



Crossref



Crossref's API: A wealth of metadata

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We are Crossref, a not-for-profit membership organization for scholarly publishing, working to make content easy to find, cite, link and assess. We do it in five ways: rallying the community; tagging metadata; running a shared infrastructure; playing with new technology; and making tools and services to improve research communications.

It's as simple—and as complicated—as that.



<metadata>



Step 1: A researcher identifies the articles they are interested in:



A screenshot of the PubMed website search interface. The search bar contains the text "type 1 diabetes". A dropdown menu shows suggestions: "type 1 diabetes mellitus", "type 1 diabetes children", "type 1 diabetes review", "type 1 diabetes insulin", "type 1 diabetes exercise", "type 1 diabetes pregnancy", "type 1 diabetes treatment", "type 1 diabetes complications", and "type 1 diabetes genetics". The PubMed logo and "US National Library of Medicine National Institutes of Health" are visible at the top.

A screenshot of the Google Scholar search results for "type 1 diabetes". It shows approximately 2,080,000 results. The top results are listed with their titles and authors. The first result is "Type 1 diabetes" by D Daneman, published in The Lancet in 2006. The second result is "Type 1 diabetes" by A Adkinson, GS Eisenbarth, and AW Michels, also in The Lancet in 2014. The third result is "Type 1 diabetes" by Lemmark, published in Clinical chemistry in 1999. The fourth result is "Intensive diabetes treatment and cardiovascular disease in patients with type 1 diabetes" by Davies, Y Kawaguchi, ST Bennett, and JB Copeman, published in Nature in 1994. The fifth result is "genome-wide search for human type 1 diabetes susceptibility genes" by Davies, Y Kawaguchi, ST Bennett, and JB Copeman, published in Nature in 1994. The sixth result is "Intake of vitamin D and risk of type 1 diabetes: a birth-cohort study" by Hyönnä, E Lääkä, A Raunonen, and MR Järvelin, published in The Lancet in 2001.

A screenshot of the CrossRef metadata search results for "diabetes type 1". The search results are sorted by relevance and publication year. The first result is "Characterizing Subgroups of Type 1 Diabetes" by J. S. Skyler, published in Diabetes in 2014. The second result is "Prevention of Type 1 Diabetes Mellitus" published in Diabetes Care in 2002. The third result is "Prevention of Type 1 Diabetes Mellitus" published in Diabetes Care in 2003. The fourth result is "Screening for Type 2 Diabetes" published in Diabetes Care in 2003. The fifth result is "Pancreas Transplantation in Type 1 Diabetes" published in Diabetes Care in 2003. The sixth result is "Screening for Type 2 Diabetes" published in Diabetes Care in 2003.



Research Paper

Patients with type 1 diabetes in Sweden experience more fatigue than the general population

Johan Segerstedt, Robert Lundqvist, Mats Eliasson

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doi:10.1016/j.jcte.2015.06.001

Impact Factor 1.579

Manuscript Table of Contents

BioMed Research International
Volume 2015 (2015), Article ID 847906, 2 pages
<http://dx.doi.org/10.1155/2015/847906>

Editorial

Environmental Trigger(s) of Type 1 Diabetes: Why Is It So Difficult to Identify?

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Abstract

Full-Text PDF

Full-Text HTML

Full-Text ePUB

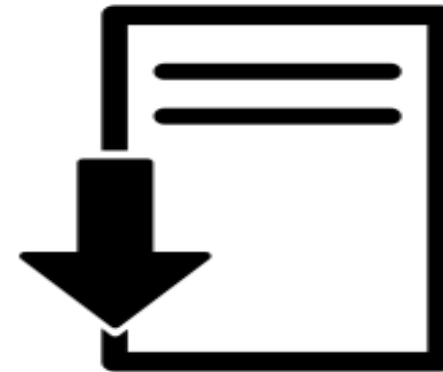
Full-Text XML

How to Cite this Article

Complete Special Issue



10.5555/12345678
10.5556/12345679
10.1016/12345680
10.8080/12345681
10.1155/12345682
10.1100/12345683
10.5555/12345684
10.1007/12345685
10.1111/12345686
10.2406/12345687
10.3994/12345688
10.5006/12345689



PMC US National Library of Medicine National Institutes of Health

type one diabetes

Save search Journal List Limits Advanced

Display Settings: Summary, 20 per page, Sorted by Default order

Send to: Filter your results:

Results: 1 to 20 of 245995

1. [A novel therapeutic effect of statins on nephrogenic diabetes insipidus](#)
Leonilde Bonfrate, Giuseppe Procino, David Q-H Wang, Maria Svelto, Piero Portincasa
J Cell Mol Med. 2015 February; 19(2): 265–282. Published online 2015 January 16. doi: 10.1111/jcmm.12422
PMCID: PMC4407600
[Article](#) [PubReader](#) [PDF–535K](#) [Citation](#)

2. [Banting Lecture 2009: An Unfinished Journey: Molecular Pathogenesis to Prevention of Type 1A Diabetes](#)
George S. Eisenbarth
Diabetes. 2010 April; 59(4): 759–774. doi: 10.2337/db09-1855
PMCID: PMC2844823
[Article](#) [PubReader](#) [PDF–695K](#) [Citation](#)

Choose Destination

File Clipboard
 E-mail Collections

Download 245995 items.

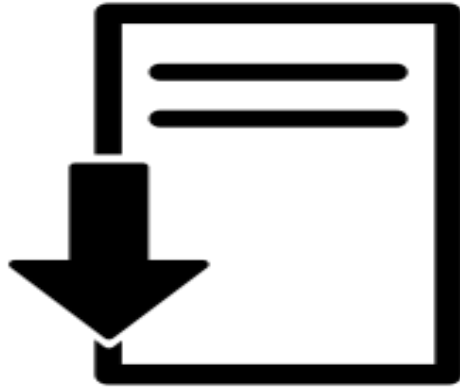
Format
Summary (text)

Sort by
Default order

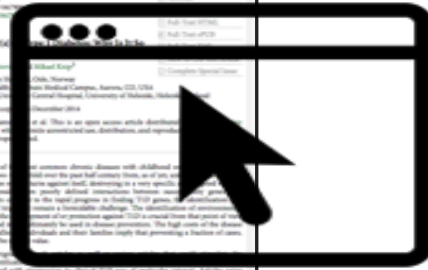
Create File

Crossref Metadata API

<http://api.crossref.org>



Crossref



<metadata>

Example XML

```
<ai:program name="AccessIndicators">  
  <ai:license_ref>http://creativecommons.org/licenses/by/3.0/</ai:license_ref>  
</ai:program>
```

```
<doi_data>  
  <doi>10.1155/2014/969265</doi>  
  <resource>http://www.hindawi.com/journals/aaa/2014/969265/</resource>  
<collection property="text-mining">  
  <item>  
    <resource mime_type="application/pdf">http://downloads.hindawi.com/journals/aaa/2014/969265.pdf</resource>  
  </item>  
  <item>  
    <resource mime_type="application/xml">http://downloads.hindawi.com/journals/aaa/2014/969265.xml</resource>  
  </item>
```

Example XML

```
<ai:program name="AccessIndicators" xmlns:ai="http://www.crossref.org/
AccessIndicators.xsd">
  <ai:license_ref applies_to="tdm">http://doi.wiley.com/10.1002/tdm_license_1</
  ai:license_ref>
  <ai:license_ref applies_to="vor" start_date="2016-02-05">http://
  onlinelibrary.wiley.com/termsAndConditions</ai:license_ref>
</ai:program>
<doi_data>
  <doi>10.1111/iji.12250</doi>
  <resource>http://doi.wiley.com/10.1111/iji.12250</resource>
  <collection property="text-mining" setbyID="wiley">
    <item>
      <resource content_version="vor" mime_type="application/pdf">http://
      api.wiley.com/onlinelibrary/tdm/v1/articles/10.1111%2Fiji.12250</resource>
    </item>
  </collection>
```

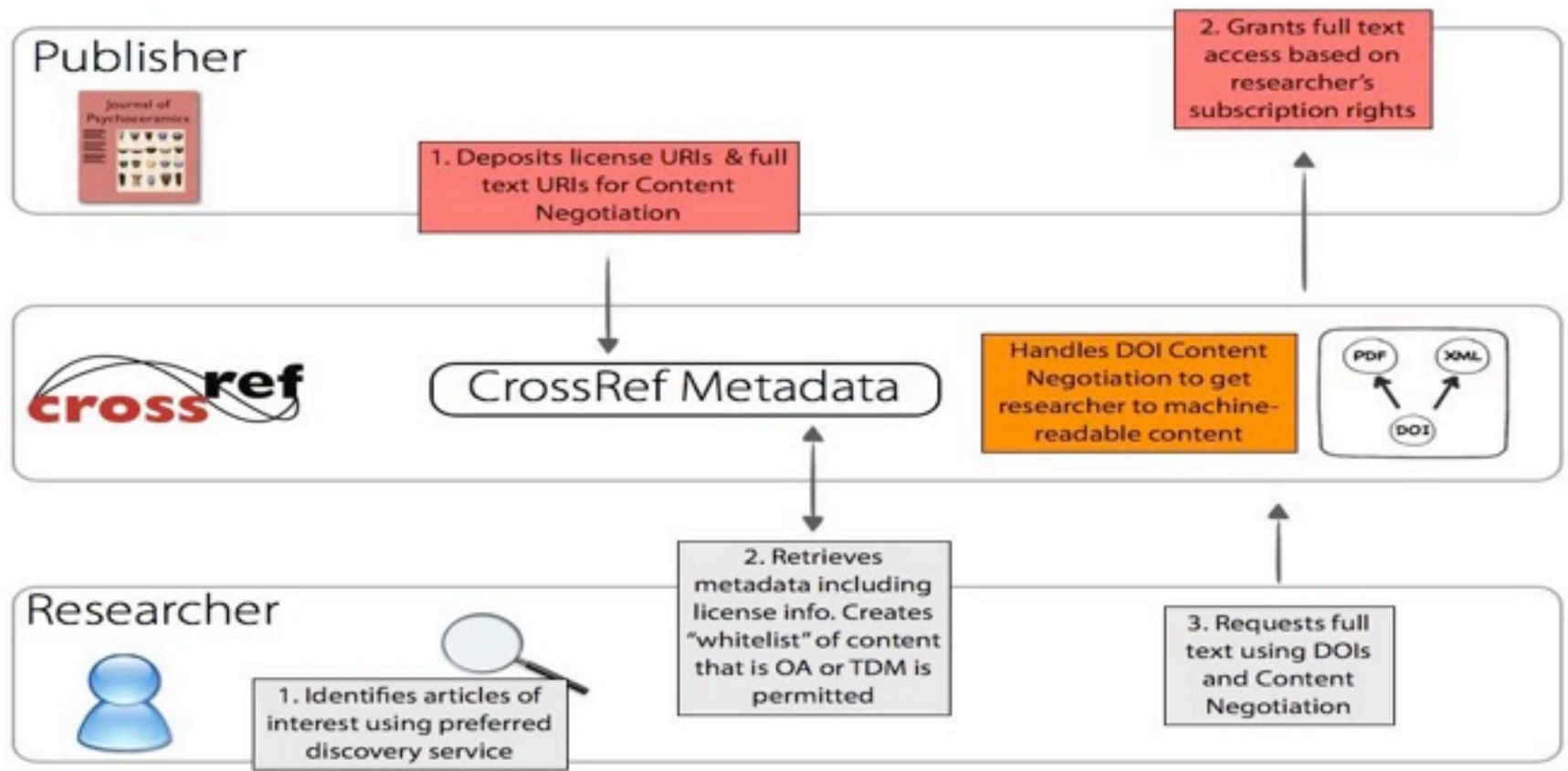
Example API queries

```
← → ↻ api.crossref.org/works?filter=full-text.application:text-mining&rows=0
{
  status: "ok",
  message-type: "work-list",
  message-version: "1.0.0",
- message: {
  - query: {
    search-terms: null,
    start-index: 0
  },
  items-per-page: 0,
  items: [ ],
  total-results: 20786596,
  facets: { }
}
}
```

Example API queries

```
api.crossref.org/works?filter=full-text.application:text-mining

- source: "CrossRef",
- title: [
  "Intelligence Culture - Engaging the Organization in Market Intelligence"
],
prefix: "http://id.crossref.org/prefix/10.1002",
member: "http://id.crossref.org/member/311",
- container-title: [
  "The Handbook of Market Intelligence",
  "Understand, Compete and Grow in Global Markets"
],
- link: [
  - {
    intended-application: "text-mining",
    content-version: "vor",
    content-type: "application/pdf",
    URL: "http://api.wiley.com/onlinelibrary/tdm/v1/articles/10.1002%2F9781119208082.ch9"
  }
]
```

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- Creative commons or proprietary
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 - Optional click-through service
 - Review and agree to multiple licenses in one place

Click-through service

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The Click-through Service uses ORCID to identify you.

Log in with ORCID



Click-through service

ORCID

CrossRef Text and Data Mining 

has asked for the following access to your ORCID Record



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45ea10b6-d0db7798-592cdb99-025fd746

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Researcher queries DOI using API token



Publisher verifies API token
(frequency at publisher discretion)



If token verified AND access control allows,
publisher returns full text



Benefits for researchers

- Streamlines access to distributed full text
- Enables machine-to-machine automated access
- Makes article-level licensing info visible
- Central place for proprietary T&Cs

Thank you

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NFAIS, Monday 21st March 2016

