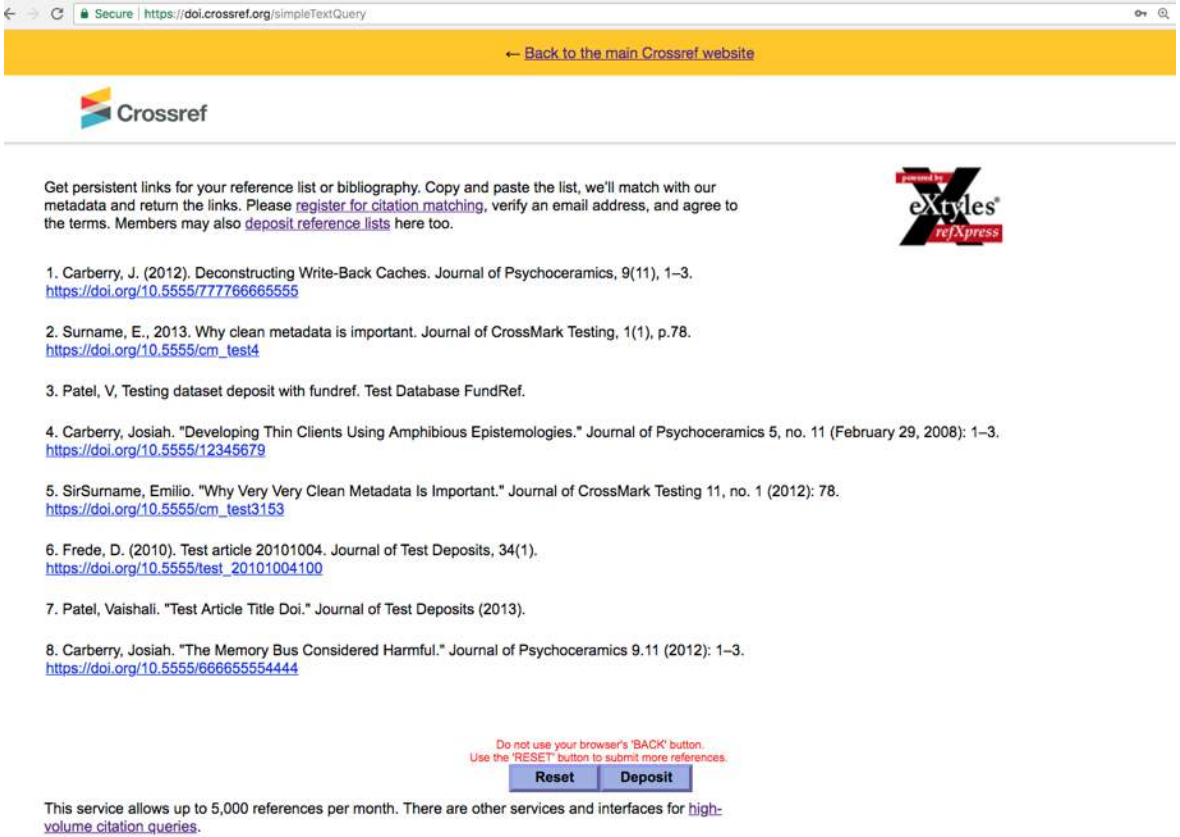
Query Services Account



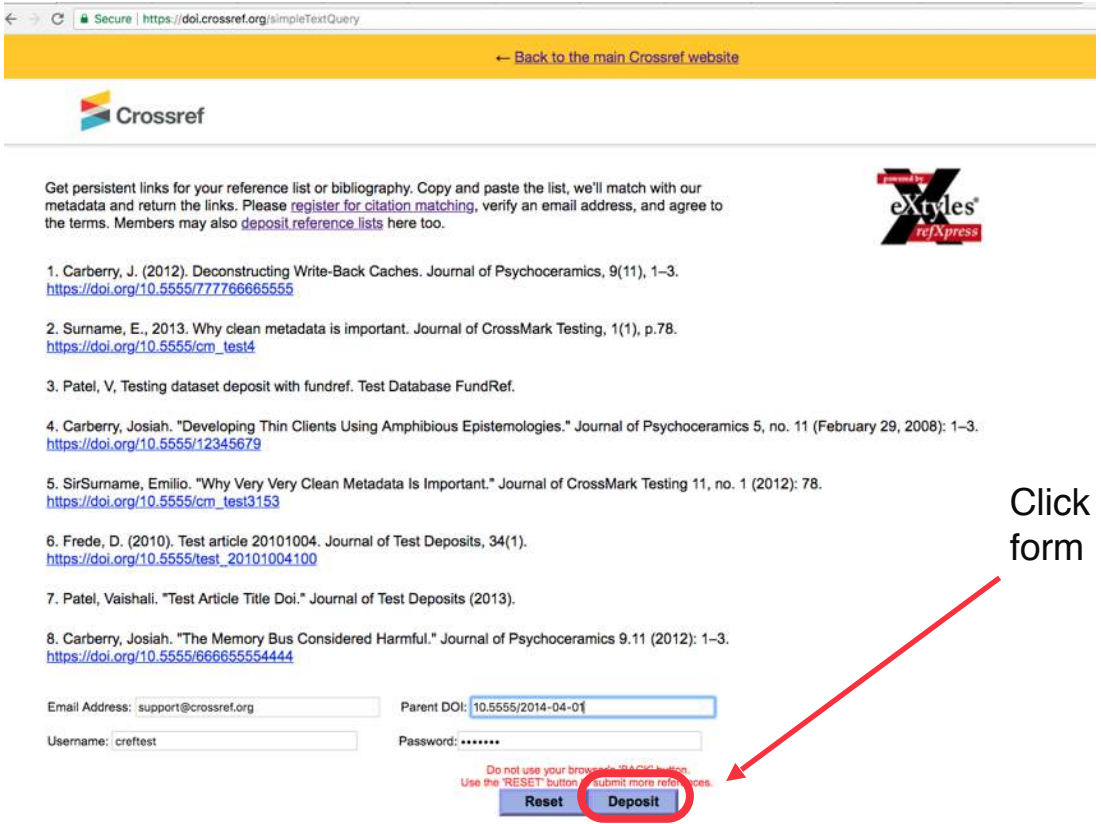
Copy-paste references and Submit STQ form



References display with DOIs beneath

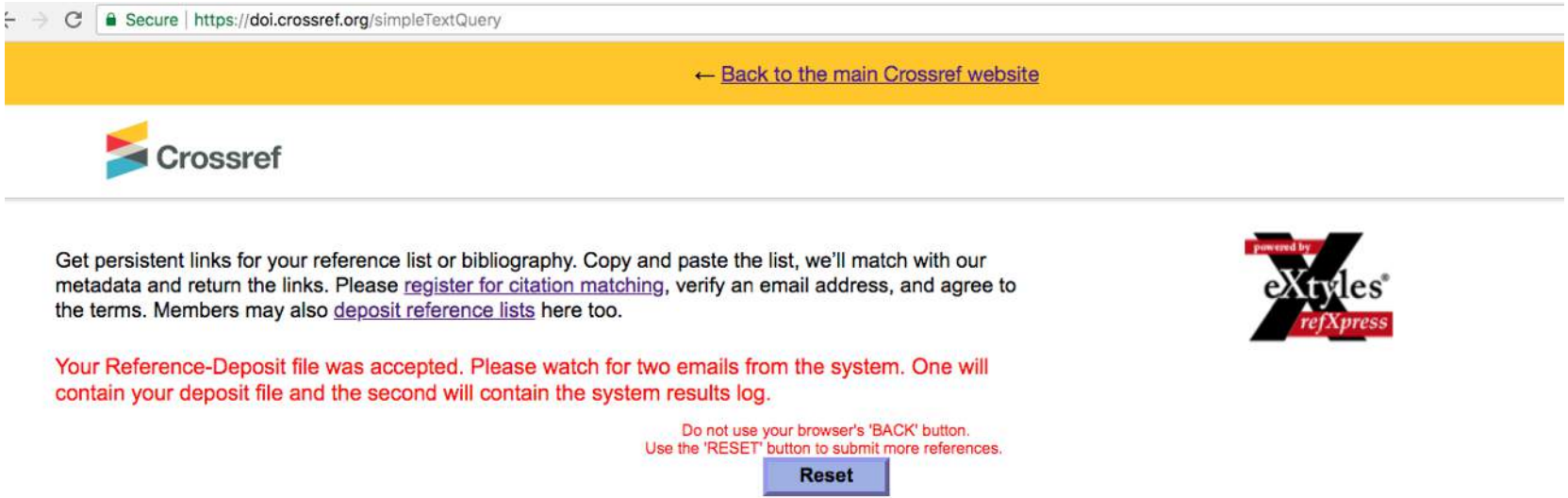


Using Simple Text Query to deposit References

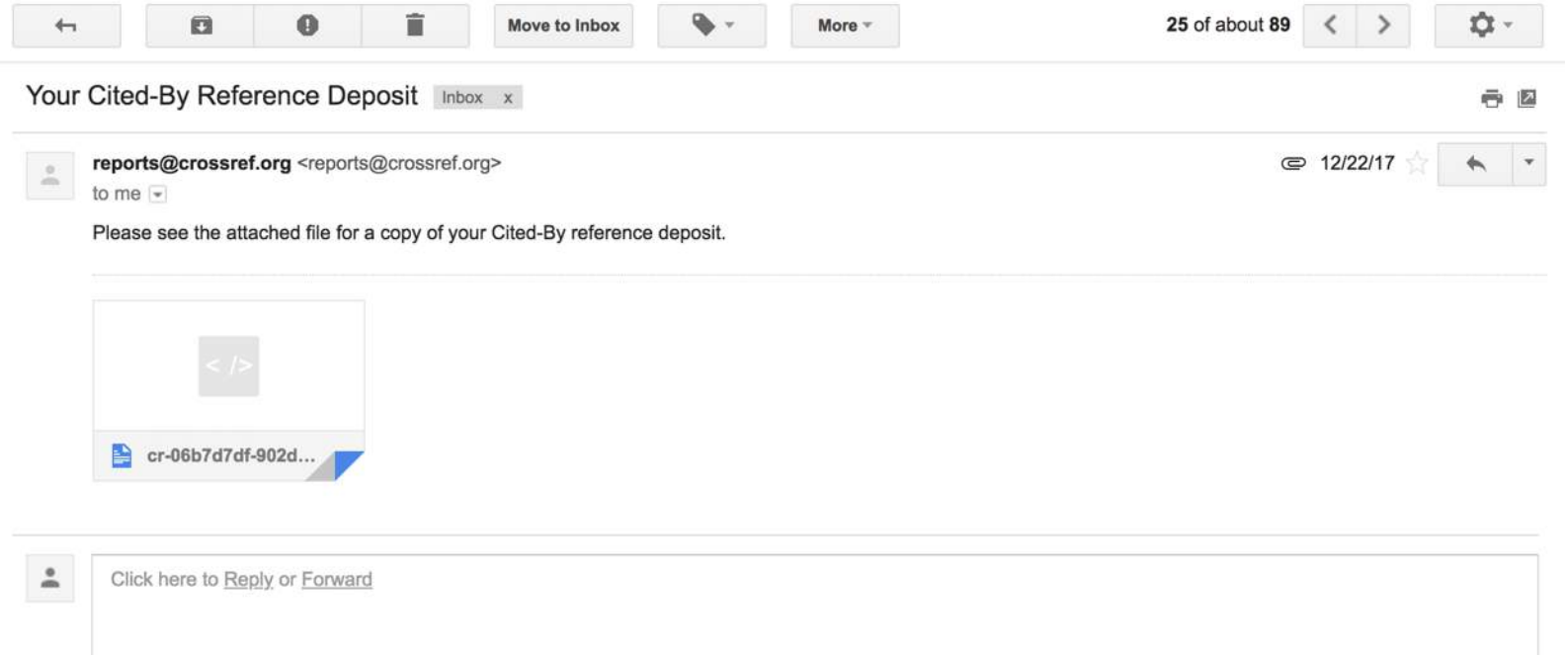


Click “Deposit” to expand form

Reference Deposit Confirmation



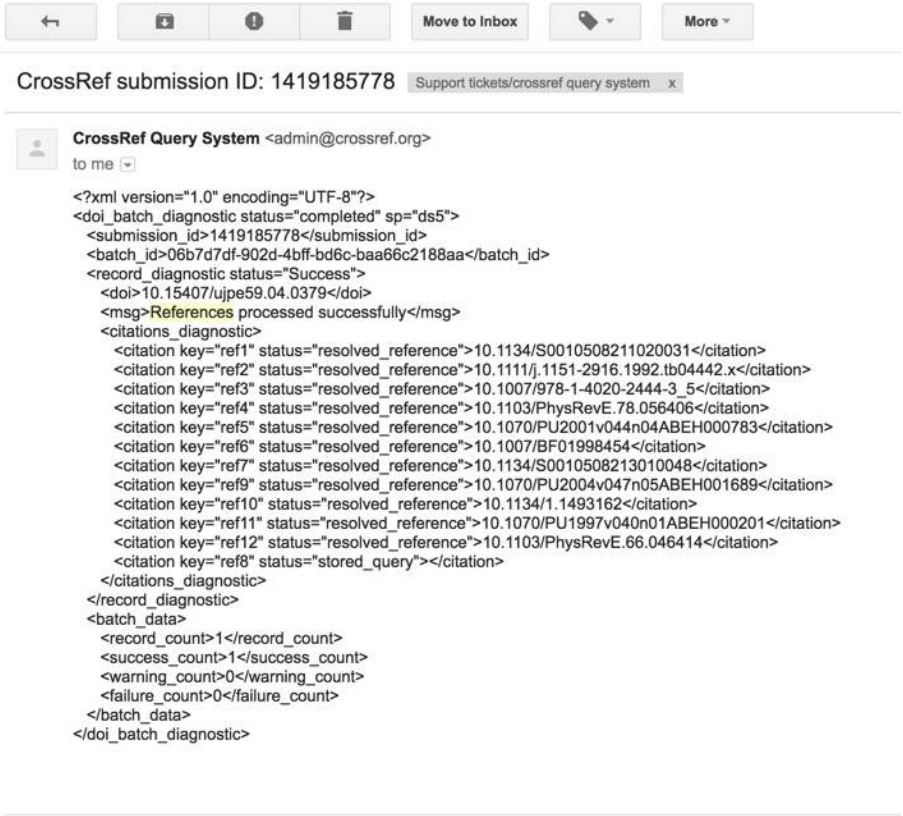
Email Confirmation and XML



XML Reference-only Deposit

We call this a “resource-only deposit”. Adds ancillary metadata to an already-registered DOI.

Submission Log Email for Reference Deposit



Move to Inbox | More

CrossRef submission ID: 1419185778 Support tickets/crossref query system x

CrossRef Query System <admin@crossref.org>
to me

```
<?xml version="1.0" encoding="UTF-8"?>
<doi_batch_diagnostic status="completed" sp="ds5">
  <submission_id>1419185778</submission_id>
  <batch_id>06b7d7df-902d-4bff-bd6c-baa66c2188aa</batch_id>
  <record_diagnostic status="Success">
    <doi>10.15407/ujpe59.04.0379</doi>
    <msg>References processed successfully</msg>
    <citations_diagnostic>
      <citation key="ref1" status="resolved_reference">10.1134/S0010508211020031</citation>
      <citation key="ref2" status="resolved_reference">10.1111/j.1151-2916.1992.tb04442.x</citation>
      <citation key="ref3" status="resolved_reference">10.1007/978-1-4020-2444-3_5</citation>
      <citation key="ref4" status="resolved_reference">10.1103/PhysRevE.78.056406</citation>
      <citation key="ref5" status="resolved_reference">10.1070/PU2001v044n04ABEH000783</citation>
      <citation key="ref6" status="resolved_reference">10.1007/BF01998454</citation>
      <citation key="ref7" status="resolved_reference">10.1134/S0010508213010048</citation>
      <citation key="ref9" status="resolved_reference">10.1070/PU2004v047n05ABEH001689</citation>
      <citation key="ref10" status="resolved_reference">10.1134/1.1493162</citation>
      <citation key="ref11" status="resolved_reference">10.1070/PU1997v040n01ABEH000201</citation>
      <citation key="ref12" status="resolved_reference">10.1103/PhysRevE.66.046414</citation>
      <citation key="ref8" status="stored_query"></citation>
    </citations_diagnostic>
  </record_diagnostic>
  <batch_data>
    <record_count>1</record_count>
    <success_count>1</success_count>
    <warning_count>0</warning_count>
    <failure_count>0</failure_count>
  </batch_data>
</doi_batch_diagnostic>
```

- Resolved Reference = Matched as citing this DOI
- Stored Query = No match, we'll query again periodically

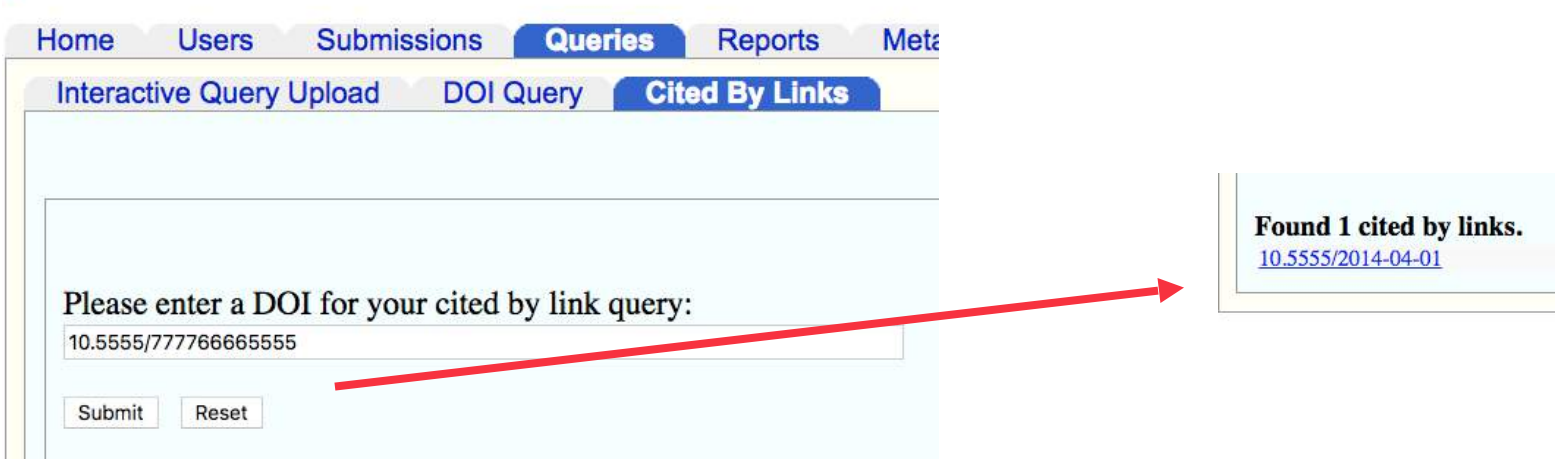
Reference Distribution and Cited-By

Once you have references deposited you can:

- Query for the DOIs that match as citing your content*
- Opt to have your references distributed as open, limited, or closed

*You need to sign-up for our Cited-by service first, but there's no fee involved

Cited-by match



Cited-by Count in metadata record for 10.5555/777766665555

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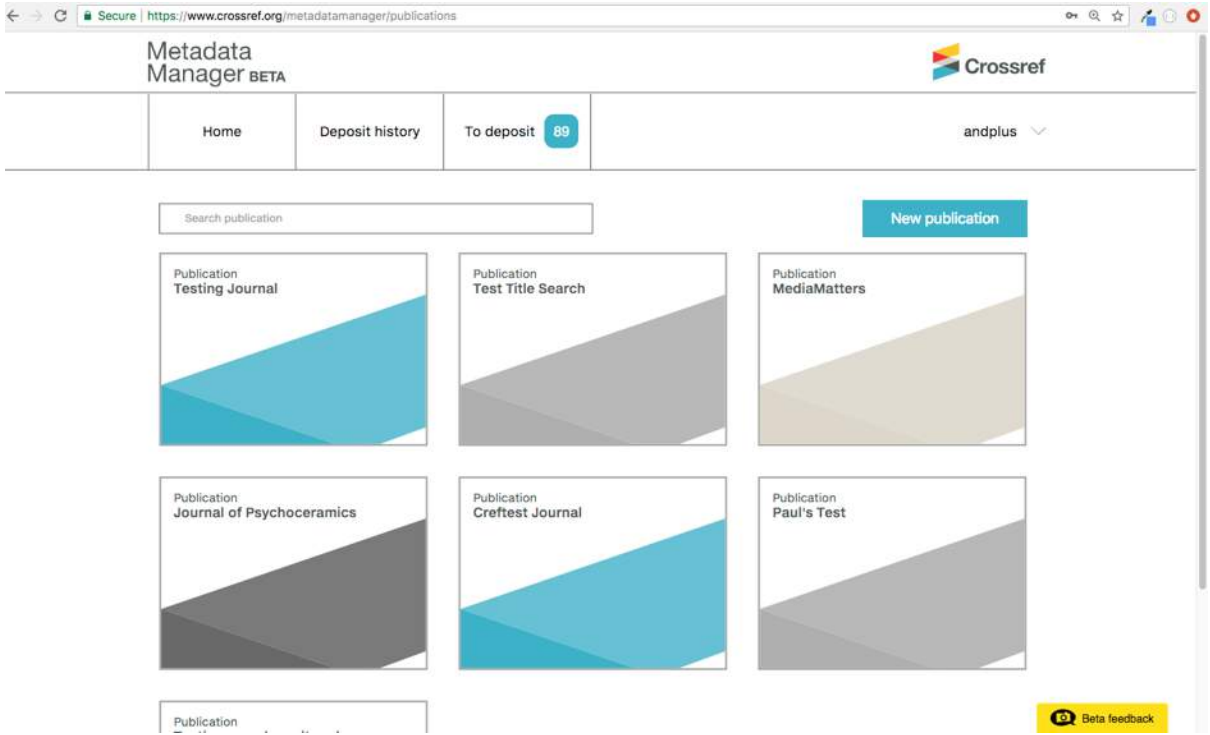
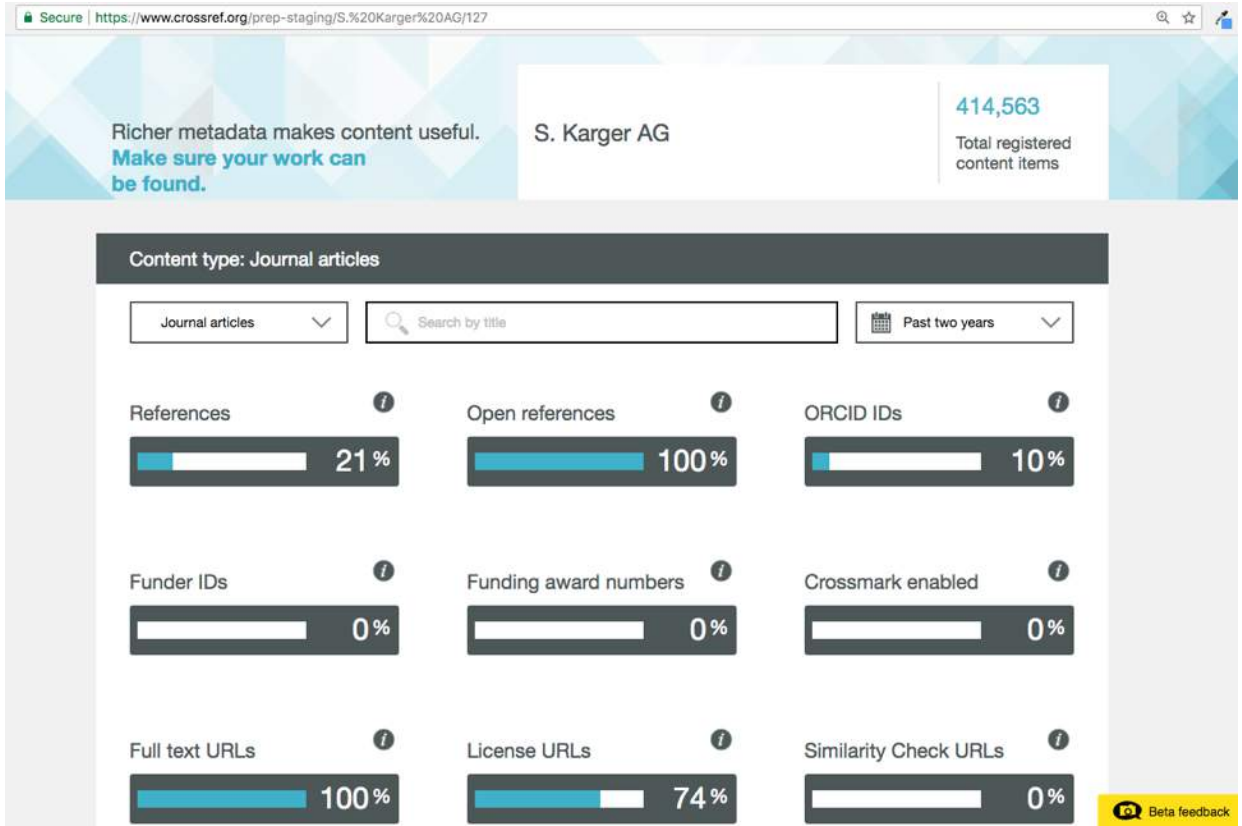
<crm-item name="citedby-count" type="number">1</crm-item>
```

Coming soon, Metadata Manager…



...and Participation Reports



Thank you!

@CrossrefSupport
support@crossref.org

Crossref