Initiatives on open metadata and open references

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Vice President | Springer Nature

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Google Scholar



A little about me...



Aliaksandr (Alex) Birukou Александр Бирюков

Vice President Journals, Russia <u>aliaksandr.birukou@springer.com</u>

Journals:





- 2012-2020: Springer, Heidelberg, Germany. Editor...Editorial Director. LNCS and CS proceedings
- 2020: Journals from Russia and ex USSR, conference proceedings from Russia

Represent editorial in innovation / research projects

• Chair Crossref/DataCite group on persistent IDs for conferences









Opening references: some history

Springer Nature becomes largest publisher to open up all reference lists

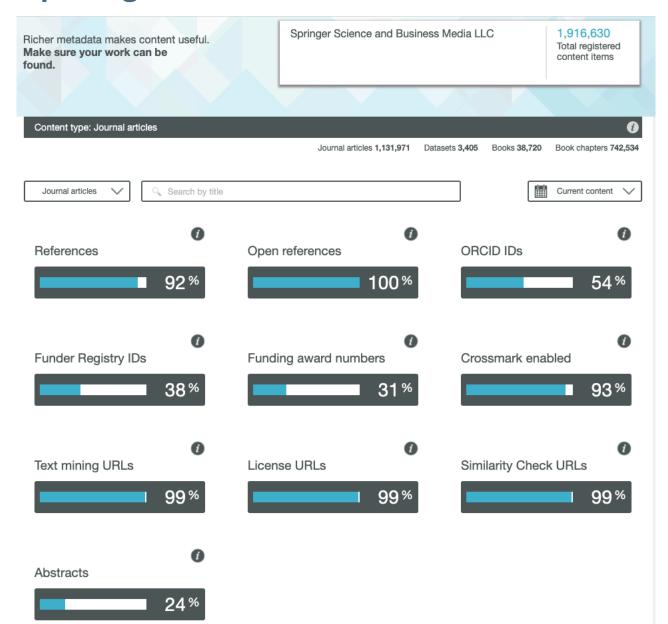
6 March 2017: Springer Nature becomes the largest academic publisher to open up reference lists to advance data discovery and reuse, effective as of today. Working closely with Crossref, Springer Nature will make the metadata for reference lists available across all academic books and owned journals (and as an option for society partners.)

The references are available through the Crossref Metadata APIs and Metadata Search including the 'link references' tool for matching references to DOIs.

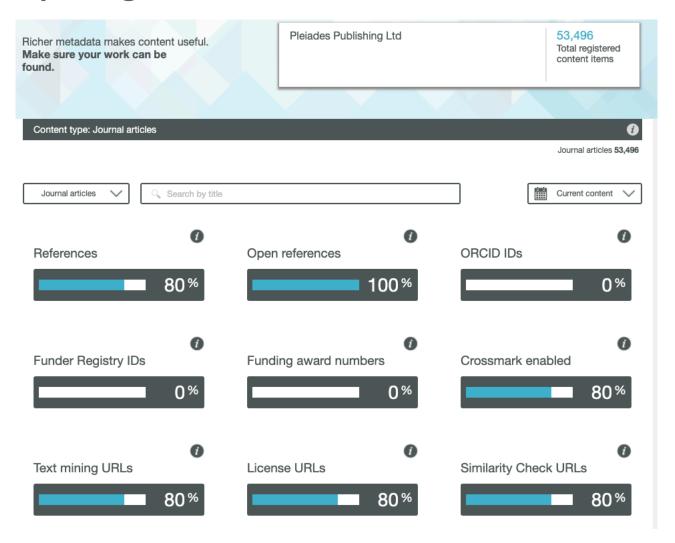
Steven Inchcoombe, Chief Publishing Officer adds: "From open access, to open data, and now open citations. We will be the largest major publisher to make all our citation metadata freely available through Crossref. This move will make our customers' lives easier by helping them to mine a large body of references in one go. We want to provide the best possible service to the whole research community, and we see advancing data discovery and reuse as a crucial part of this."

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Opening references: current status



Opening references: current status



Example – 2020 data

- In 2020, we had around 422k articles and 294k chapters. This means deposit of approx. 5 million references from 2020 articles and about 3.5 million references from 2020 chapters (estimation, 12.7 references average per article, maximum 196, median 6, min 1)
- Fun fact: for Nature journals an average is 41 references per article, max 1700 references (see on the right), median is 38, min is 1

The Japanese Society of Hypertension Guidelines for the Management of Hypertension (JSH 2019)

https://www.nature.com/articles/s41440-019-0284-9.

The Japanese Society of Hyperte... 246 / 247 | — 100% + | 🖸 🔇

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S. Umemura et al.

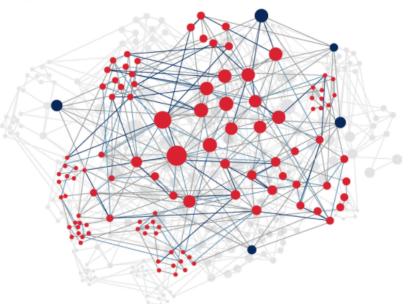
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Related initiatives: SciGraph

Welcome to SN SciGraph, our Linked Open Data offering which aggregates data sources from Springer Nature and key partners from the scholarly domain. The Linked Open Data platform collates information from across the research landscape, for example funders, research projects, conferences, affiliations and publications.

Additional data, such as citations, patents, clinical trials and usage numbers will follow over time. This high quality data from trusted and reliable sources provides a rich semantic description of how information is related, as well as enabling innovative visualizations of the scholarly domain.

By doing so, SN SciGraph overcomes former boundaries by relating comprehensive information about the research landscape. It represents a further step in data integration and it will continue to grow organically. Our aim is to increase the discoverability of high quality data as larger parts of our datasets are being made available under CC-BY licensing.



The data in SN SciGraph is projected to contain 1.5 to 2 billion triples. We are constantly iterating on adding more metadata from journals and articles, books and chapters, organizations, institutions, funders, research grants,











Results: First SN SciGraph Hack Day

Further Info

SN SciGraph at a

Q1 2019 release included references

Q1 2020 – extra release of conference details on Figshare

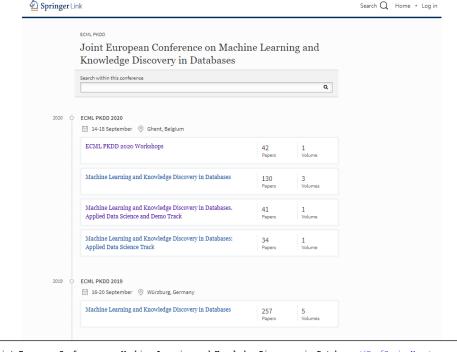
Nature, Springer (2020): Details of Springer Nature Computer Science conference proceedings (2015-2020). figshare. Dataset.

https://doi.org/10.6084/m9.figshare.12280073.v1

Conference series ID in metadata and SpringerLink

At Springer Nature: we make use of an internal Conference series ID on **book** level for conference proceedings, mainly.

This is not a unique persistent identifier but rather a starting point towards a Unique Persistent Identifier for conference metadata



https://www.crossref.org/vgroups/conferences-project

Internal metadata format



```
<ConfSeriesName>Joint European Conference on Machine Learning and Knowledge Discovery in Databases</ConfSeriesName>
<ConfSeriesID Type="Springer">ecml</ConfSeriesID>
<ConfSeriesID Type="DBLP">ecml</ConfSeriesID>
<ConfEventID Type="Springer">ecml2020</ConfEventID>
<ConfEventAbbreviation>ECML PKDD</ConfEventAbbreviation>
<ConfEventLocation LocationType="InPerson"><City>Ghent</City><Country Code="BE">Belgium</Country></ConfEventLocation>
  <Year>2020</Year>
  <Month>09</Month>
  <Day>14</Day>
 </ConfEventDateStart>
 <ConfEventDateEnd>
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  <Month>09</Month>
  <Day>18</Day>
</ConfEventDateEnd>
<ConfEventURL>https://ecmlpkdd2020.net/</ConfEventURL>
<ConfEventPeerReviewInformation AverageNumberOfPapersPerReviewer="4,4" AverageNumberOfReviewsPerPaper="4,5" ExternalReviewersInvolved="No</pre>
/ConferenceInfo>
```

Crossref / DataCite working group

- Launched 2017
- Technical group (implementation) Feb 2019
- Scope of the group:
 - (1) Unique Conference IDs implement for other publishers
 - (2) Metadata on peer-review process

Read more about the group:

https://www.crossref.org/workinggroups/conferences-projects/

Conference metadata document:

https://www.crossref.org/blog/pids-forconferences---your-comments-are-welcome/ Group participants:



Crossmark for conference proceedings

Goals



- transparency of the peer review process
- identification of the conference, where the paper/chapter was presented
 - via conference's persistent identifier

Scope

- currently implemented in Springer Nature's computer science proceedings (LNCS, LNBIP, CCIS, IFIP-AICT and LNICST series)
- can be used by all Crossref members, publishing conference proceedings

Acknowledgements

 This project stems from the research on creating a dataset of peer review in computer science conferences published by Springer, carried out in the PEERE project: TD1306 - New Frontiers of Peer Review (PEERE)



Crossmark for conference proceedings - screenshots



International Symposium on String Processing and Information Retrieval

SPIRE 2018: String Processing and Information Retrieval pp 1-11 | Cite as

Recoloring the Colored de Bruijn Graph

Authors Authors and affiliations

Bahar Alipanahi 🔄 , Alan Kuhnle, Christina Boucher

Conference paper

First Online: 14 September 2018



Part of the Lecture Notes in Computer Science book series (LNCS, volume 11147)

is live since mid September 2018

About this paper



Cite this paper as:

Alipanahi B., Kuhnle A., Boucher C. (2018) Recoloring the Colored de Bruijn Graph. In: Gagie T., Moffat A., Navarro G., Cuadros-Vargas E. (eds) String Processing and Information Retrieval. SPI 2018. Lecture Notes in Computer Science, vol 11147. Springer, Cham

First Online 14 September 2018 DOI https://doi.org/10.1007/978-3Publisher Name Springer, Cham

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Springer, Ci

030-00479-8_1

Print ISBN Onli 978-3-030-00478-1 978-

Online ISBN 978-3-030-00479-8 eBook Packages Computer Science

More Information

Conference Information

Conference Acronym: SPIRE

Conference Name: International Symposium on String Processing and

Information Retrieval
Conference City: Lima
Conference Country: Peru
Conference Year: 2018

Conference Start Date: 9 October 2018 Conference End Date: 11 October 2018

Conference Number: 25 Conference ID: spire2018

Conference URL: http://eventos.spc.org.pe/spire2018/

Peer Review Information

Type: Single-blind

Conference Management System: EasyChair Number of Submissions Sent for Review: 51

Number of Full Papers Accepted: 22 Number of Short Papers Accepted: 6

Acceptance Rate of Full Papers: 43% - The value is computed by the equation "Number of Full Papers Accepted / Number of Submissions Sent for Review * 100" and then rounded to a whole number.

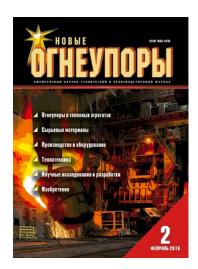
Average Number of Reviews per Paper: 3 Average Number of Papers per Reviewer: 3.8

External Reviewers Involved: Yes

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Suggestion to the Open Citations project / discussion point

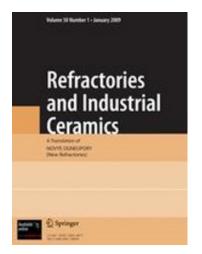
See https://www.youtube.com/watch?v=2wgGqZMnFSE&t=3s&ab_channel=FooCamp



Разработка технологий, производство и служба формованных и неформованных огнеупоров на основе ВКВС

<u>ЮЕ Пивинский, ЕМ Гришпун... - Новые ..., 2016 - newogneup.elpub.ru</u>
Аннотация Проанализирован многолетний опыт разработки и развития промышленных технологий, позволивших осуществить широкомасштабное производство эффективных для потребителя и высокорентабельных для производителя формованных и неформованных огнеупоров, получаемых на основе ВКВС как плавленого кварца, так и высокоглиноземистых составов. Еще задолго до соврем





[HTML] Engineering, manufacturing, and servicing of shaped and unshaped refractories based on highly concentrated ceramic binding suspensions

YE Pivinskii, EM Grishpun, AM Gorokhovskii - Refractories and Industrial ..., 2015 - Springer An analysis is made of the many years of experience in designing and improving industrial technologies which use quartz-glass HCBSs (highly concentrated ceramic binding suspensions) and high-alumina composite HCBSs to make shaped and unshaped refractories that are effective products for customers and sources of profit for manufacturers. Long before the current boom in nanomaterials, HCBS-based technologies employed elements.

☆ Cited by 17

lated articles All 6 versions

Thank you! Gracias!

