

# Connecting the scholarly record through community action:

## Ways of leveraging Crossref's open relationship metadata

Luis Montilla, Technical Community Manager

Crossref

# Scholarly metadata and the scholarly record

https://doi.org/10.1162/qss_a_00022



QSS

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- 6. FUTURE WORK
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February 01 2020

**Crossref: The sustainable source of community-owned scholarly metadata**

Ginny Hendricks , Dominika Tkaczyk , Jennifer Lin , Patricia Feeney

Check for updates

> Author and Article Information

*Quantitative Science Studies* (2020) 1 (1): 414–427.

https://doi.org/10.1162/qss_a_00022 **Article history**

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## Abstract

This paper describes the scholarly metadata collected and made available by Crossref, as well as its importance in the scholarly research ecosystem. Containing over 106 million records and expanding at an average rate of 11% a year, Crossref's metadata has become one of the major sources of scholarly data for publishers, authors, librarians, funders, and researchers. The metadata set consists of 13 content types, including not only traditional types, such as journals and conference papers, but also data sets, reports, preprints, peer reviews, and grants. The metadata is not limited to basic publication metadata, but can also include abstracts and links to full text, funding and license information, citation links, and the information about corrections, updates, retractions, etc. This scale and breadth make

# Scholarly metadata and the scholarly record

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- Abstract
- Authors
- Container
- References
- Member
- Dates
- Content type
- Funding
- Updates


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# Scholarly metadata and the scholarly record



**“A rich and reusable open network of relationships connecting research organisations, people, things, and actions… that the global community can build on forever, for the benefit of society.”**

# Scholarly metadata and the scholarly record



# Scholarly metadata and the scholarly record



Metadata

Global open infrastructure

Shared responsibility

Research integrity

Transparency

Community-led effort

Connections between research output

Shared governance

# Scale of Crossref

**25,000** organisational members from **169** countries
- **51%** of members are based in Asia
- **40%** of members are universities or scholar-led
- **6%** of members are based in GEM-eligible countries

**140** Sponsoring orgs; **50** Ambassadors

**183 million** open metadata records with DOIs that are resolved

**1.4 billion** times per month (**93%** of all DOI usage)

**2.1 billion** queries of our metadata every month by **hundreds of thousands of** systems ingesting and reusing this open metadata



# Scale of Crossref

Libraries

Research organizations

Funders

Societies

Government agencies

Universities

Publishers

Crossref







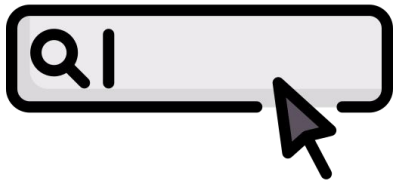
Scholarly record

# Metadata retrieval

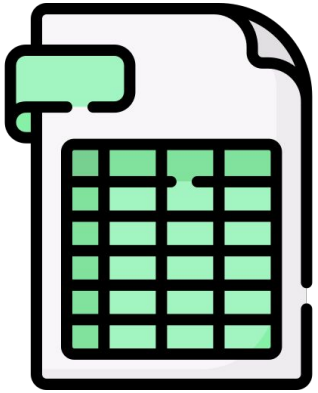
**25,000** organisational members from **169** countries
**183 million** open metadata records with DOIs that are resolved




APIs



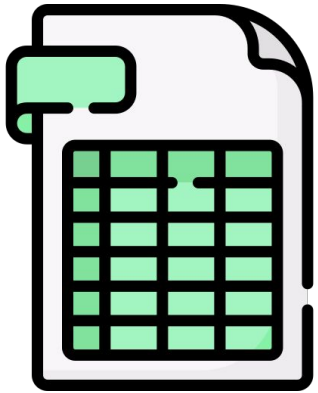
Search interfaces



Data sets

# Metadata retrieval



Cited by

Supplement of



# Relationship metadata

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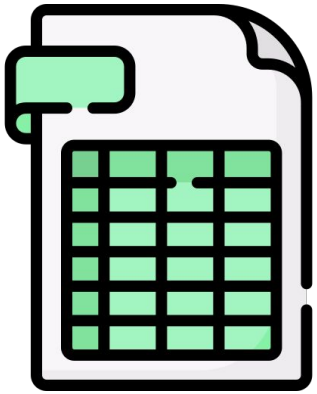


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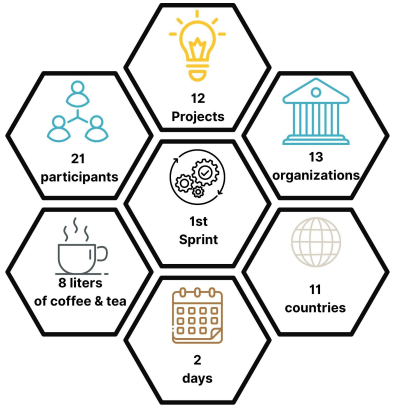
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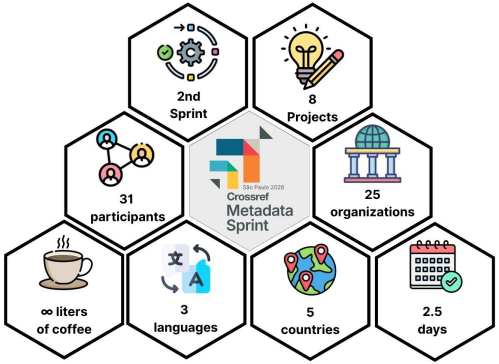
# Matching projects and data sets



- DOI-to-DOI citations (https://doi.org/10.13003/su58kxzm)
- Funder names to ROR IDs (https://doi.org/10.13003/zmkagc4i)
- Preprints to journal articles (https://doi.org/10.13003/ac2ienay)
- Grants to research output (https://doi.org/10.13003/aexidu9f)
- Retraction Watch data

# Community events









https://gitlab.com/crossref/metadata-sprints/

# What can we do?

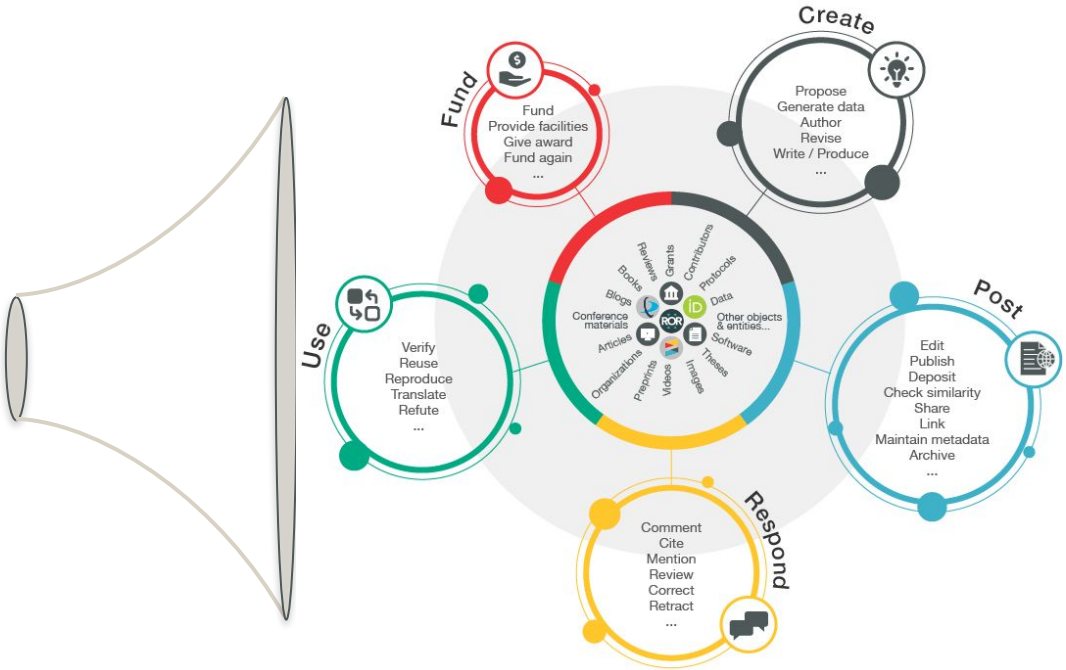
## Crossref REST API

build-2803163510

/swagger-docs

Welcome to the Crossref REST API. This page contains basic information about the API, including details about available endpoints and request parameters, and options to try requests yourself. You can find additional information on our documentation website.

https://api.crossref.org



# What can we do?

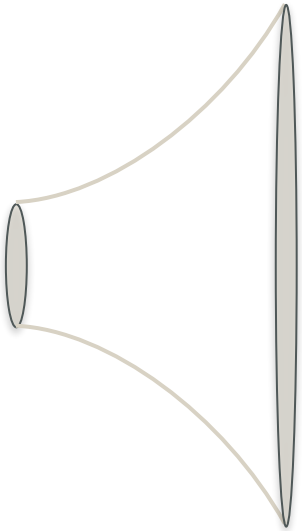
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https://api.crossref.org



- Publishing vendors
- Peer-review systems
- Reference manager systems
- Lab & diagnostics suppliers
- Info management systems
- Educational tools
- Data analytics systems
- Literature discovery services
- Registration Agencies

# Share your feedback on new Crossref Member Practices

➔ **Join a webinar:**

- 15th September at 17:00 UTC
- 24th September at 07:00 UTC

Register via: https://www.crossref.org/events/




Scan for the pdf

➔ **Comment on the PDF**

- Download the PDF of the Member Practices, add your comments in the document, and email it to feedback@crossref.org with the subject line “Feedback on Crossref Member Practices”.

➔ **Email us**

Email your feedback directly to feedback@crossref.org with the subject line “Feedback on Crossref Member Practices”.



# Questions?

Documentation: https://www.crossref.org/

Forum: https://community.crossref.org/

Support: https://support.crossref.org/

Crossref