Measuring Journal Quality & Impact
Purpose

• Enable researchers at Murdoch University to measure the quality and impact journals and identify high quality, reputable journals in their field of research
Overview

1. Why measure journal quality and impact?
2. Thinking about journal relevance
3. Evaluating journal integrity and quality
4. Finding circulation data
5. Finding journal metrics and ranking data: SCImago & Scopus
6. Looking at journal prestige lists
Tools: Guide

Measure Research Quality and Impact: Home

Research Support

Researchers at Murdoch University are supported by the Library and the Research and Innovation Directorate.

Please contact your Subject Librarian to make an appointment for advice on measuring research quality and impact.

Measuring Research Quality and Impact

The activity of measuring and describing the quality and impact of academic research is increasingly important in Australia and around the world. Applications for grant funding or career advancement may require an indication of both the quantity of your research output and of the quality of your research.

Research impact measurement may be calculated using researcher specific metrics such as the h-index, or by quantitative methods such as citation counts or journal impact factors. This type of measurement is also referred to as bibliometrics.

This guide provides information on a range of bibliometrics including citation metrics, alternative metrics, researcher impact, journal quality and impact, book quality and impact, and university rankings.

Key Terms and Definitions

Altmetrics - Altmetrics (alternative metrics) are qualitative data that are complementary to traditional, citation-based metrics (bibliometrics), including citations in public policy documents, discussions on research blogs, mainstream media coverage, bookmarks on reference managers, and mentions on social media.

Author identifiers - Author identifiers are unique identifiers that distinguish individual authors from other researchers and unambiguously associate an author with their work.

Bibliometrics - Bibliometrics is the quantitative analysis of traditional academic literature, such as books, book chapters, conference papers or journal articles, to determine quality and impact.

Cited reference search - A cited reference search allows you to use appropriate library resources and citation indexes to search for works that cite a particular publication.

Citation index - A citation index is an index of citations between publications, allowing the user to easily establish which later documents cite which earlier documents.

Citation report - A citation report is a compilation of the bibliographic details for all of the publications a researcher has authored, along with the number of times those publications have been cited and any relevant author metrics.

libguides.murdoch.edu.au/measure_research
Why measure journal quality and impact?

• To enable you to submit future research outputs to reputable, well known journals in your field of research

• To avoid unethical publishers and journals

• To demonstrate to university administrators, and others, that your research is published in journals that are high quality, relevant to your field of research and will have a demonstrated impact on future research and practice
Measuring journal quality and impact

- Relevance to your field of research and reaching the desired target audience
- The integrity and quality of the journal, and its editorial team and contributors
- The size of a journal’s potential audience based on circulation and subscription data
- Journal impact on future research and practice, which is often measured using metrics and journal rankings
Thinking about journal relevance

- What is the scope of the journal?
- Who are the readers?
- Are they part of your research community?
- Would they be interested in your publication?
- In which journals, do experts in your research area publish?
Identifying relevant journals

Ulrichsweb Global Serials Directory

- Provides information about thousands of journals
- You can use Ulrich’s to identify journals in a specific discipline
- Links to the journal website for further detailed information about the journal, including the scope of the journal and instructions for authors
- Indicates if journals are peer reviewed, Open Access or indexed by bibliographic databases
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| Website        | [http://www.nature.com/nature/
|                | libproxy.murdoch.edu.au/ng/
|                | index.html]                   |
| Email          | natgen@us.nature.com          |
| Description    | Comprehensive coverage of new developments and issues in all branches of genetics, with particular emphasis on the human genome project and genetic aspects of disease. |

### Subject Classifications

- [ ]

### Additional Title Details

- [ ]

### Publisher & Ordering Details

- [ ]

### Price Data

- [ ]

### Online Availability

- [ ]

### Abstracting & Indexing

- [ ]

### Other Availability

- [ ]

### Demographics

- [ ]

### Reviews

Nature Genetics publishes genetic and functional genomic studies on human traits and other organisms, including the mouse, fly, nematode, and yeast. It focuses on the genetic basis for common and complex diseases as well as the mechanism, architecture, and evolution of gene networks. Contents include editorials, research articles, letters, news and views, and meeting reports. Online features include the "Free Association" blog, which contains links and editorial comments on research and news in genetics, as well as reader feedback. Articles are published online in advance of the print publication. Online full text is available from 1992 to the present, with a subscription. Sample issues are available. Appropriate for special and academic libraries that support biology programs. URL: [www.nature.com/ng/index.html](http://www.nature.com/ng/index.html) (O'Neill, Kimberly)

ML 01-04-2019
Identifying relevant journals

Some of the major academic publishers also have journal suggestion tools:

- Journal Finder (Elsevier)
- Publication Recommender (IEEE)
- Find Journal (Wiley)
- Journal Suggestor (Springer Nature)

These tools use keywords from an article's title and abstract to search for relevant journal titles.

Most journal suggestion tools also provide a range of impact metrics, so that you can identify highly ranked journals.
Journal Finder (Elsevier)

Find the perfect journal for your article

Elsevier® Journal Finder helps you find journals that could be best suited for publishing your scientific article. Please also consult the journal’s aims and scope for further guidance. Ultimately, the Editor will decide on how well your article matches the journal. Powered by the Elsevier Fingerprint Engine™, Elsevier Journal Finder uses smart search technology and field-of-research specific vocabularies to match your article to Elsevier journals.

Simply insert your title and abstract and select the appropriate field-of-research for the best results.

Paper title
Enter your paper title here

Paper abstract
Copy and paste your paper abstract here.

Fields of research
Optional: refine your search by selecting up to three research fields

- Agriculture
- GeoSciences
- Mathematics
- Chemistry
- Economics
- Humanities and Arts
- Physics
- Materials Science and Engineering
- Life and Health Sciences
- Social Sciences

Filter
- Limit to journals with Open access options

FIND JOURNAL

*Murdoch UNIVERSITY*
Publication Recommender (IEEE)

**IEEE Publication Recommender™**

Find the best match for your scholarly article

- Search 190+ periodicals and 1800+ conferences
- Compare critical points such as Impact Factor and Submission-To-Publication Time
- Get all the key data about IEEE publications at a glance
- Download the results of your search

**Choose a search type and let Publication Recommender do the work!**

- Both Periodicals and Conferences
- Periodicals only
- Conferences only

**Enter keywords, key phrases, or article title**

**Extract keywords from your article**

Enter your abstract or drag your article file here (PDF, DOC, DOCX, TEX).

**Narrow by date:**
(Optional)

I would like to publish before:

**Get Recommendation**

**Or, find details for a specific Periodical or Conference:**

Enter the name of a periodical or conference
Evaluating journal integrity and quality

• Is the journal name unique and not easily confused with other, well-known journals?

• Are publisher and editor contact details available?

• Do you know anyone on the Editorial Board and what are their credentials?

• Is the journal open about its peer review process?

• Is copyright and licensing information clearly described on the journal's website?
Evaluating journal integrity and quality

• Is there a clearly stated plan for archiving and preservation of the journal's content?

• Does the journal have clear policies on handling potential conflicts of interest?

• Does the journal charge a fee for publication? If so, are details of the fees available?

• Is the journal indexed by reputable bibliographic databases and easily discoverable?

• Does the journal have a current top quartile rating in SCImago?
Beware!

- Unethical journals and publishers
- Hijacked journals

These publishers often target early career researchers and PhD candidates
Unethical publishing

• You may be directly contacted by an unethical publisher asking you to contribute articles to a journal they publish

• Remember to evaluate all organisations that approach you to determine the quality and integrity of their publications

• Unethical publishing may also be called questionable, disreputable or predatory publishing

• Many unethical publishers use an Open Access model, but not all OA publishers are unethical
Unethical publishing

Usually involves:

• A professional sounding journal and often a professional looking website

• No peer review process and little or no editorial support

• The payment of significant publication fees by the author, while the publishers expend very little

• The use of unsuspecting researchers’ names on editorial boards or "editing" committees
Hijacking

Usually involves:

• The use of a counterfeit website with a similar web address to mimic the website of an authentic and reputable journal

• The fraudulent use of established journal names and often identifiers, such as an ISSN

• The soliciting of manuscript submissions for the hijacked journal and charging of high publication fees

Often takes time for the legitimate publisher to discover this disreputable activity!
Ethical publishing: Tools

• **Stop Predatory Journals** - provides lists of unethical publishers, unethical and hijacked journals, and fake and misleading metrics
  The website is based on the archive of Beall's List

• **Directory of Open Access Journals (DOAJ)** - an independent online directory that indexes and provides access to high quality, open access, peer-reviewed journals

• **Retraction Watch** - tracking article retractions as a signal of scientific integrity
Finding journal circulation data

• Circulation or subscription data for journals can be very difficult to find

• Some journals will include circulation or subscription data on their websites

• Some journals do not report their circulation data (especially small or obscure journals)

• Ulrichsweb Global Serials Directory includes circulation data on Demographics tab for some titles, but mostly not for academic titles
Journal metrics

Can be used to identify quality academic journals, but do have limitations:

• Some metrics cannot be compared across disciplines

• Review articles may attract more citations, regardless of their quality

• Good quality articles and journals may not be cited

• The quality of a particular article cannot necessarily be judged by the journal in which it is published

• Articles may be self-cited or cited by colleagues to increase their visibility
Finding journal metrics

• Metrics, impact factors and rankings should not be the only criteria used to determine journal quality and impact

• Use only reputable journal metrics tools, there are a number of unethical publishing companies that provide misleading or fake journal metrics

• Recommended sources of journal metrics:
  * SCImago
  * Scopus

• When reporting journal metrics, always state full details of the metric, how you obtained it and when
**SCImago**

- Metrics tool - based on data from Scopus

- Journals can be analysed individually, or as part of a subject area or category

- To see how an individual journal is ranked within a subject area and category, select Journal Rankings and the relevant area and category

- The results list will list the journals in descending order of prestige, based on a metric called the SJR (SCImago Journal Rank)

www.scimagojr.com/
SCImago: SJR

- A prestige metric based on the number of citations received by a journal in a particular year and the prestige of the journals that make those citations

- SJR is a normalised score which allows the comparison of the impact of articles within a subject area and across disciplines
SCImago: Quartiles

- Individual journals will also be assigned to a Quartile

- The Quartile indicates how the journal performs in relation to other journals in the same subject area

- Q1 indicates that the title is in the top 25% of journals in that subject category

- Multidisciplinary journals may attain different Quartile metrics for each of their different subject categories

- You want your articles to be published in journals that are ranked in either Q1 or Q2 for your field of research
SCImago also reports

- H-index = # of articles (n) published by a journal that have received the same number or more (n) citations over time

- H-index should only be used to compare journals within the same field

- SCImago also includes citation data for a journal and for articles published within the journal
SCImago

SJR
Scimago Journal & Country Rank

Enter Journal Title, ISSN or Publisher Name

WHAT IS SCIMAGOJR FOR?

JOURNAL RANKS
COUNTRY RANKS
VIZ TOOLS

EXPLORE
EXPLORE
EXPLORE
SCImago: Journal search

Nature Genetics

Country: United Kingdom - SIR Ranking of United Kingdom
Subject Area and Category: Biochemistry, Genetics and Molecular Biology, Genetics
Publisher: Nature Publishing Group
Publication type: Journals
ISSN: 10614036
Coverage: 1992-ongoing
Scope: Nature Genetics publishes the very highest quality research in genetics. It encompasses genetic and functional genomic studies on human traits and on other model organisms, including mouse, fly, nematode and yeast. Current emphasis is on the genetic basis for common and complex diseases and on the functional mechanism, architecture and evolution of gene networks, studied by experimental perturbation.

H Index: 511

Homepage
SCImago: Journal search
SCImago

**Activity:**

Use SCImago to search for a journal in your field of research

- What is the journal’s h-index?
- What is the 2017 SJR for the journal?
- What is the current quartile for the journal?
SCImago: Subject search
A journal may be in more than one subject category.
Scopus is a multidisciplinary bibliometric database of peer-reviewed academic journals, books and conference proceedings.

There are two ways to find impact metrics and rankings of journals indexed by Scopus:

1. Using Scopus Sources
2. Using Scopus Compare Sources
Scopus metrics
Scopus Sources

- Scopus Sources provides a range of metrics which can be used to evaluate a journal:
  - SJR
  - CiteScore
  - SNIP (Source Normalized Impact per Paper)

- Sources also provides a percentile ranking within a subject area and a range of indicators of journal impact, including:
  - Documents published in the preceding three year period
  - Citations in the past year
  - Percentage of documents cited
CiteScore

• Calculates the average number of citations received in a calendar year by all articles published in a journal in the preceding three years

• The calendar year to which a journal’s issues are assigned is determined by issue cover date, not the dates that the articles were made available online

• CiteScore and CiteScore percentile should not be used to compare journals from different subject areas, as they are not field-normalised
SNIP

- Calculated by measuring a journal’s citation count per paper against the citation potential of articles in the same research area

- The impact of a single citation will have a higher value in subject areas where citations are less likely, and vice versa
### Scopus Sources

#### Sources

<table>
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<tr>
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<th>CiteScore</th>
<th>Highest percentile</th>
<th>Citations 2017</th>
<th>Documents 2014-16</th>
<th>% Cited</th>
<th>SNIP</th>
<th>SJR</th>
<th>Publisher</th>
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## Scopus Sources

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Scopus Sources

Nature Genetics
Scopus coverage years: from 1992 to 2018
Publisher: Springer Nature
ISSN: 1061-4036 E-ISSN: 1546-1718
Subject area: Biochemistry, Genetics and Molecular Biology: Genetics

CiteScore 2017: 21.12
SJR 2017: 22.243
SNIP 2017: 5.867

CiteScore Tracker 2018: 19.80

Last updated on 11 February, 2019
Updated monthly
Activity:

Using the same journal that you used for the ScIImago activity, search **Scopus Sources**

- What is the 2017 CiteScore for the journal?
- What is the 2017 SJR for the journal?
- What is the 2017 SNIP for the journal?
Scopus Compare Sources

- Allows you to compare up to 10 Scopus sources

- Metrics and indicators, include:
  - SJR, CiteScore & SNIP
  - citations
  - # of citing documents
  - percentage of documents not cited
  - percentage of review articles published

- The Chart view displays information in a line graph, with separate graphs for each metric or indicator

- The Table view lists metrics and indicators in one consolidated table
Scopus metrics
Scopus Compare Sources

Select up to 10 sources to compare

Search by title, publisher, ISSN, and/or subject area
Source title
Enter title
E.g., Cell, cancer
Limit to
All subject areas
Search

Search results
CiteScore

Source
CiteScore
Scopus Compare Sources
Scopus Compare Sources
Activity:

Using Scopus Compare Sources, compare four journals in your field of research

• Which journal has the highest 2017 SJR?

• Which journal has the lowest number of uncited articles in 2017?

• Which journal has the highest 2017 SNIP?
Looking at journal prestige lists

Some subject areas also provide lists of relevant, high quality journals:

- ABDC Master Journal List (Australian Business Deans Council)
- APS Preferred Journals List (Australian Political Studies Association)
- ERIH PLUS (European Reference Index for the Humanities)
- RePEc (Research Papers in Economics)
Tools: Guide

Publishing Research: Home

Research Support
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Publishing Research
This guide provides information on quality practices that should be considered when determining the most appropriate method for publishing your research.

Relevant formats and publications will vary depending on your area of research, but the integrity and quality of publishers and publications should always be important criteria when choosing where to publish.

Before Submitting Your Manuscript
There are several things you need to consider before submitting your research for publication:

- Determine the intended readership for your research
- Choose the publication format that is the most appropriate for your area of research - this may be a journal, book, conference paper or other media
- Develop a strategy that takes into consideration the pros and cons of each format
- Think carefully about which publishers and publica
d- ons are best suited to your research and intended audience
- Consider using placement tools to identify the publications which most closely fit your area of research
- Evaluate the quality and integrity of potential publishers and publications
- Consider the role of impact metrics in determining where to publish
- Consider the possible advantages and costs of Open Access publications
- Consider the impact of the following constraints:
  - A manuscript may only be submitted to one publication at any time
  - Acceptance rate for submissions can vary greatly between publications
  - The peer review process takes time and may require your manuscript to be reworked
  - Turnaround time for some publications may result in a long interval until publication
- Make sure the publication you choose meets the requirements of assessment processes such as HERDC (Higher Education Research Data Collection) and ERA (Excellence in Research for Australia)
- Carefully follow any instructions to authors provided by the publisher or publication

libguides.murdoch.edu.au/publishing
Help: Ask Our Librarians

Ask our Librarians

Need help finding resources for your assignments or building your research strategies?

Our Subject Librarians are skilled information professionals who can provide study, teaching and research support. We can provide support on:
- Finding scholarly information to support research via our Subject Guides
- Library skills training
- Managing and organizing research sources using EndNote
- Referencing sources in assignments
- Scholarly publishing, publication impact, open access and copyright.

Ask us a question

For quick questions via email, use the enquiry form below. For Murdoch students and staff only.

[ASK A QUESTION]

Subject support and consultations

Connect with our Librarians, access their Subject Guides or book a consultation for more complex study or research enquiries.

- Arts
- Business and Governance
- Education
- Engineering and Information Technology
- Health Professions
- Law
- Psychology and Exercise Science
- Sir Walter Murdoch School of Public Policy and International Affairs
- Veterinary and Life Sciences

when are we open?

Check the opening hours of the Geoffrey Bolton, Mandurah and Veterinary libraries.

join the Murdoch Library to make the most of what we can offer you.

[SIGN UP NOW]

goto.murdoch.edu.au/AskaLibrarian
Help: Consultations

- Provide further research support and skills training for academic staff and research students
- You can arrange an individual or small group consultation
Any questions?

Please help us by completing the feedback survey