What’s new at Crossref

Yera Hur PhD

Crossref Ambassador (South Korea)
Research Prof. Hallym Univ. College of Medicine
• Open your cell-phone camera
• yellow internet address: qr.sli.do

Join at
slido.com
#565
Check any Crossref services you know

① Start presenting to display the poll results on this slide.
• Open, foundational scholarly infrastructure
• **Metadata registry** to enable services
• **Services:** Content Registration, Reference linking, Cited-by, Funder Registry, Similarity Check, Crossmark, Event Data, Metadata retrieval (incl. Metadata Plus)
Attraction and achievement as 2 attributes of gamification in healthcare: an evolutionary concept analysis

Journal of Educational Evaluation for Health Professions received the top-ranking Journal Impact Factor—9.3—in the category of Education, Scientific Disciplines in the 2023 Journal Citation Ranking by Clarivate

Sun Huh

Educational/Faculty development material
| Jun 13, 2024

The 6 degrees of curriculum integration in medical education in the United States
Julie Youn, Jennifer Christner, Kevin Hittle, et al.
J Educ Eval Health Prof. 2024:21:15.

Research article | Jun 13, 2024
Redesigning a faculty development program for clinical teachers in Indonesia: a before-and-after study
Rita Mustika, Nadia Greviana, Devi Anggraeni Kusumoningrum, et al.
• Open data and APIs with metadata > 160 million records from over 20K members (157 countries)

• Metadata and relationships = scholarly record research nexus

• Metadata use: APIs 1.8 billion requests/month
Agenda

1. Crossref acquires and opens Retraction Watch data
   - Join the call 27th Sept at 1pm UTC
   - https://dx.doi.org/10.1371/journal.pone.0195910

2. Crossref Open Funder Registry

3. Crossref Similarity Check
   - Powered by iThenticate
Retraction watch & Crossref
Are ChatGPT's knowledge and interpretation ability comparable to those of medical students in Korea for taking a parasitology examination?: a descriptive study

Sun Huh

DOI: https://doi.org/10.3352/jeehp.2023.20
Published online: January 11, 2023
Are ChatGPT’s knowledge and interpretation ability comparable to those of medical students in Korea for taking a parasitology examination?: a descriptive study

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DOI: https://doi.org/10.3352/jeehp.2023.20.1
Published Online: 2023-01-11
Update policy: https://doi.org/10.3352/crossmark_policy

CrossMark

Document is current

Any future updates will be listed below

Authors

License Information

More Information

About CrossMark
- 12th September 2023
  - Crossref acquired Retraction Watch data

- Combine & distribute data
  - Tens of thousands of retracted research papers

- Around 50k retractions & overlap
  - Crossref retractions = 14k
  - Retraction Watch retractions = 43k
• **Crossmark button**
  - filling gaps, high-quality services, open data

• **Crossref’s initial acquisition fee USD 175,000**
  - will pay Retraction Watch USD 120,000 / yr

• **Initial term of the contract**
  - 5 years, sustainable funding to improve

• **Full dataset**: download directly as .csv file
News: Crossref and Retraction Watch (2023)
https://www.crossref.org/blog/news-crossref-and-retraction-watch/

• Enquiries For Retraction Watch/Center for Scientific Integrity: Ivan Oransky, ivan@retractionwatch.com

• For Crossref: Ginny Hendricks, ginny@crossref.org
Open Funder Registry (OFR) (formerly FundRef)
funders can see the results of their grants in one place

https://www.crossref.org/services/funder-registry/
History of OFR

- Open Funder Registry (OFR) - 2013
- Cite research financing - organizations’ grant
- Support - Elsevier, Crossref
- Open persistent identifiers for funding organization
History of ROR

• Research Organization Registry (ROR) - 2019
• Support - Digital Science, California Digital Library, Crossref, Datacite
• Open persistent identifiers for research organizations
What does the Funder Registry look like?

Updated every 4-6 weeks
What does a ROR ID look like?

Search the ROR registry at https://ror.org/search
<table>
<thead>
<tr>
<th>ROR</th>
<th>Funder Registry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launched in 2019</td>
<td>Launched in 2013</td>
</tr>
<tr>
<td>Primary use case is contributor affiliation</td>
<td>Primary use case is funding acknowledgement</td>
</tr>
<tr>
<td>105k+ records</td>
<td>35k+ records</td>
</tr>
<tr>
<td>CC0 data</td>
<td>CC0 data</td>
</tr>
<tr>
<td>REST API</td>
<td>REST API</td>
</tr>
<tr>
<td>Free to use</td>
<td>Free to use</td>
</tr>
<tr>
<td>Entire registry downloadable as JSON and CSV</td>
<td>Entire registry downloadable as RDF; funder names and IDs downloadable as CSV</td>
</tr>
<tr>
<td>Records contain mappings to other IDs</td>
<td>Records do not contain mappings to other IDs</td>
</tr>
<tr>
<td>Organization relationships and hierarchy</td>
<td>Organization relationships and hierarchy</td>
</tr>
<tr>
<td>8 organization types</td>
<td>2 funder types, 8 funder subtypes</td>
</tr>
<tr>
<td>ROR</td>
<td>Funder Registry</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Web-based registry search</td>
<td>Web-based search for works in Crossref associated with each Funder ID</td>
</tr>
<tr>
<td>Web-based landing pages for each ROR</td>
<td>JSON landing pages for each Funder Registry record</td>
</tr>
<tr>
<td>record</td>
<td></td>
</tr>
<tr>
<td>Updated monthly</td>
<td>Updated monthly</td>
</tr>
<tr>
<td>Public curation process</td>
<td>Private curation process</td>
</tr>
<tr>
<td>Anyone can request changes and additions</td>
<td>Anyone can request changes and additions</td>
</tr>
<tr>
<td>Stable financial support</td>
<td>Stable financial support</td>
</tr>
<tr>
<td>Beginning to be supported in funding</td>
<td>Somewhat well supported in most funding and publishing workflows</td>
</tr>
<tr>
<td>and publishing workflows</td>
<td></td>
</tr>
<tr>
<td>Currently used by 260+ Crossref members</td>
<td>Currently used by 2100+ Crossref members</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Key difference

• **ROR** always include
  - funding organizations
  - mappings to Funder IDs

• **ORF** includes
  - only **FUNDING** organizations
What does this mean?

- For **new** Funders - register with ROR IDs
- Legacy Funder IDs - mapped to a ROR ID
- Schema updates: Developing matching affiliation strings to ROR IDs - release in coming weeks
If you want to know more...

Open Funder Registry (OFR)
https://www.crossref.org/services/funder-registry/

Open Funder Registry to transition into Research Organization Registry (ROR), 2023
https://www.crossref.org/blog/open-funder-registry-to-transition-into-research-organization-registry-ror/

RORing ahead: using ROR in place of the Open Funder Registry
Similarity Check v2
Which Similarity Check (iThenticate) version are you using?

① Start presenting to display the poll results on this slide.
how it works

https://www.crossref.org/services/similarity-check/
• why upgrade to iThenticate v2?
• what does iThenticate v2 look like
The infamous three "cardinal sins" of scientific misconduct

Why upgrade to iThenticate v2?

- Faster, user-friendly, responsive interface.
- Preprint exclusion filter
- "Red flag" feature
- iThenticate v1 - only until mid-year 2025
What is iThenticate v2?

- New improved version
- Separate from version 1 - need upgrade to v2

Who can upgrade?

- Eligibility = Similarity Check URLs at least 90% of the content
New iThenticate v2 account
what's new in v2?

**iThenticate REPORT**

1. Upload a document to iThenticate

2. A *similarity report* is produced

3. Compare side-by-side

4. Is the similarity detected okay, or does it need further investigation?
Enhanced Similarity Report

Introduction

Anti NMDA receptor encephalitis is a rare disease, with an estimated incidence of 1.5 per million population per year, and was described only 15 years ago in 2007 by Dalmau et al. The understanding of this disease started a new era in neurology and psychiatry. Proposed pathophysiology of anti-NMDAR encephalitis is thought to involve antibodies against the NR1 subunit of N-methyl-D-aspartate receptor (NMDAR), which causes reversible internalization of the receptor in neurons. 2 Tumors and viral infection are two known potential immunologic triggers of anti-NMDAR encephalitis. However, in about half of patients with anti-NMDAR encephalitis, the immunologic triggers are still unknown. It is hypothesized that the antigen (NMDAR), which may be expressed in ovarian teratomas or released by viral-induced neuronal disruption and is directly transported to the local lymph nodes in soluble form or taken up by antigen-presenting cells (APCs), resulting in the generation of memory B cells which cross blood brain barrier and finally differentiating to anti-NMDAR antibody-producing plasma cells (Dalmau, 2016). However, there have been reports in the literature that stress can induce anti-NMDAR.

Case 1: Sixteen year old female appearing in high school exit examination presented with abnormal behavior in the form of agitation, and other psychiatric symptoms like anxiety, panic attacks, delusions, disorganized thinking. This was followed by abnormal movements. She was seen by a psychiatrist and a neurologist; her MRI was normal (Figure 1) and EEG was reported as normal. Her sensorium started to worsen at home and she reported to emergency. She was having recurrent abnormal limb movements in upper extremities. She was intubated. Routine CSF was normal and PCR was negative for herpes Virus. Susicion of Anti NMDAR Encephalitis remained and anti NMDAR
what's new in v2?

Similarity overview: Match Groups

- Match Groups - breaks the overall similarity down into four categories

Environmental impacts of freshwater home aquaria

A rising number of households are embracing the popular pastime of freshwater aquarium keeping. Freshwater aquaria offer a delightful home to a diverse range of aquatic species, including mystery snails, freshwater shrimp, guppies, goldfish, and clownfish. Keeping an aquarium can be a source of relaxation, joy, and education. This essay aims to explore the environmental impacts associated with owning an aquarium, both positive and negative.

A freshwater aquarium is a receptacle that holds one or more freshwater aquatic organisms for decorative, pet-keeping, or research purposes. For the purpose of this essay, the focus lies on aquaria used for non-research reasons, such as home pet-keeping or ornamentation in public spaces like offices. Species kept in freshwater aquaria may be either coldwater or tropical species, which are generally not mixed due to incompatibilities in temperature. Popular species frequently kept in such aquaria...
Example: Missing Citation

Similarity overview: Sources

- Sources - list of sources organized in descending order by highest total similarity percentage.

What are overlapping sources?

53% Overall Similarity

Show overlapping sources

39% Overall Similarity

Show overlapping sources

Viewing match details with source cards

Viewing match details with source cards

the biology of group movement in invertebrates, a group that is quite important for ecosystem function, remains more of a mystery and its study could lead to novel insights for other groups as well. Parading shrimps Macrobrachium dienbienphuense Đặng and Nguyễn, 1972, an Asian endemic species of freshwater shrimps, perform a unique type of group movement known as “Parading Behavior” ( Figure 1a,b; Video 1). This behavior is unique in that the freshwater shrimps, which have an obligate aquatic lifestyle, climb out of a river at night and walk en masse upstream on land alo
Example: Sources

Acknowledgements

Early in his career and for some time, Rembrandt painted mainly portraits. Although he continued to paint—and *etch* and, occasionally, *draw*—portraits throughout his career, he did so less frequently over time. Roughly one-tenth of his painted and etched oeuvre consists of studies (Roughly 58%) of his own face as well as more-formal *self-portraits*, a fact that has led to much speculation.

...g the human recurrent missense variant A1783V (Depienne et al. 2009; Klassen et al. 2014). Axonopathy and altered synaptic development in early hippocampal epileptogenesis of Dravet syndrome

Queen Elizabeth can refer to several historical and contemporary queens, but one of the most well-known is Queen Elizabeth II, who was born on April 21, 1926, and reigned as the...
what's new in v2?

Applying filters

13% Overall Similarity

- Match Groups
- Sources

Show overlapping sources

- Internet
  - academic.oup.com
    - 15%
    - 243 matched words
- Internet
  - blumsteinlab.eeb.ucla.edu
    - 14%
    - 218 matched words

Exclusion filters

- Exclude bibliography
- Exclude quoted text
- Exclude cited text
- Abstract
- Methods and Materials
- Exclude small matches

Compare submissions against
Select at least one source type to check for similarity.

- Submitted Works
- Internet content
- Publications
- Crossref
- Crossref posted content
Applying filters

- Exclude bibliography
- Exclude quoted text
- Exclude cited text
- Abstract
- Methods and Materials
- Exclude small matches

Set match exclusion threshold
8 Words
1) Flags tab and side panel

Source: https://guides.ithenticate.com/hc/en-us/articles/27842257510029-Flags
what's new in v2?

Flags

Acknowledgements

Early in his career and for some time, Rembrandt painted mainly portraits. Although he continued to paint—and etch and, occasionally, draw—portraits throughout his career, he did so less frequently over time. Roughly one-tenth of his painted and etched oeuvre consists of studies (Roughly 58) of his own face as well as more-formal self-portraits, a fact that has led to much speculation.

g the human recurrent missense variant A1783V (Depienne et al. 2009; Klassen et al. 2014). Axonopathy and altered synaptic development in early hippocampal epileptogenesis of Dravet syndrome

Queen Elizabeth can refer to several historical and contemporary queens, but one of the most well-known is Queen Elizabeth II, who was born on April 21, 1926, and reigned as the Queen of the United Kingdom and other Commonwealth realms for many decades. Please note that my knowledge is up to date only until September 2021, so there may have been developments or changes since then. Here is an overview of Queen Elizabeth II:

Source: https://guides.ithenticatecom/hc/en-us/articles/27842257510029-Flags
2) Hidden text

- Paper mills, to hinder similarity matching
- Commonly found on YouTube, social media

Text blended into the white background
3) Replaced characters

The majestic blue whale, the goliath of the sea, certainly stands alone within the animal kingdom for its adaptations beyond its massive size. At 30 metres (98 ft) in length and 190 tonnes (210 short tons) or more in weight, it is the largest existing animal and the heaviest that has ever existed. Goliath is not only the physical embodiment of a giant, but also a symbol of the brute forces of nature. Despite their incomparable mass, aggressive hunting in the 1900s by whalers seeking whale oil drove them to the brink of extinction. But there are other reasons for why they are now so endangered.

The blue whale’s common name derives from bluish-hue that covers the

Source: https://guides.ithenticate.com/hc/en-us/articles/27842257510029-Flags
3) Replaced characters

Finding replaced characters

Some characters in different alphabets can look similar enough to the naked eye, it is difficult, if not impossible, to tell them apart.

<table>
<thead>
<tr>
<th>e</th>
<th>e</th>
<th>o</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>Cyrillic</td>
<td>Latin</td>
<td>Greek</td>
</tr>
</tbody>
</table>

Our system automatically swaps these characters out when scanning a submission so they will not affect the Similarity Report. However, by replacing characters, the intent is to try and interrupt a similar match.

How to confirm

For most file types, you can open the originally uploaded document in a word processor or a PDF viewer. Use the search or find tool (CTRL + F) to search the document for non-Latin characters.

Viewing the file using different fonts or in plain text may also introduce other stylistic differences that will help you differentiate between the alphabets. When completely unsupported, these will appear as unique icons such as " and o.

Source: https://guides.ithenticate.com/hc/en-us/articles/27842257510029-Flags
Sharing the Report

43 encephalitis triggered by West Nile virus (WNV) infection. A 21-year-old male veterinarian with a history of frequent travels to the United States presented to our center after a 1-month evolution of neuropsychiatric symptoms that began as flu-like symptoms. Computed tomography, brain magnetic resonance imaging, and an electroencephalogram were performed with no relevant findings. Cerebrospinal fluid analysis revealed pleocytosis, although initial immunoassays and cultures for possible infectious causes were negative. After discarding an infectious cause and meeting the criteria for autoimmune encephalitis, treatment with methylprednisolone was initiated.

50 In the following days, the patient's condition worsened with the addition of hyperkinetic crises, hallucinations, and catatonic symptoms. Subsequent cerebrospinal fluid analysis demonstrated the
Sharing the Report

- first page of Similarity Report

iThenticate v2

**WHAT'S NEW IN V2?**

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## Similarity Report ID: oid:3618:61269453

<table>
<thead>
<tr>
<th>PAPER NAME</th>
<th>AUTHOR</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>WORD COUNT</th>
<th>CHARACTER COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3019 Words</td>
<td>20067 Characters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAGE COUNT</th>
<th>FILE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Pages</td>
<td>2.1MB</td>
</tr>
</tbody>
</table>

**SUBMISSION DATE**

Jun 12, 2024 10:49 AM GMT+9

**REPORT DATE**

Jun 12, 2024 10:50 AM GMT+9

- 25% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

- 22% Internet database
- Crossref database
- 0% Submitted Works database
- 22% Publications database
- Crossref Posted Content database
How to use Similarity Reports

• High degree of overlap is *sometimes* fine
  - Preprint by the same authors
  - References to existing work
    (as long as referenced properly, this is fine)
  - Descriptions of methods/materials etc
• Checking for *similarity*, not *plagiarism*
If you want to know more…

**Similarity Check**
https://www.crossref.org/services/similarity-check/

**Similarity Check: what’s new with iThenticate v2?**
https://www.crossref.org/blog/similarity-check-whats-new-with-ithenticate-v2

**Overview of the new Similarity Report experience**
Audience Q&A Session

Start presenting to display the audience questions on this slide.
Terima kasih!

Yera Hur PhD
Crossref Ambassador (Korea)
med_edu@naver.com