

# Open Science & Open Access

Presented by Pete Lewis, Associate Publisher,

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# Elsevier Today





Over **2,800** journals & serials



Over 19 million articles and chapters, with 1.6 billion consumed by researchers



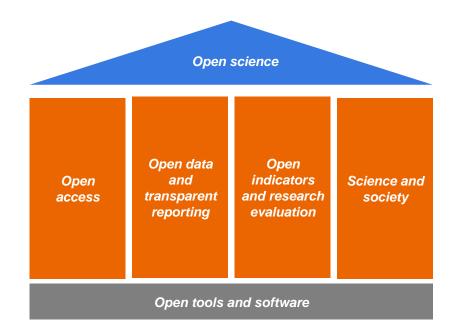
Over 600,000 articles published in 2022 and made discoverable through search engine marketing.

# What is Open Science?



Open science describes a way of working that is more **inclusive**, **collaborative** and **transparent**.

Elsevier partners with the research community to empower open science. We believe open science can benefit research and society and drive research performance.



# Open Science Enablers





Establishing open science policies and mandates

### Institutions

Implementing open science policies and repositories

### Governments

Deciding on open science policies and mandates



### **Publishers**

Providing journals, tools and platforms that support open science uptake by researchers and institutes

### Researchers

Being encouraged, incentivized & supported to share more of their research output, more transparently & openly

### Readers

Looking for additional ways to read and validate research content



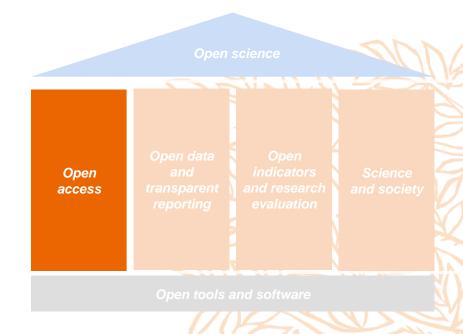
### Open science is facilitated through:

- Policies and mandates (plus compliance monitoring)
- Funding
- Education and guidance
- Journals, tools and platforms
- Incentives and evaluation
- Culture and values

Stakeholders must collaborate and align to nurture a research and publication environment that nurtures open science.



# Open Access



# What is Open Access?



- Free and permanent access to scholarly research for everyone.
- Elsevier primarily offers the gold and green open access routes.

### Gold open access

- ✓ Final version of an article is immediately accessible to everyone
- ✓ The article is made available to readers under a Creative Commons end user license
- Cost of publishing is recovered upfront
  - Typically as an Article Processing Charge (APC)

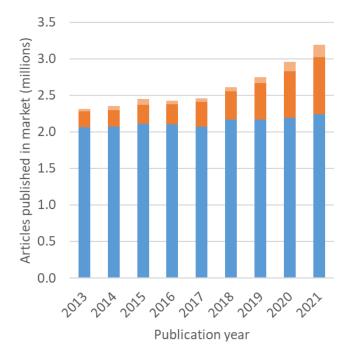
### **Green** open access

- ✓ A version of a subscription article is made freely available
- Relies on the subscription model to continue to operate
  - Usually after an embargo period
  - Normally a draft copy of the article

# The Open Access Global Landscape oday



- Over 11 million documents are now tagged gold, hybrid or bronze open access in Scopus.
- Increasingly more mandates to publish Open Access from funding bodies: E.g. OSTP in the US & Horizon Europe.



- Gold OA articles in hybrid journals
- Gold OA articles in fully gold OA journals
- Subscription articles (mostly in hybrid journals)

# Elsevier's Approach to Open Access

ELSEVIER

- Elsevier is committed to open access! We are one of the fastest-growing open access publishers worldwide.
- All 2,800 of our journals enable open access publishing, including more than 700 fully open access journals.
- Elsevier published over 150,000 Open Access articles in 2022, a year on year increase of over 26% Open Access Model.
- We have converted over 160 of our subscription based journals to the Gold Open Access Model.
- We support over 2,000 institutions globally to publish open access through transformative agreements.

### Open Access Agreements

Elsevier has reached open access agreements with the following institutions. Click on a link below to find out more information.

For Information on Funding Arrangements, please visit this page.

### Agreements (A-Z)

- Austrla
- Australia & New Zealand CAUL Consortium
- Australia Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- Bulgaria Bulgarian National Consortium
- Canada Canadlan Research Knowledge Network (CRKN)
- Colombia Colombia Consortium
- Denmark Royal Danish Library National License Consortium
- Finland FinELib Consortium
- France Couperin Consortium
- · Germany Brandenburg University of Technology
- Greece HEAL Consortlum
- Hungary EISZ Consortlum
- Ireland Consortium of Irish Higher Education Institutions
- . Italy CRUI Consortlum
- Japan Japan Alliance of University Library Consortia for E-Resources (JUSTICE)
- Netherlands VSNU
- Norway Unit Consortium
- · Poland Polish Consortium
- Portugal (FCT)
- · Qatar Qatar National Library and Qatar University
- Saudi Arabia King Abdullah University of Science and Technology (KAUST)

- Singapore SAUL Consortium
- Spain CRUE-CSIC
- Slovenia CTK Consortium
- South Africa SANLIC Consortium
- South Korea National Research Council of Science & Technology (NST)
- Sweden BIBSAM
- Switzerland CERN
- Switzerland Swiss Universities
- Talwan CONCERT Consortlum
- ....
- UK JISC
- USA California State University (CSU)
- USA Carnegle Mellon University (CMU)
- USA Cold Spring Harbor Laboratory
- USA Department of Energy Laboratories
- USA University of Kansas
- USA State University of New York (SUNY)
- USA Texas Christian University (TCU)
- USA Texas Library Coalition for United Action
- USA Tulane University

(TLCUA)

- USA University of California (UC)
- USA University of Florida (UF)
- OSA OMITCISIC OFFICIAL (OF)
- USA University of Idaho
- USA University of Michigan
- USA Washington University In St. Louis

A List of Elsevier's Open Agreements

# Open access and subscription articles are priced separately



This fundamental principle is enshrined in our strict no double dipping policy.

### Open access (author pays)

Elsevier sets APC prices based on the following criteria which are applied to **open access articles only**:

- Journal quality
- Editor/Production costs
- Competitive considerations
- Market conditions
- Other revenue streams associated with the journal



## Gold open access

Individuals cover publication costs to broadcast their own article to the rest of the world.

### **Subscription (reader pays)**

- When calculating subscription prices, we take into account subscription articles only.
- Subscription prices are adjusted annually, and reflect subscription article volume development, in addition to other factors including developments in journal quality, journal usage, competitive considerations and market conditions.



## Subscription model

Readers pay to receive access to research content published around the world.

www.elsevier.com/about/policies/pricing

# The Future of Open Access



### North America

USA has typically prioritized the subscription route and making manuscripts available after an embargo period. It is now seeing a period of change in relation to its Public Access guidance towards immediate access.

### Europe

Coalition S, while a globally coordinated initiative, is prominent in Europe. It aligns funding bodies around principles and approaches to make funded research openly accessible immediately upon publication. Europe has a focus on pay to publish models, supported by open access agreements with publishers

### South America

Much of Latin America supports the use of open access publication platforms subsidized by institutions and individual volunteer work.

### Asia

Some Asian countries are starting to consider the topic, with variations in focus along the open science spectrum.

China is known for its preference for the subscription model but has shown interest in open science policies and open access publishing.

### The Social Science Research Network: Elsevier's Pre-Print Platform

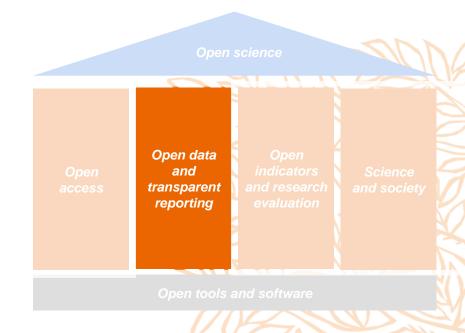




- Elsevier's preprint platform, SSRN, provides access to write-ups of early-stage research prior to peer review.
- SSRN is devoted to the rapid worldwide dissemination of research and is composed of a number of specialized research networks.
- SSRN's eLibrary provides over 820,000 research papers from nearly 400,000 authors.



# Open Data and Transparent Reporting



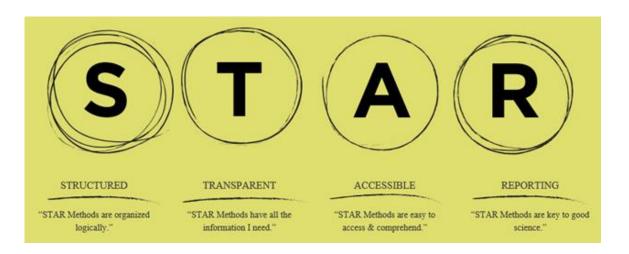
# Why open data and transparent reporting matters



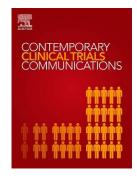
- Reproducibility is vital and underpins trust in science. Transparency in how research was undertaken and the results obtained is prerequisite for reproducibility.
- Stakeholders including funders, institutions, publishers and researchers must collaborate and align to build a positive research culture that rewards and integrates reproducibility practices.
- At Elsevier we seek to nurture reproducibility by:
  - Encouraging rigorous and transparent methods and protocols
  - Placing emphasis on research questions and methodology
  - Encouraging open research data sharing
  - Validating results pre-publication
  - Supporting transparency statements

# Encouraging rigorous and transparent methods and protocols





Cell Press' STAR Methods encourage: structured, transparent, accessible, reporting of methods; key features rolled out to >1,500 iournals



### Journals dedicated to methods transparency

 Supports AllTrials which calls for all clinical trials to be registered with full methods and results summary.



# Encouraging open research data sharing





Research Elements
journal suite for diverse
data output: OA, peer
reviewed & citeable,
creating incentives &
providing key context,
multidisciplinary
supporting discovery
across fields



platforms to share research data e.g., Mendeley Data

Many journals have a research data policy enabled. ~1,200 journals require a link to research data or data availability statement











# Validating results pre-publication



New submissions are screened automatically for textual similarity.





Plagiarism

**Duplicate Submission** 

{headtcentre}

humboldt-elsevier advanced data & text centre





Piloting potential AI solutions to detect image manipulation (with humans in command).



Developed image integrity guidelines as part of STM Association Working Group on Image Alterations and Duplications

# Interested in Becoming an Editor?



It is an important and rewarding job. Keeps one informed, knowledgeable, visible in the community.

Editor in mathematics

### **Elsevier Editor Roles:**

- Editor-in-Chief: Leadership strategic lead, desk & final decisions, prior experience required.
- Senior/Executive Editor, Section Editor, Associate Editor: Assists EiC by overseeing peer review, sourcing reviewers, attending meetings, advising on journal strategy.
- **Guest Editor:** Usually a temporary role. Invites content/and leads a special issue on a topic of interest to journal. A good entry role.
- **Editorial Board Member:** Reviews manuscripts, promotes the journal, advises on journal strategy. A good starting point for engaging with an editor community.
- **In-House Editors:** Employed by Elsevier to work on <u>Cell Press</u> and <u>The Lancet</u>. Current openings and more information is available here.

Read about Editor
Experiences on <u>our dedicated</u>
Editors' Update blog. As you
will see, there is a wide range
of backgrounds, personalities
and cultures which make up
our editorial teams!

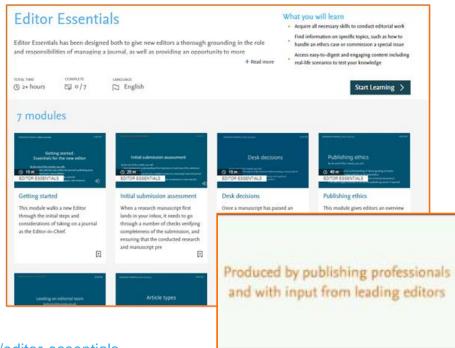
### **Editor Criteria:**

- Prior involvement with the journal: E.g. Editorial Board Member, Guest Editor, or active reviewer.
- Sufficient time to dedicate to the role: Editors must be responsive to authors & reviewers. Workload varies according to journal and role.
   Support from your institution is encouraged.
- Willingness to Promote the Journal: Must attend editor meetings and contribute feedback on journal performance. Editors are often recruited to expand a journal's reach in particular geographic areas.
- An Established Network: Editors will use their networks to invite reviewers and authors to the journal, in addition to Elsevier's database.
- Subject Expertise: Editors are hired with expertise in areas that the journal receives a large number of submissions on.

## **Editor Essentials**



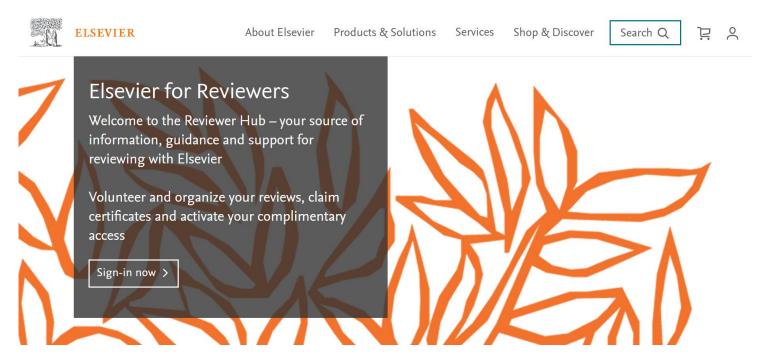
- Designed to give new editors a thorough grounding in the editorial role, as well as providing an opportunity for more experienced editors to refresh their knowledge.
- Developed and delivered by publishing professionals and with input from leading editors.
- Covers a comprehensive range of topics spanning the breadth of editorial work.
- Each module is self-contained and most contain interactive Q&A sections describing real-life scenarios.



https://researcheracademy.elsevier.com/editor-essentials/editor-essentials

# Reviewer Hub

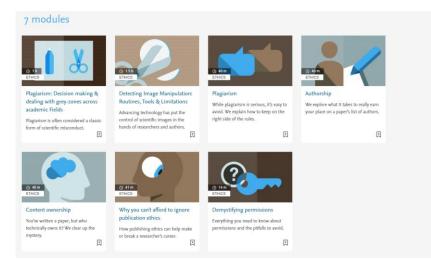


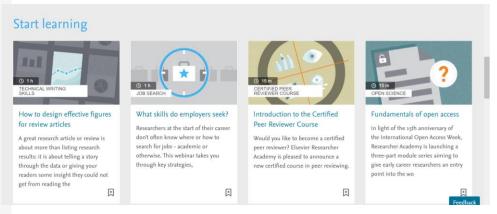


https://www.elsevier.com/en-gb/reviewers

# Transparency for Authors: Researcher Academy







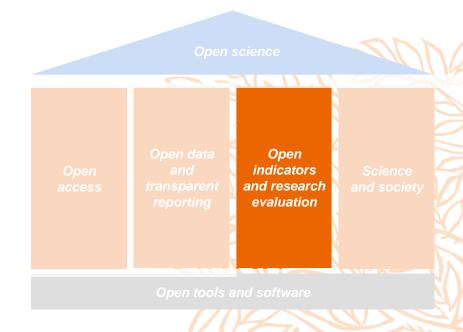
# Elsevier's Researcher Academy has resources on how to publish ethically:

https://researcheracademy.elsevier.com/publication-process/ethics

And many other training e-learning modules developed by global experts. Career guidance and advice. To get unlimited access to all modules, sign in or register with your email!



# Open Indicators and Research Evaluation



# Indicators in Research Evaluation: Elsevier's view



- e Elsevier seeks to reduce overreliance, lack of transparency and inappropriate application of citation-based journal metrics.
- We support and invest in the development of suitable indicators for all levels of research evaluation.

Base decisions on both quantitative and qualitative evidence



Seek indicators based on open, transparent, validated and replicable methods



Use an **array of indicators** appropriately
and responsibly



Nurture **trust** between the evaluator and the evaluated through **clear** evaluation criteria



# Our commitments to responsible research evaluation



In 2019, Elsevier established The International Center for the Study of Research (ICSR) which works in partnership with the research community to further the study of research and to develop responsible approaches to research evaluation.

In 2020, Elsevier endorsed the Leiden Manifesto for Research Metrics, and signed the Declaration on Research Assessment (DORA).

#### Published: 22 April 2015

# Bibliometrics: The Leiden Manifesto for research metrics

<u>Diana Hicks</u> <sup>™</sup>, <u>Paul Wouters</u>, <u>Ludo Waltman</u>, <u>Sarah de Rijcke</u> & <u>Ismael Rafols</u>

<u>Nature</u> **520**, 429–431 (2015) <u>Cite this article</u> **25k** Accesses **981** Citations **2161** Altmetric Metrics

 $Use these ten principles to guide \ research \ evaluation, \ urge \ Diana \ Hicks, Paul \ Wouters \ and \ colleagues.$ 





Our Mission

The mission of the International Center for the Study of Research (ICSR) is to further the study of research and thus to contribute to the evidence base supporting the practice of research strategy, evaluation and policy. Our vision is a world in which decisions informed by such evidence benefit research and society.

In 2022, Elsevier added its support for the **Agreement on Reforming**Research Assessment.

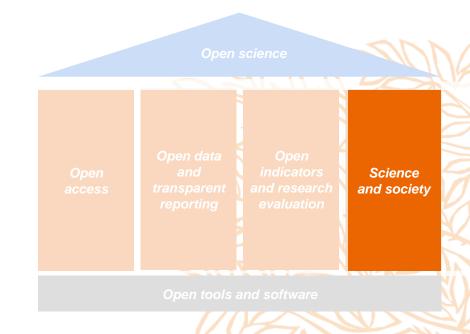
AGREEMENT ON REFORMING RESEARCH ASSESSMENT

20 July 2022





# Science and Society



# Widening access beyond open access



We partner with non-profits, institutions and organizations to bring scientific outputs closer to citizens, increase science literacy, and make information available where it is most needed. We do this through:

Partnering with
Research4Life to
provide access to
researchers at
institutions across
120 low- and
middle-income
countries





Maintaining
public,
journalist and
patient access
initiatives that
bring science to
citizens

Translating
research with the
potential for realworld impact so it
can be understood
more widely





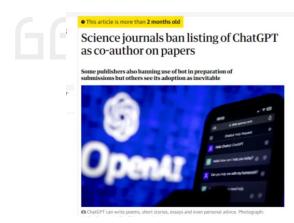
Welcome to Elsevier's Novel Cononavirus Information Center, Here you will find expert, curated information for the research and health community on SARS-CoV-3 and COVID-19.

Providing free access to research in public health emergencies

# A.I.'s role in Open Science

ELSEVIER

- Elsevier recognizes the role that A.I. can play in helping authors for whom English is not a native language.
- Our new 'Declaration of A.I.' statement allows authors to acknowledge the role played by A.I. in improving language and readability.
- Use of A.I. should be done with human oversight and should **not** be listed as an author.
- More information on Elsevier's A.I. Policy can be found here.

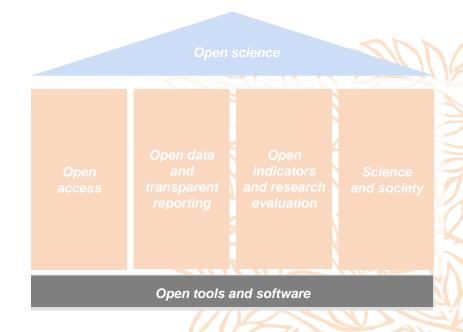


### Example Statement:

During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.



# Open tools and software



# Open science is underpinned by tools and software







# Thank you

