

## Research Impact

Evaluating the impact of scientific output can be very useful in your career as a researcher, for instance when looking for top publications in a subject area, deciding where to publish, for grant applications, and new collaborations. Research metrics provide one possible way of evaluating research impact.

It is important to make a responsible and critical use of research metrics. Data needs to be gathered from various sources, and metrics related to different types of research output such as papers, posters, software, data can help to build a more accurate picture.

In this task you will explore some tools providing quantitative indicators for assessment of research at journal, publications and researchers level.

These tools are mainly based on traditional metrics such as journal citation counts and therefore have limitations and require consideration of their sources, the subject area you are investigating, and what you are measuring.

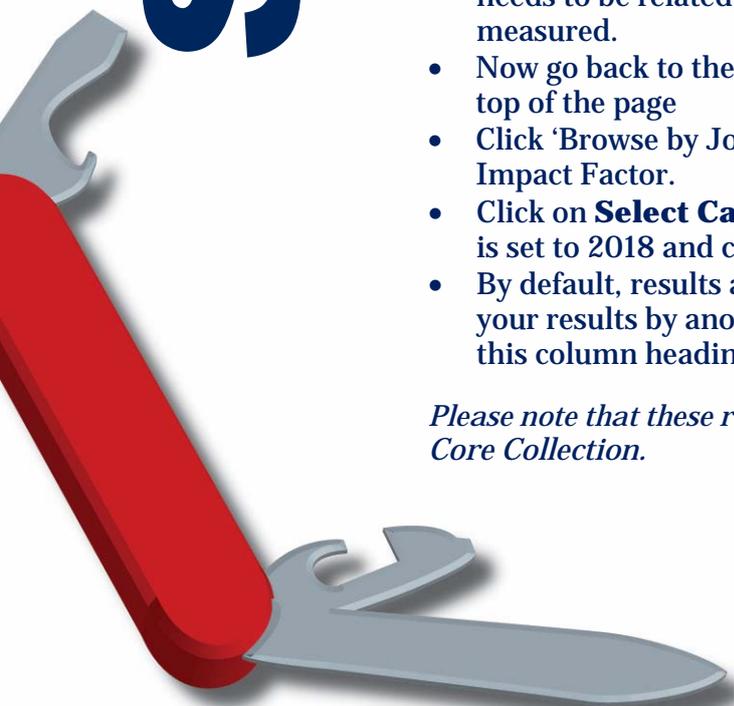
*Note: For more details, go to the Bibliometrics & Citation Tracking Library Guide listed at the bottom of the page.*

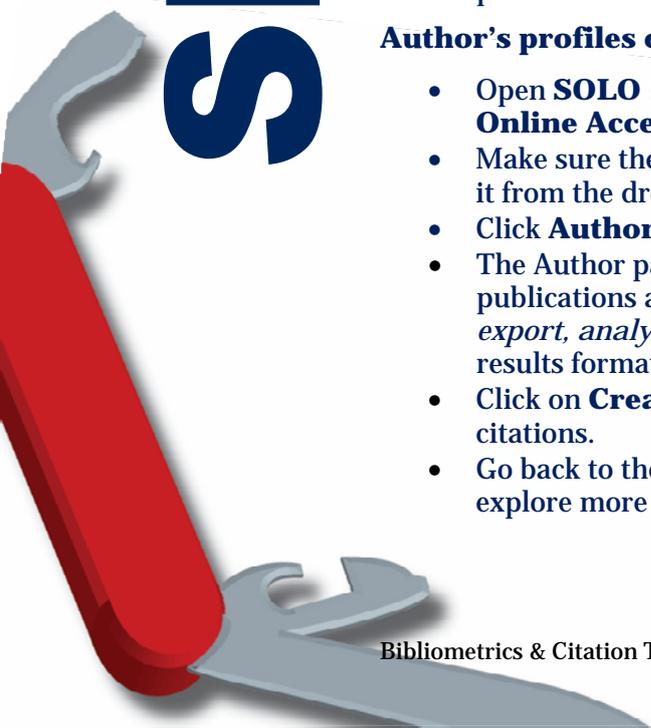
### Task A – Journal Rankings and Metrics

#### Journal Citation Reports (JCR)

- Open **SOLO** (<https://solo.bodleian.ox.ac.uk/>) and type **Journal Citation Reports**. Find the Database record and follow the *Online access* link.
- Search the journal 'Bioinformatics' in the main search box. Click on its title from the result lists.
- A new tab will open with information on trends for this **journal impact factor** in 2018 and in the past years.
- *The Impact Factor of a journal is the average number of times articles published in the previous two years from that journal have been cited in the reporting year.*
- Scroll down to see a detailed description of how the impact factor is calculated, and more metrics related to it.
- Click on each of the three category boxes at the top of the page to see how this journal ranks differently in each category. The impact factor always needs to be related to similar journals in the subject field against which it is measured.
- Now go back to the Home page by clicking Journal Citation Reports at the top of the page
- Click 'Browse by Journal' to see journals in your subject area ranked by Impact Factor.
- Click on **Select Categories** and choose a subject. Make sure the JCR year is set to 2018 and click on **Submit** to get a list of results.
- By default, results are ranked by Journal Impact Factor. You can re-sort your results by another indicator, for instance by **Total Cites**, by clicking this column heading. Click on a journal title to see its metrics page.

*Please note that these results are based on documents indexed in Web of Science Core Collection.*





### Scopus Sources – CiteScore metrics

- Open **SOLO** ([solo.bodleian.ox.ac.uk](http://solo.bodleian.ox.ac.uk)) and search **Scopus**. Click Online Access.
- Click on **Sources** at the top right of the page. Enter a Subject area. You can also select a specific title, a publisher, or an ISSN.
- Click Apply. You'll get a list of journals sorted by CiteScore. The **CiteScore** of a journal measures the average citations received in the reporting year per any document (including articles, reviews, conference papers, letters, editorials) published on a journal in the prior three years.
- Click on a Journal title to see more details on its CiteScore trend for past years.

*Please note that these results are based on documents indexed by Scopus.*

As you can see, depending upon the tools you are using and the metrics selected, journals will be ranked differently, but these lists can give you a flavour of top cited journals in your subject area.

### Task B - Measuring impact of publications at article level

Number of citations is traditionally the main indicator of the impact that a paper is having on its research field. Alongside this kind of metrics, alternative metrics are now used to capture the 'attention' that a publication is getting from non-traditional sources such as social media, news, reference management software, web pages.

- Open **SOLO** ([solo.bodleian.ox.ac.uk](http://solo.bodleian.ox.ac.uk)) and search **Scopus**. Click Online Access.
- Search the article "*Vertical mixing, energy, and the general circulation of the oceans*" by Wunsch, C., Ferrari, R., and then click on the article title.
- Click on **View All Metrics** in the Metrics box on the right.
- The Scopus metrics shows citation data for this article. The PlumX metrics shows alternative metrics related to activity on social media, and citation tools.

### Task C – Viewing Researchers' profiles

You might be interested in having an overview of an author's research output, including information on citations in time.

#### Author's profiles on Scopus

- Open **SOLO** ([solo.bodleian.ox.ac.uk](http://solo.bodleian.ox.ac.uk)) and search **Scopus**. Click Online Access.
- Click on **Authors**, enter the name of your supervisor or of the Head of your Department and click Search. Select the author entries you want to view.
- On the Author page you can find a list of all author's publications (indexed by Scopus) and information such as research main topics, co-authors, total number of citations, etc.
- Click on **View Citation Overview** to view citations for the author's publications over the years.

#### Author's profiles on Web of Science

- Open **SOLO** ([solo.bodleian.ox.ac.uk](http://solo.bodleian.ox.ac.uk)) and search **Web of Science**. Click **Online Access**.
- Make sure the **Web of Science Core Collection** is selected, otherwise select it from the drop-down menu.
- Click **Author Search**. Enter the author details and click **Find**.
- The Author page will open. You can find there information such as the author's publications and number of citations. Click on '*View as a set of results to export, analyse and link to full text*' to see the author's documents in search results format on Web of Science.
- Click on **Create Citation Report** for a more detailed view of the authors' citations.
- Go back to the Web of Science list of documents and click **Analyze Results** to explore more in detail the author's publications.