

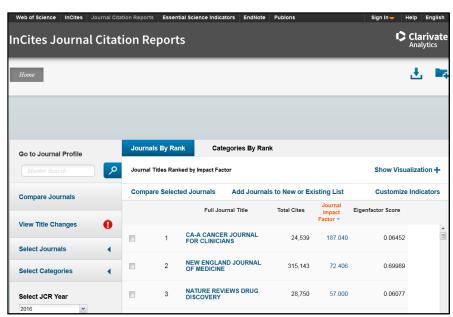
# Where do I start? - Measuring research impact

You can measure research impact through citation analysis. You may want to evaluate and compare journals or see how often a particular author or paper has been cited.

## **Journals**

# Incites Journal Citation Reports (JCR)

Journals are rated for quality. To help you decide which journals to publish in, you can use the Incites Journal Citation Reports database from Clarivate Analytics. JCR uses a number of measures to evaluate and compare journals. For example the journal impact factor compares a journal's relative importance to others in the same field. This is done by measuring the frequency with which the average article in a journal has been cited within a particular year. You can find this database and a guide to using it through searching by



title on SUPrimo or using the lists of databases at: http://guides.lib.strath.ac.uk/az.php

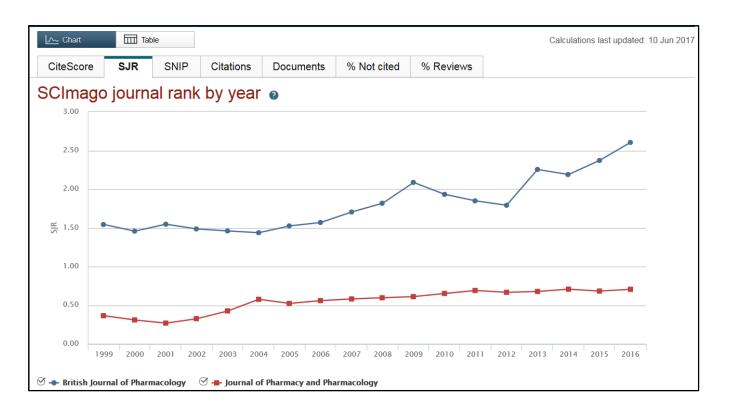
## Scopus - Compare Sources

Scopus Compare Sources compares the content and performance of up to ten sources at a time using ranking metrics fields.

- CiteScore calculates the average number of citations received in a calendar year by all items published in that source in the preceding three years.
- The SJR (SCImago Journal Rank) is weighted by the prestige of a journal, so a citation from a source with a high SJR is worth more.
- SNIP (Source Normalized Impact per Paper) weights citations based on the total number of citations in a subject field so you can compare sources across different fields.
- Citations compares sources by the number of documents published in a year.
- Documents compare sources by the number of documents published in a year.
- % Not Cited compare sources by the percentage of documents published in a year that have never been cited to date.
- % Reviews compare sources by the percent of articles that are review articles.

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Detailed information about Scopus journal metrics can be found at: <a href="https://www.elsevier.com/solutions/scopus/features/metrics">https://www.elsevier.com/solutions/scopus/features/metrics</a>

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## **Authors**

## Web of Science - Citation report

You can create a citation report from your Web of Science Core Collection search results if you have 10,000 or less results. Go to the alphabetical list of databases, choose Web of Science and login using your DS username and password. Carry out a search. Choose the Create Citation Report link to the right of your results. The graphs illustrate the number of published items and the number of citations per year. Summary information about the results includes average citation per article, the h-index and the total number of citations. Below this information, the papers are listed with the most cited first. For each paper you can see the times cited per year, the total number of citations and the average number of citations. These citation counts only cover papers that are indexed in Web of Science Core Collection.



#### H-index

The h-index was developed by US Physicist Jorge Hirsch and is a measure of an individual's scientific research output. A scholar with an index of 'h' has published 'h' papers and each paper has received at least 'h' cites by others. It therefore takes account of the number of papers and number of citations per paper. The h-index can be used only to compare scholars working in the same field. H-index is available through Web of Science and Scopus.

## **Scopus – Author Evaluator**

You can analyse an author's publishing output with charts covering documents, citations and h-index. Use the Author Search form, then select the link to the name of the author you want to evaluate to view this author's profile.

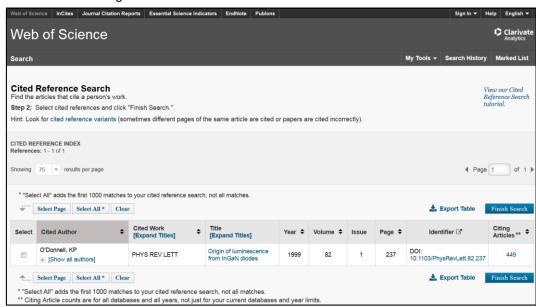


#### Web of Science - Cited Reference Search

Citation searching lets you search forward in time from an older paper to find more recent papers that have cited this older paper. It can be used to:

- Find out how often your work has been cited by others to give you an idea of its impact
- Track the development of ideas and topics over time
- Find papers on a similar subject area
- · Identify other researchers working in the same field to facilitate collaboration

Use the down arrow next to Basic Search to choose Cited Reference Search from the Web of Science Core Collection database. Enter details of the Cited Author, Cited Work and Cited Year and click on Search. Tick the box(es) next to the relevant work and click on Finish Search. The screenshot shows a cited reference search for citations



to an article by Prof Kevin O'Donnell which was published in Physical Review Letters in 1999.

## Google Scholar - Cited by

Google Scholar https://scholar.google.co.uk/ also offers citation searching. Search results have a 'Cited by'

link, which gives the number of other articles that have cited that article and links to those articles. The screenshot shows a search on Google Scholar for zika virus outbreak. The first article shown (Zika virus outbreak, Bahia, Brazil) has been cited 668 times.



#### **Altmetrics**

Altmetrics <a href="http://altmetrics.org/manifesto">http://altmetrics.org/manifesto</a> are new metrics that been developed to compliment the more traditional metrics. They aim to show the impact of research by counting the number of times a paper has been discussed or shared via social media tools such as Twitter, Linked-In and Mendeley.

## **Further Help**

See the Research Support LibGuide for further help with measuring research impact: <a href="http://guides.lib.strath.ac.uk/research\_support">http://guides.lib.strath.ac.uk/research\_support</a>

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