Welcome!
This is what we’ll cover today:

• Introducing Crossref
• What is (and isn’t) a DOI?
• Content Registration at Crossref
• The importance of scholarly metadata
• Crossref services
• New developments
• FAQs & getting help
Shared Notes and Questions:
Crossref makes research outputs easy to find, cite, link, assess, and reuse.

We’re a not-for-profit membership organization that exists to make scholarly communications better.
Who uses Crossref?

- Publishers
- Funders
- Institutions
- Archives & repositories
- Research councils
- Data centres
- Professional networks
- Patent offices
- Indexing services
- Publishing vendors
- Peer review systems
- Reference manager systems
- Lab & diagnostics suppliers
- Info management systems
- Educational tools
- Data analytics systems
- Literature discovery services
- Registration Agencies
Why do publishers join Crossref?

• To help get their content discovered
• Show people where their content is located and update that if/when the content moves
• Drive more traffic to publications
• Turn references into hyperlinks
• Find out who is using their content
• Participate in other collaborative services
>100,000,000 content items
Content Types

- Journals
- Books
- Conference proceedings
- Standards
- Technical reports
- Working Papers
- Theses and dissertations
- Components (figures, tables)
- Datasets (supplementary data)
- Databases
- Posted content (includes preprints)
- Peer Reviews
Content registration at Crossref
What is (and isn’t) a DOI?

https://doi.org/10.1006/jmbi.1995.0238

• The DOI directory: makes the DOI actionable on the web
• Prefix: assigned by Crossref
• Suffix: assigned by the publisher

Total DOI = routes through the DOI resolver to point to the registered URL
First steps

1. We send you a prefix and login

2. Review different methods for registering your metadata

Getting started with Content Registration:
Including your content in Crossref means that not only are you able to create DOIs, you can also contribute a comprehensive set of metadata so that other services can find you in more ways.

We recommend including as much metadata as possible with each item of content. In addition to the basic bibliographical information, such as: abstracts, references, ORCID IDs; related material such as datasets, and components such as figures and graphs.

The more metadata you include, the more connections can be made by others who will find your content.

Watch the recording of this webinar (24 minutes) for our guide to depositing metadata. Then you can choose to deposit your metadata through either:
- Uploading your XML files via doi.crossref.org or
- Manually entering your metadata at apps.crossref.org/webDeposit.

Your username:  
Your password:  
Your DOI prefix:

Get involved:
Take a look at the members' page on our website, which includes quick links to some key resources. One of our guiding principles is to uphold fair representation from our members, large and small, and from all around the world. We encourage you to vote in our board election each year, volunteer for working groups or ask about our committees. Getting involved in the Crossref community helps to support and improve our scholarly infrastructure services.

Next steps:
DOI prefix

• One prefix may be used for all content

• New titles may be added at any time

• No limit to the number of DOIs created, also no minimum number is required.

10.555555  10.4444
Your prefix ≠ your content

• It means you created a DOI
• It does not mean you are the current content owner

DOIs move from member to member all the time!
DOI suffix

- consistent
- simple
- short

Examples:

https://doi.org/10.5028/jatm.v11.1066

https://doi.org/10.5028/e3119

https://doi.org/10.5028/ISSN-vol-n-id

More details: https://support.crossref.org/hc/en-us/articles/214669823
Crossref DOI display guidelines

• Always be displayed as a full URL link

• Example of best practice: https://doi.org/10.1629/22161

• Old format: http://dx.doi.org/
Abstract

A theory of generation–recombination noise is presented and applied to the analysis of the performance limitations of extrinsic photoconductive detectors. The theory takes account both of the photoinduced generation of carriers and of thermal generation that is due to the finite temperature of the detector. Explicit formulas are derived that relate the detector response time, responsivity, and noise equivalent power to the material properties of the photoconductor (such as the presence of compensating impurities) and to the detector's operating conditions, such as its temperature and the presence of background radiation. The detector's performance is shown to degrade at high background levels because of saturation effects.

© 1984 Optical Society of America

OSA Recommended Articles
Ways to register content

• Upload XML file (https://doi.crossref.org)

• The manual web deposit form (https://apps.crossref.org/webdeposit)

• OJS Crossref plugin

• The new Metadata Manager
Create XML

Crossref Schema

Metadata deposit schema: for everything
Metadata deposit schema 4.4.1 (documentation)

Resource schema: for adding most non-bibliographic metadata to existing records
doi_resources4.3.6.xsd (documentation)
Journal title: International Journal of Meetings
ISSN: 4445-6767
Publication date: 5-5-2001
Volume: 33
Issue: 1
Let’s have a meeting

author: Bob Surname

pages: 100-200

DOI: 10.50505/test_2007
These forms allow you to enter metadata and register DOIs. Review the help documentation for details.

Note: Your Crossref username and password will be required at the end of this process to submit data to the system. Please ensure your browser allows JavaScript so that the data validation will function.

Step 1: Select Data Type

Data Type Selection


Step 2: Identify the Journal

Journal information

Title
Abbr.
Journal DOI
Journal URL
Print ISSN Elect ISSN Journal DOI and/or ISSN required
Volume Issue
Issue DOI
Issue URL

Publication dates

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

Type: print
*Year Month: Day:

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
This plugin can be configured to automatically register Digital Object Identifiers (DOIs) with CrossRef. You will need a username and password (available from CrossRef) in order to do so. If you do not have your own username and password you can still export into the CrossRef XML format, but you cannot register your DOIs with CrossRef from within OJS.

### Requirements

All plugin requirements are satisfied.

### Settings

The following items are required for a successful CrossRef deposit.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depositor name</td>
<td>Clement O. Adeunmi</td>
</tr>
<tr>
<td>Depositor email</td>
<td><a href="mailto:test@example.com">test@example.com</a></td>
</tr>
</tbody>
</table>

This plugin can be configured to automatically register Digital Object Identifiers (DOIs) with CrossRef. You will need a username and password (available from CrossRef) in order to do so. If you do not have your own username and password you can still export into the CrossRef XML format, but you cannot register your DOIs with CrossRef from within OJS.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Username</td>
<td>test</td>
</tr>
<tr>
<td>Password</td>
<td>**************</td>
</tr>
</tbody>
</table>

Please note that the password will be saved as plain text, i.e. not encrypted.

- **Register DOIs automatically**: OJS will deposit article DOIs automatically to CrossRef as articles are published. Please note that this may take a short amount of time after publication to process. You can check for all unregistered DOIs in the [unregistered articles listing](https://docs.pkp.sfu.ca/crossref-ojs-manual/en/).
Submission queue

All content registration submissions are added to the same queue

Most are processed quickly but if not, you can view your spot in the queue
Success! Your content now has persistent identifiers and a Crossref metadata record

Failure…your content has not been registered.
Metadata Manager

Home | Deposit history | To deposit

Search publication

Publication: Journal of Psychoceramics
Publication: The Journal Of Test Deposits

New publication

https://www.crossref.org/metadatamanager/
Not just bibliographic metadata

- Contributor
- Funding
- License
- References
- Related items
- Additional information
- Crossmark
### Deposit history

<table>
<thead>
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<th>Deposit ID</th>
<th>Title</th>
<th>Date</th>
<th>Type</th>
<th>Status</th>
<th>DOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>143734644</td>
<td>NEW TITLE added 10-05-10</td>
<td>Jan 15</td>
<td>Article</td>
<td>Accepted</td>
<td><a href="https://doi.org/10.5555/pubdate2">https://doi.org/10.5555/pubdate2</a></td>
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<tr>
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<td>NEW TITLE added 10-05-10</td>
<td>Jan 14</td>
<td>Article</td>
<td>Accepted</td>
<td><a href="https://doi.org/10.5555/pubdate2">https://doi.org/10.5555/pubdate2</a></td>
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<tr>
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<td>NEW TITLE added 10-05-10</td>
<td>Jan 14</td>
<td>Article</td>
<td>Accepted</td>
<td><a href="https://doi.org/10.5555/pubdate2">https://doi.org/10.5555/pubdate2</a></td>
</tr>
</tbody>
</table>

[https://www.crossref.org/blog/improved-processes-and-more-via-metadata-manager/](https://www.crossref.org/blog/improved-processes-and-more-via-metadata-manager/)

Video Demo: [https://www.youtube.com/watch?v=413MTflgJDA](https://www.youtube.com/watch?v=413MTflgJDA)
The importance of metadata
Members —> Crossref

Basic metadata: titles; author names; ISSNs/ISBNs, abstracts, references

Funding Information, Funder identifiers, award numbers

License Information, License URIs

Full-text URIs (e.g. for text mining and similarity check)

Crossmark: updates, retractions, corrections

ORCID iDs

Recently: Peer Review reports, relations

Soon… Organization IDs, Grant IDs…
Crossref metadata for machines & humans
Search & discover

Search the metadata of 108,139,473 journal articles, books, standards, datasets & more

Title, author, DOI, ORCID iD, etc.

Search help

https://search.crossref.org

Search 21,494 funders connected to 4,174,749 published works with funding data

Search funders...

https://search.crossref.org/funding
Association of increased eomesodermin, BCL6, and granzyme B expression with major clinical manifestations of Hashimoto’s thyroiditis – an observational study

Journal Article published 3 Apr 2016 in Immunological Investigations volume 47 issue 3 on pages 279 to 292

Research funded by Ministry of Science and Technology, Croatia (219-2190372-2068)

Authors: Marija Stomilov, Stana Tolić, Mirjana Suver Stenić, Ljubica Glavak-Otocic

https://doi.org/10.1080/08862019.2016.1423571 Actions

STAM2, a member of the endosome-associated complex ESCRT-0 is highly expressed in neurons

Journal Article published Jul 2015 in Molecular and Cellular Neuroscience volume 67 on pages 104 to 115

Research funded by Ministry of Science and Technology, Croatia (108-1081870-1902) | Unity For Knowledge Fund, Republic of Croatia (UKF 35/08) | EU FP7 project GlowBrain – Combining Stem Cells and Biomaterials for Brain Repair – Unlocking the Potential of the Existing Brain Research through Innovative in Vivo Molecular Imaging (REGPOT-2012-CT2012-318120)

Authors: Katarina Kapunin, Marija Curin, Dinko Miletic, Nada Kosi, Christoph Schwarzer, Gordana Glavan, Sreco Gajdove

https://doi.org/10.1016/j.mcn.2015.06.009 Actions

Immunohistochemical localization of CD31, NOTCH1 and JAGGED1 proteins in experimentally induced polycystic ovaries of immature rats

Journal Article published May 2011 in Acta Histochemica volume 113 issue 3 on pages 262 to 269

Research funded by Ministry of Science and Technology, Croatia (No.065002)

Authors: Anita Gritic, Lea Sokolic, Ana Borovcic, Jagoda Rosa, Vanja Fendi

https://doi.org/10.1016/j.acthis.2009.10.008 Actions

Extrinsic 6DOF calibration of a radar–LiDAR-camera system enhanced by radar cross section estimates evaluation

Journal Article published Apr 2019 in Robotics and Autonomous Systems volume 114 on pages 217 to 230

Research funded by European Regional Development Fund | Ministry of Science and Technology, Croatia

Authors: Juraj Peršić, Ivan Marković, Ivan Petrović

https://doi.org/10.1016/j.robot.2018.11.023 Actions

Drawing and using free body diagrams: Why it may be better not to decompose forces

Journal Article published 29 Dec 2015 in Physical Review Special Topics - Physics Education Research volume 11 issue 2

Research funded by Ministry of Science and Technology, Croatia (1/2014) | University of Rijeka (13.12.1.4.06)

Authors: Nina Avioni, Natasa Erceg, Vanes Mesić

https://doi.org/10.1103/physrevstpr.11.020137 Actions

https://search.crossref.org/funding
Crossref REST API overview

- Search, filter or sample metadata from thousands of members
- Returns results in JSON
- The information is continually updated
- The REST API helps unlock the value metadata; making it available to query easily and to integrate into other tools and services
- No sign-up is required and the data can be treated as facts from members. Therefore it is not subject to copyright and available to use for whatever purpose
- Simplifies access for researchers who want to mine and analyze research outputs and content
Rest API (https://api.crossref.org)

- All records for a prefix:
  http://api.crossref.org/prefixes/10.xxxxx/works

- All records for a prefix with funder information:
  http://api.crossref.org/prefixes/10.xxxx/works?filter=has-funder-doi:true

- All records with ORCIDs:
  https://api.crossref.org/works?filter=has-orcid:true

- All records containing a given term:
  http://api.crossref.org/works?query=croatia

More information and examples here: https://github.com/CrossRef/rest-api-doc#queries
<table>
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<th>Description</th>
</tr>
</thead>
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<tr>
<td>103,508,094</td>
<td>Registered content records</td>
</tr>
<tr>
<td>72,712,804</td>
<td>Records with full-text links</td>
</tr>
<tr>
<td>12,320</td>
<td>Member organizations</td>
</tr>
<tr>
<td>3,613,266</td>
<td>Records with funding information</td>
</tr>
<tr>
<td>2,594,207</td>
<td>Records with a Funder Registry ID</td>
</tr>
<tr>
<td>33,646,053</td>
<td>Records with licenses</td>
</tr>
<tr>
<td>2,341,361</td>
<td>Records with ORCID IDs</td>
</tr>
<tr>
<td>8,390,104</td>
<td>Crossmark count</td>
</tr>
<tr>
<td>2,621</td>
<td>Registered retractions through Crossmark</td>
</tr>
<tr>
<td>101,266</td>
<td>Registered updates through Crossmark</td>
</tr>
</tbody>
</table>

https://www.crossref.org/dashboard/
library systems

bibliographic management software

scholarly sharing networks

specialist subject databases

manuscript tracking systems

author profiling tools
over 600 million metadata queries per month across all interfaces
No, this is Crossref metadata
This may be your Crossref metadata
....but maybe this?
Find out more: https://www.crossref.org/participation/
Search at: https://www.crossref.org/members/prep/
Crossref Services
Reference linking means hyperlinking to Crossref DOIs when you create your citation list.
Reference Linking

Publisher A references

Publisher B

Publisher C

Publisher A

User
Reference Linking

decision to publish, or preparation of the manuscript.

References


Bell V, Bishop DVM, Przybylski AK. 2015. The debate over digital technology and young people. BMJ 351:h3064


https://doi.org/10.1037%2Ffa0013494
Cited-by provides a clear overview of the publications that have cited a piece of content - and lets your readers navigate from your content to the content that is citing it.
Snowbed vegetation in Croatia: Phytosociology, ecology and conservation status

Ž. Modrić Surina & B. Surina

Abstract

Phytosociology, ecology and chorology of snowbed vegetation in the Dinaric Alps, NW Croatia, were classified into the formation Festucion retuseae, Arabidetalia caeruleae, Thlaspiocaricion aquilegivulgaris, Phloxcaeruleae, with snowbed communities forming a subassociation of the formation. Snowbed vegetation is significantly affected by local climate conditions, shading and topography. Snowbed communities are typical of cold, shaded and well-drained areas. Snowbed communities are typical of cold, shaded and well-drained areas. Snowbed vegetation is strongly affected by local climate conditions, shading and topography. Snowbed vegetation is a subassociation of the formation Festucion retuseae. Snowbed communities are typically found in shaded and well-drained areas.

Citations


Figuring out who has cited your content can be difficult; **Cited-by** provides a way to find these citations, display the results, and connect your content to further research.
Crossmark

• An embedded button for HTML and PDF that, when clicked, shows the researcher publication information that a publisher chooses to include

• A great way to show users extra or updated information about the content they’re viewing so that they can trust it

• The information stays with the article and can be accessed even away from the publisher site

• Machine-readable metadata available via the Crossref REST API
Features of Particle and Heavy Ion Trajectory System (PHITS) version 3.02

Tatsuhiko Sato, Yosuke Iwamoto, Shintaro Hashimoto, Tatsuhiko Ogawa, Takuya Furuno

Pages 1-7 | Received 02 Nov 2017, Accepted 13 Dec 2017, Published online: 05 Jan 2018

Download citation | https://doi.org/10.1080/00223131.2017.1419860

Check for updates
Voice Pathology Detection Using Modulation Spectrum-Optimized Metrics

Crossref DOI link: https://doi.org/10.3389/fbioe.2016.00001
Published: 
Update policy: https://doi.org/10.3389/crossmark-policy

Authors

About CrossMark
Retraction

Retraction dated 2012-11-01

Click to view Retraction:
https://doi.org/10.1107/s1744309111039875

Cloning, expression, crystallization and preliminary X-ray crystallographic analysis of aspartyl aminopeptidase from the apeB gene of Pseudomonas aeruginosa

Crossref DOI link: https://doi.org/10.1107/s1744309111054388
Published: 2012-02-01
Update policy: https://doi.org/10.1107/cm_01
Uptake

• Over 670 publishers depositing Crossmark metadata
• For over 7.8 million DOIs
• Around 1% are updates (so even more important that they’re flagged!)
• Nearly 4,000 of the updates are retractions
Similarity Check

Our Similarity Check service offers publishers with a way to actively engage in efforts to prevent plagiarism.

Members are provided with access to Turnitin’s powerful text comparison tool, iThenticate. This allows them to compare their own documents against the largest comparison database of scientific, technical and medical content in the world.

Similarity Check members contribute their own published content into iThenticate’s database of full-text literature.
What issues are publishers looking for

• Poor, missing, or incomplete references (can be fixed)

• Self-plagiarism/text recycling (can be fixed)

• Unattributed use of parts of another person’s work

• Submitting another person’s work as your own

• Is the author attempting to mislead/misrepresent?
How it works

• Upload a document to iThenticate
• A similarity report is produced
• Compare side-by-side
• Editor makes a decision about whether the similarity detected is legitimate or if further investigation is required
• When members publish new content, they provide a link to their full-text which Turnitin use to index the item and add it into their database

http://www.ithenticate.com/
More information

• Refer to our services pages

• View our blog with links to our short service videos currently available in 7 languages:

<table>
<thead>
<tr>
<th>View videos by language</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
</tr>
<tr>
<td>English</td>
</tr>
</tbody>
</table>

• View our webinar recordings
Something new...
What is ROR?

- A community-led project to develop an open, sustainable, usable, and unique identifier for every research organization in the world.

Why ROR?

- Currently no open, stakeholder-governed infrastructure for research organization identifiers and associated metadata.
- Organization identifiers are needed to uniquely identify the affiliations of researchers and research outputs.

https://ror.org
What is ROR?

- Community-led project / open infrastructure
- Focus & scope: affiliations
- Steering orgs: California Digital Library, Crossref, DataCite, Digital Science
University of Zadar

UNIVERSITAS STUDIORUM IADERTINA, SVEUČILIŠTE U ZADRU, СВЕУЧИЛИШТЕ У ЗАДРУ

WEBSITE
http://www.unizd.hr/

OTHER IDENTIFIERS
GRID grid.424739.f
ISNI 0000000121591688
Wikidata Q2496233
What can I do?

- Look up your institution at https://ror.org

- Let info@ror.org know if it’s wrong

- Keep a look out: Crossref will start to accept ROR iDs when collecting affiliation information, and other platforms like OJS are keen to use it too!
Getting help
Staying up-to-date

Twitter: @crossrefOrg and @crossrefsupport
Community Forum: community.crossref.org
What are we thinking about: blog.crossref.org
Get in touch: feedback@crossref.org

If the contacts at your organisation change, let us know!
Just email member@crossref.org :)
Product Support

- Help members register and maintain their metadata records
- Help everyone else discover and use metadata records
- 1/3 of all support tickets are related to metadata quality concerns
- FAQs: https://www.crossref.org/faqs/

https://support.crossref.org/
Thank you! Questions?