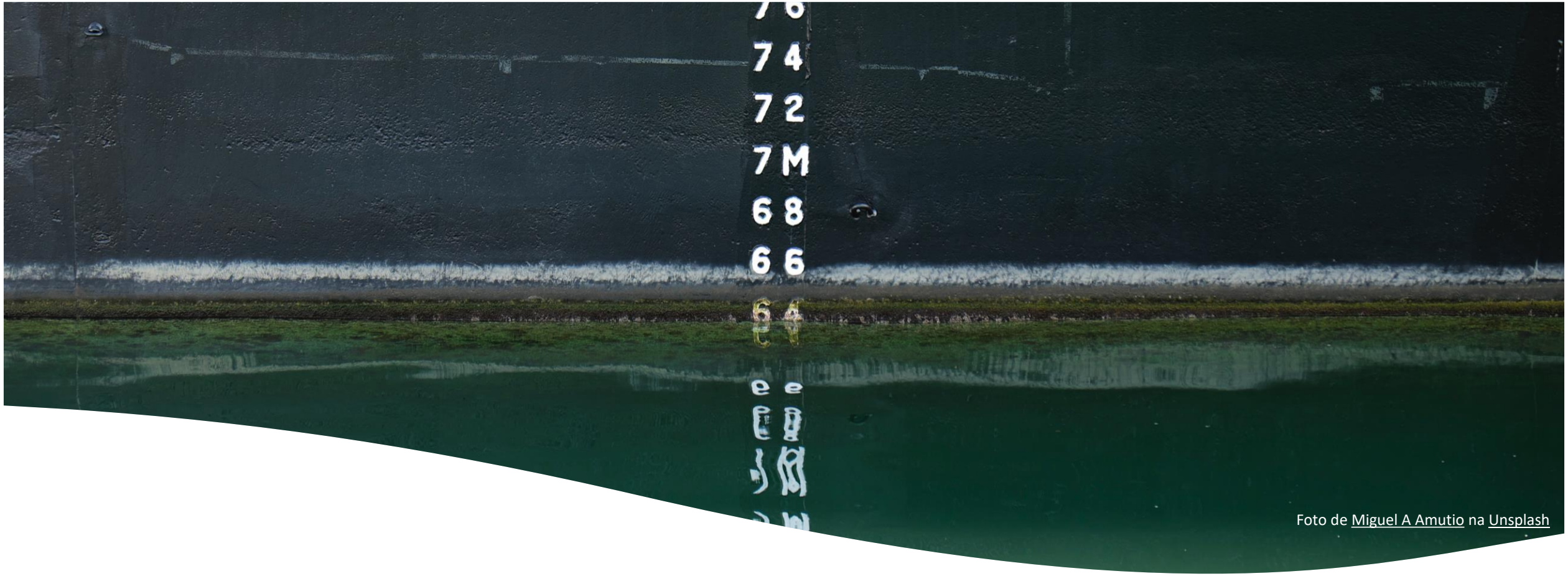


Foto de Miguel A Amutio na Unsplash

Journal Metrics

Journal Citations Reports & Scopus Sources

Cofinanciado por:

INSTITUTO POLITÉCNICO DE BRAGANÇA

POCH

PORTUGAL 2020

UNIÃO EUROPEIA
Fundo Social Europeu

- **Journal Metrics**
  - Journal Citations Reports – Clarivate Analytics
  - Scopus Sources – Elsevier

- **Open Science**

Journal of Citation Reports

Photo by Rob Curran on Unsplash

Researchers and institutions increasingly need filters and metrics to measure the impact of their work

The current reality of so-called "traditional publishing" involves submitting articles to journals indexed in peer-reviewed scientific databases

Journal Metrics

Journal metrics based on citation counts: have been the most widely used by the scientific community

are insufficient to assess the impact of a publication in academia

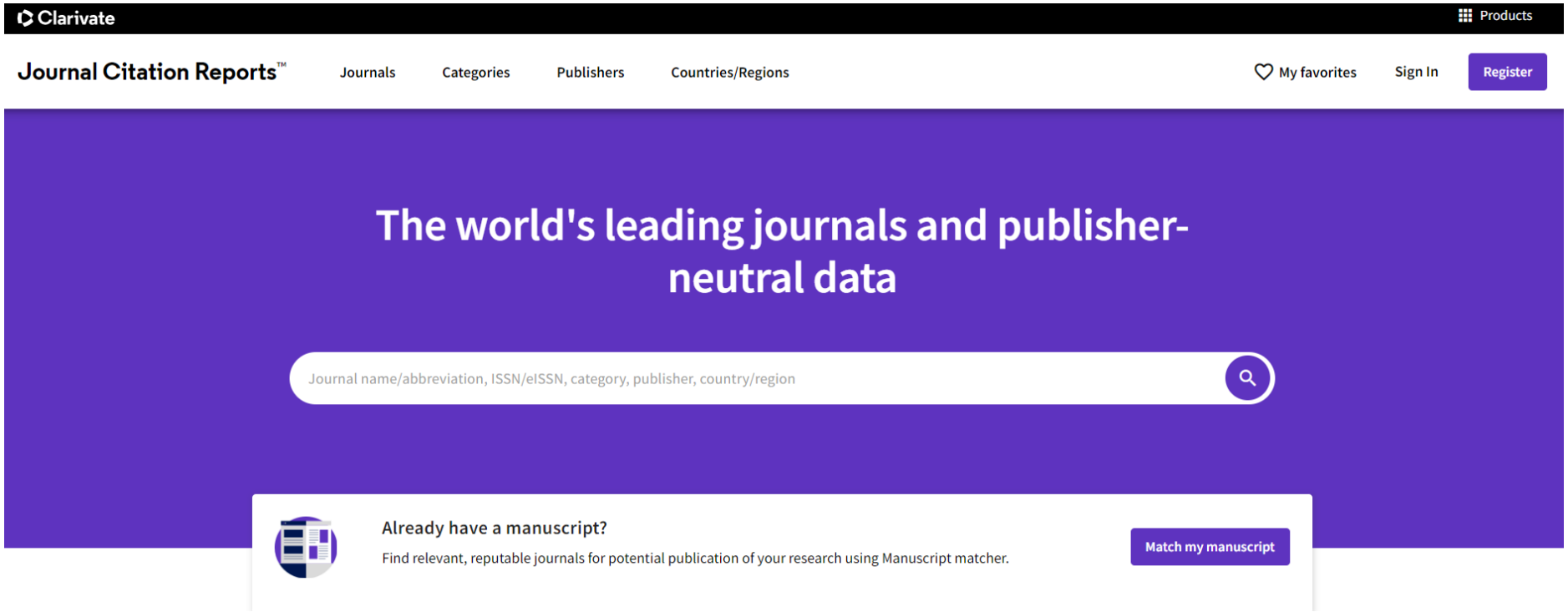
Journal Metrics

Journal metrics such as the impact factor should only apply to journals

Open science practices ---- methodologies for evaluating researchers based on indicators of the prestige of scientific journals should be avoided.

Journal of Citation Reports (Clarivate Analytics)

Acess



Journal of Citation Reports (Clarivate Analytics)

Title, issn or publisher search

Thematic categories list

Journal of Citation Reports (Clarivate Analytics)

- **Impact Factor | 5 Year Impact Factor**

- **Journal Citation Indicator (JCI)**

Journal of Citation Reports (Clarivate Analytics)

Journal Impact Factor

Created by Eugene Garfield, founder of ISI - Institute of Scientific Information, in a 1955 article published in Science.

Initially used only to determine which publications to include in the Science Citation Index (Web of Science). It has become the most widely used bibliometric indicator internationally.

Journal of Citation Reports (Clarivate Analytics)

Journal Impact Factor

is the average number of times articles from the journal published in the past 2 years have been cited in the JCR year. It is calculated by dividing the number of citations in the JCR year by the total number of articles published in the two previous years

Journal of Citation Reports (Clarivate Analytics)

Journal Impact Factor

- updated every year
- is based on citation data from Web of Science Core Collection (Clarivate Analytics)

Journal of Citation Reports (Clarivate Analytics)

Journal Impact Factor

It should be used with some caution

- The differences in the citation practices of the different subject areas
- The type of journal.
- **It is inappropriate to use a journal-level metric as a measure for individual researchers, institutions or articles.**

Journal of Citation Reports (Clarivate Analytics)

5-year Impact Factor

is the average number of times articles from the journal published in the past 5 years have been cited in the JCR year. It is calculated by dividing the number of citations in the JCR year by the total number of articles published in the 5 previous years

Journal of Citation Reports (Clarivate Analytics)

Quartiles

It allows a journal to be compared with others in its category, based on its Impact Factor.

Q1, Q2, Q3 and Q4

If a journal belongs to Q1, it means that it performs better than at least 75% of the journals in the same category.

Journal of Citation Reports (Clarivate Analytics)

Journal Citation Indicator (JCI) – criado em 2021

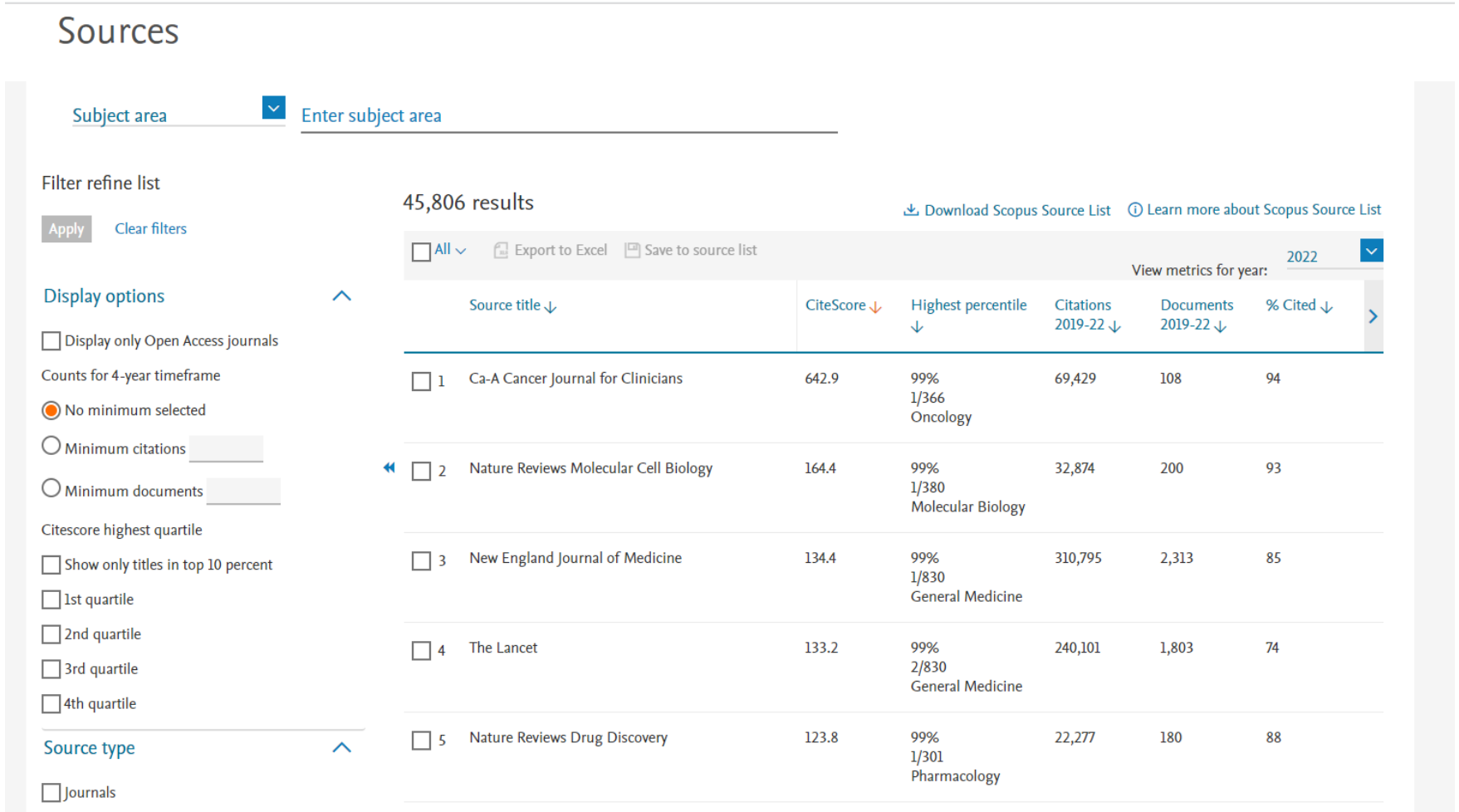
The average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period.
The average JCI in a category is 1

- Journals with a JCI of 1.5 have 50% more citation impact than the average in that category. It may be used alongside other metrics to help you evaluate journals

Scopus Sources

Photo by Chang Duong on Unsplash

Scopus Sources



Scopus Sources

Acess

- Title, issn or publisher search
- Thematic categories list

Scopus Sources

Scopus sources

CiteScore

Counts citations received in the previous 4 years published in the same time period (articles, reviews, conference papers, book chapters and data papers)

Scopus Sources

Scopus sources

CiteScore

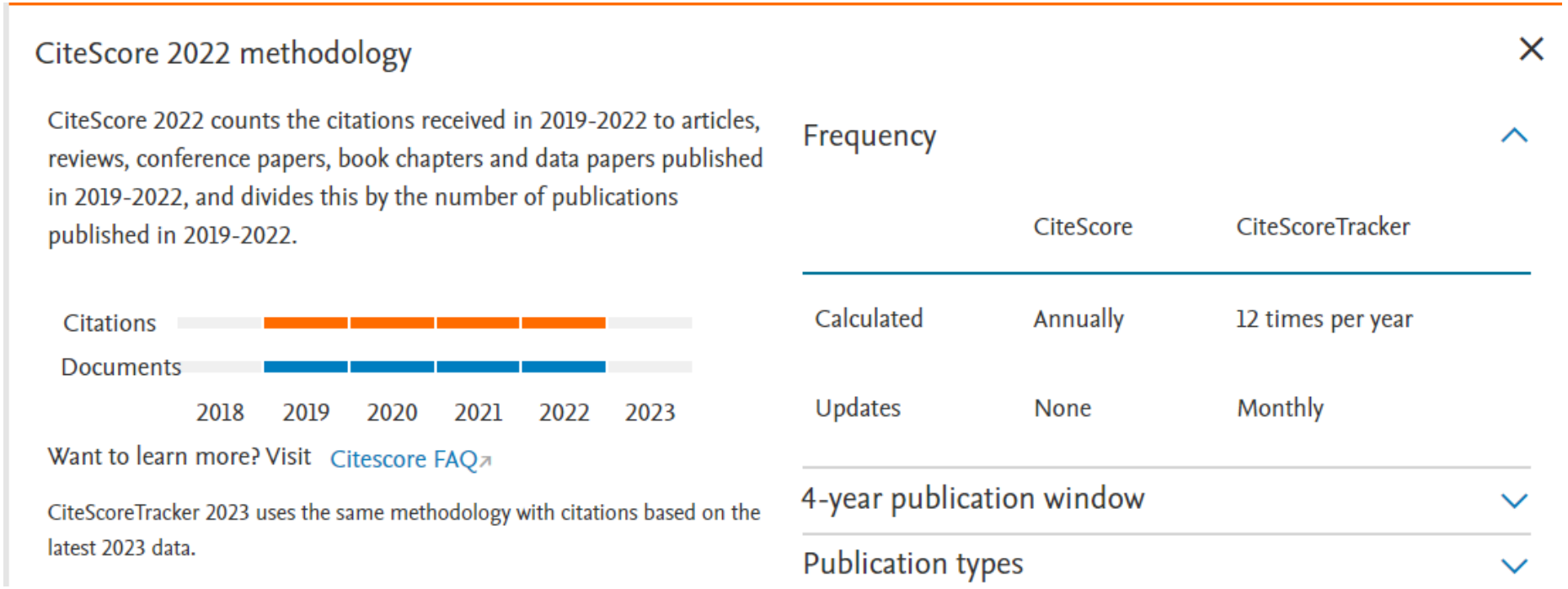
Citation data from the SCOPUS database

More information Citescore

Scopus Sources

Scopus sources

CiteScore



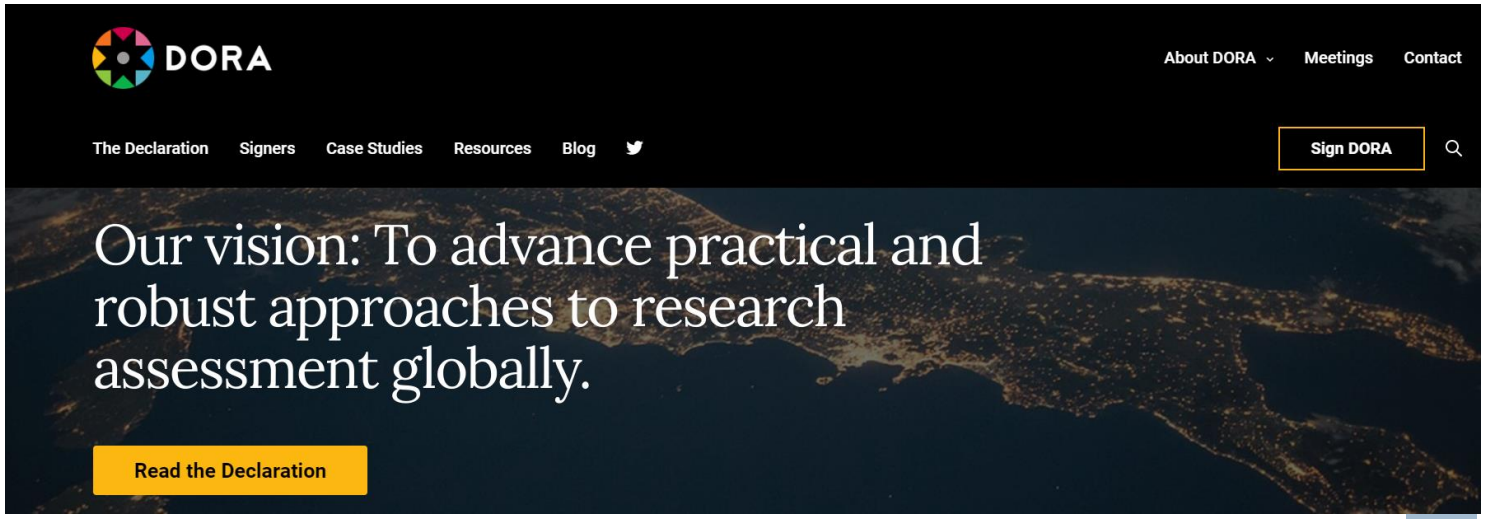
Open Science

shift in scientific evaluation and metrics

DORA - San Francisco Declaration on Research Assessment (2012)

https://sfdora.org/ written at the Annual Meeting of The American Society for Cell Biology (ASCB) in San Francisco, CA, on December 16, 2012

- The group developed a series of recommendations based on the idea that it is imperative that scientific production be measured accurately and evaluated prudently
- eliminate the use of journal-based metrics, such as impact factor, in funding, appointment and promotion evaluations



DORA - San Francisco Declaration on Research Assessment

https://sfdora.org/

General Recommendation

Recommends that evaluation methodologies based on the prestige indicators of scientific journals should be avoided, that all types of research results should be considered and that various forms of metrics and qualitative evaluation methods should be used in parallel.

has been signed by thousands of researchers, institutions, publishers and funders, who are committed to putting these principles into practice.

LEIDEN MANIFESTO FOR RESEARCH METRICS (2015)

http://www.leidenmanifesto.org/

Set of 10 principles for the evaluation of science, provides guidelines for the responsible use of metrics

- Quantitative evaluation should support specialized qualitative evaluation
- Consider the differences between areas in publication and citation practices
- The best evaluation practice is to select a set of possible indicators and allow the different areas to choose those that are most suitable for them
- Review and update the indicators regularly.

European Comission

[The eight ambitions of Open Science (CE) – ao nível da avaliação]

New Generation Metrics

OPEN SCIENCE

Open Science is a system change allowing for better science through open and collaborative ways of producing and sharing knowledge and data, as early as possible in the research process, and for communicating and sharing results. This new approach affects research institutions and science practices by bringing about new ways of funding, evaluating and rewarding researchers. Open Science increases the quality and impact of science by fostering reproducibility and interdisciplinarity. It makes science more efficient through better sharing of resources, more reliable through better verification and more responsive to society's needs.

The eight ambitions of Open Science

Open science policy has developed progressively in the EU. It concerns all aspects of the research cycle, from scientific discovery and scientific review to research assessment, publishing and outreach; its cornerstone being open access to publications and research data. Since 2016, the Commission organises its open science policy according to eight 'ambitions':

European Comission

Next-generation metrics: Responsible metrics and evaluation for open science (2017)

Proposal for new generation metrics:

- qualitative evaluation (peer review) should be complemented by quantitative indicators
- transparency better use of existing metricsmeasuring what "really matters"

European Comission

Open Science Policy Platform Group final report

co-create a "research system based on shared knowledge by 2030"

An academic pathway structure that promotes results, practices and behaviours in a transparent way to maximize researchers' contributions to a system of shared scientific knowledge

Coalition for Advancing Research Assessment --- COARA

COARA

Coalition for Advancing Research Assessment

European University Association

Text

It is now time to go beyond existing declarations and define clearly what we want for the future of research assessment. Universities, researchers and all stakeholders need to choose how they want to be assessed and need to choose now.

Michael Murphy

President of the European University Association, EUA

Coalition for Advancing Research Assessment

- Abandon inappropriate uses of impact factor
- Avoiding the use of institutional rankings in evaluation
- Prioritize qualitative evaluation (peer-review) supported by an appropriate use of metrics

Metrics based on citation counts are insufficient to assess the impact of a publication in academia

One of the basic principles of scientific evaluation - transparency - clear definition of rules and criteria

Consider several indicators on different platforms - article-level metrics and author metrics

Do not use journal indicators (e.g. impact factor) to evaluate the outputs of researchers or articles.

Disseminate and subscribe declarations of principles and commitments, such as the Coalition for Advancing Research Assessment