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<http://vinmes.eu/>


**V4 Seminars for Young Scientists on Publishing Techniques
in the Field of Engineering Science**

About literature research
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Literature


Table of contents:

- Libraries, sources, publishers, and their importance;
- Search Engines, where to search?
- Books, libraries and repositories;
- References, referencing - and why they are important;
- Question of self citation?
- Focusing on what is relevant from the aspect of your research?
- Focus on your introduction and literature research!

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Summary


Literature:

Past times: libraries holding the knowledge of the predecessors;



First libraries: before 2000 BC
Sumerian, stone tablets

Library of Alexandria:

- 300 BC, papyrus based knowledge
- dedicated to the nine Muse, the goddesses of the arts

©. Von Conven - Tatzmann, Don Heinrich, Alfred Hessel and Reuben Peiss. The Memory of Mankind. New Castle, DE: Oak Knoll Press, 2001

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Current times: smaller-larger libraries and **online knowledge centers**.

1. Search Engines – do not house materials, just catalogue them (e.g. Google Scholar);
2. Subscription based knowledge centers (e.g. Scopus, Web of Science);
3. Subscription based publisher sites (e.g. IEEE Xplore);
4. Open source libraries (e.g. ArXiv.org -> Cornell university);
5. Social Network for Research (e.g. ResearchGate);
6. Independent web-shops for books, papers, articles, standards, patents etc. (for hard prints, licenses, etc.);
7. Pirate sites.



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Other classification:

- scholarly publishers and university presses (such as IEEE, ACM, Macmillan, Wiley, University of Chicago);
- digital hosts/facilitators (such as HighWire Press, MetaPress, Ingenta);
- societies and other scholarly organizations and government agencies (such as the American Physical Society, National Institute of Health, NOAA);
- and preprint/reprint servers (such as arXiv.org, Astrophysics Data System, RePEc, and CiteBase).

Pfister Jacob, (2005) "Google Scholar: the pros and the cons". Online Information Review, Vol. 29 Issue: 2, pp.209-214. <https://doi.org/10.1108/14684520510598066>



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Sources of literature research:

- Journal papers: from renowned publishers (subscription/open access);
- handbooks: solid foundations of a given topic;
- book chapters: chapters from books covering case studies;
- white papers, application notes, datasheets, official documentations: mostly from companies;
- websites, magazines: note the author, publication date and possible affiliations.
- dissertations, published thesis-works – based on the source they can be high to very low quality sources;
- standards, patents -> depending on the reliable resource and the organization behind the patent/standard handling.



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Reliability of Sources:

- Reliability is a key issue -> feedback on previous presentation about publishers;
- More reliable publisher -> more reliable information.
- Open access papers from predatory / not indexed (no name) journals may contain problematic and false information.
- White papers released from companies may be reliable but they are often based on commercial aspects.
- Handbooks from recognized publishers are the most reliable sources for basics.
- Usual university material, teaching courses, PPT-s, textbooks, teaching syllabus -> not considered to be a proper source for a scientific literature research.
- Nothing can be 100% reliable, despite of peer reviewing! ☺

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Most reliable publishers in our field:



























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Examples for Digital Libraries-Databases

scholar.google.com 

- Beta Started at 2004.
- Estimated to contain roughly 160 million documents (2015 data!)
- Indexing of scholarly content
- Based on search engine indexing technologies
- Allows profile management.

Alternatives:

- Academic.Microsoft.com
- (375 million entities,170 million academic papers)
- CiteSeerX
- Scirus

Academic.Microsoft.com

Publications
172,037,947

Fields of Study
228,563

Countries
4,807

The catalogue size is exactly comparable to large libraries.

Orsula Malka, E. Aykol, J. H. Marmakatos, A. & Diego Lopez-Gomez, E. (2015). Methods for estimating the size of Google Scholar. *Sourmetrics*, Springer, 104(3), 391–40.

Article first online: 11 May 2015

133 955 22
Views Downloads Citations

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Visegrad Fund **Examples for Digital Libraries-Databases** 

Sci-hub
http://????



- Pirate website;
- Over 60 million articles;
- Served by backdoors to university/campus subscriptions
- Based on the idea to remove commercialist approach to science
- Community-based background with similar approach to sharing platforms (e.g. torrent)
- Ever changing links, servers, etc.

It claims itself to be a reliable and good source, mostly for developing country!

↓

Legally questionable use, violating copyrights!

PIRACY!



Thomson Reuters

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Visegrad Fund **Gripping on authors** 

Further platforms helping literature research and publishing: Makes authors easier to find.

ORCID:  **Researcher ID:** 

Open Researcher and Contributor ID

- Digital Identifier;
- Avoids mistakes by names (family name, etc.);
- Helps manuscript submission;
- Helps finding an author or the author's publication;
- Open source background;

- Digital Identifier
- Avoids mistakes by names (family name, etc.)
- Tracks cites, h-index, potential collaborator.
- Integrates with WoS
- ORCID Compliant.
- Thomson Reuters©.

+ Many More!

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Visegrad Fund **Citation format question** 

Reference indexes: according to journal recommendation

Elsevier:

„All publications cited in the text should be presented in a list of references following the text of the manuscript. . In the text make references using a number in square brackets on the line (e.g. "Since Petersen [1] has shown?") and the full reference should be given in a numerical list at the end of the paper."

For reference:

Elsevier, International Heat and Mass Transfer: Guide for Authors
http://www.elsevier.com/locate/locate/thermalsciences
revised:07/13/2016guide-for-authors, accessed at 2018.04.05.

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Citation format question

Reference indexes: according to journal recommendation

Emerald:

References to other publications must be in **Harvard** style. You should cite publications in the text: (Adams, 2006) using the first named author's name or (Adams and Brown, 2006) citing both names of two, or (Adams et al., 2006), when there are three or more authors. Ref. list in alphabetical order should be supplied.

Extensive description can be found at: http://emeraldgroupublishing.com/products/journals/author_guidelines.htm?de=ssmt

For:

Books, Book chapters, Journals, Published/Unpublished Conference proceedings, Unpublished Conference Proceedings, Working Papers, Encyclopedia Entries, Newspaper Articles, Non-authored newspaper articles, Archival/unpublished resources, electronic sources, data...

Emerald, Software and Service Mark Technologies, Guide for authors, http://emeraldgroupublishing.com/products/journals/author_guidelines.htm, accessed 01/20/2019.

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Key tips for summarizing your literature research

- Build up your literature presentation with the bottom up method.
- Try to aim for the general overview on the topic, then narrow down the points to the relevant questions regarding your topic.
- Try not to wander too far from the topic.
- Try to figure out the timeline of the topic's evolving. It can be confusing to refer forth to back on the progression of your topic.
- Present and write the articles (and the reference indexes) as you write the text -> later it will be difficult to catch on with the indexes.
- Always note the citation format required to the given journal, publication platform.
- Cite the pictures as well, which you do not own! Sometimes your older pictures may be copyrighted by the publisher, where your paper was published!

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Key tips for making your literature research more focused

PAPER

- Sum up recent articles from the given journal, where you aim to publish your article. The editors like to see the relevance of the given topic in comparison to their previous publications.
- Include the most relevant citations to your research -> and maybe send your work later to your inspiring researchers. You never know when you will receive a citation or a different form of recognition from them.

THESIS WORK

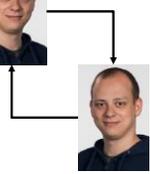
- If you have different topics, different chapters, different thesis groups, it can be logical to separate the cited work.
- If possible try to upload your work to an open access platform, website or Researchgate -> so that an indexing database may list your work to the cited persons.

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Self citation?

Questionable, but sometimes necessary!

- Some topics need deep discussion, and you do not have time, space, to describe all things again from the scratch!
- Plagiarism checks may focus on your previous works -> do not write again everything down.
- However the work should be understandable on its own.
- Difficult question -> depends on critical thinking of what is necessary

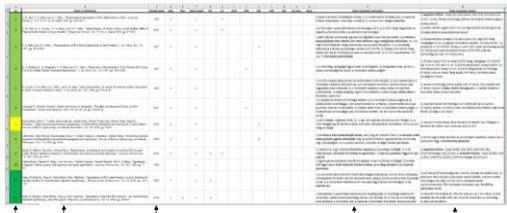
After PhD (habilitation, post-doc grants) it can weaken your reputation if your self citation ratio is too high. It does not count to scientist analytics (h-index).

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GOOD PRACTICE

Excel table for cataloging your findings.



No | Reference | Release Date | Topics | Most important comments | Most important results described in the article.

LIVE DEMONSTRATION!

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Summary

Presentation techniques for your success!

- Be well aware of your material sources – be it an online library, or a search engine!
- Focus onto the main points of your research!
- Know your selected literature papers and organize them!

After your first publications you will also be part of the huge libraries and databases! Be part of the literature!

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