Publishing & Reviewing in Life Sciences and Exact Sciences

October 22 and 24, 2024

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Research, Innovation & Valorisation Antwerp (RIVA)

DOA team

University of Antwerp

Communication of Research

To peers

Our **focus** is here

To broader audience

Social Media

University of Antwerp

Why?

RESEARCHER

Pressure?

Basis of communication in science

Peer review

Publications → Choices

Journal

Publication type

Number and order of authors

DOMAIN SPECIFIC

Audience

Impact

How to realise?

How to verify?

Publications

Think before writing (and submitting)

- Audience
- Publication Type
- Number and Order of Authors
- Quality ↔ Quantity

Write for the right audience

- Do not write for yourself
- Nor for your colleagues
- Write for your **peers** (authors you cite)
- Write for **reviewers** (represent audience + gate keepers)

Choose the right publication type

Article ↔ Book

Different publication types
(100 m sprint vs. 42 km marathon)

	Book	Article
Size impact	+	±
Lasting impact	+	±
Review process	Slow	Fast(?)
Production process	Slow	Fast
Editor role (commercial)	Large	Smaller
Writing time	5 x	1 x
Argument	Broad	Focused

Article ↔ Conference proceedings

- Discipline-dependent
- ‘Effort’ equals that of an article

- Often marginalized!

Alone ↔ with co-authors

Pros

- Division of tasks (specialized)
- Shows ability to work together
- More work done (quantity)
- Learn from one another (student vs. supervisor)

Co-author with nice, reliable people

Cons

- Ghost authorship
- Honorary authorship
- Independence, creativity, leadership?
- Only data provider, analyst

Surfing on others' efforts

Alone ↔ with co-authors

Make clear and explicit agreements

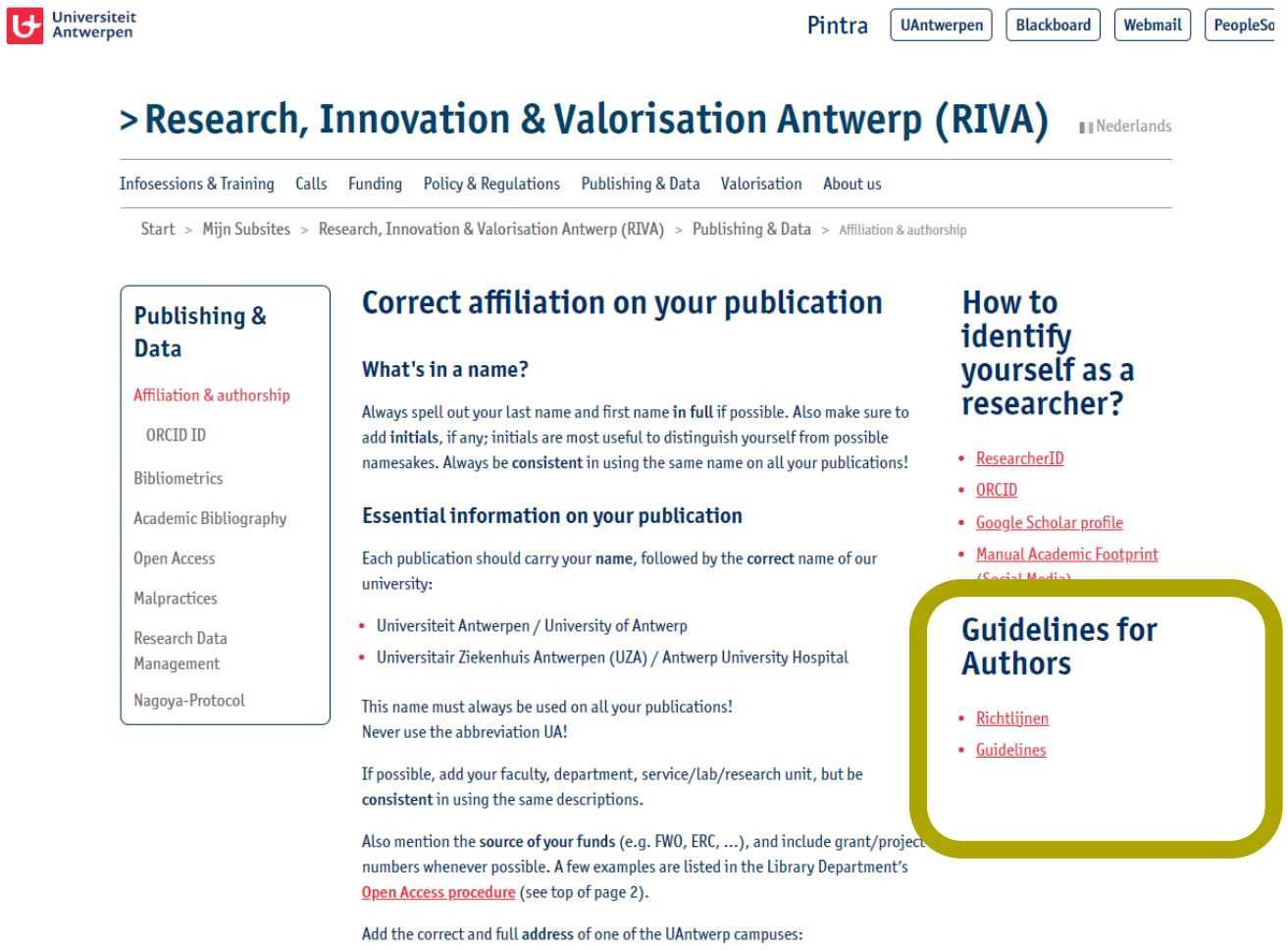
- Before start
- About **who** should be co-author
- About **order** of authors (domain specific)

www.icmje.org

Who should be co-author?

1. Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; AND
2. Drafting the article or revising it critically; AND
3. Final approval of the version to be published; AND
4. Agreement to be accountable for all aspects of the work

UAntwerp policy guidelines on authorship



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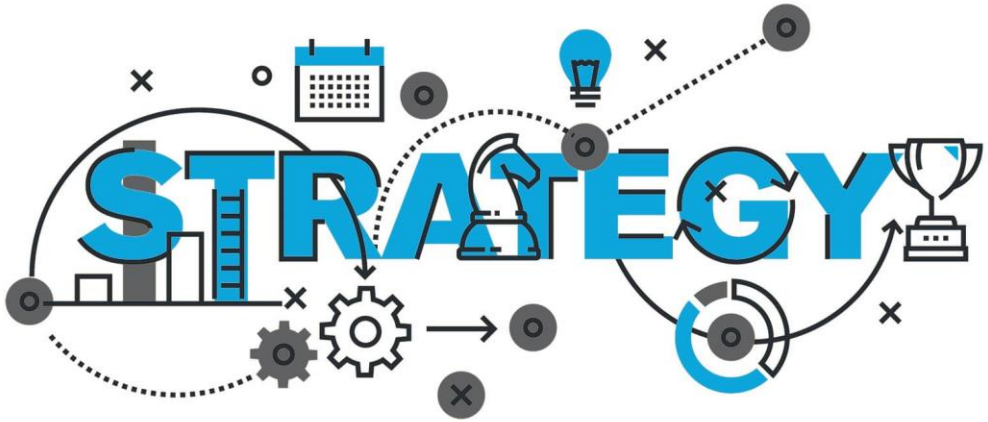
Quality ↔ quantity

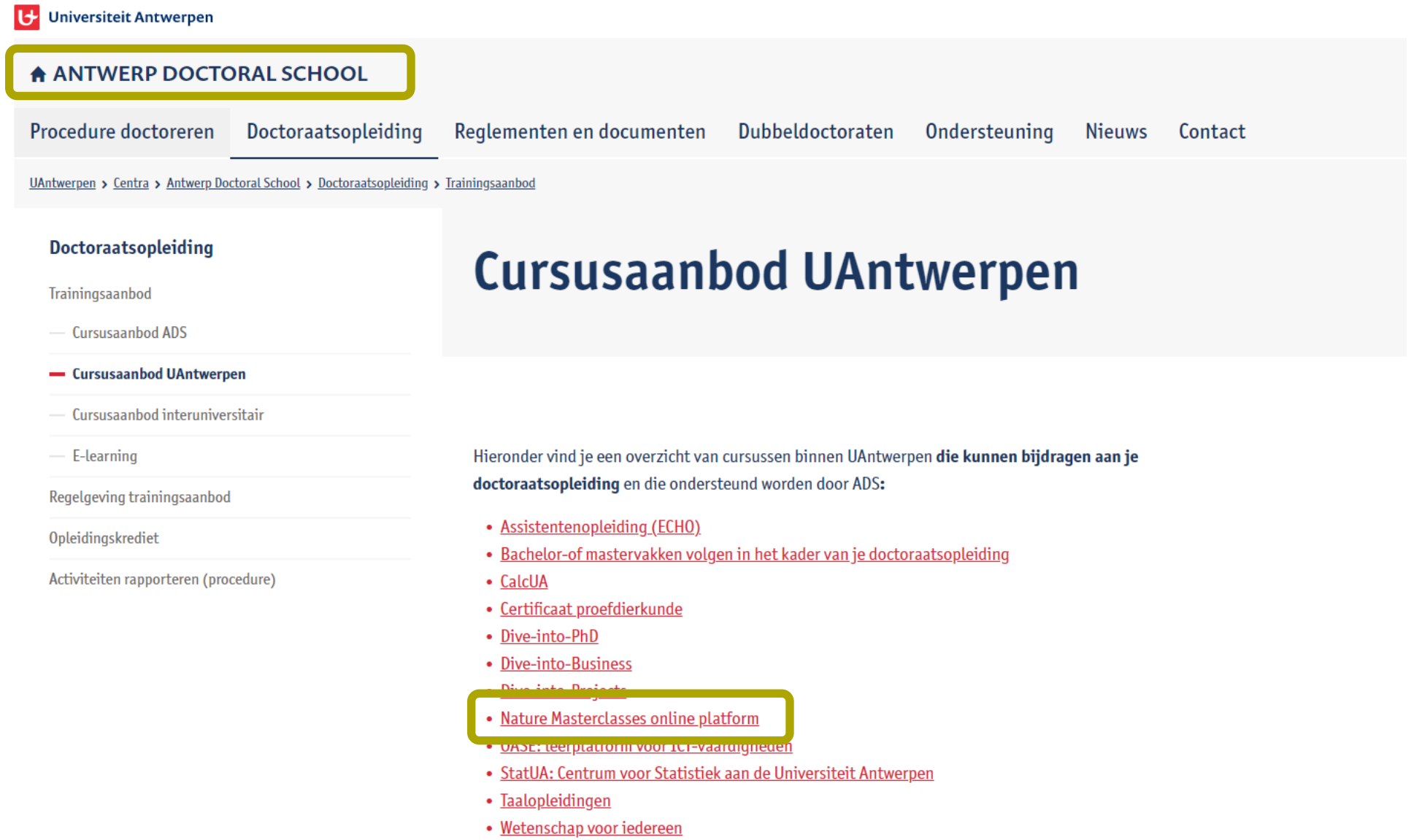


Dilemma between

Publishing **a lot** ↔ Publishing **a few, high-impact** publications

- **False** contrast: quality and quantity are related!
  But still: **let quality prevail**!
- Try to find a good **balance** between quality and quantity

If you want to learn more



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https://masterclasses.nature.com/

Journal selection

Unpublished research is virtually invisible: no science without publications!

- Very important for the **reputation** of scientists
- **Quantifying**
  - **Amount** of publications
  - The **prestige** of the channels in which they appeared, and
  - Their **impact** (citations and derived indicators)

  is common practice
- In addition, the **academic** and **societal** impact of publications is of increasing importance

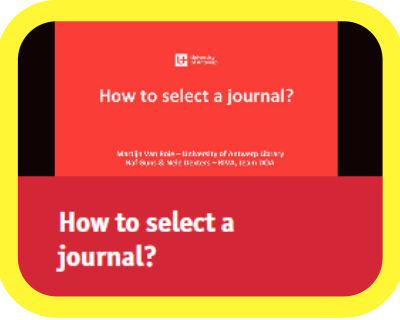
DOMAIN SPECIFIC

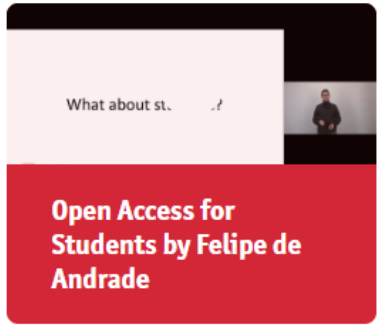
How to choose the *most appropriate* journal/publisher/conference for your work?

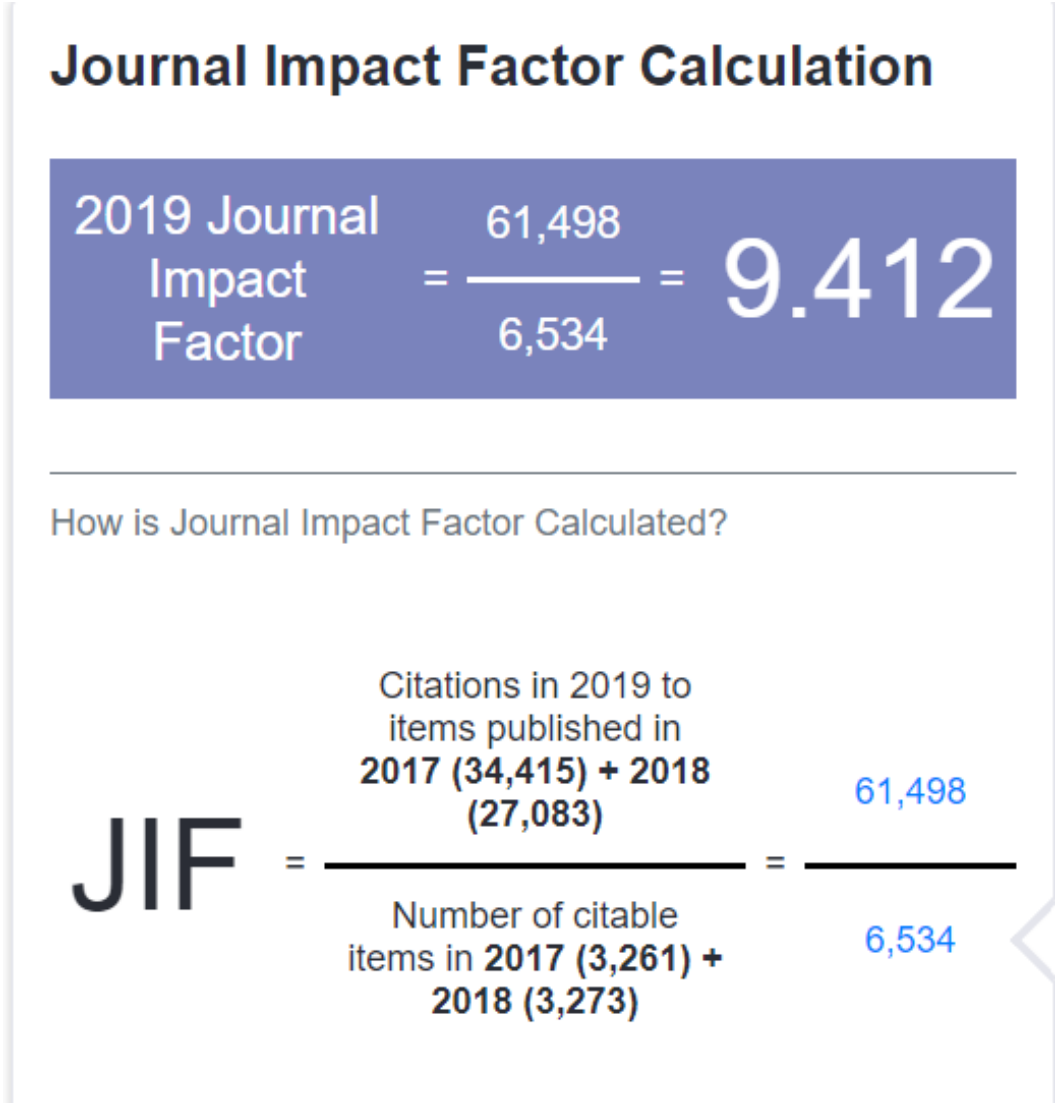
Where to publish? Tips for selecting a journal

- Aim for journals in your **discipline**
  - Discuss with co-authors, colleagues, supervisor
  - Check some examples of recent papers
- Aim for journals with a **good reputation**
- Aim for a **diversity** of journals

[Open Access Week 2023 | Bibliotheek | Universiteit Antwerpen (uantwerpen.be)]







WoS Journal Impact Factor (JIF)

JIF reflects the yearly **average** number of **citations** that articles published in the last two years in a given journal received.

- Used as a proxy for the **relative importance** of a journal within its field.
- Don't compare JIF **values across** subject categories!

Traditional journals vs open access journals

Classic journal

- Usually no cost for authors
- To gain access you need a subscription

Open access journals

- May charge publishing fees (APCs)
- Free access to read

DOAJ OPEN GLOBAL TRUSTED

13,783 JOURNALS WITHOUT APCS

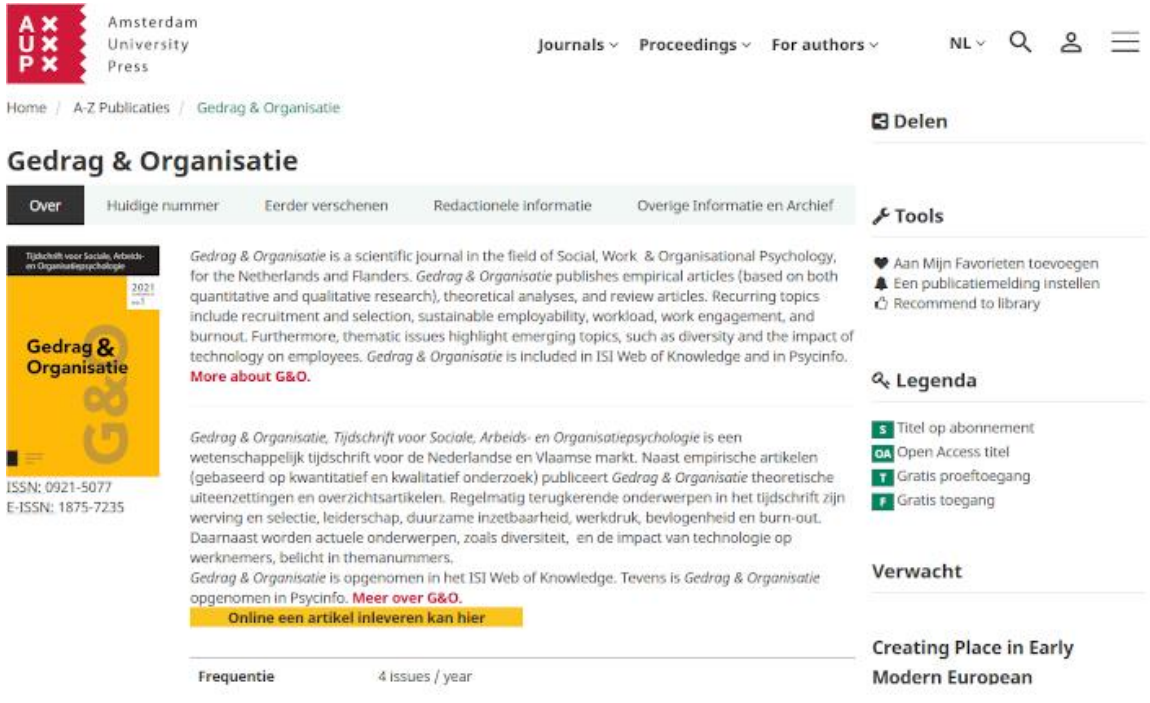
20,996 JOURNALS

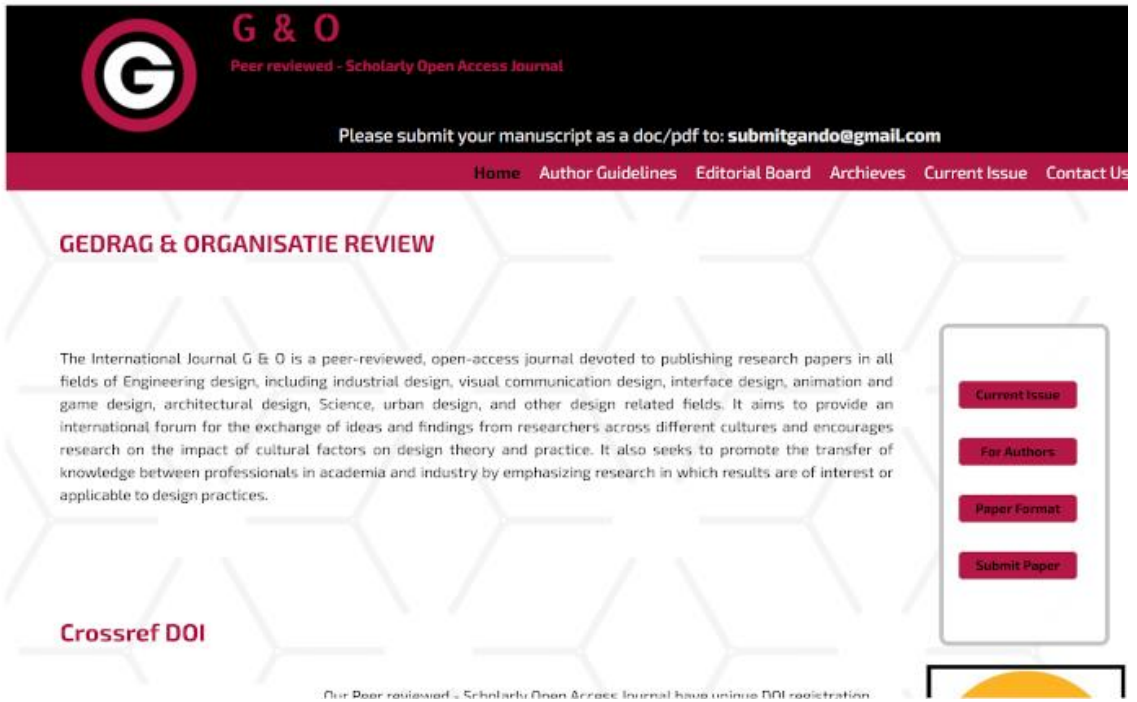
Predatory journals and conferences

- Checklists how to **recognize** predatory outlets:
  - Journals/publishers https://thinkchecksubmit.org/
  - Conferences https://thinkcheckattend.org/

- **Reliable** open access journals:
  Directory of Open Access Journals
  https://doaj.org/

Hijacked journals

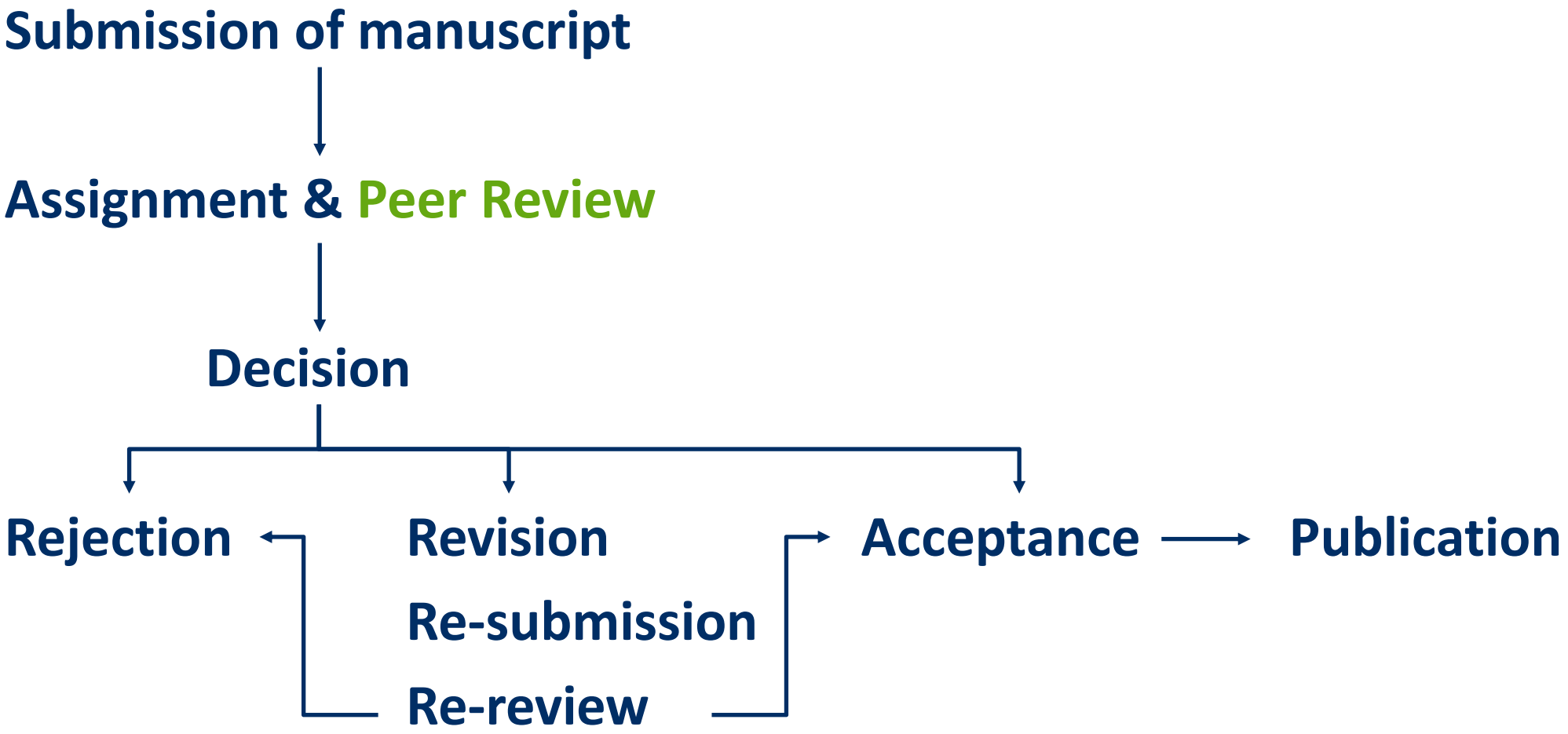




https://retractionwatch.com/the-retraction-watch-hijacked-journal-checker/

Peer Review

Publishing process



Peer review

- determine the **validity**, **significance** and **originality** of the work
- suggest any **improvements** that are to be made in the manuscript
- closely check **methodologies**, **validity** of data and consider **ethical approach**

- on the recommendations of peer reviewer, editor will
  - **accept**,
  - accept with (major/minor) **revision** or
  - **reject** a manuscript

Types of peer review

- **Single blind**: reviewer knows the identity of authors, but authors don't know the identity of reviewers

- **Double blind**: authors and reviewers are unknown to each other; article is anonymized

- **Open identity**: authors' and reviewers' identities are disclosed
  - This *may* be what is meant when one refers to "open peer review". Another common interpretation of open peer review refers to **open contents**, in which the review contents are made publicly available

impact
measure
research
altmetrics
work
social
citation
traditional
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article
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Google
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landscape
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done
order
attempts
see

Impact

Knowledge Clips

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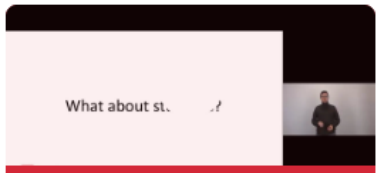
Introduction FAIRVault

Financing an Open Access article

How to select a journal?



Open Access for Students by Felipe de Andrade

Introduction to Open Science

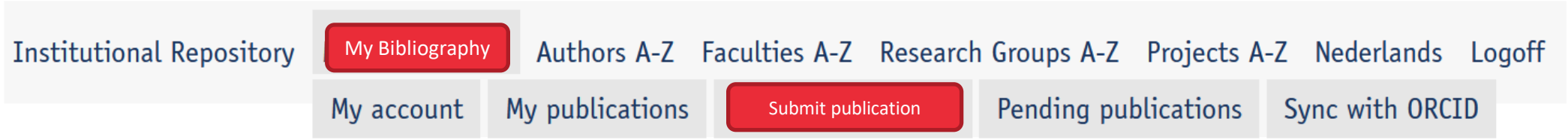
Introduction to the Institutional Repository

How to register output in the institutional repository?

- **Register** publication as soon as published

repository.uantwerpen.be

Universiteit Antwerpen



- mailto:helpdesk@library.uantwerpen.be
  - When adding paper to the repository for the **first** time
  - For publications from former employers (! mention if publications are indexed in Web of Science)
  - to add corrections, fulltext, ….

- Monthly updates from Web of Science

Link research projects & research output

- Reporting via the university's databases is currently already **mandatory** for FWO, BOF and IOF funding.

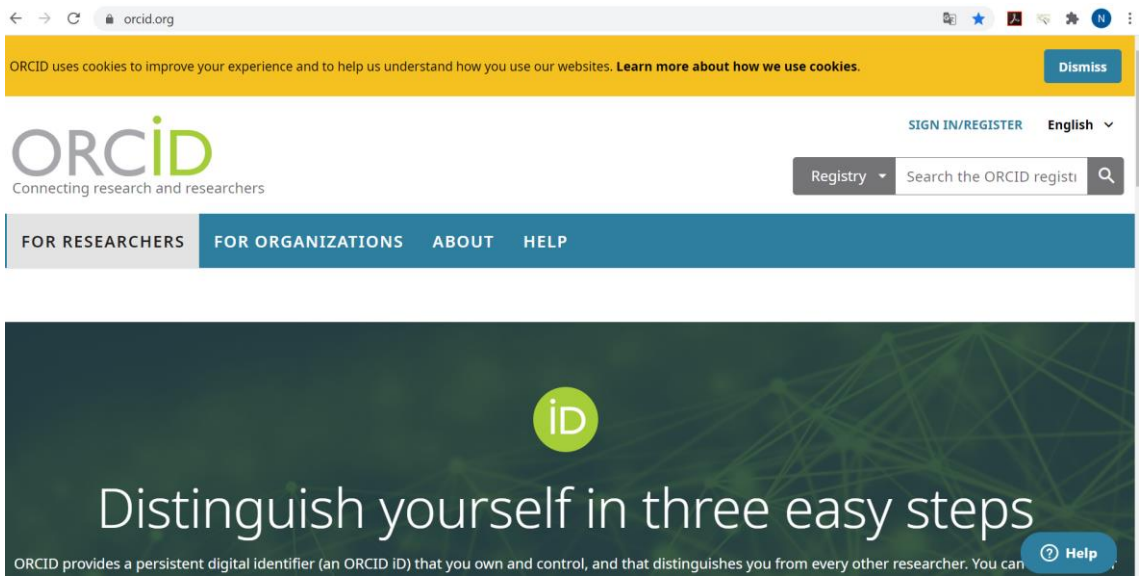
More information:

https://www.uantwerpen.be/en/library/research/

ORCID

Open **R**esearcher and
Contributor
Identifier

orcid.org



- Publishers
- Research organisations
- Funder

How to register and synchronize IR with ORCID?

Universiteit Antwerpen

More information:

https://www.uantwerpen.be/en/library/research/

Knowledge Clips – Open Access

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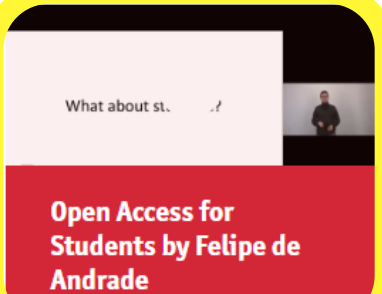

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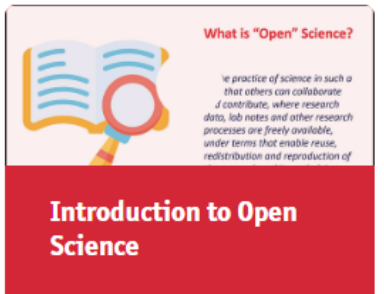

Introduction to Open Science

Introduction to the Institutional Repository

University of Antwerp Open Access Policy

- All UAntwerp authors are **obliged** to include the PDF of
  - either the final author version, or
  - an open access publisher's version

  when reporting a peer-reviewed journal article for inclusion in AB.

- Final accepted manuscripts (author versions) can be made freely available according to the Belgian Open Access law
  - Belgian Open Access law explained by prof. Esther van Zimmeren from the Faculty of Law: https://www.youtube.com/embed/HVSIkDyGtmw

Knowledge Clips - Open Science

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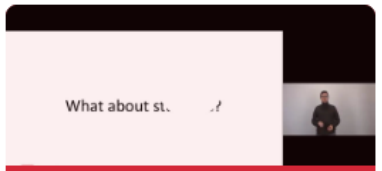

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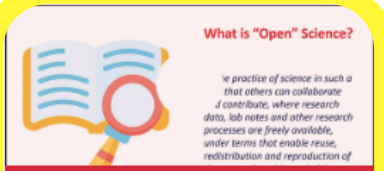

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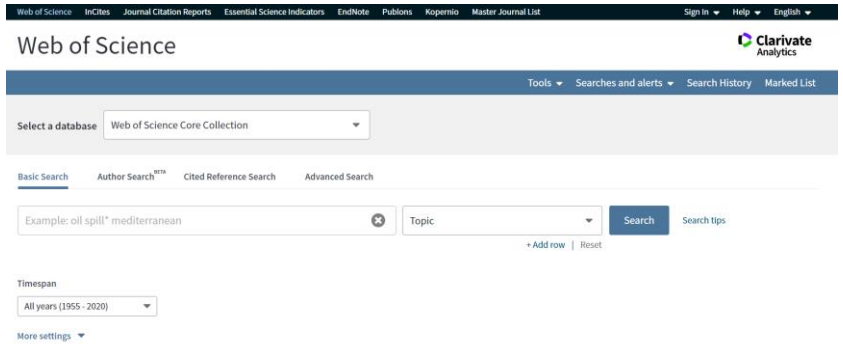
Introduction to the Institutional Repository

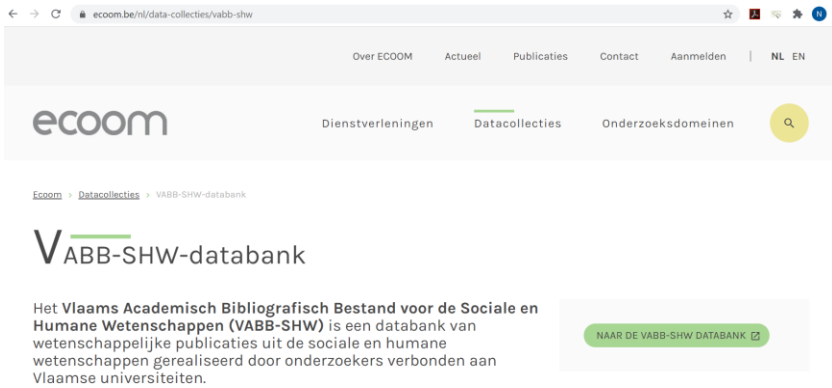
Publication databases

Web Of Science (WoS)



www.webofknowledge.com

VABB-SHW



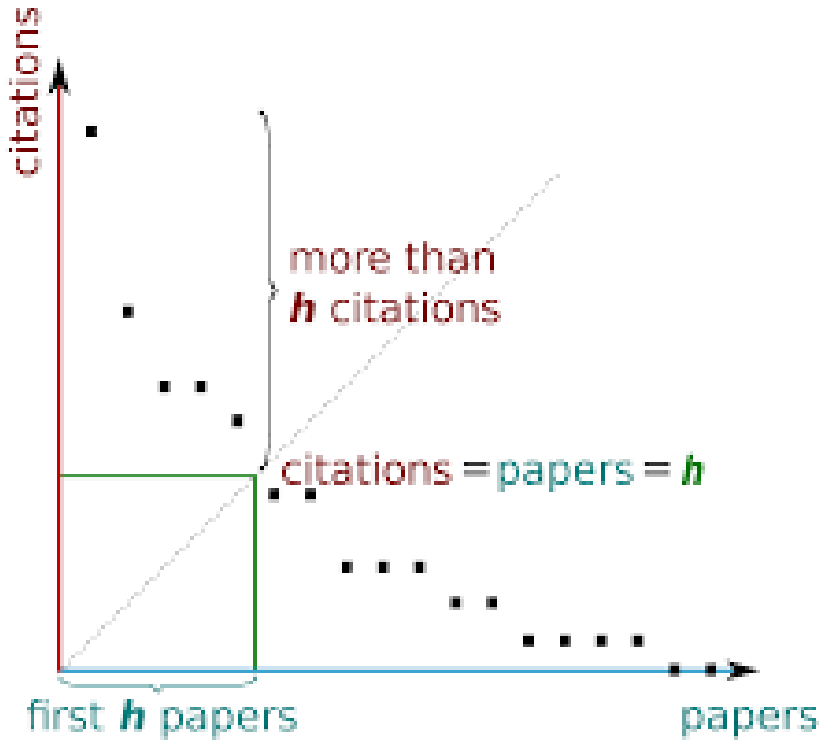
www.ecoom.be/vabb

And many others:

- Scopus (Elsevier)
- Google Scholar
- …

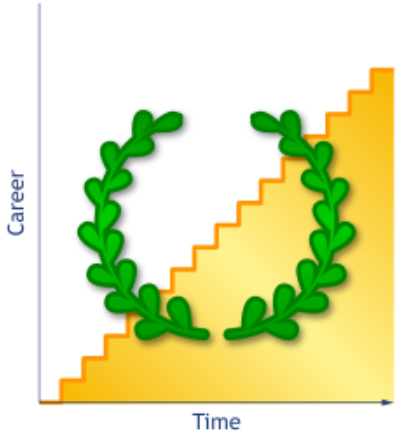
Indicator of author impact: h-index

The h-index is defined as the maximum value of *h* such that the given author has published *h* papers that have each been cited at least *h* times.



Indicator of author impact: h-index

Unfair comparisons



Favors researchers with longer careers

Favors researchers in publication- and citation-dense fields

Database dependent!

Thank you!