Libraries and Learning Services

Measuring your research impact using SciVal and InCites

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About the guide

This guide provides steps for obtaining key author metrics from SciVal and InCites. Individual comprehensive guides for SciVal and InCites cover the full range of metrics available in both tools.

Bibliometric tools

SciVal and InCites are bibliometric tools for benchmarking research performance based on citations for publications indexed in databases. SciVal provides metrics for publications in the Scopus database and InCites for publications in the Web of Science (WoS) database.

There are currently three bibliometric tools available – SciVal, InCites and Google Scholar Citations. Google Scholar can provide individual researchers’ citation counts and h-index, while SciVal and InCites can offer benchmarking analytics at the individual, departmental and institutional levels.

Scopus and Web of Science

As SciVal and InCites generate metrics from different sets of publications (databases), their metrics are different. A glossary of the metrics provided by each of the tools is given in the appendices.

Scopus has a broader coverage and represents a wider selection of materials from different disciplines, but coverage for most journals is from 1996 onwards, with pre-1996 publications being added progressively. The WoS collections extend further back but are narrower in scope and do not represent the non-STEM disciplines well.

Both Times Higher Education and QS University ranking systems use Scopus data for indicators of research influence. The ERA assessment exercise in Australia in 2015 also uses Scopus data. The Academic Ranking of World Universities is the only system that uses WoS data but recently switched to Scopus data for the ranking of Asia Pacific universities.

Interpreting the metrics

It is important to understand that publications not indexed in Scopus or WoS are not factored into the metric evaluations. Also, citation metrics are one of many quantitative indicators and represent only the academic impact of scholarly outputs. Research impact beyond academia and qualitative indicators of impact are also important. Hence, the metrics presented in this guide should be used in combination with other measures to give a full picture of research influence.

A list of the metrics available in SciVal is given in Appendix 1. A second list of metrics found in InCites can be found in Appendix 2.

For information on other measures available, consult the library Biblioinformatics Guide or contact your subject librarian for a consultation.
SciVal

Know the basics before you start

What is a SciVal entity?

- It may be a single researcher, publication or institution.
- Or, it may refer to a group of researchers, a set of publications, or a group of institutions.

Overview Module

- You can select one entity only.
- Year range is limited to 2010-2014.

Benchmarking Module

- You can select more than one entity.
- Year range is limited to 1996-2015.

Disclaimer

- SciVal is based only on the publications within the Scopus databases and therefore will not represent a researcher’s complete bibliometrics statistics.

How to access SciVal

1. Users without a Scopus or SciVal account
   a. Go to the library homepage and click Databases
   b. Type SciVal into the search box and click GO
   c. You will see SciVal listed; click Direct Connect
   d. On the SciVal Login page, select Register Now
   e. Fill in your details and email address, create a password
   f. Tick the Registered user agreement checkbox, click Register

2. Users with a Scopus or SciVal account
   a. Follow steps 1a-1c above
   b. On the SciVal Login page, log in with your Scopus or SciVal Username and Password.
Retrieve your publications indexed in Scopus

1. Search
   a. Click on Overview
   b. In the left hand column, click on Researchers and Groups
   c. Click Add Researchers and Groups
   d. Click Define a new Researcher
   e. Enter your name details
      - Entering A for first name will retrieve Andrew, Ann, Arthur and so on
      - Entering Andrew will only retrieve Andrew
      - Click Add another field > Add a name variant (optional)
   f. Enter University of Auckland in the Affiliation field
      - Click Add another field > Add an Affiliation (optional)
   g. Click Search

2. Select
   a. From the list of authors retrieved, select the listings that are yours.
   b. If you are not sure, do one of the following
      - Click Show recent publications under the author in question
      - Click Validate publications after selecting your authors
   c. Click Directly go to Save Researcher or Next Step (if you have to validate publications)
   d. You will see the following only if you have selected more than one author. If you have selected one author only, go to Step 4.

When you combine author name variants, these changes will also be reflected in Scopus within 2 weeks.

Do you want to validate the affiliated publications that will be associated to the Researcher you are about to define?

- Click here if you are sure all the publications under the different Scopus author profiles are yours
- Go to Step 4
- Click here if you are NOT sure they are your publications
- Go to Step 3
3. Validate publications (optional)
   a. Go through the publication list and de-select those that are not yours
   b. Once completed, go to Next Step

4. Save Researcher
   a. Click on the name field to see the different name variants and choose your preferred one. This is the name that will be displayed in your public Scopus profile.
   b. All your name variants and affiliations will remain (but hidden in your public Scopus profile).

Choose a journal classification scheme
SciVal offers several different journal classification schemes to choose from, each of which assigns journals to one or more broad subject disciplines. The classification scheme we prefer is Australian and New Zealand Standard Research Classification (ANZSRC) Field of Research scheme (FoR), as its subject discipline categories are the most appropriate. All the items published in a journal will fall under the same subject disciplines and the citation metrics by discipline are calculated accordingly.

1. To choose it, click on your name, then Preferences.

2. By default, the All Science Journal Classification (ASJC) scheme is chosen. Select FoR instead.
Choose a year range and discipline

Be default, all your publications during 2010 to 2014 are included. (To get metrics for publications prior to 2010, go to the Benchmarking module.)

• Select either a 3-year or 5-year range.

• Click to display a list of subjects for the journal classification scheme you have chosen. Select a subject category to filter your publications.

• Click on the blue arrow to expand the main category.

• List is expanded – click on the arrow again to collapse it.
**Know your metrics**

A list of the metrics is attached in Appendix 1.

**Summary tab**

The landing page is a summary of your outputs in your chosen period. Aggregate values are displayed.

- View list of publications
  - Check what publications are included

- Analyze in more detail
  - This will take you to the other tabs

**Publications tab**

Breakdown values by year are displayed.

- Total outputs and top journals by year
- Outputs by your past and current affiliations
- Outputs by top 10 journals
- Select a visual presentation
  - Total outputs and field-weighted citation impact by subject category
- Click to choose a journal metric – SNIP, IPP or SJR
Citations tab

Total and average citations and field-weighted citation impact by year

Collaboration tab

Export your metrics

You can download the contents of a tab/section as a PDF document or export it as an Excel document.

Get metrics for individual publications (2010-2015)

1. Follow the steps to retrieve your publications first (see p.4)
   a. In the left hand, click Publication Sets
   b. Click Add Publication Sets
   c. Click Define a new Publication Set
   d. Select your own name; click Next Step
   e. Your publications will display - select a publication
   f. Click Next Step to see the metrics
Benchmark yourself

Go to the benchmarking module

Benchmark against another researcher

1. Define the researcher you want to benchmark against (steps on doing this on P.5)
   a. Select the researcher and yourself
   b. In the left column, click on Institutions and Groups to see if any group has been selected. Click into the box to de-select any group.
   c. Do the same with other sections to make sure no other entity is selected.
   d. Click on the year range and adjust the years

2. Click y-axis and select a metric (e.g. click Cited and select Field-Weighted Citation Impact)

Note: Once you click on a citation metric, you can choose to include or exclude self-citations. Click x-axis and select Publication Year (if not already selected)
3. Click x-axis and select Publication Year (if not already selected)

![x-axis selection](image)

**Benchmark against UoA publications in the same discipline**

1. In the left column, click on **Institutions and Groups** to select University of Auckland.
   a. Click on Researchers and Groups to select yourself only (de-select other researchers)
   b. Adjust year range and choose metrics for x axis and y axis as in the previous section.
   c. Select a discipline.

**Benchmark against your department (available on request only)**

Contact your subject librarian or the Library Research Support Services team if you want to have a SciVal entity generated for your department. Once the entity is generated, it will be shared with you via email.

1. Click on the link provided in the email to activate the entity. This will take you to the My SciVal section in SciVal.
   a. Click into the box against the entity.
   b. Click Add to selection panel.
   c. Click Benchmarking to go back to the Benchmarking Module.
   d. In the left column, click on Researchers and Groups to select yourself and your department for benchmarking.

Important! This entity will be updated periodically and an update will be sent to you via email. Always click on the link provided in the email to activate the new updated entity.
InCites

Know the basics before you start

What is the Analytics Explorer?
- It is a single-page toolkit for exploring InCites data and creating tiles; a tile is the vehicle for delivering visualized data to your dashboard, or sharing with colleagues.
- Create reports in which you can include tiles, and save your reports in folders that can be accessed at any time.

What is a Master Tile?
- The Explorer consists of five Master Tiles, each providing a different view of the InCites dataset, and enabling you to direct your focus by People, Organizations, Regions, Research Areas, and Journals, Books, Conference Proceedings.

Explore Data
- Select a Master Tile from the Explorer that provides the view of the InCites dataset you wish to analyse
  a. Apply Filters - Use the filter panel to identify the attributes by which you wish to discover data.
  b. Pin Results and Benchmarks - pick and choose items from the results list to create a peer group to compare to each other as well as calculated benchmarks.
  c. Choose Indicators and Visualizations - rank your results by a specific Indicator and select a visualization that best conveys the information.

Create Tiles
- Once you have narrowed your focus and discovered the information that best fits your needs, InCites enables you to capture that data and an accompanying visualization by creating a Tile.

Disclaimer
- InCites is based only on the publications within the Web Of Science databases and therefore will not represent a researcher’s complete bibliometrics statistics.

How to access InCites

1. Users without a Web of Science or InCites account
   a. Go to the library homepage and click Databases
   b. Type incites into the search box and click GO
   c. You will see the InCites link; click Direct Connect
   d. On the home page, select Register in the top right corner
   e. Fill in your details and create your own username and password
f. Click **Register**

2. Users with a Scopus or SciVal account
   a. Follow steps a-c above
   b. On the Log in page, select **Subscriber Log in** and log in with your Web or Science or InCites credentials

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**Save your personal tile**

1. Search
   a. From the **Analytics** tab, click on **People**
   b. In the left hand column, under **Attributes**, click on **Person Name or ID** to expand it
   c. Start typing the Person Name or ID and as you type, it will offer suggestions.
   d. Click on all your name variants.
   e. Enter **University of Auckland** in the **Affiliated Organization** field if you want to narrow your search results.
   f. Start typing University of Auckland it will search for it as you type.
   g. Scroll to the bottom of the column and select **Update Results**.

2. Refine
   a. The results will show as below, showing metrics for all variations of your name.
      
      
      | Name            | Rank | Affiliation          | # Web of Science Documents | Category Normalized Citations Impact | Times Cited | % Docs Cited | h-index |
      |-----------------|------|----------------------|---------------------------|-------------------------------------|-------------|--------------|---------|
      | Kroitchek, D.   | 1    | University of Auckland | 430                       | 3.83                                | 11,744      | 90.24        | 45      |
      | Kroitchek, D    | 2    | n/a                  | 46                        | 1.04                                | 986         | 60.43        | 17      |
      | Kroitchek, Daniel J. | 3    | n/a                  | 8                         | 4.55                                | 1,068       | 100%         | 7       |
      | Kroitchek, David | 4    | n/a                  | 1                         | 0                                   | 0           | 0            | 0       |

   b. To check to see if all the variants of your name really are you, click on the **Web of Science Documents** number and it will show a pop up of your publications.
   c. To delete the name variants that are not you, close the pop up, check the boxes next to those names and then select **Exclude From Results**.
3. Baseline
   a. Pin your names to the top by checking the check box next to each name and selecting **Pin To Top** at the bottom right of the page.
   b. Create a **Baseline for Pinned Items** by clicking on **Benchmarks** and then **Baseline for Pinned Items** so that you can easily compare yourself to others once you further filter the search.
   c. Now the **Baseline for Pinned Items** shows the unique items from all of the name variants.

   ![Baseline for Pinned Items](image)

   **Note:** These figures are for this set of publications not for individual publications or individual journals.

4. Save your tile to your Dashboard
   a. Choose the kind of visualisation you want to display and which indicator it will be based on.
   b. Click **Save Tile** in the top right corner and enter a **Title**.
   c. Select **Create a new folder** (Folder icon on the left), select **Save To Dashboard** and then **Create**.
   d. To view your tile, select the **Dashboard tab** at the top of the page.

   ![Create Tile](image)

   **Note:** This saves your personal results permanently to your dashboard and will allow you to easily access your metrics for further analysis.
To view and analyse the dataset again, select the **Configure tile** icon from your **Dashboard** and then **View Data**.

**Retrieve your metrics**

A list of the metrics is attached in Appendix 1.

**Manage Indicators**

1. To add more metrics such as your h-index, % Docs cited, average journal normalized citation impact, times cited, citation impact etc, click on the **Configure Indicators** (Cog icon).
   a. **Browse Indicators** and add or remove indicators and then click **Done**.
Benchmark yourself

Benchmark against another researcher

1. Retrieve your personal metrics from your Dashboard by selecting the Configure tile icon from your Dashboard and then View Data.
   a. Define the researcher you want to benchmark against by adding their name under Person Name or ID as well.
   b. To check to see if all the variants of their name really are your targeted researcher, click on the Web of Science Documents number and it will show a pop up of their publications, OR add a specific Research Area via a Schema.
   c. Delete the name variants that are not your targeted researcher, check the boxes next to those names and then select Exclude From Results.
   d. Browse Indicators via the Configure Indicators icon to add or remove indicators and then click Done.
   e. You can now compare yourself to the researcher using a variety of metrics. Click on each indicator heading, eg, Times Cited to sort and rank you against the other researcher.

Benchmark against UoA researchers in the same discipline

1. Retrieve your personal metrics from your Dashboard by selecting the Configure tile icon from your Dashboard and then View Data.
   a. Make sure your name/s are Pinned To Top, and then delete your name/s from the left hand column under Person Name or ID by selecting the “x” – (your name/s will stay pinned to the top).
   b. In the left hand column under Attributes, enter University of Auckland in the Affiliated Organization field.
   c. Start typing University of Auckland - it will search for it as you type.
   d. Expand Research Area and under Schema choose the Australian and New Zealand Standard Research Classification (ANZSRC) Field of Research (FoR) scheme – Australia FOR Level 1.
   e. Select your research area.
   f. Scroll to the bottom of the column and select Update Results.
   g. You can now compare yourself to that research area at the University of Auckland using a variety of metrics. Click on each indicator heading, eg, Times Cited to sort and rank you against the other research area.
Benchmark UoA publications in the same discipline

1. Click the **Explore Organizations** report explorer
   a. In the left hand column under **Attributes**, enter *University of Auckland* in the **Affiliated Organization** field.
   b. Start typing University of Auckland it will search for it as you type.
   c. Expand **Research Area** and under Schema choose the Australian and New Zealand Standard Research Classification (ANZSRC) Field of Research (FoR) scheme – **Australia FOR Level 1**.
   d. Select your research area
   e. Scroll to the bottom of the column and select **Update Results**.
   f. Select **Web of Science Documents** and a pop up will show all the publications by UoA researchers from your specified research area including your selected indicators eg **Times Cited**.
   g. Select the **Export** icon in the top right corner for analysis within Excel.
   h. You must type in the number of records before you can **Export** it.
Appendix 1: Glossary of Scival metrics

The definition of a metric is displayed when it is selected in the Benchmarking Module. The following are the key ones and are found in the Overview Module.

**Field-weighted citation impact**

The number of citations received by the publications under review as compared with the average number of citations received by all other similar publications (ie, publications in the same field) in the Scopus database. If it is greater than one, it is above average.

**Impact per publication (IPP)**

There are two steps to calculate this journal metric. First, get the total citations a journal receives in a year to the publications published in that journal in the previous three years. Second, divide this total by the number of publications published in the journal in those three years. This is the equivalent of SNIP, but without adjusting for disciplinary differences.

**Outputs in top percentiles**

The total number of publications that were included in the 1% and 10% most cited publications worldwide in the Scopus database.

**Outputs in top percentiles (field-weighted)**

The total number of publications that were included in the 1% and 10% most cited publications worldwide in the Scopus database. Metrics were adjusted for the disciplinary differences in citation patterns to allow for cross-disciplinary comparisons.

**Outputs in top journal percentiles**

The number of publications that were published in the top 10% of journals across the disciplines in the Scopus database. Journals in SciVal are rated by their SNIP values. Two other ratings are available for you to choose: the IPP and SJR values.

**Source Normalized Impact per Paper (SNIP)**

A measure of citation impact after correcting for differences in citation practices between subject fields. It is defined as the ratio of a journal’s citation count per paper to the citation potential in its subject field. A value above one indicates an above average performance.

**SCImago Journal Rank (SJR)**

This measures the prestige of a journal based on citation counts. With SJR, each citation is weighted differently taking into account the subject field, quality and reputation of the citing journal.
Appendix 2: Glossary of InCites metrics

Baseline
A baseline is the average performance of a global set of publications with the same subject area, document type and year. Baselines are calculated using a whole counting method, this means that all papers in a subject area are counted towards the baseline calculation regardless of whether those papers are also in other subject areas or not.

Normalized Citation Impact
The Normalized Citation Impact (NCI) of a single publication is calculated by dividing the actual count of citing items by the expected citation rate (baseline) for publications with the same document type, year of publication and subject area.

Journal Normalized Citation Impact
The Journal Normalized Citation Impact (JNCI) indicator is a similar indicator to the Normalized Citation Impact, but instead of normalizing per subject area or field, it normalizes the citation rate for the journal in which the document is published. The Journal Normalized Citation Impact of a single publication is the ratio of the actual number of citing items to the average citation rate of publications in the same journal in the same year and with the same document type. The JNCI for a set of publications is the average of the JNCI for each publication.

% Documents Cited
The %Documents Cited indicator is the percentage of publications, in a set, that have received at least one citation. It shows the extent to which other researchers in the scientific community utilize the research output produced by an entity. Another way of thinking about this indicator is as the inverse of the number of papers that didn't get cited at all.

Highly Cited Papers
The Highly Cited Papers indicator shows the volume of papers that are classified as highly cited in the Thomson Reuters service known as Essential Science Indicators (ESI). Highly Cited Papers in ESI are the top one percent in each of the 22 subject areas represented in the Web of Science, per year. They are based on the most recent 10 years of publications. Highly Cited Papers are considered to be indicators of scientific excellence and top performance and can be used to benchmark research performance against field baselines worldwide.