Guide to Generating Citation Metrics

Design to Inspire. Inspired to Design.

SWITCH LIBRARY

OBJECTIVE

How to generate citation report or citation metrics using different platforms

Section 1: What is Citation Metrics

Duration: 10 mins

Section 2: Web of Science Demo

Duration: 20 mins

Section 3: Google Scholar Demo

Duration: 20 mins

Section 4: Practice and Q&A

Duration: 20 mins

Tools needed: Web of Science, Excel, Google Scholar, Publish and Perish, DIY tools developed

1. What are Citation Metrics

- **Track and measure** citations to provide an indication of the impact of a paper/author/journal/organization, etc.
- **Different Levels of Citation Metrics**
  - **Article Level:** total number of citations, recent citations, 'Highly-Cited Paper'
  - **Journal Level:** Impact Factor- a measure of the average number of citations that articles published by a journal in the previous two years have received in the current year.
  - **Author Level:** total citations, average citations per published article/year, h-index (author has published X articles with at least X citations each)
  - **Institution Level:** total number of citations, recent citations.

1. Source for Citation Metrics

- **Scopus** (no subscription currently)
- **Web of Science** (includes ISI indices & others)
- **Google Scholar** (includes all scholarly publications without time period limit)
  - Includes highest numbers of published articles
  - Gives highest citation counts

2. Web of Science

1) Generating Citation Report for a Researcher/ Organization/Paper Indexed

2) Generating Citation Report for a Paper Which is Not Indexed in Web of Science

3) Searching Tips

1) Generating Citation Report for a Researcher/ Organization/Paper Using WoS

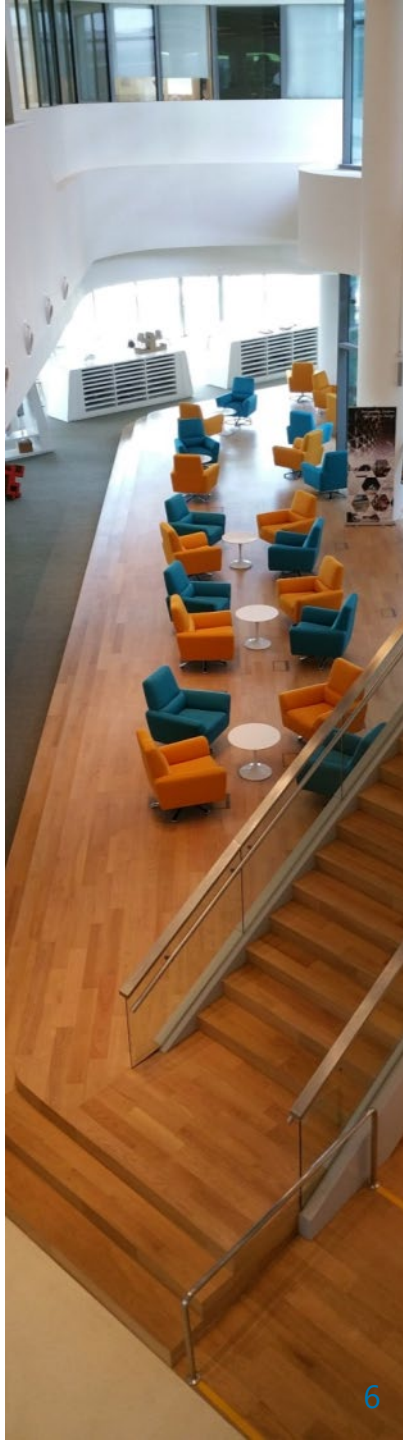
✓ Researcher

Researcher with Identifier	Researcher without Identifier
Basic Search → Author Identifier → ORCID or ResearcherID → Retrieve Citation Reports/Metrics Note: ORCID may not integrate well with WoS now especially for researchers without ResearcherID	• Basic search: Enter Author Name → Validate the Author → Remove Irrelevant Records → Retrieve Citation Reports/Metrics • Advanced Search: Enter Author Name → Select Research Domain → Select Organization → Remove Irrelevant Records → Retrieve Citation Reports/Metrics

✓ Organization

Organization (Web of Science)	*InCites
Basic Search → Organization-Enhanced → Retrieve Citation Reports/Metrics	• Analytics: Organizations → Enter Organization Name → Retrieve Citation Metrics

*Contents update in InCites is (about 3 months) slower than that of WoS.



1) Generating Citation Report for a Researcher/ Organization/Paper Using WoS

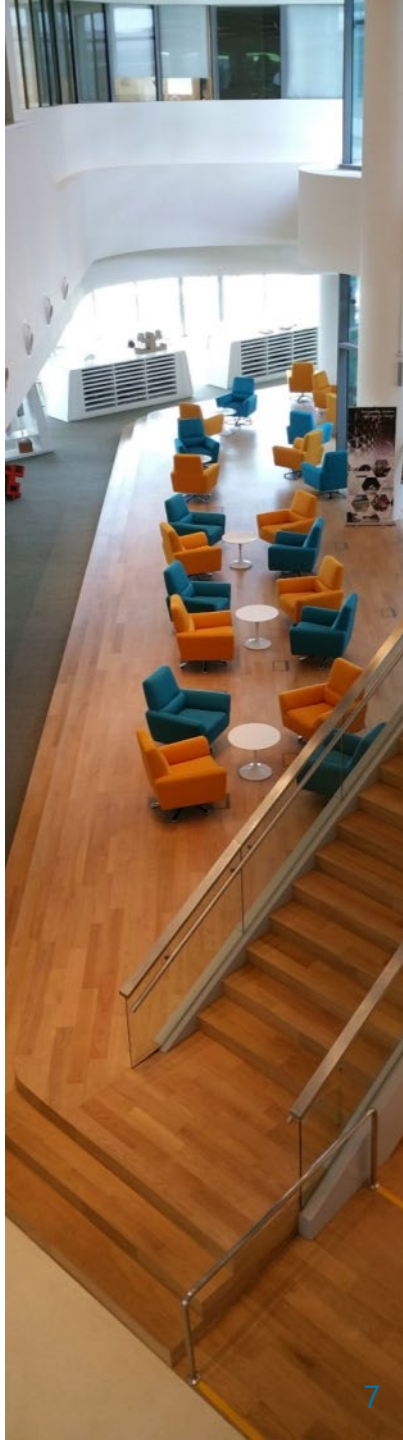
✓ Paper/Books

Paper	*Book
Basic search: Enter Title or Topic → Click Records → Retrieve Citation Metrics	Basic search: Enter Title or Topic → Click Records → Retrieve Citation Metrics

✓ What if the paper or the book is not indexed in WoS?

Cited Reference Search	
Cited Reference Search: Cited references are the articles, books or other materials listed in a bibliography or as works cited in a particular publication. Because citation databases index each reference, it is possible to search these cited references.	Steps: Enter Title → Validate Records Choose "**Analyze Results**" not "Create → Citation Report" → Retrieve Citation Metrics

*WoS only indexes books for last 5 years



Summary and Tips

✓ **What is covered in WoS?**

a) Papers/books/conference papers, etc. published in journals selected by its editors (subject to coverage of years)
b) References found at the end of each of the above

✓ **What information need to be obtained before searching?**

It is best to get a list of publications or CV from the author. If cannot, we may try to obtain a list of the following:

a) Affiliated organizations
b) Information like when he/she starts publishing
c) Authors he/she normally work with
d) Journal titles he/she normally publishs in

✓ **Why choose All Research Domains rather than just the domains that are specific to the Author?**

If only the specific research domains of the Author were chosen, there is a possibility that some documents would be missed due to the way WoS classifies research categories.

✓ **How to make appropriate recommendations to researcher?**

We need to make better understanding of a researcher's needs.

a) For faculty who wants to be promoted, he/she needs get the benchmarking citation metrics for himself/herself and his/her peers → consistent method, refine results by publication year, research areas, etc.
b) For researcher who wants to have most comprehensive data → basic/advanced search and cited reference search, calculate citation metrics for users

3. Google Scholar

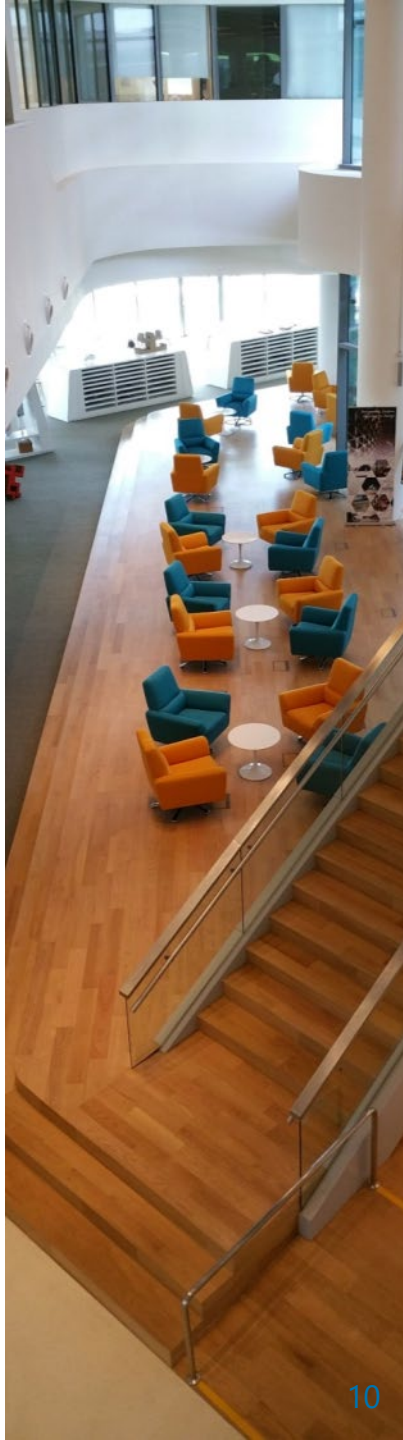
1) Generating Citation Metrics for a Researcher/Paper

2) Searching Tips

1) Generating Citation Metrics for a Researcher using Google Scholar

✓ Use Publish and Perish

Researcher with Google Scholar Profile	Researcher without Google Scholar Profile
Using Google Scholar Profile Search(GSPS): Searching full names of the researcher; Narrow down by including affiliation (if known) if you get too many results. Note: GSPS only works if academic in question has created a profile. No result if you search by full given name and academic has only used initial in their profile (Easily fixed by using a less restrictive search)	Using Google Scholar Search: 1. Single initial + Family name. 2. Multiple initials + Family name. 3. Full given name + Family name. 4. Two author names separated by AND will report co-authored papers. 5. Two author names separated by OR will report paper authored by either author (or name variants of one author). Note: 1. Might report too many homonyms due to author name variants. 2. Might miss (some) publications if author has also published with one initial or published in fields where publishing with initials only is common.



Summary and Tips

✓ **Searching Tips**

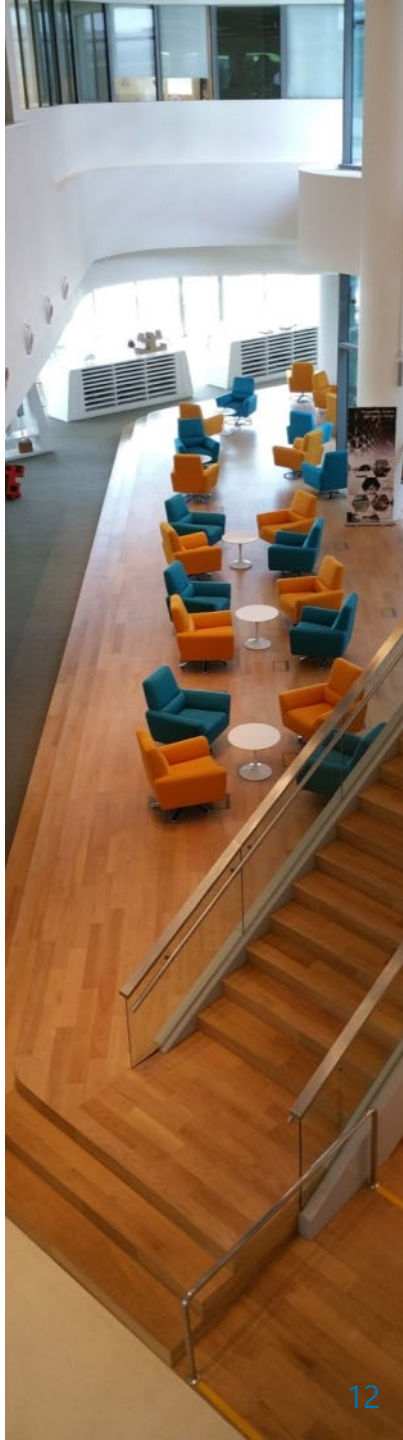
- **Put quotes** around your search, e.g. "KL Wood", not KL Wood. If you don't, Google will match the initial anywhere in the author record, so you might get publications by A Wood and KL Jones.
- If author has normally published with **multiple initials**, e.g. "KL Wood", then use multiple initials.
- If author as only ever published with **one initial**, you can exclude namesakes with multiple initials by excluding "K* Wood", "K** Wood", "K*** Wood".
- If author works in a field where journals typically list **full given names**, you can simply search for "Kristin L. Wood".
- Bear in mind Google Scholar 's **limitation of 1,000 results**.
- Please note that the order does matter in the **All of the words** field. However for **Author** field , order or upper/lower case don't affect the results.

✓ **What if this still doesn't give you the result you want?**

- Use **year restrictions**: Useful if you know you author has only published since which year.
- Use **multiple names**: Useful if your author has published under multiple names (e.g. maiden/married name, original/anglicized name).
- **Exclude co-authors**: Useful if your author has only published with a limited number of co-authors, you can then exclude namesakes' co-authors.
- Use **research field**: Useful if your author has published in designated research field that are likely to appear in their articles.
- Use **affiliation**: Useful if your author has only work in a limited number of institutions.

Publish and Perish Manual: https://harzing.com/resources/publish-or-perish/manual

Summary and Tips (cont.)

✓ What is the difference between Web of Science and Google Scholar?

Difference	Web of Science	Google Scholar
Content coverage	Only mainstream (high quality) journal papers and books selected by its editors	Almost all scholarly journals, book, patents, dissertations, etc.
Focus	Science, technology, social sciences, arts and humanities	All subject areas
Non-English materials	Yes, if has an English abstract; only 22% of journals are non-English	Articles published in many languages
Time period coverage	Journals: 1965-now Books: published in past 5 years	No time period limit
Peer review	Yes	Not necessarily
Result matching pattern	Web of Science is limited to abstract and title searching. Since it's a human-curated database and metadata is provided, the search results are more reliable.	Searches some full-text: you can find information that is not necessarily in the citation or abstract of an article. Search engine of the whole internet which narrows the internet results is based on machine automated criteria. Criteria for inclusion as "scholarly" in Google Scholar results is based on publishers submitting information to Google Scholar about their websites, and is not necessarily based on the attributes of the sources themselves.