Where to find open scholarly metadata

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Open Science (A.Y. 2022/2023)
Second Cycle Degree in Digital Humanities and Digital Knowledge
Alma Mater Studiorum - Università di Bologna

OpenCitations

OpenCitations (http://opencitations.net) is an independent infrastructure organization

- dedicated to open scholarship and the publication of open bibliographic and citation data by the use of Semantic Web technologies
- engaged in advocacy for open citations and open bibliographic metadata

It provides:

- a data model: the OpenCitations Data Model (based on the SPAR Ontologies)
- bibliographic and citation data (CC0): OpenCitations Indexes and OpenCitations Meta
- software: in our GitHub repository, released with open source licenses
- online services: REST APIs, SPARQL endpoints, dumps and interfaces

Crossref

Crossref (https://crossref.org) was formed in 2000 as a not-for-profit membership association with the stated purpose to promote the development and cooperative use of new and innovative technologies to speed and facilitate scientific and other scholarly research

It allows its members to register the DOIs of their publications

It makes available a REST API that enables one to retrieve metadata of publications it provides DOIs for

Hendricks, G., Tkaczyk, D., Lin, J., & Feeney, P. (2020). Crossref: The sustainable source of community-owned scholarly metadata. Quantitative Science Studies, 1(1), 414–427. https://doi.org/10.1162/qss_a_00022

OpenAlex

OpenAlex (https://openalex.org/), developed as a replacement for Microsoft Academic Graph (MAG, https://aka.ms/academicgraph), is a free and open catalog of the world's scholarly papers, researchers, journals, and institutions — along with all the ways they're connected to one another

It provides:

- Its own REST API
- A dump their complete dataset (under the CC0 waiver)

Wang, K., Shen, Z., Huang, C., Wu, C.-H., Dong, Y., & Kanakia, A. (2020). Microsoft Academic Graph: When experts are not enough. Quantitative Science Studies, 1(1), 396–413. https://doi.org/10.1162/qss_a_00021

Unpaywall

Unpaywall (https://unpaywall.org/) is a service that locates open-access articles and presents paywalled papers that have been legally archived and are freely available on other websites to users who might otherwise have hit a paywalled version

It provides a [REST API](#) and a [dump](#) of the full dataset

Else, H. (2018). How Unpaywall is transforming open science. Nature, 560(7718), 290–291. https://doi.org/10.1038/d41586-018-05968-3

OpenAIRE

OpenAIRE (https://openaire.eu) is an infrastructure that provides unlimited, barrier free, open access to research outputs financed by public funding in Europe

Among it services, it provides the OpenAIRE Research Graph which is queryable via REST API and can be downloaded in full

Rettberg, N., & Schmidt, B. (2012). OpenAIRE - Building a collaborative Open Access infrastructure for European researchers. LIBER Quarterly, 22(3), 160. https://doi.org/10.18352/lq.8110

DataCite

DataCite (https://datacite.org) is a global non-profit organisation that provides DOIs)for research data and other research outputs

Organizations within the research community join DataCite as members to be able to assign DOIs to all their research outputs – e.g. it is used by Zenodo for releasing their DOIs

It makes available a [REST API](#) to retrieve metadata of the articles they host

ORCID

ORCID (https://orcid.org) is an international, interdisciplinary, open and not-for-profit organization created to solve the researcher name ambiguity problem for the benefit of all stakeholders, including research institutions, funding organizations, publishers, and researchers themselves

Its core mission: to provide a registry of persistent unique identifiers for researchers and scholars

It provides a REST API and full dumps of their data

Haak, L. L., Fenner, M., Paglione, L., Pentz, E., & Ratner, H. (2012). ORCID: A system to uniquely identify researchers. Learned Publishing, 25(4), 259–264. https://doi.org/10.1087/20120404

ROR

ROR (https://ror.org) is a community-led project to develop an open, sustainable, usable, and unique identifier for every research organization in the world

It makes available dumps and a REST API to retrieve metadata of institutions

Closing remark: social advertising of research

The dissemination of science to wider audiences is an increasingly important task in academia

Twitter plays a significant role in the discovery of scholarly information and cross-disciplinary knowledge spreading

For information sharing, Twitter is particularly important in the social sciences and humanities

It is possible that other disciplines rely on effective alternative communication means, such as conferences, preprint archives, or professional online networks such as LinkedIn, but still Twitter is a well-known and used option

Mohammadi, E., Thelwall, M., Kwasny, M., & Holmes, K. L. (2018). Academic information on Twitter: A user survey. PLOS ONE, 13(5), e0197265. https://doi.org/10.1371/journal.pone.0197265

End

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