A nyílt tudomány kezdeményezések támogatása megbízható adatokkal és méretezhető megoldásokkal

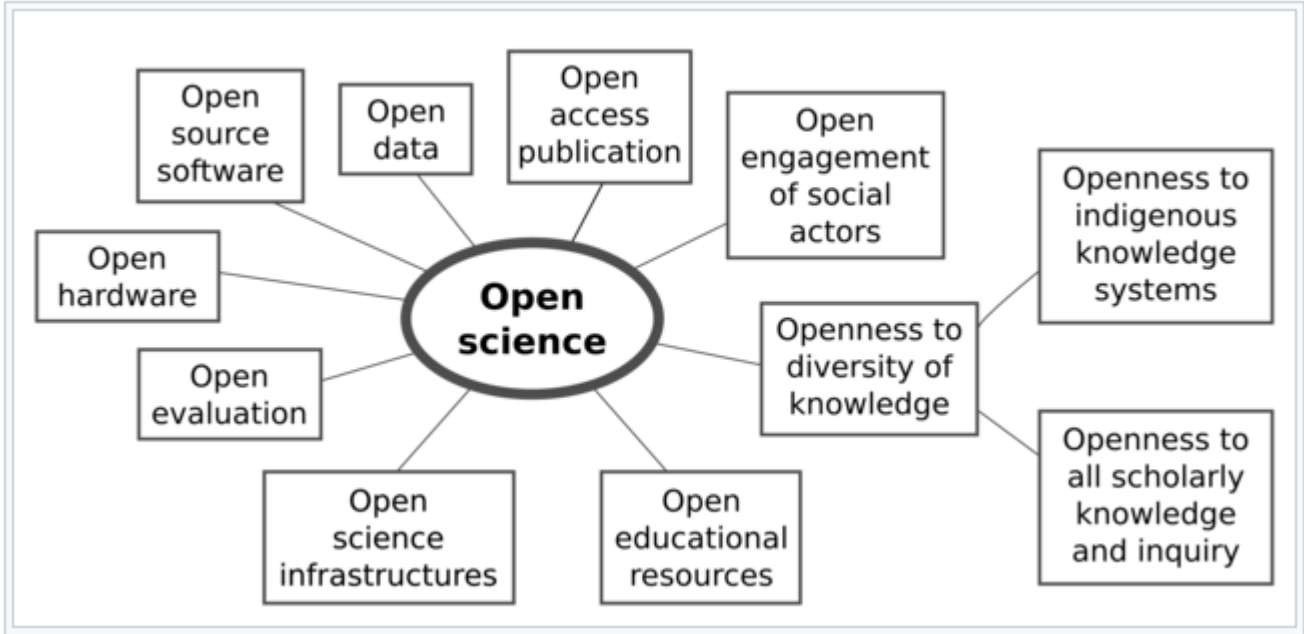
Tóth Szász Enikő

2022. március

Agenda

- Background on the State of Open Science
- Clarivate's Position on Open Science
- Clarivate's Open Science Ecosystem
- Global Open Science Initiatives

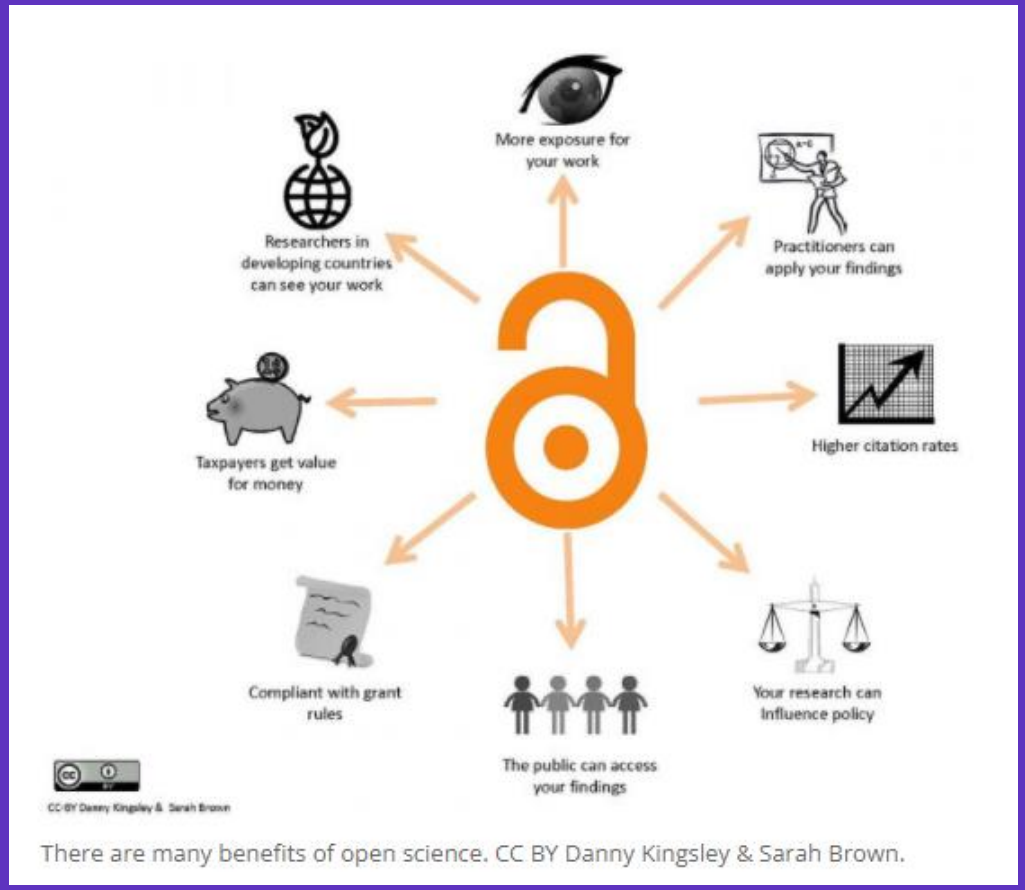
Open Science is the movement to make scientific research and data accessible to all. It includes practices such as publishing open scientific research, campaigning for open access and generally making it easier to publish and communicate scientific knowledge.



https://en.wikipedia.org/wiki/Open_science

Benefits of Open Science for Research Community and Society

- Increases visibility, usage, and impact of research.
-
- Fuels innovation, discovery, and progress.
- Allows researchers to retain control over their publications.
- Allows researchers to use derivatives of their own work freely.
- The Public gets a better return on its investment (results of publicly funded research are freely accessible and not behind costly barriers).
- Promotes knowledge and free expression as a public good.
- Supports global mission of teaching and learning.
- Offers potential savings for libraries and Institutions.
- Creates free market forces and competition for publishers.



There are many benefits of open science. CC BY Danny Kingsley & Sarah Brown.

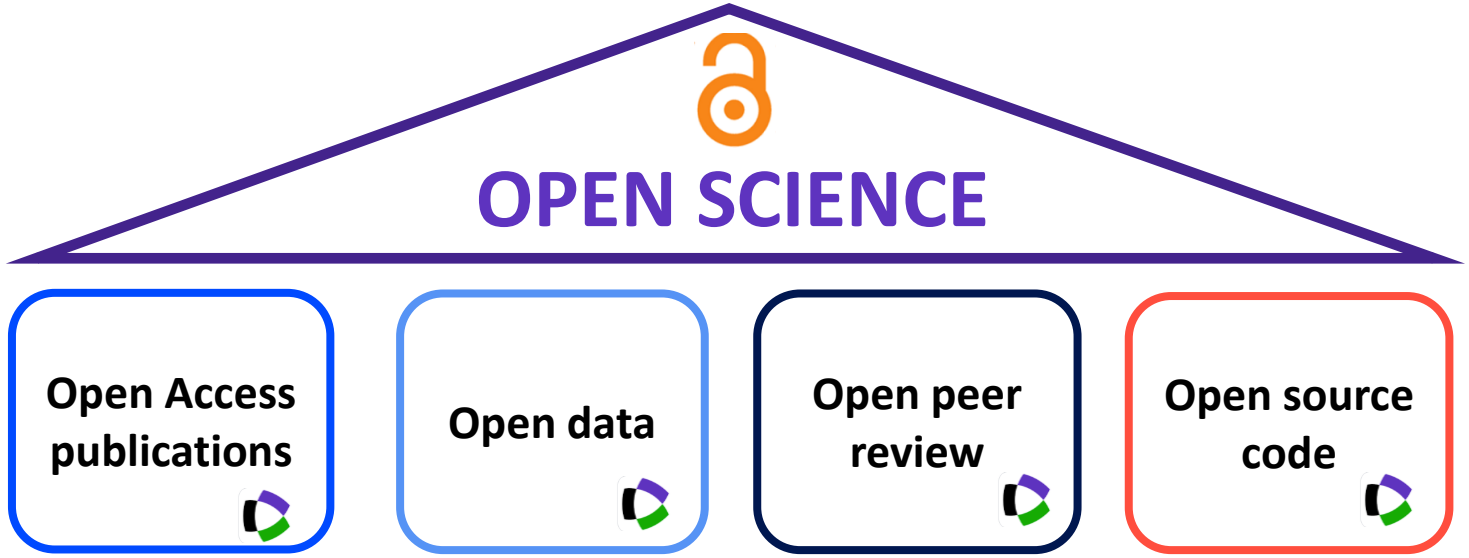
Clarivate believes that open science/open research initiatives will help science be more efficient, improve research outcomes, and establish public confidence in science.

As a producer of publisher neutral resources, we are uniquely positioned to provide data and services to help institutions meet the goals of open science initiatives.

Our goal is to help institutions comply with funding mandates, measure impacts, and improve research efficiency.

Clarivate's Open Science Ecosystem

- **Supporting your Open Science initiatives, with publisher neutral, reliable and trusted data**
- **Clarivate provides a comprehensive set of interconnected solutions covering different aspects of open science**



Web of Science
helps you to find full text from quality Open Access journals and measure the impact of your institution's investment in Open Access.

Data Citation Index
Providing quick access to research data. We are also DataCite members, and endorse the Force 11 joint declaration on data citation.

Publons
provides a free profile solution for researchers and reviewers. It is also pioneering the Transparent Peer Review.

VIVO Services
We are a corporate sponsor of VIVO, an Open Source web application used to showcase institutions.

EndNote Click
Single click access to full text via both subscription content and Open Access.

InCites B & A
Allows benchmarking and analysis of Open Access performance.

Journal Citation Reports
information on Journal`s type and proportion of Open Access

Master Journal List
A searchable list of Web of Science journals, containing submission, Open Access and peer review data.

Clarivate™

Publisher neutral, reliable, trustworthy data

Web of Science Core Collection

- Comprehensive and transparent curation and selection criteria for high-quality research, equally applicable **for all OA journals**
- See selection details here
- See our Master Journal List transparent content detail

Our data powers national assessment and evaluation exercises, including UK (REF), Norway and Australia, providing a reliable baseline for measuring a core aspect of research performance.

Evolution of Open Access Identification in the Web of Science

Direct access to full text for the best available, legal, peer-reviewed OA content

2014

- Clarivate starts tagging OA Publications in the DOAJ Journals
- Incomplete: limited to Gold
- 2 M Records identified (Core Collection only)

2017

- Clarivate partners with *Impactstory* (now *Our Research*) - providing a generous grant

2018

- Complete OA identfication on the whole Web of Science platform
- Legal, published, accepted and submitted green, free-to-read content identified along with DOAJ and hybrid Gold

2021

- >18M OA Records identified on the Web of Science Platform
- Full OA metrics added to InCites B&A and Journal Citation Reports

Open Access Types in Web of Science

Open Access Type		Descriptions
Gold	Gold	• Identified as having a Creative Commons (CC) license by OurResearch Unpaywall Database. • All articles in these journals must have a license in accordance with the Budapest Open Access Initiative to be called Gold.
	Hybrid	• Items identified as having a Creative Commons (CC) license by OurResearch but that are not in journals where all content is Gold. • Hybrid Gold open access status is at varying levels of completeness, especially for newly published articles.
Free to Read		The licensing for these articles is either unclear or identified by OurResearch as non-CC license articles. These are free-to-read or public access articles located on a publisher's site. A publisher may, as a promotion, grant free access to an article for a limited time. At the end of the promotional period, access to the article may require a fee which can lead to temporary errors in our data. You may find content that is incomplete, especially new content.
Green	Published	• Final published versions of articles hosted on an institutional or subject-based repository (e.g., an article out of its embargo period posted to PubMed Central).
	Accepted	• Accepted manuscripts hosted on a repository. • Content is peer reviewed and final, but may not have been through the publisher's copy-editing or typesetting.
	Submitted	• Original manuscripts submitted for publication, but that have not been through a peer review process.

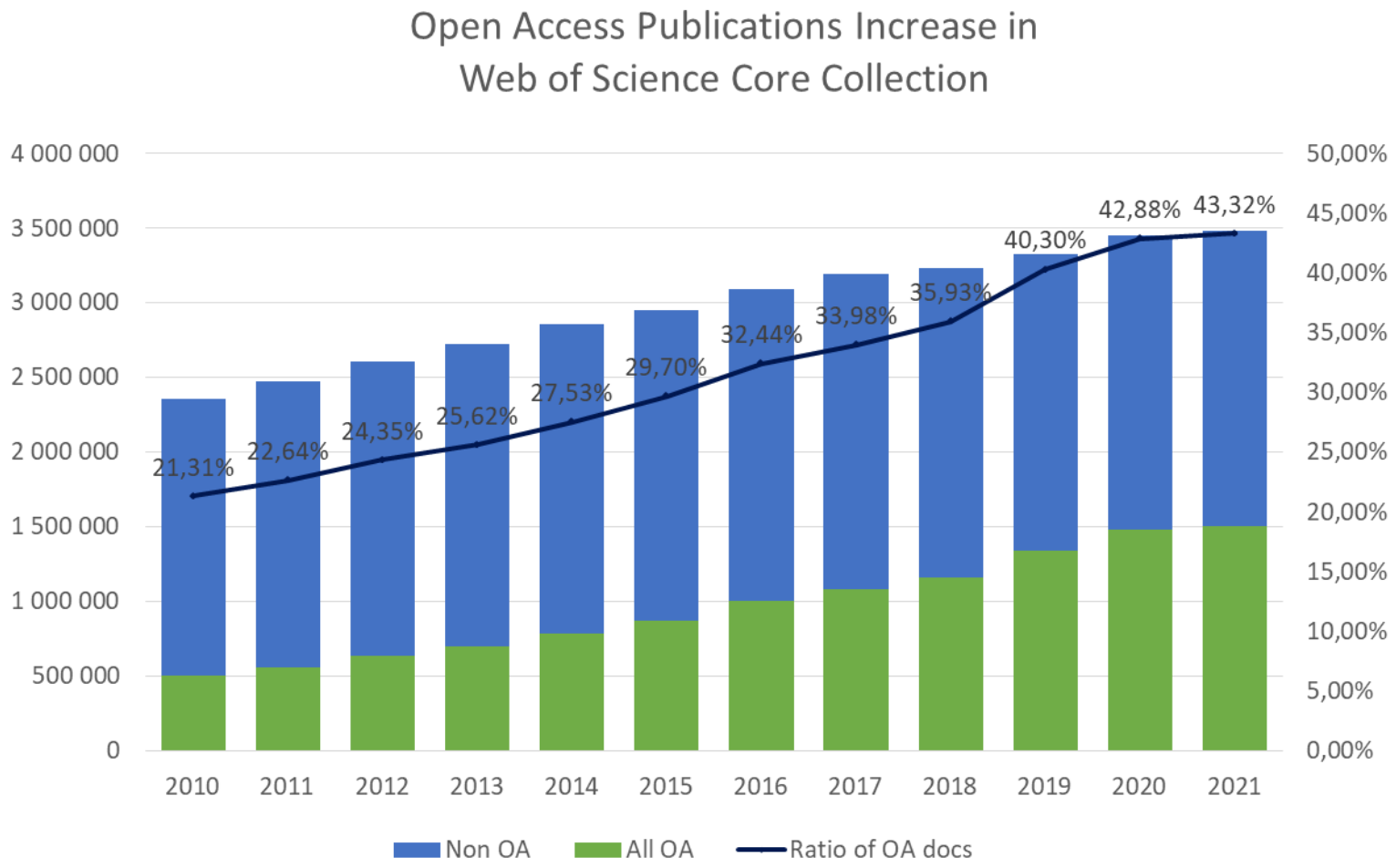
Clarivate™

https://webofscience.help.clarivate.com/en-us/Content/open-access.html

Web of Science: Open Access Growth

- Number and share of **Open Access publications** are constantly increasing in Web of Science.

- By exporting the data, you can use other applications to produce bespoke analysis and customised charts that you need for your reports.



Clarivate’s Open Science Ecosystem

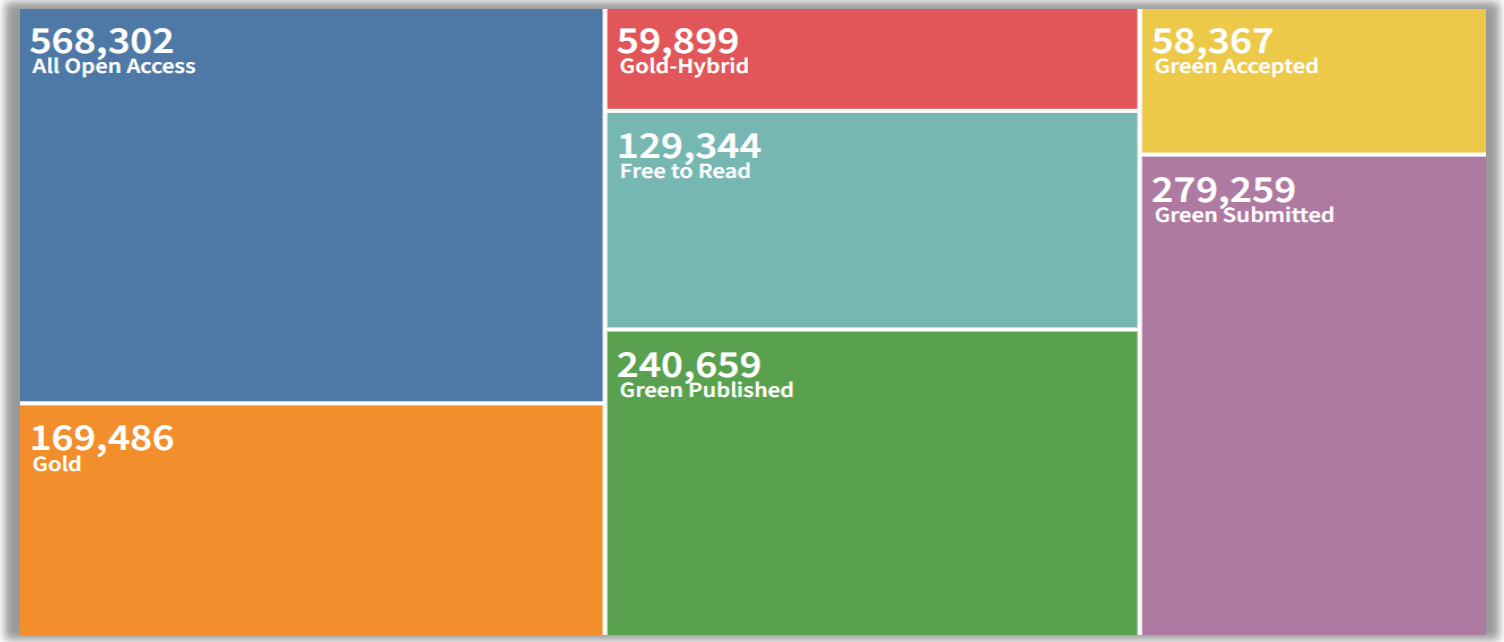
New Web of Science

Analyze Results provides an easy way to see a picture of Open Access within a topic, an organisation, a funder, and mote. Trends over time can also be seen.

Simply refine your results to get the documents you want to analyse and select the "**Open Access**" option.

This example is the breakdown of France's Open Access publications over the past 10 years.

Both the visualization and the tabular data can be **download** for use in reports or further analysis.



Field: Open Access	Record Count	% of 568,368
All Open Access	568,368	100.000%
Gold	169,486	29.820%
Gold-Hybrid	59,897	10.538%
Free to Read	129,237	22.738%
Green Published	240,775	42.363%
Green Accepted	58,401	10.275%
Green Submitted	279,291	49.139%

Clarivate™

EndNote Click

Getting to the Full Text and Open Access information.

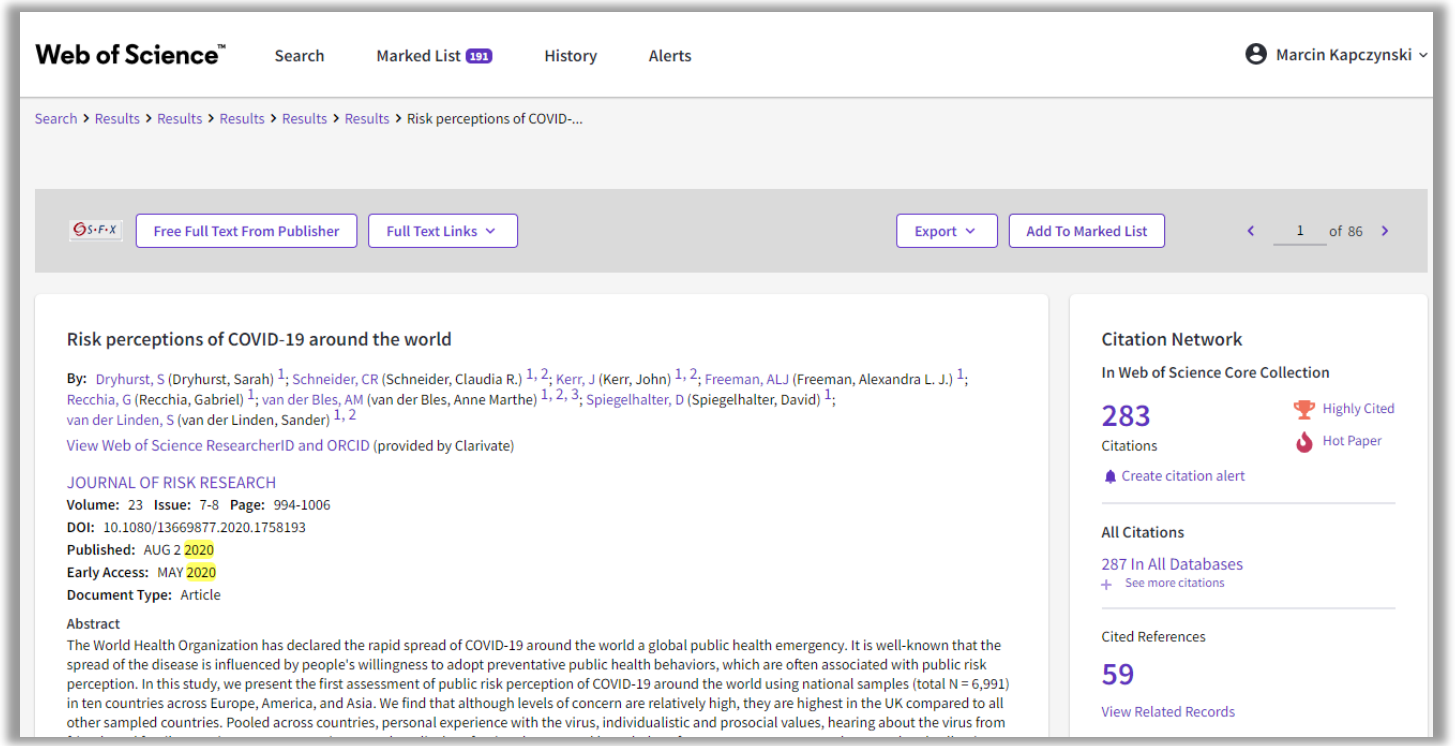
EndNote Click one click to the best available PDF, at your point of need, based on your library's subscription.

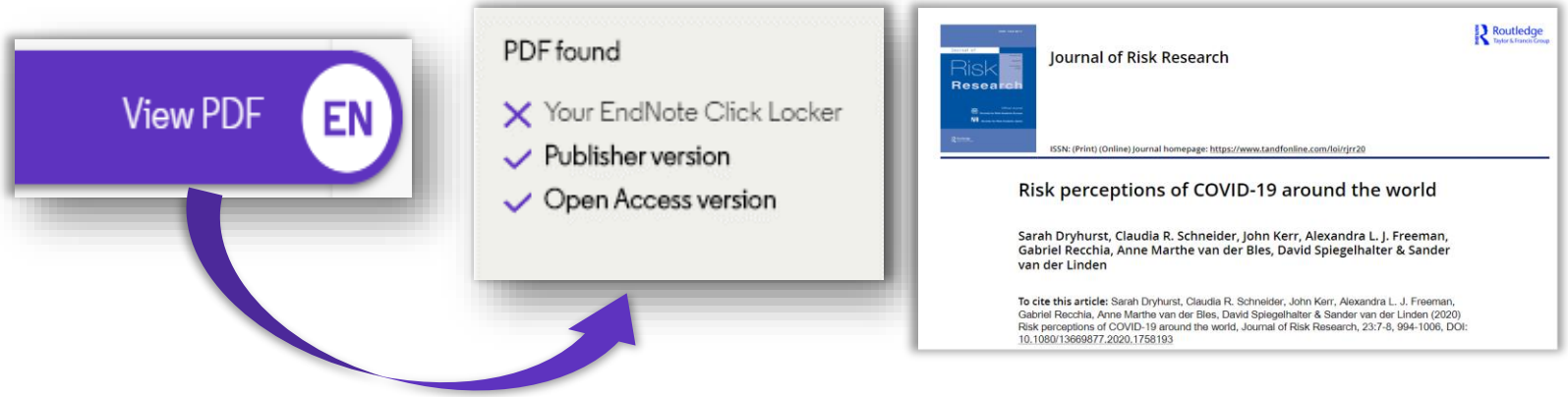
Free browser plug-in.

One click access to Full Text.

Integrates with your library holdings.

Currently used by over 750 thousand researchers worldwide.





Clarivate™

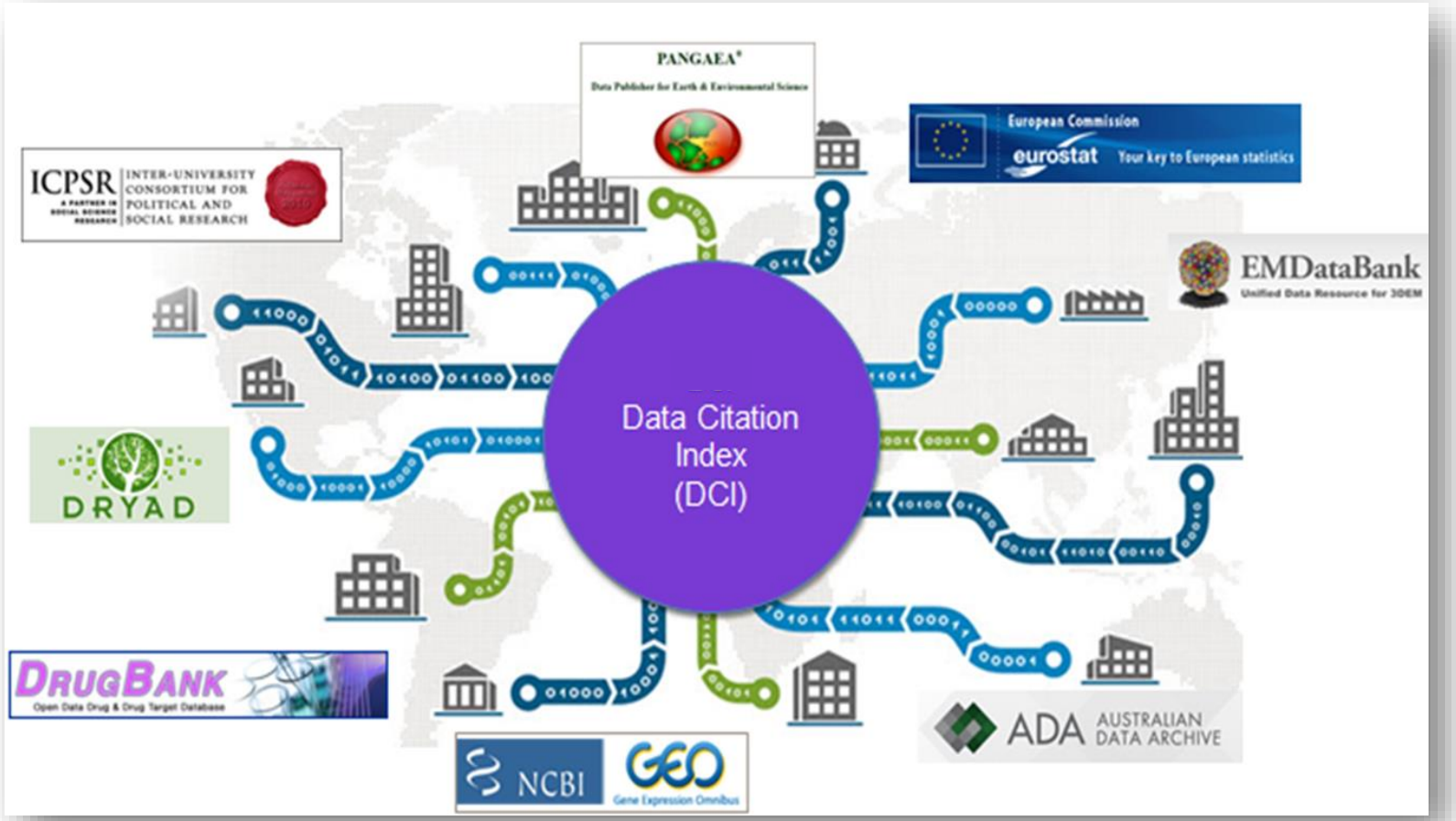
Data Citation Index

Clarivate develops the Data Citation Index (DCI) – a pioneering initiative to support **Open Data**.

2012: DCI is launched on the **Web of Science** platform.

The challenge: Open Data in repositories

Enormous variation in searchability and data structure



Data Citation Index

More that 90% of DCI content is openly accessible.

We encourage anyone hosting a data repository to submit it for coverage, please send details to:

repository.submission@clarivate.com

Clarivate™

Data Citation Index

Connecting data to the research it informs

- Supports the **discoverability** of Open Data
  - The Data Citation Index is the only citation index covering **data sets**, **studies**, **repositories** and **software**
  - In addition to the citations provided by the repository, we include citations from articles in **Web of Science**.
  - Supports FAIR data sharing and the **FORCE 11 Joint declaration** on data citation, as well as **DataCite** citation guidelines.
  - For a full **list of repositories**, Search our **Master Repository List** (updated quarterly)

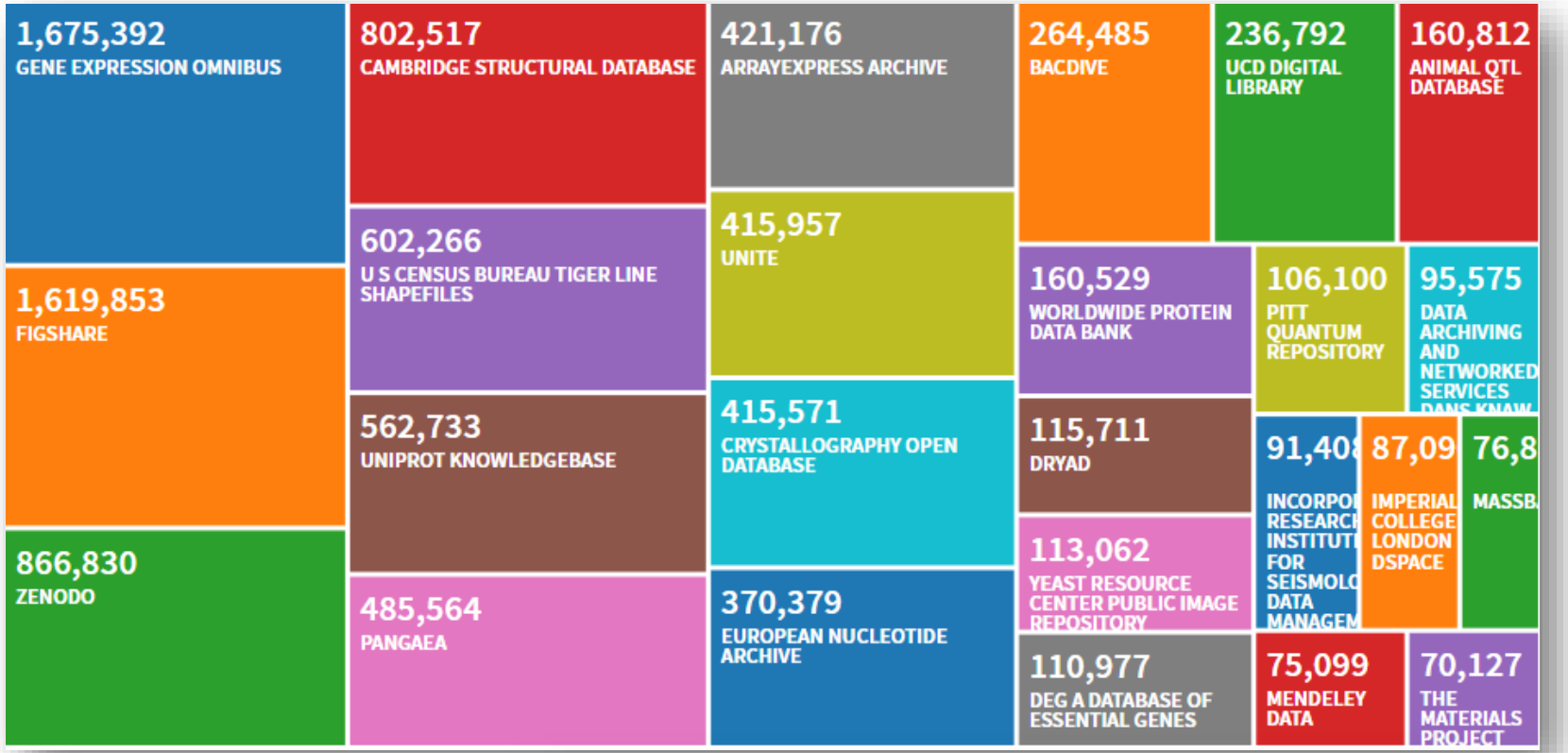
As of March 2022

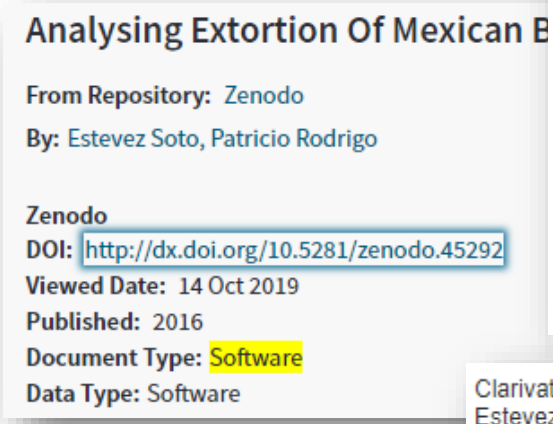
- data from 443 repositories
- 12.3M datasets
- 1.4M data studies
- 265K software

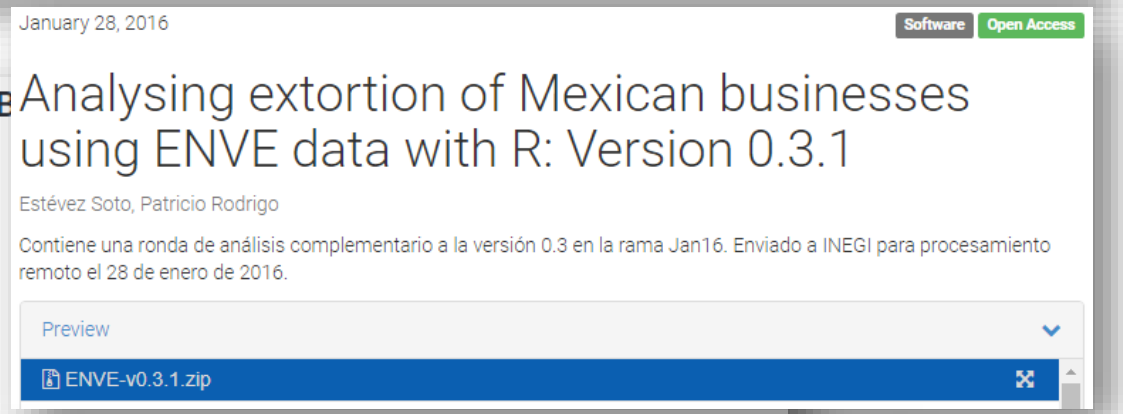
Data Citation Index

Read the ***whitepaper***:
"Recommended practices to promote scholarly data citation and tracking"

Consult the DCI Descriptive Document ***here:***







Clarivate Analytics recommends citing this resource as:
Estevez Soto, Patricio Rodrigo (2016): Analysing Extortion Of Mexican Businesses Using Enve Data With R: Version 0.3.1. Zenodo. http://dx.doi.org/10.5281/zenodo.45292

Open data in Data Citation Index

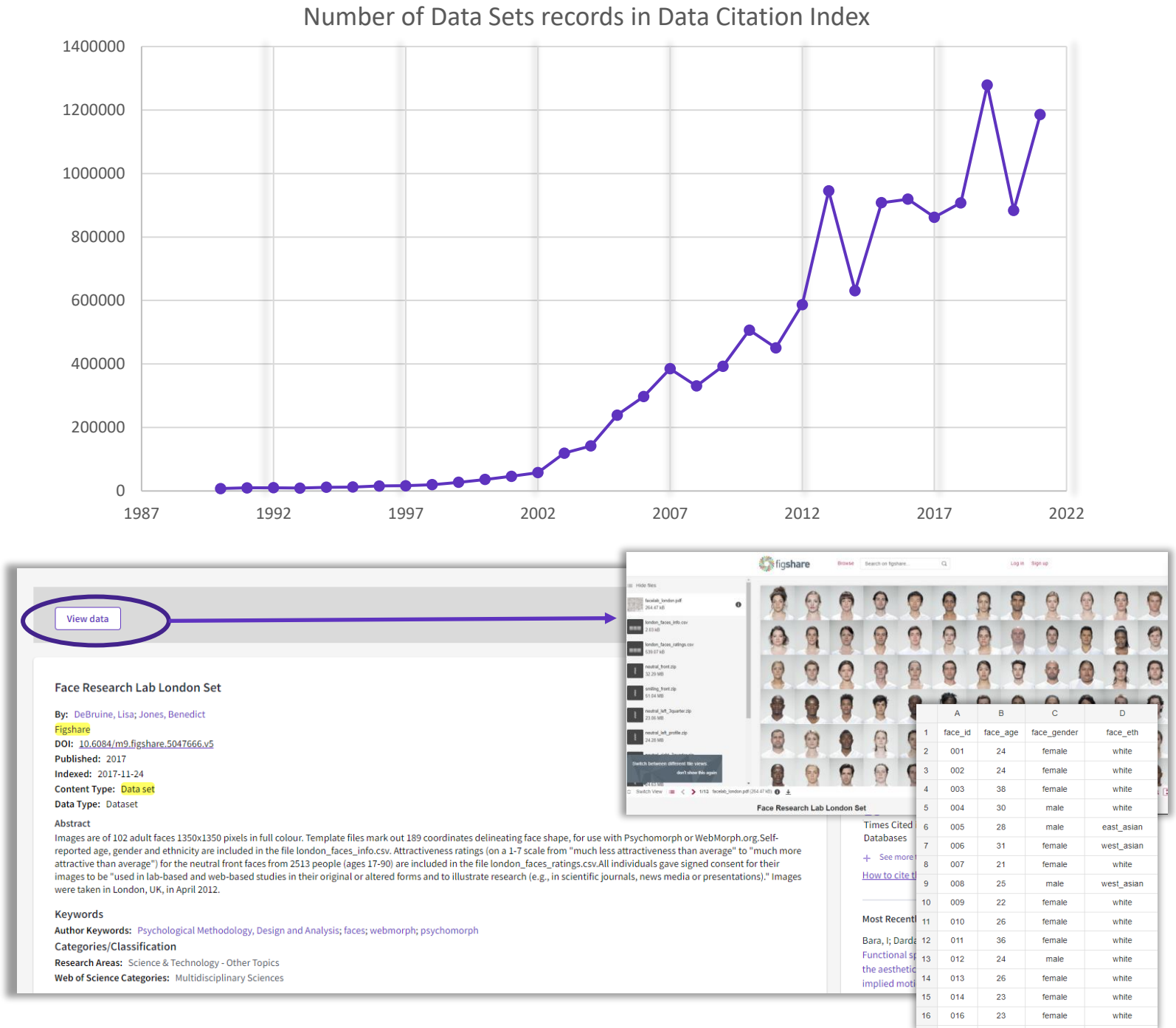
As a result, improved records for Repositories, Data Studies, Data Sets and Software are added to the Data Citation Index.

The DCI spans from 1900 and includes all available citation data

The DCI provides access to over 12.3 Milions Data Sets and Data Studies coming from 443 repositories.

•**Over 95%** of the repositories in the DCI provide free access to **open content.**

Clarivate™

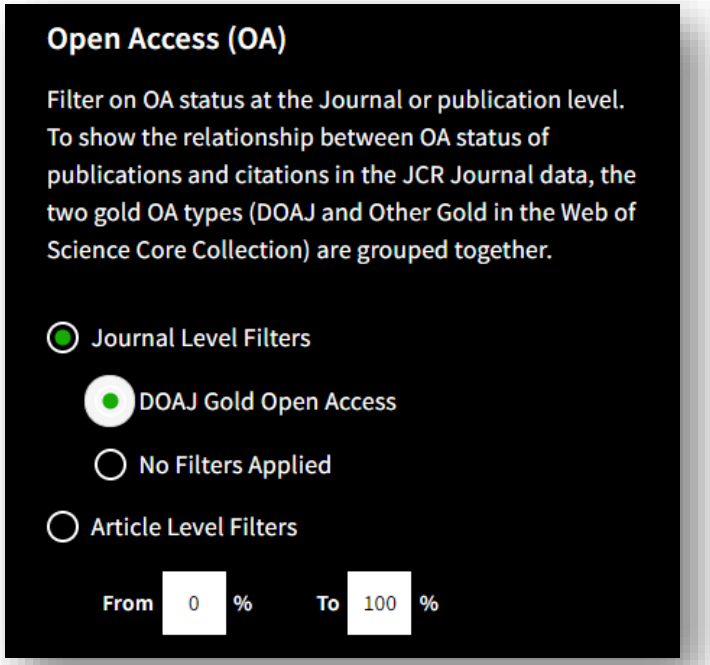


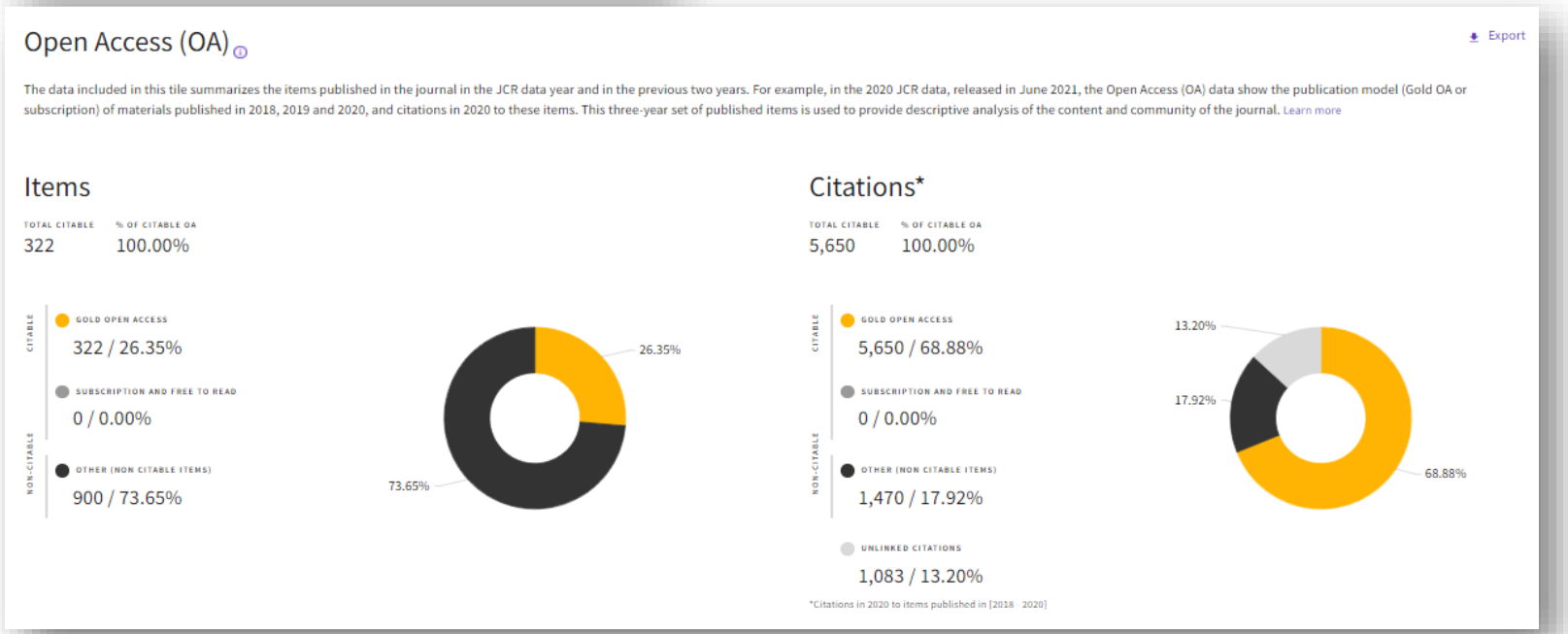
Journal Citation Reports (JCR)

After a redesign in 2018 to provide a Journal Profile and promote **responsible metrics**, JCR now has a new interface which offers easier workflows and metrics beyond **Journal Impact Factor**.

We also provide **filtering** by Open Access and clear Open Access **status** indicators on the profiles.

The new UI has enhanced the **Open Access Profiles**, showing items and citations to those items, broken down by type of access .





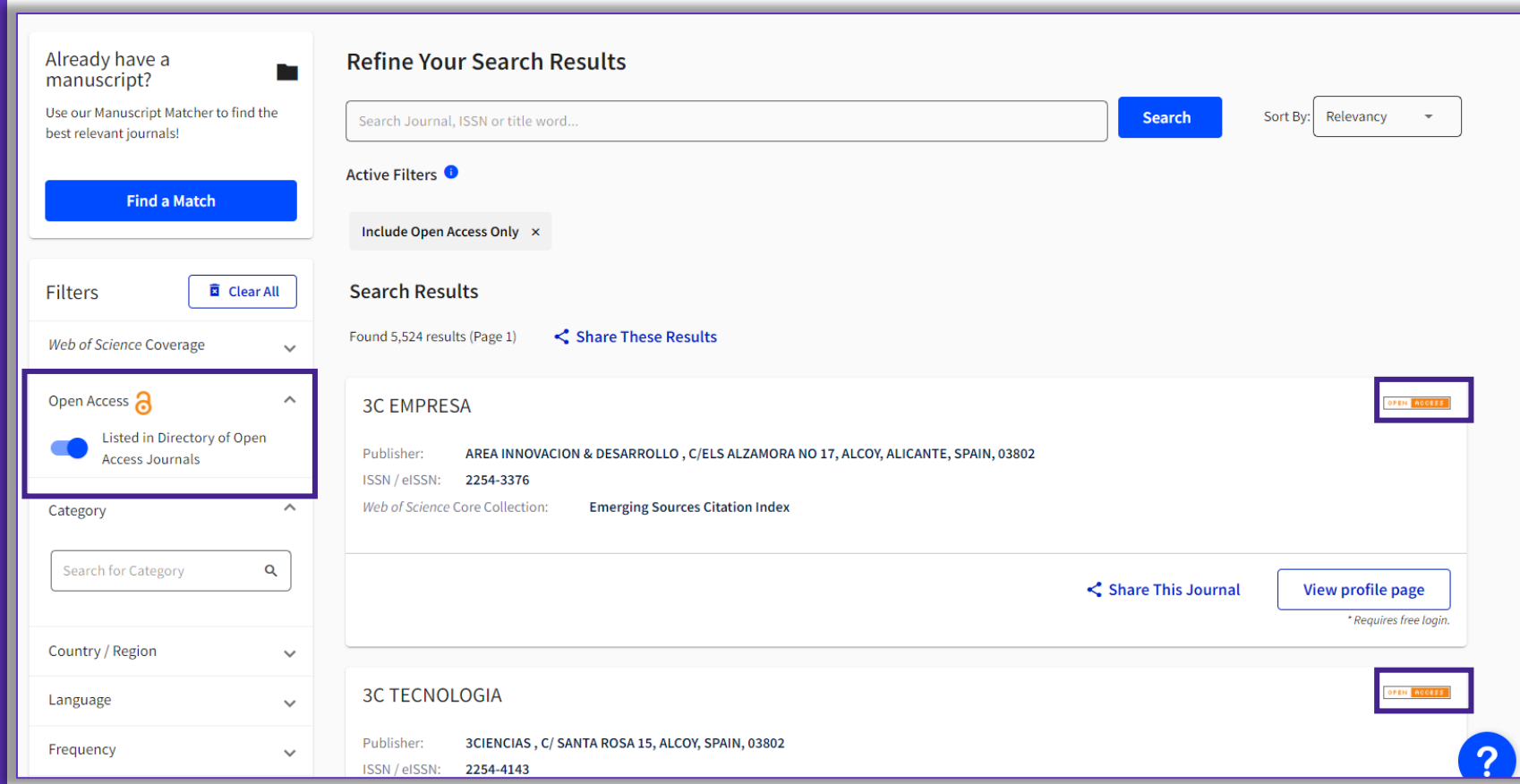
Master Journal List

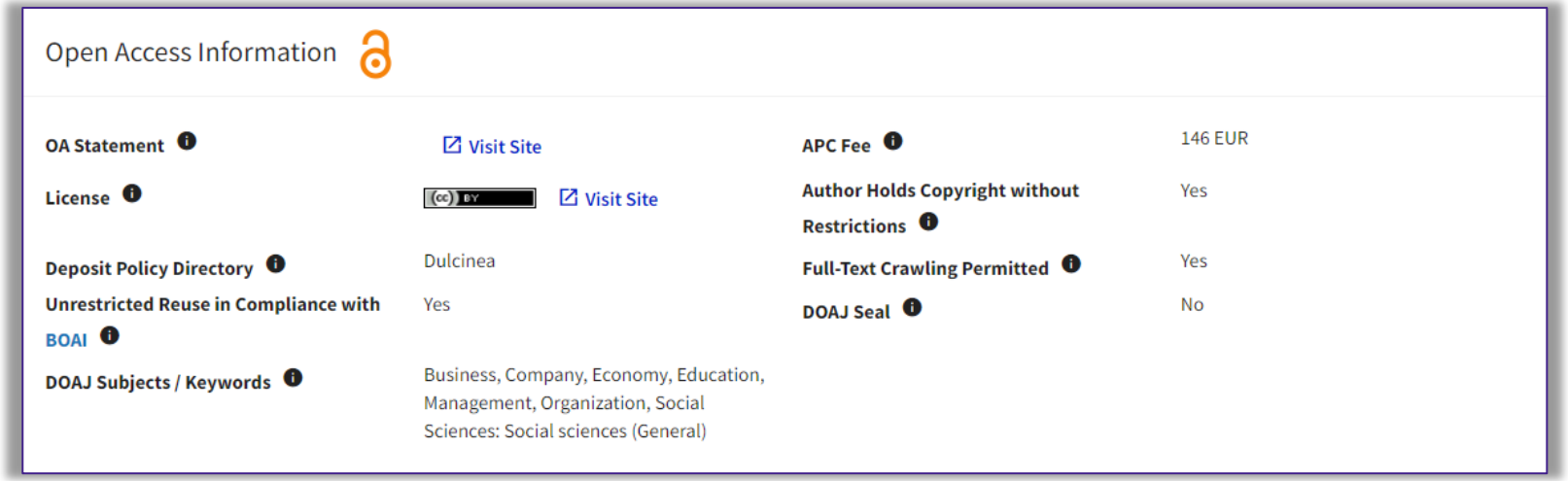
The Master Journals List with added wide range of search filters enable users to quickly navigate 24,000+ journals across 254 subject disciplines.

Open Access status based upon Directory of Open Access Journals is also available.

Journal profile pages provide a more comprehensive view of a journal, with information on journal metrics, peer review details, **open access** information, and more.

Clarivate™





InCites B&A

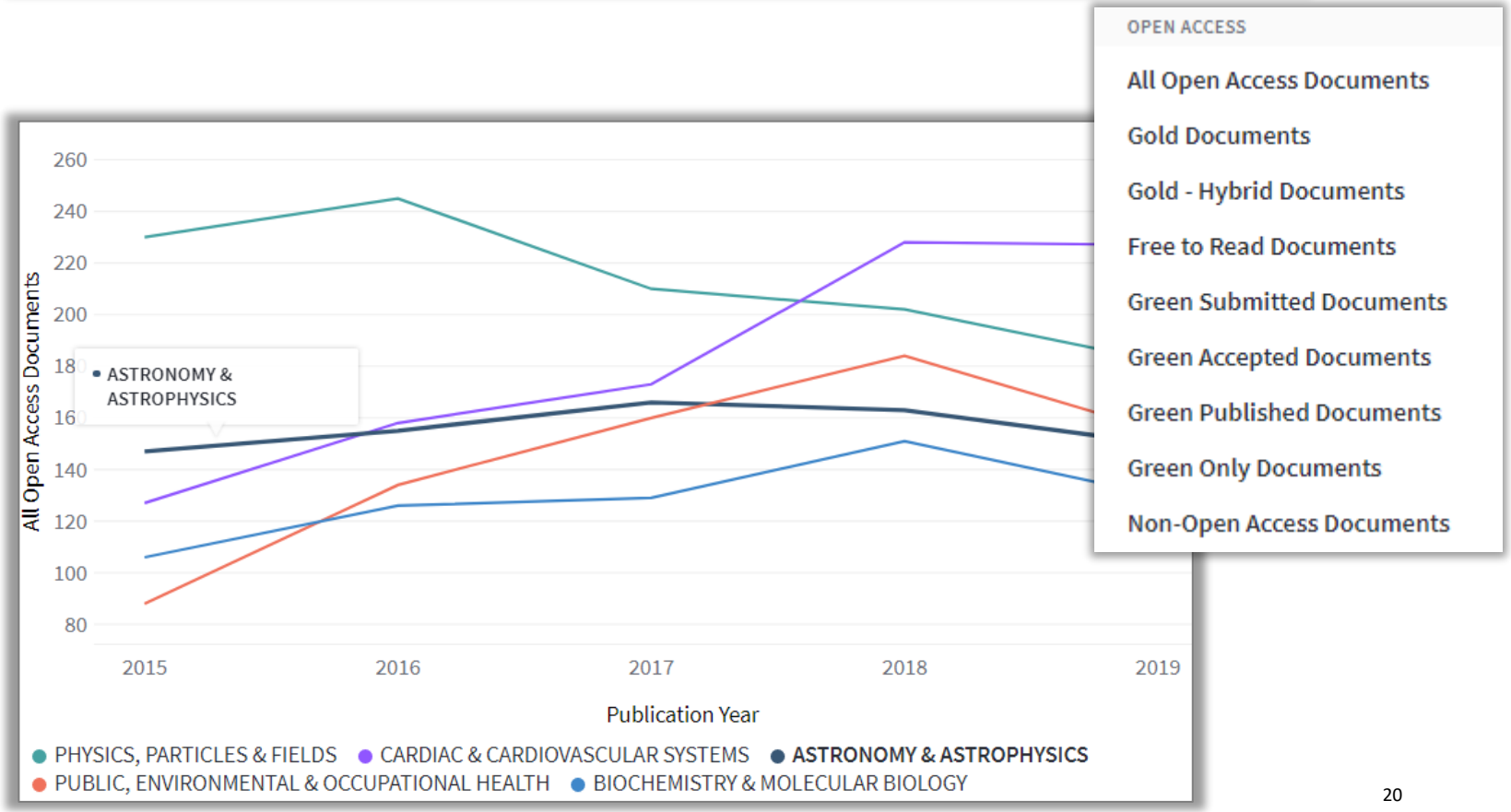
Open Access status available across the Web of Science platform, is also included in InCites, with **18 indicators**.

This makes it possible to analyse Open Access of all types: Gold or Free-to-read (from a publisher's website) and Green (e.g., author self-archived in a repository).

OA Filters and new **Visualizations** are also available.

The Open Access data is included in **exports** and are in the **APIs**.

Research Area	Rank	Green Published Documents	Green Accepted Documents	DOAJ Gold Documents	Other Gold Documents
PHYSICS, PARTICLES & FIELDS	1	895	973	663	234
CARDIAC & CARDIOVASCULAR SYSTEMS	2	426	614	113	223
ASTRONOMY & ASTROPHYSICS	3	499	700	161	283
PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH	4	442	575	247	184



Publons

Over the past 2 years Publons has linked up with a number of publishers, to put into place the first automated, scalable **transparent peer review** workflow.

The model…

Is scalable and robust

Requires minimal work from the publisher

Is a simple process for researchers

Provides reviewers, authors and editors a 360° view of their contribution

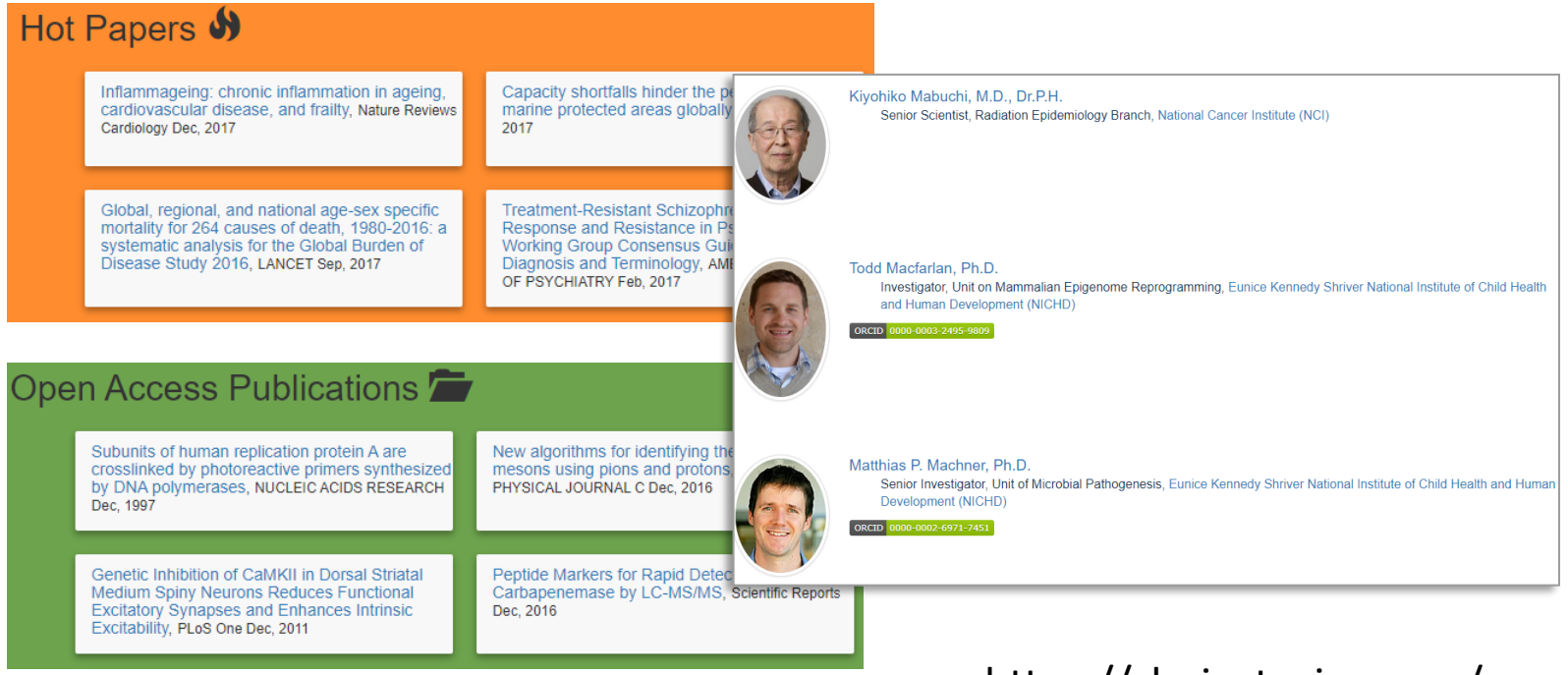
Is GDPR compliant

VIVO

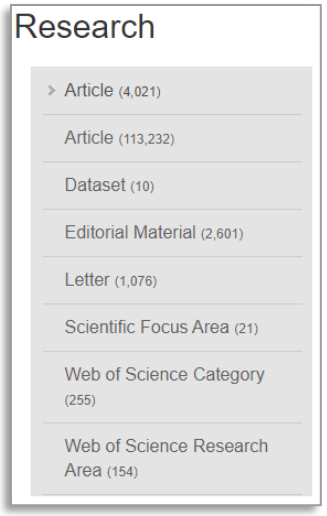
Research producing organisations can publicly and openly display their contributions using research portals partly fed by Web of Science data.

Research portals can be built by organisations, or can be open source, such as VIVO.

The Web of Science group is a certified VIVO partner.



https://clarivatevivo.com/

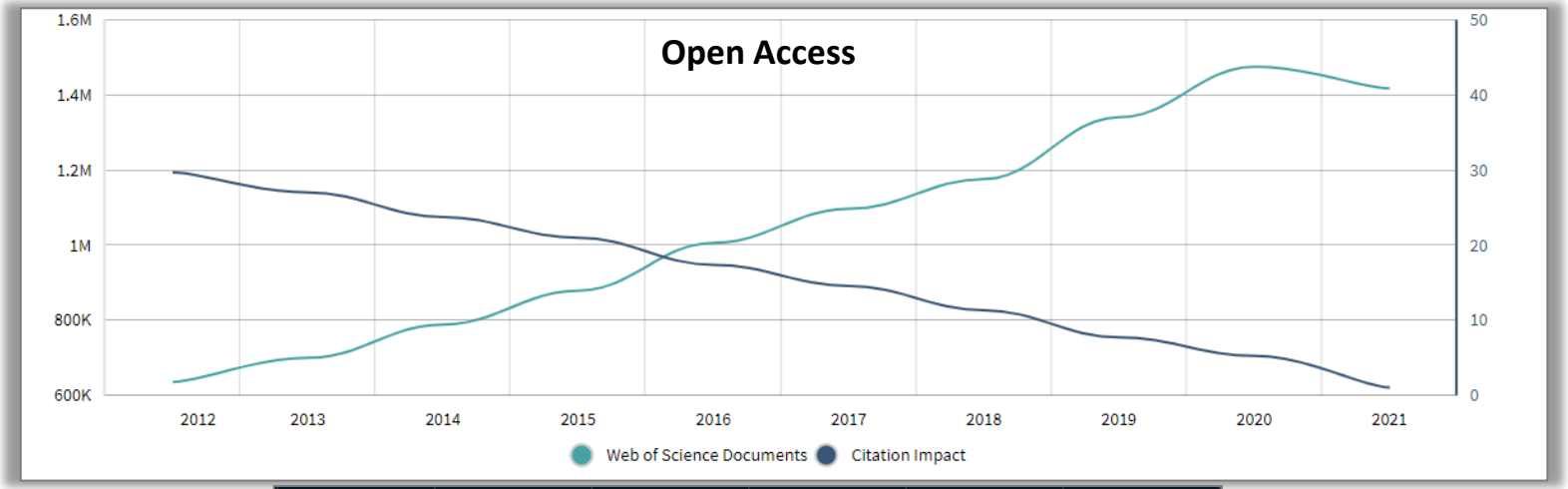


OA publications Impact

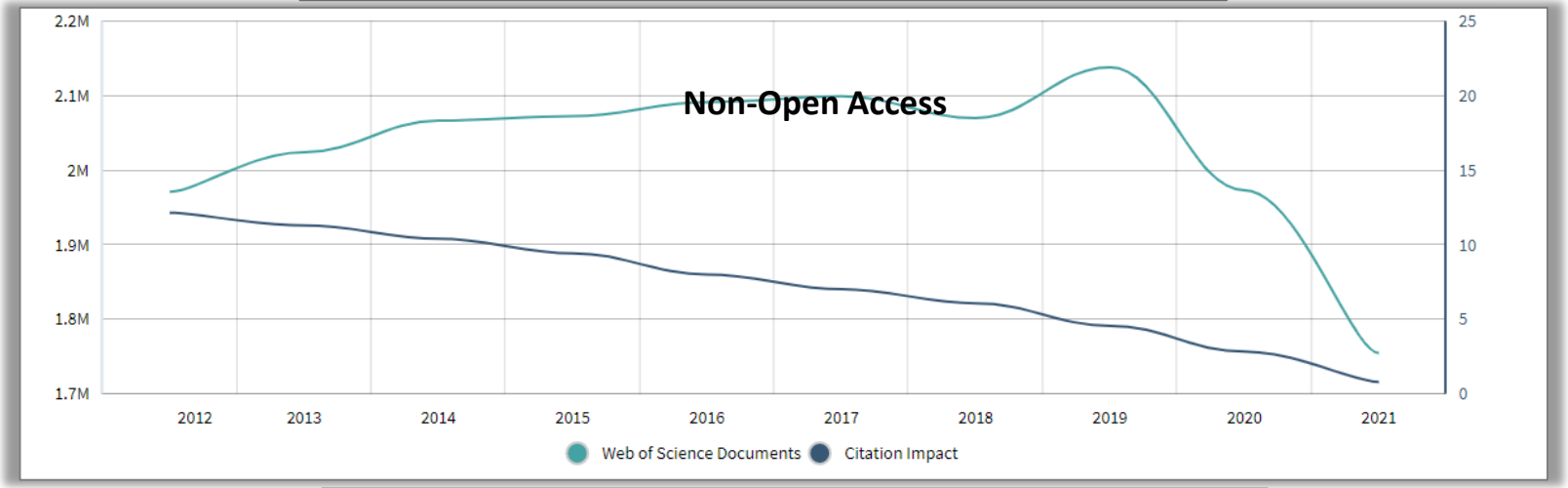
Number of publications in **Open Access** mode is constantly increasing. In 2021 in Web of Science there was **44.7%** papers tagged as OA documents with in that **26%** was marked as Gold OA.

Publishing in Open Access correlates with higher Citation Impact. Average numer of citations per document published between 2012-2021 equals 13.5 with Normalized Citation Impact 1.32

Same set of indicators for non- open access publiscation has lower values of Citation Impact 7.37 and CNCI 0.83



Web of Science Documents	Times Cited	Citation Impact	Category Normalized Citation Impact	% Documents Cited	% International Collaborations
10,527,699	142,172,533	13.5	1.32	75.48%	27.21%



Web of Science Documents	Times Cited	Citation Impact	Category Normalized Citation Impact	% Documents Cited	% International Collaborations
20,267,886	149,411,456	7.37	0.83	55.44%	15.66%

Indicators: Citation Impact,Web of Science Documents.**Time Period**:2012-2021. **Schema**:GIPP. **Open Access**:Non-Open Access. **Research Area**:OVERALL. **Dataset**: InCites Dataset

InCites dataset updated Mar 4, 2022. Includes Web of Science content indexed through Jan 31, 2022.Export Date: Mar 14, 2022.

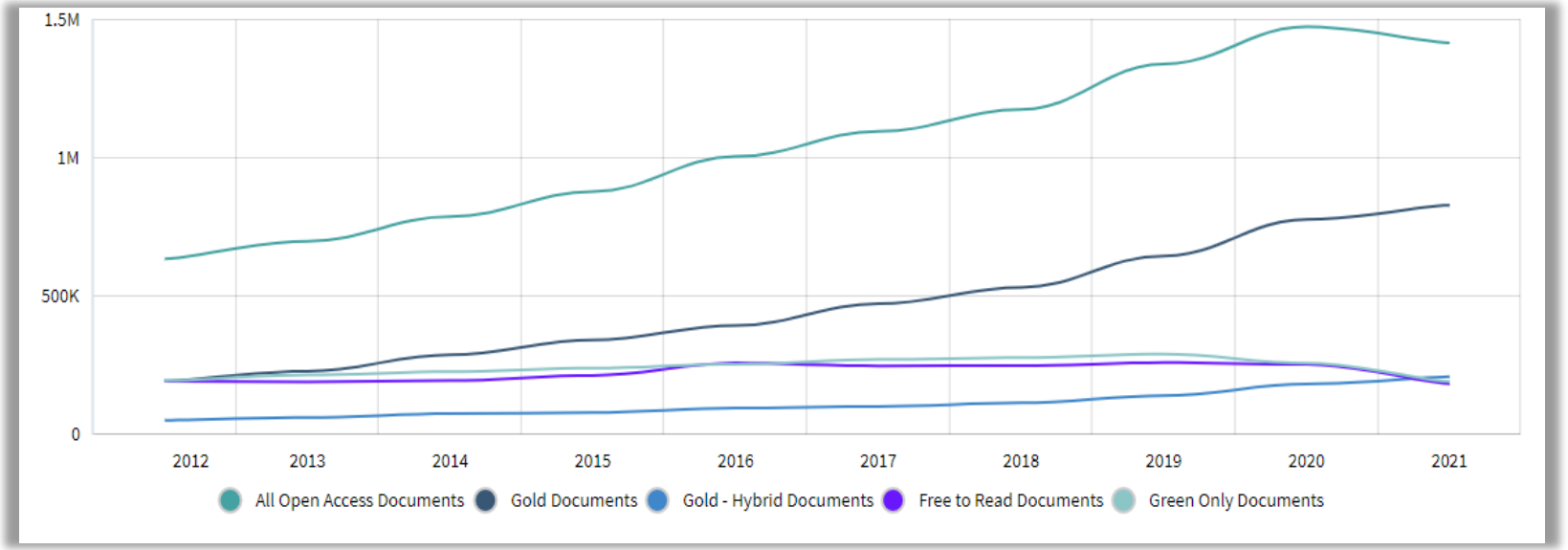
Clarivate™

Trend analysis for various types of Open Access

The Open Access information in Web of Science and InCites contains all types of Open Access for a given publication.

This new visualisation in InCites allows to assess and compare the OA types and output over time.

With InCites wide indicators menu you can assess which OA model is the most popular and impactful.



	% Documents Cited	Citation Impact	% International Collaborations	Category Normalized Citation Impact
Total	62.29%	9.47	19.61%	0.97
Gold	72%	9.13	23.40%	0.9
Gold Hybrid	79.47%	16.53	33.70%	1.45
Green Only	86.33%	18.76	35.14%	1.49
Non-Open Access	55.44%	7.37	15.66%	0.83

Indicators: All Open Access Documents,Gold Documents,Gold - Hybrid Documents,Free to Read Documents,Green Only Documents.**Time Period**:2012-2021. **Schema**:Web of Science. **Dataset**: InCites Dataset

InCites dataset updated Mar 4, 2022. Includes Web of Science content indexed through Jan 31, 2022.Export Date: Mar 15, 2022.

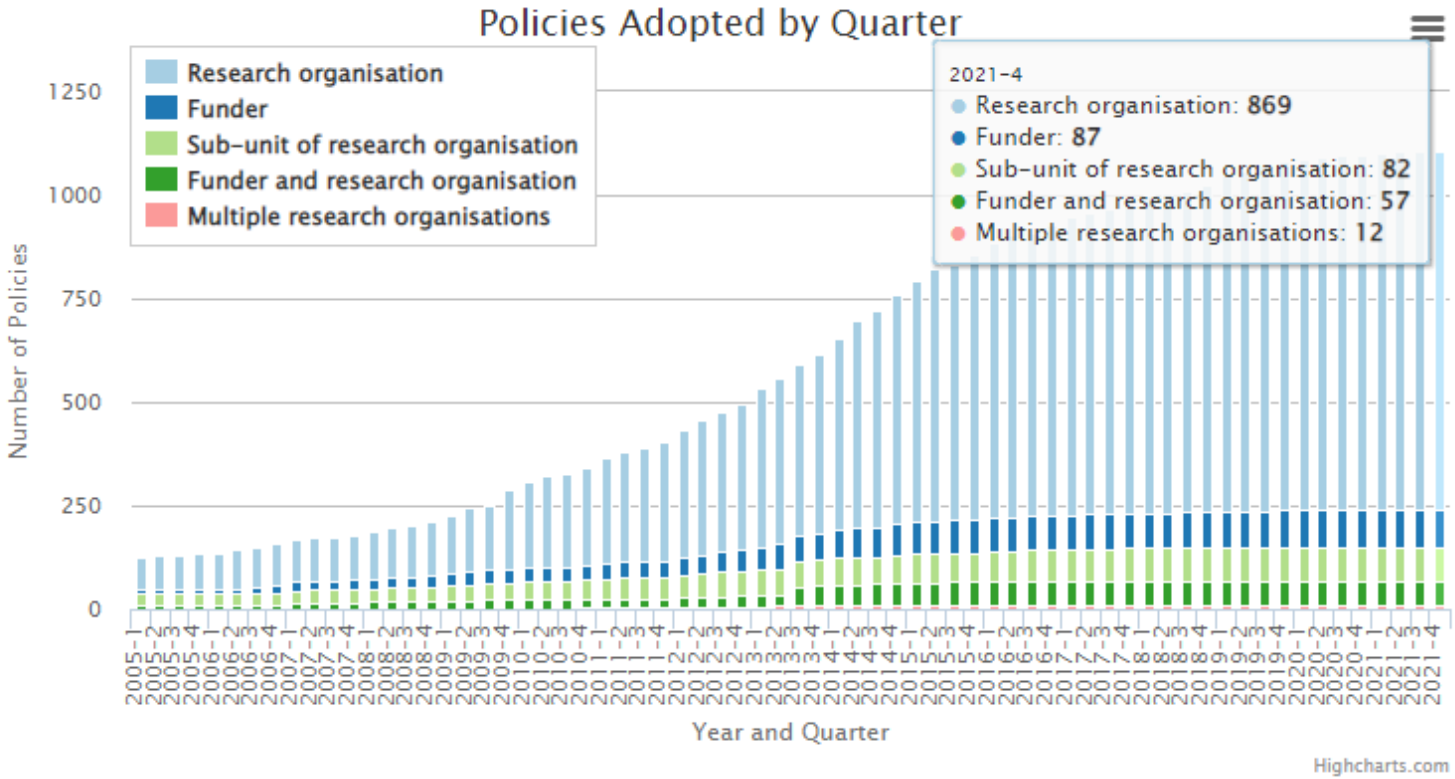
Clarivate™

Global Open Science Initiatives

Open Access Mandates

Open Access (OA) mandates generally come from one of two directions: some are imposed by funders and others are imposed by authors' institutions.

The Registry of Open Access Repository Mandates and Policies (ROARMAP) is a searchable international registry charting the growth of open access mandates and policies adopted by universities, research institutions and research funders that require or request their researchers to provide open access to their peer-reviewed research article output by depositing it in an open access repository.



http://roarmap.eprints.org//

ROARMAP
Registry of Open Access Repository Mandates and Policies

Clarivate™

Funders and Open Access – Plan S

Supported by cOAlition S, an international consortium of research funding and performing organizations.

Plan S requires that, from 2021, scientific publications that result from research funded by public grants must be published in compliant Open Access journals or platforms.

Open Access is Foundational to the Scientific Enterprise

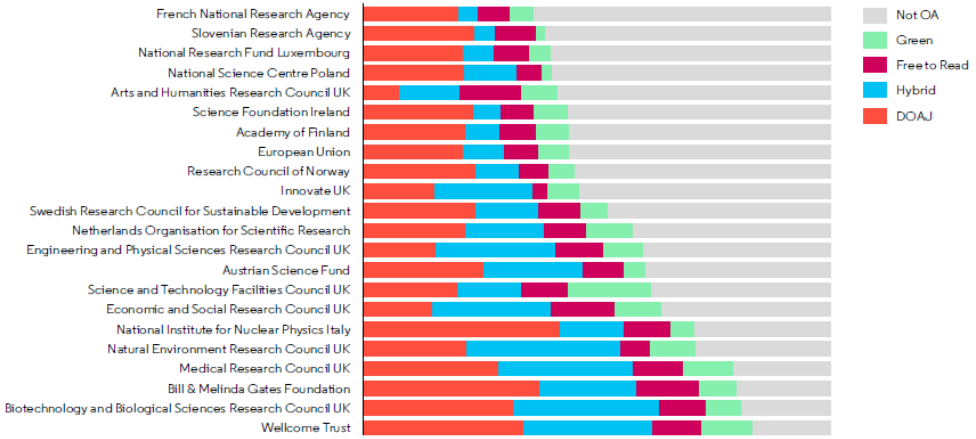
https://www.coalition-s.org/

Funder and Open Access – Plan S

Under Plan S, some European countries would publish more than 40% of their output as OA. This could reach 50% where the national funder is also a Plan S supporter. About 19% of European international collaborative papers are supported by Plan S funders and therefore involve non-Plan S researchers.

The USA is (in absolute terms) the second largest producer of papers that acknowledge Plan S funding and a high proportion of some institutions' output is Plan S supported. But the USA government has yet to endorse the plan

Funding Agency	Web of Science Documents	% All Open Access Documents	% Gold Documents	% Gold - Hybrid Documents	% Green Only Documents	% Free to Read Documents	% Non-Open Access Documents
Baseline for All Items	**9,681,466**	**46.43%**	**16.8%**	**5.37%**	**14.49%**	**9.77%**	**53.57%**
National Natural Science Foundation of China (NSFC)	**2,253,698**	28.92%	17.5%	2.49%	4.4%	4.53%	71.08%
United States Department of Health & Human Services	**1,326,113**	84.1%	17.17%	6.16%	39.63%	21.14%	15.9%
National Institutes of Health (NIH) - USA	**1,294,447**	84.93%	17.24%	6.2%	40.22%	21.27%	15.07%
European Commission	**971,945**	62.41%	18.11%	10.34%	22.14%	11.83%	37.59%
National Science Foundation (NSF)	**696,927**	55.82%	11.17%	8.99%	20.3%	15.36%	44.18%
Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT)	**505,207**	46.67%	18.53%	5.24%	10.88%	12.01%	53.33%
UK Research & Innovation (UKRI)	**428,778**	73.7%	16.89%	18.97%	25.1%	12.75%	26.3%
Japan Society for the Promotion of Science	**426,496**	47.23%	18.75%	5.45%	11.26%	11.77%	52.77%
Grants-in-Aid for Scientific Research (KAKENHI)	**345,144**	47.38%	18.82%	5.36%	11.21%	11.99%	52.62%
German Research Foundation (DFG)	**307,750**	56.94%	19.53%	9.35%	16.79%	11.26%	43.06%



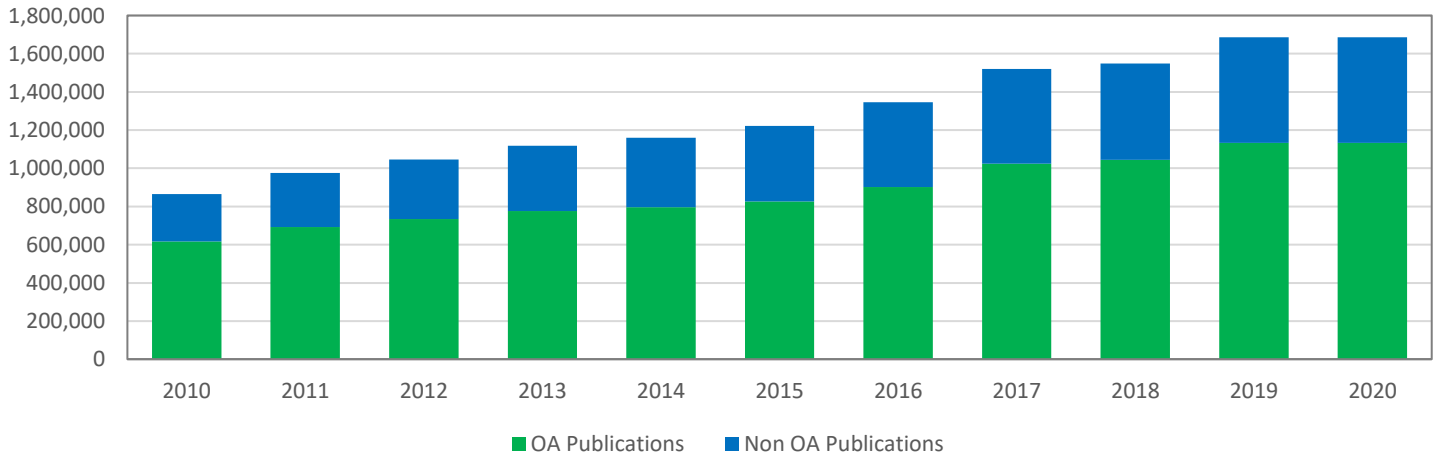
The proportions of papers published in 2017 that acknowledge one or more funding organisations that have indicated support for Plan S grouped by Open Access status.

Open Access in Funded Research

Funders are actively involved in the field of Open Access which is reflect in their funding programs and the OA publications increase.

For 1294 Top Funding Agencies average level of OA documents in last 10 years is 46.43% which is 5% higher than for total publications.

Funding Agency	Web of Science Documents	% All Open Access Documents	% Gold Documents	% Gold - Hybrid Documents	% Green Only Documents	% Free to Read Documents	% Non-Open Access Documents
Baseline for All Items	**9,681,466**	**46.43%**	**16.8%**	**5.37%**	**14.49%**	**9.77%**	**53.57%**
National Natural Science Foundation of China (NSFC)	2,253,698	28.92%	17.5%	2.49%	4.4%	4.53%	71.08%
United States Department of Health & Human Services	1,326,113	84.1%	17.17%	6.16%	39.63%	21.14%	15.9%
National Institutes of Health (NIH) - USA	1,294,447	84.93%	17.24%	6.2%	40.22%	21.27%	15.07%
European Commission	971,945	62.41%	18.11%	10.34%	22.14%	11.83%	37.59%
National Science Foundation (NSF)	696,927	55.82%	11.17%	8.99%	20.3%	15.36%	44.18%
Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT)	505,207	46.67%	18.53%	5.24%	10.88%	12.01%	53.33%
UK Research & Innovation (UKRI)	428,778	73.7%	16.89%	18.97%	25.1%	12.75%	26.3%
Japan Society for the Promotion of Science	426,496	47.23%	18.75%	5.45%	11.26%	11.77%	52.77%
Grants-in-Aid for Scientific Research (KAKENHI)	345,144	47.38%	18.82%	5.36%	11.21%	11.99%	52.62%
German Research Foundation (DFG)	307,750	56.94%	19.53%	9.35%	16.79%	11.26%	43.06%



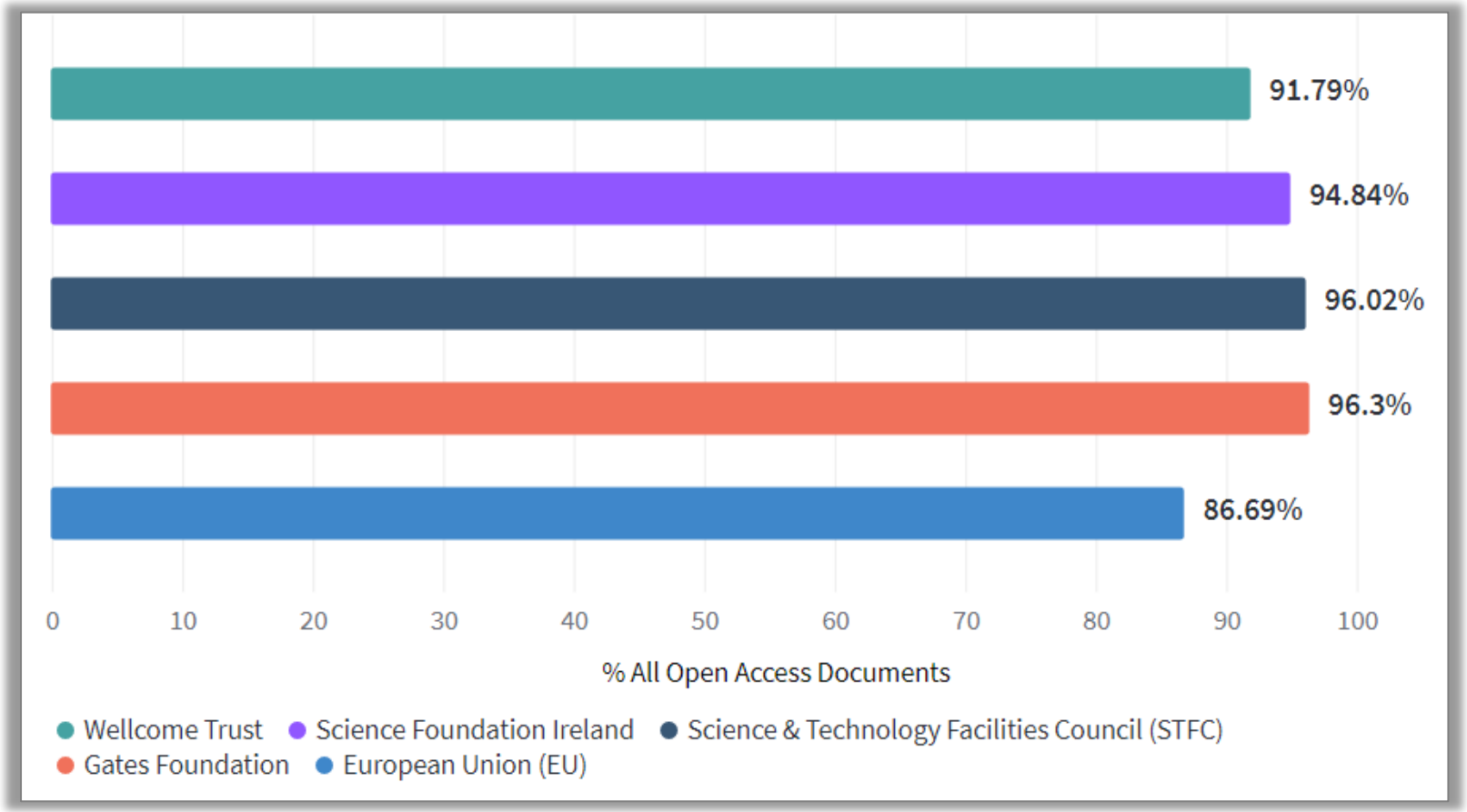
Clarivate™

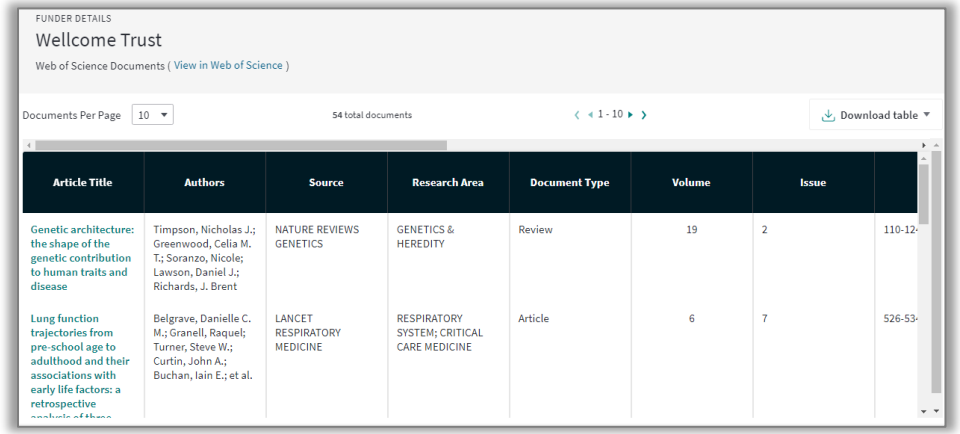
Funder Open Access requirements

A lot of funders are stipulating that any publications are made Open Access. Some need DOAJ, some Green, others any type.

Monitoring compliance and reporting back to the funder may be crucial to securing future awards.

Here five of the funders are analysed and non-compliant publications are traced back to the awarded grants.




FUNDER DETAILS

Wellcome Trust

Web of Science Documents (View in Web of Science)

Documents Per Page 10 | 54 total documents | 1 - 10 | Download table

Article Title	Authors	Source	Research Area	Document Type	Volume	Issue	
Genetic architecture: the shape of the genetic contribution to human traits and disease	Timpson, Nicholas J.; Greenwood, Celia M. T.; Soranzo, Nicole; Lawson, Daniel J.; Richards, J. Brent	NATURE REVIEWS GENETICS	GENETICS & HEREDITY	Review	19	2	110-12
Lung function trajectories from pre-school age to adulthood and their associations with early life factors: a retrospective	Belgrave, Danielle C. M.; Granell, Raquel; Turner, Steve W.; Curtin, John A.; Buchan, Iain E.; et al.	LANCET RESPIRATORY MEDICINE	RESPIRATORY SYSTEM; CRITICAL CARE MEDICINE	Article	6	7	526-53

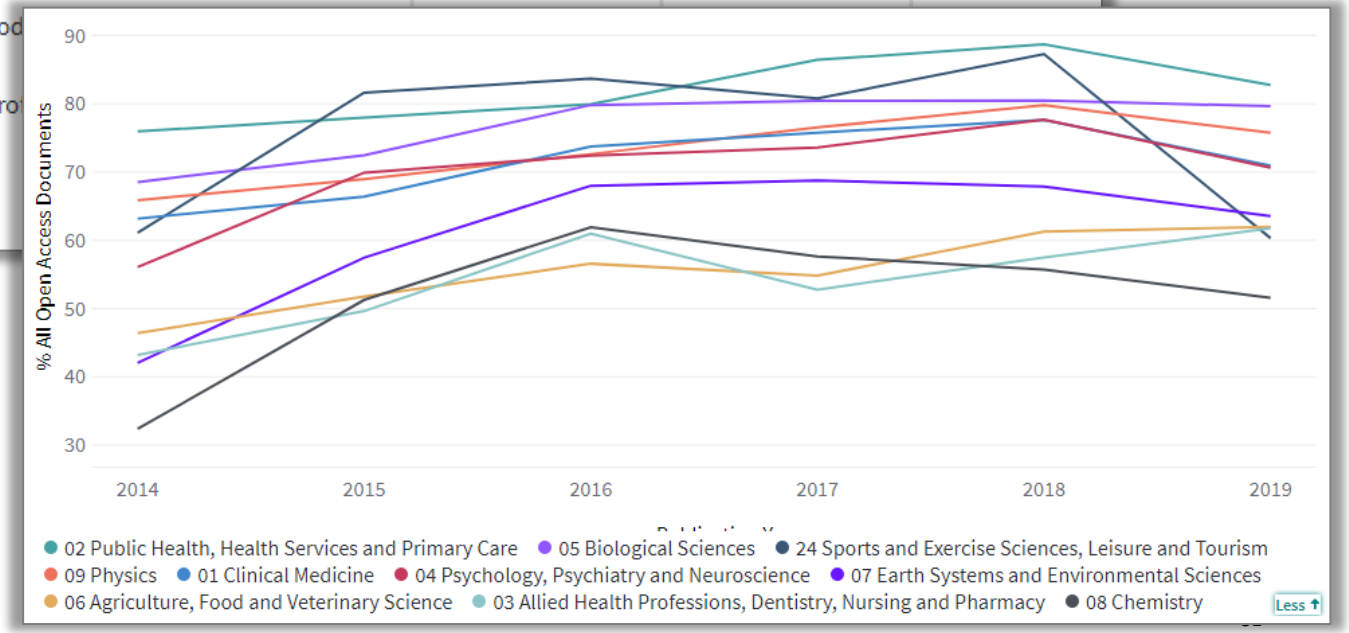
Funding Agency	Show details	Grant Number
Natural Sciences and Engineering Research Council of Canada		
Canadian Institutes of Health Research (CIHR)		
Wellcome Trust		WT104125MA

REF2021 Units of Assessment Open Access analysis

As there is an Open Access element to the REF2021 submission, which will probably be even greater in the next cycle, it is important to know which UoAs are likely to be an issue.

Here an organisation's output in each of the UoA is measured for Open Access content.

Research Area	Rank	Web of Science Documents	% All Open Access Documents
02 Public Health, Health Services and Primary Care	1	2,042	82.57%
05 Biological Sciences	2	3,352	77.15%
24 Sports and Exercise Sciences, Leisure and Tourism	3	322	75.16%
09 Physics	4	2,846	73.47%
01 Clinical Medicine	5	4,821	71.62%
04 Psychology, Psychiatry and Neuroscience	6	2,356	70.37%
07 Earth Systems and Environmental Sciences	7	3,054	61.56%
06 Agriculture, Food			
03 Allied Health Pro... Pharmacy			
08 Chemistry			



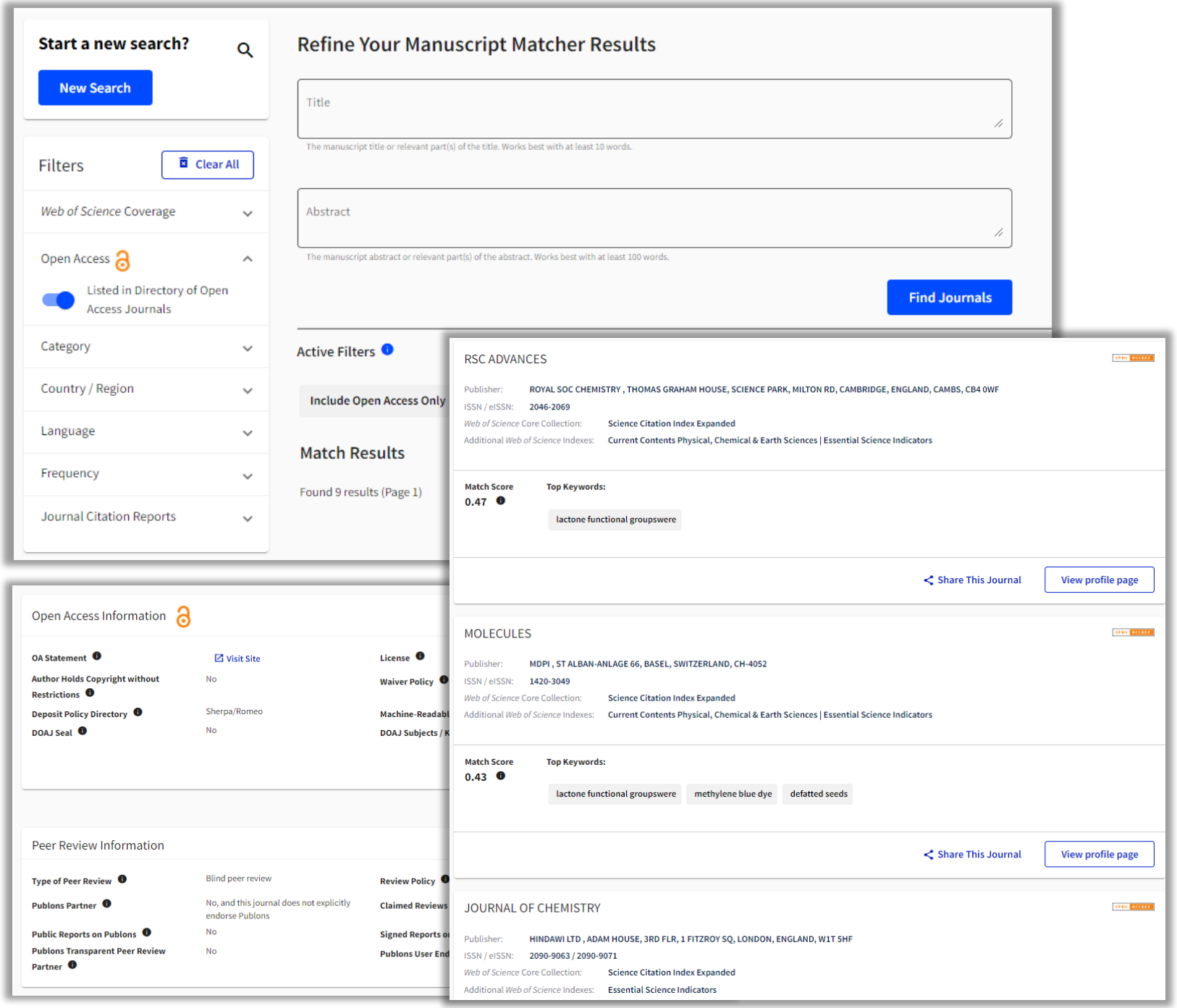
Clarivate™

Finding OA journals for manuscript submission

Manuscript Matcher helps you find the most related journals for your manuscript. It works best when your title has at least 10 words and your abstract has at least 100 words. Using this information, it will pull the most relevant keywords for matching.

Results can also be refined on Open Access Journal status.

Clarivate™

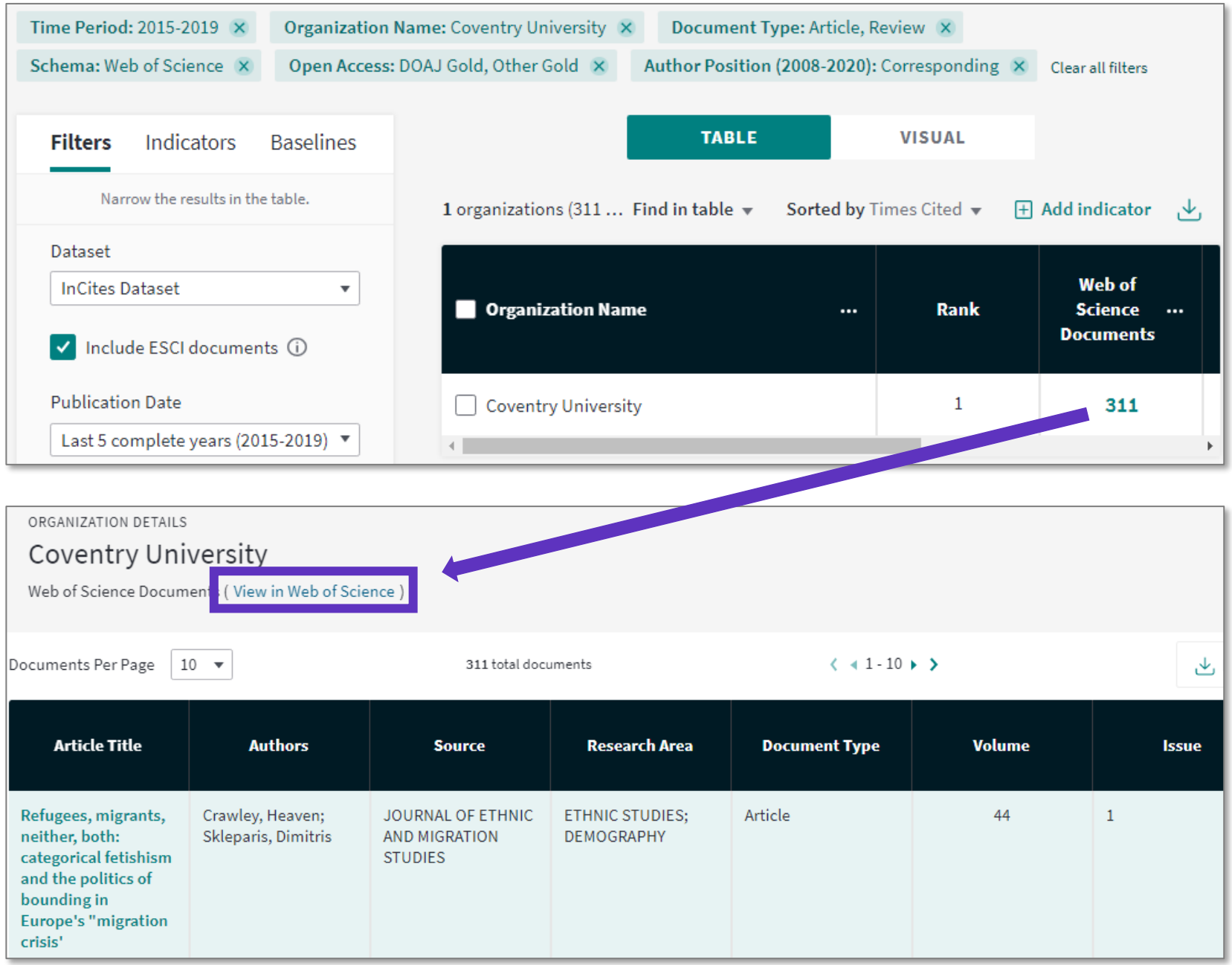


Example Use Case

Open Access usually involves **APC fees**.

Using the "**Corresponding Author Position**" in InCites, you can identify the publications that might have incurred fees.

Exporting these to **Web of Science** will enable the number of publications in each journal to be established.

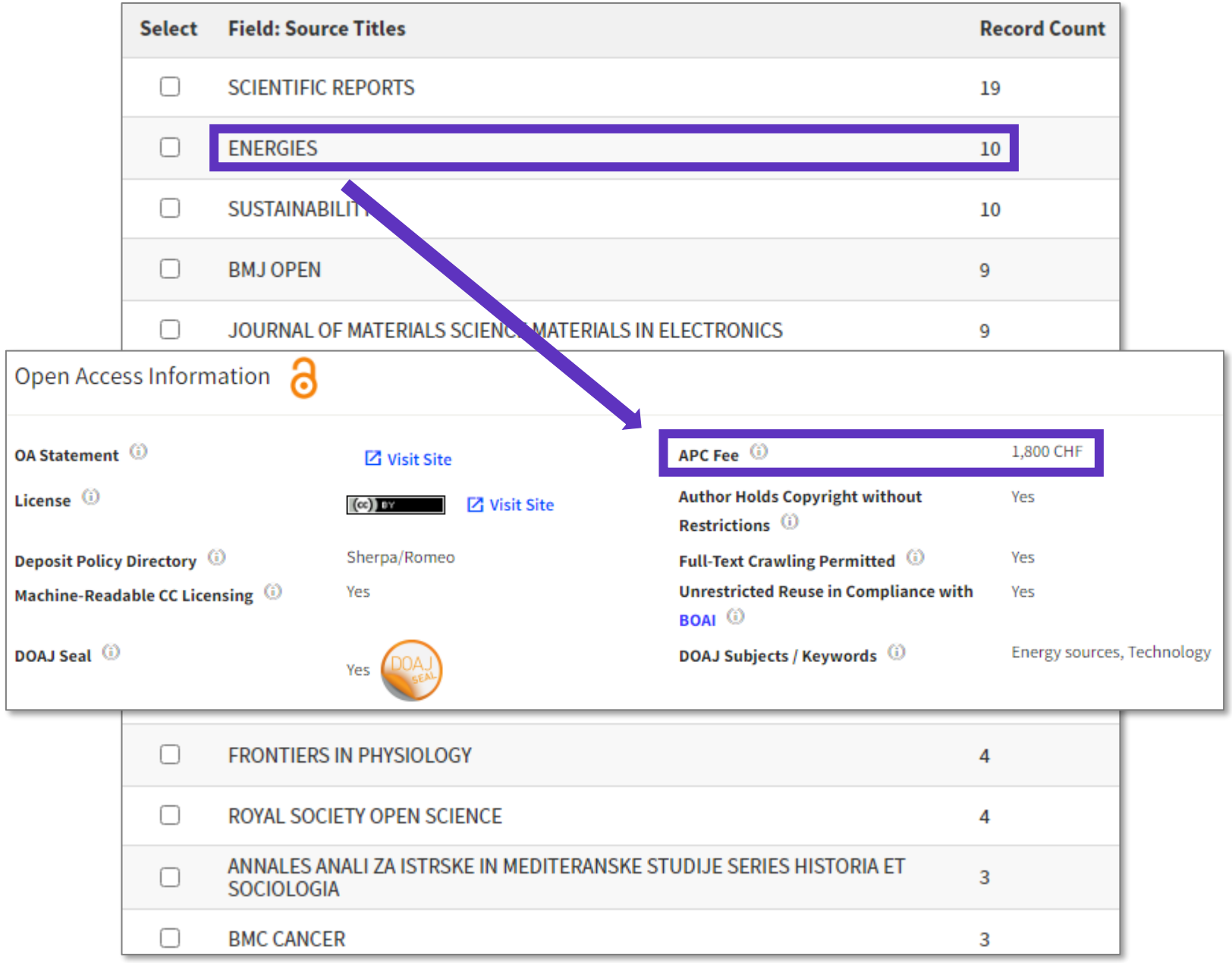


Example Use Case

Using **Analyze Results** in Web of Science, the journals and number of documents in them can be established (either from the visualization or the table).

Looking at the "**Open Access Information**" panel for each journal in the Master Journal List, provides the **APC fees**.

The **Analyze Results** table could be exported, to enable calculations on the data.

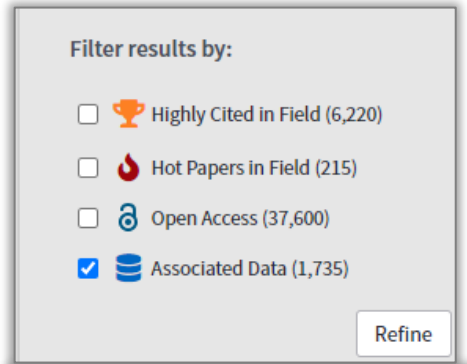


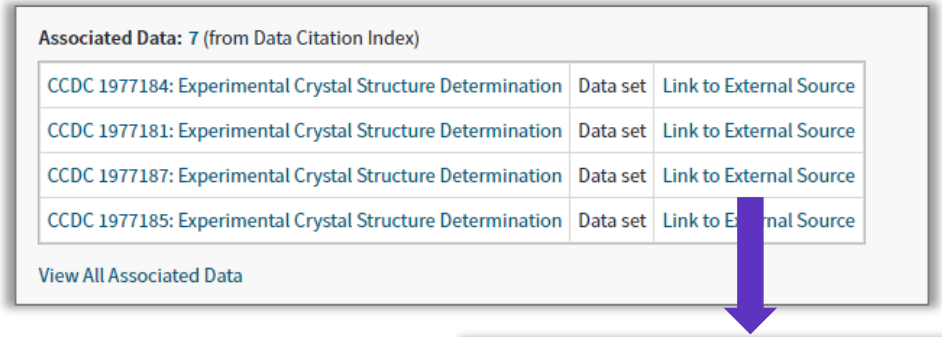
Data Management Plan - DMP

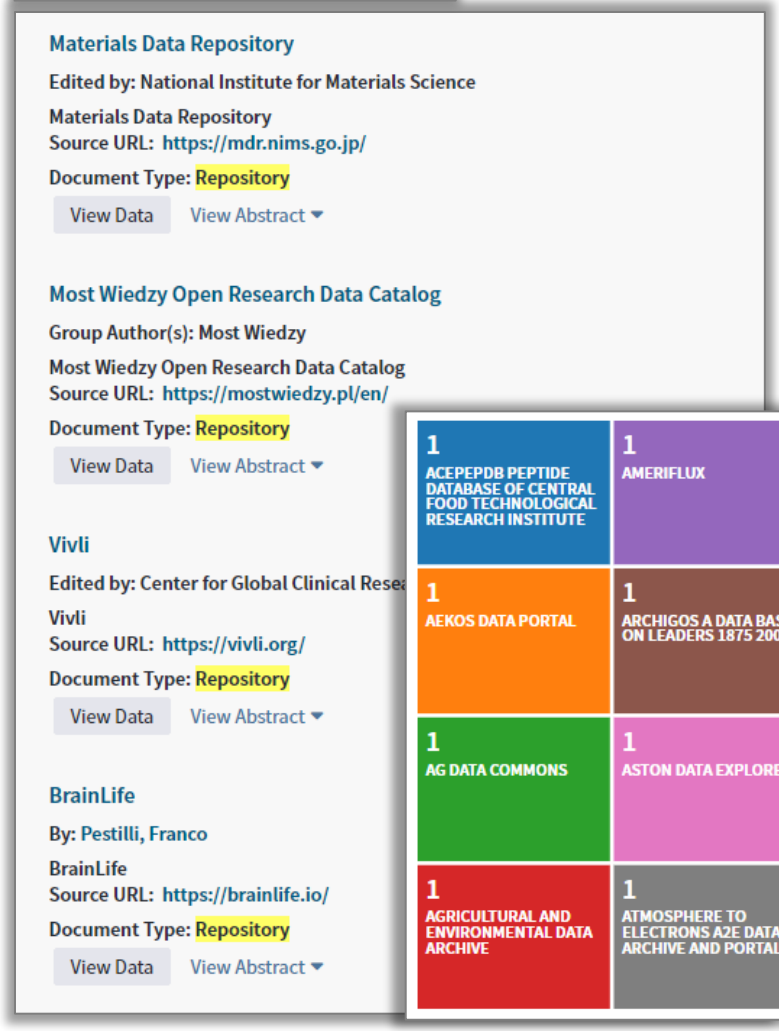
Many funding agencies require a DMP with every funding request. Each agency or directorate creates its own set of policies for data management.

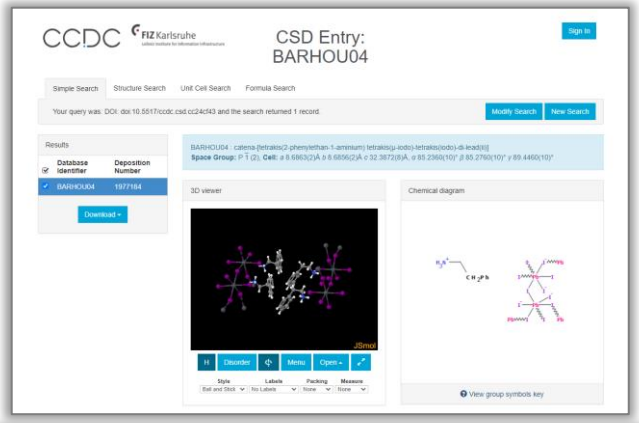
Open Repositories can be used at the end of your project to share and preserve your data.

Data Citation Index on Web of Science offers access to more than 400 open repositories which can be used in your DMP









Clarivate™

Can we help you?

If you subscribe to our tools, we can show you how to achieve what you need.

If you don't, our Professional Services team can work with you to produce specific reports.

These could be produced on a single occasion, or be a regular occurrence.

Clarivate™

Some examples that might be relevant:

- Trend analysis for all types of Open Access
- Funder Open Access conformity monitoring
- Publisher APC fees analysis
- REF2021 Units of Assessment Open Access check
- Performance of Open Access vs Subscription publication output
- Benchmarking Open Access output against other organisations

Useful, additional resources

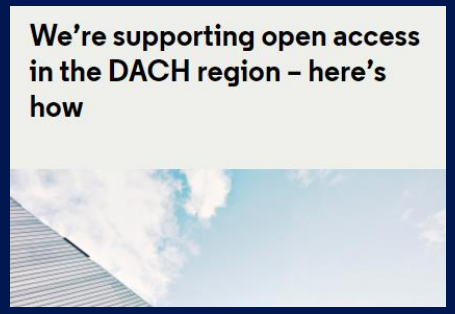
Blog article on Open Access in Funding here

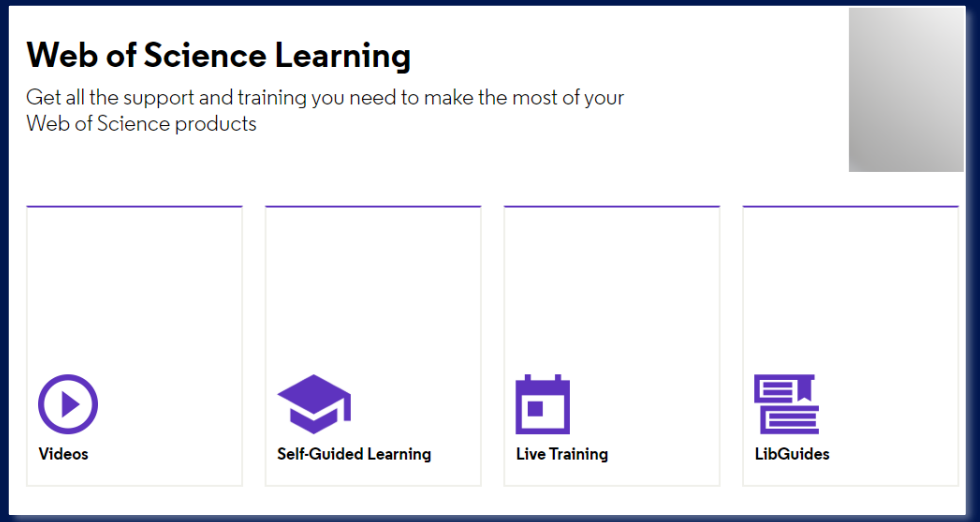
Open Access in DACH region article here

ISI Reports here

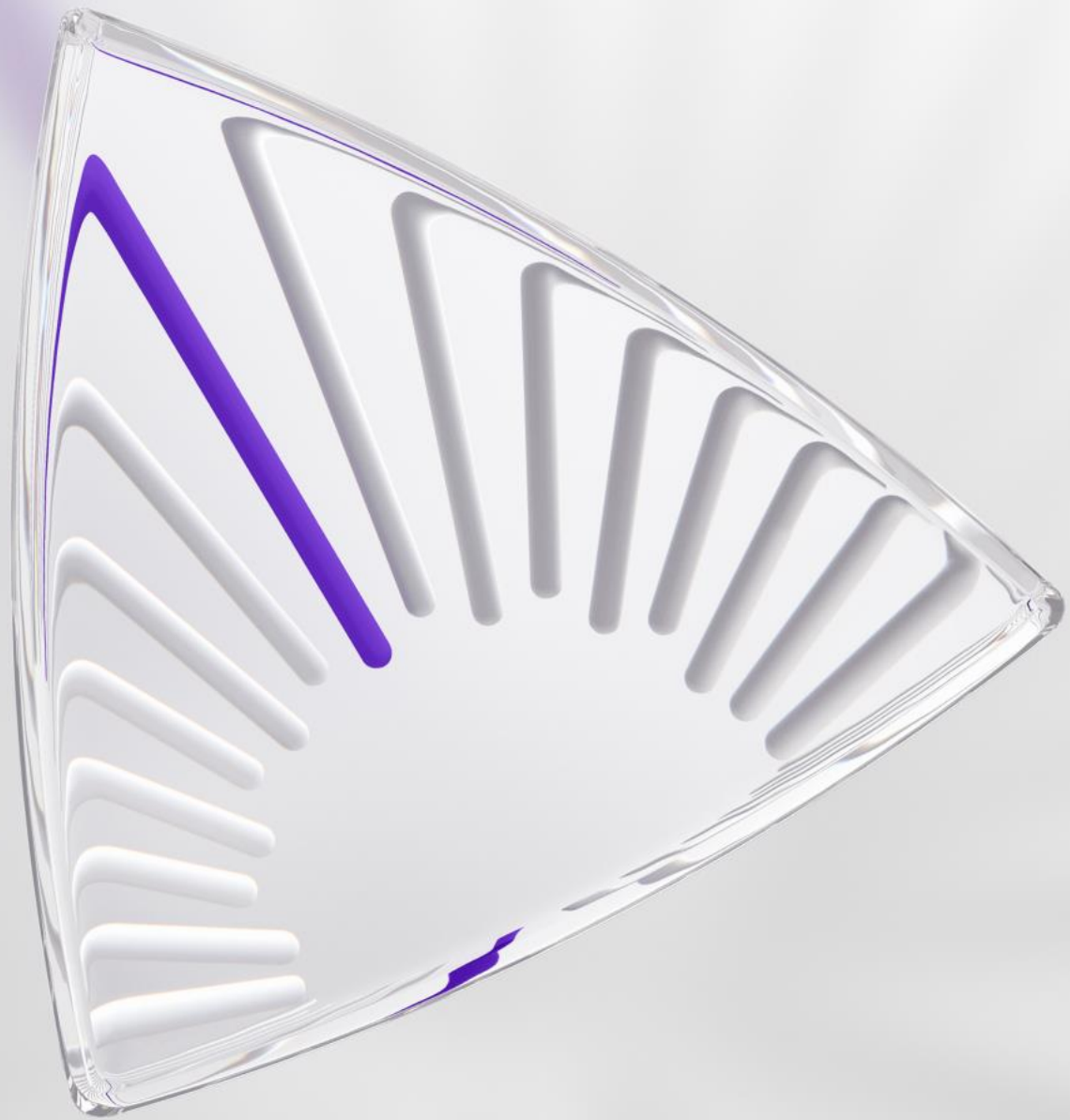
Web of Science Learning

Master Journal List





Köszönöm!



clarivate.com

© 2020 Clarivate. All rights reserved. Republication or redistribution of Clarivate content, including by framing or similar means, is prohibited without the prior written consent of Clarivate. Clarivate and its logo, as well as all other trademarks used herein are trademarks of their respective owners and used under license.