Scholarly Communication: Finding impact factors for journals

What are impact factors and how would I use them?

A journal's impact factor is based on how often articles published in that journal during the previous two years (e.g. 2000 and 2001) were cited by articles published in a particular year (e.g. 2002). The higher a journal's impact factor, the more frequently articles in that journal are cited by other articles. The impact factor can therefore give an approximate indication of how prestigious a journal is in its field.

There are different measures of impact factors, taken across different numbers of years, so be careful that you are comparing like with like. Impact factors are calculated by the Thomson Reuters <http://www.isinet.com/> (formerly known as Thomson ISI or Thomson Scientific). Not all journals have impact factors, and the importance of impact factors will vary between disciplines. They nevertheless provide a useful pointer to the more important journals in your subject.

The Eigenfactor is another way to estimate a journal's standing within the academic community and it also counts numbers of citations to a journal, but it weights those from other high impact journals higher. In this way, it works similarly to Google's PageRank.

Instructions on how to find a journal's impact factor are given below.

How do I find a journal's impact factor?

Use the Journal Citation Reports (JCR) available through the Web of Knowledge service <http://wok.mimas.ac.uk/>. To check the impact factor of a specific journal you can search by title. Otherwise, you can browse by subject (subject categories are brought together in the Science and Social Science strands).

You can sort the information in many different ways - you will most likely wish to rank journals according to their impact factor. In addition to the impact factor you can check other aspects of a journal, such as immediacy index (a measure of how soon after publication the "average" article is cited - useful in comparing how quickly different journals are cited).

Citation Databases

- ***Current Contents Connect: Database of Tables of Contents for items indexed by ISI.***

Current Contents Connect is a current awareness database that provides easy Web access to complete tables of contents, abstracts, bibliographic information, and abstracts from the most recently published issues of leading scholarly journals, as well as from more than 7,000 relevant, evaluated websites.

- ***Google Scholar***
- ***Scopus Sources***

Search by subject area and source type.

- ***Web of Science Journal Citation Reports***

Search journals by title, subject, publisher or country.

Journal Impact Factors

- ***SCOPUS (Elsevier) for All Countries***

The following is a list of high-impact journals based on impact factors (i.e. citation frequency) from the Journal Citation Reports (JCR) by Thompson Reuters (available as part of the Web of Science) and from the The SCImago Journal Rank (SJR). The SCImago Journal Rank (SJR) indicator was developed by SCImago from the widely known algorithm Google PageRank™. This indicator shows the visibility of the journals contained in the Scopus® database from 1996.

- ***SCOPUS (Elsevier) for Africa***
- ***Open Access Education Journal Impact Factors***
- ***Open Access Social Science Journal Impact Factors***

Comparing Citation Analysis Databases

Here is a quick summary of what to expect from the three best known citation analysis tools.

	Web of Science	Scopus	Google Scholar
Subject Focus	Science, Technology, Social Sciences, Arts & Humanities	Science, Technology, Medical, Engineering, Arts & Humanities	Medical, Scientific, Technical, Business, Social Sciences, Arts & Humanities
Components	Composed of several citation indexes: Science Citation Index Expanded — Over 8,500 major journals across 150 disciplines - 1900 to present Social Sciences Citation Index – Over 3,000 journals across 55 social science disciplines -1900 to present Arts & Humanities Citation Index – Over 1,700 arts and humanities journals - 1975 to present Book Citation Index - Over 50,000 editorially selected books with 10,000 new books added each year in the sciences, social sciences and arts & humanities - 2005 to present Conference Proceedings -- 1990 to present	Life Sciences, 4,687 titles Health Sciences, 8,841 titles (including 100% coverage of Medline titles) Physical Sciences > 8271 titles Social Sciences > 6,560 titles Arts & Humanities, 3,500 titles The majority of these titles go back to 2002	Selections from PubMed, IEEE, American Institute of Physics, proceedings of the National Academy of Sciences, Nature.com, American Medical Association and other medicine journals, Ingenta, SpringerLink,Wiley Interscience, Cambridge journals, Taylor and Francis, Sage Publications, Blackwell-Synergy, OCLC First Search and others Open access journals and pre-prints Online dissertations and theses

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	Web of Science	**Scopus**	**Google Scholar**
Coverage	Over 12,000 journals	21,000 active journals 50,000 books 6.5 million conference papers 24 million patents	Unknown
Time Span	Some journal files going back to 1900; see above for more detail	44.4 million records, of which: 23 million records include references going back to 1996 (78% include references) 21 million pre-1996 records go back as far as 1823	Theoretically, whatever is available on the Web
Updated	Weekly	Daily	Monthly on average
Strengths	Deeper back-files especially for Science Journals While controversial, its journal citation reports, impact factors, and h-index are most widely used. More focused on U.S. research Offers citation mapping for visual presentation	User friendly search interface Broader coverage of journals (16, 500 versus 10,000 in WOS) Downloadable reference list More internationally focused than WoS Includes more than 1,200 Open Access titles	Provides a more comprehensive picture of scholarly impact as it indexes non-traditional sources not covered by WOS and Scopus. Includes peer-reviewed papers, theses, books, abstracts, and articles from academic publishers, professional societies, preprint repositories, universities, and other scholarly organizations Better coverage of newer materials than both WOS and Scopus

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	Web of Science	**Scopus**	**Google Scholar**
			International and multi-lingual coverage
Weaknesses	Can lead to low citation counts due to errors in citations provided by authors, and different citation styles used by journals leading to poor indexing Back-files are expensive	Citation tracking is limited to the relatively narrow time span of 1996+ Not very strong in Social Science and Arts & Humanities coverage	Limited search features Inflated citation counts due to inclusion of non-scholarly sources such as promotional pages, table of contents pages, course readings lists etc. Weeding irrelevant hits is time consuming Difficult to export citations No way to determine what sources, and time spans are covered. Limited to what is available on the Web May include non-scholarly citations like newspaper articles