Topic Search

Info Sheet I **Search & Read**

March 2023

When searching for scientific literature two scenarios are typical:

A) You are looking for a document whose bibliographic data you know or at least partially know. Here, our Lib4RI-Searchbox provides guidance to quickly find the desired document (see Lib4RI Info Sheet Articles & Journals and Info Sheet Books).

B) You would like to perform a comprehensive search on a specific topic, eg as an entry into a new research area or as the basis for writing a review article. Topic searches need time to prepare and require know-how for their implementation. After all, you have to find and combine «adequate» search terms covering your topic in order to obtain as many relevant hits as possible from the bibliographic database of your choice. Corresponding metadata, often also including the abstract, can then be exported to suitable literature management software allowing you to compile your personal subject library.

Contact & help desk

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Where can I find what?

Starting point for a comprehensive literature search are often the two large, multidisciplinary bibliographic databases Scopus and Web of Science. However, depending on your topic you may also consider subject-specific databases such as SciFinder (Chemistry) or CAB Abstracts (Applied Life Sciences). For the retrieval of books, book chapters, university publications or grey literature, portals like swisscovery (inkl. Central Discovery Index), Google (inkl. Google Scholar und Google Books), BASE and other sources integrated in our Searchbox are available. Should you be looking for special materials, eg dissertations, maps or similar items, have a look at the «Search & Read» section of our website. There, you can also find a list of all available databases.

How do I search?

Analysis of the topic

Tips:

- In your quest for suitable key terms on your topic, you can often find some inspiration by browsing relevent articles you already have at hand.
- On our website at > Resources > Reference you can find links to dictionaries and reference works on multiple subjects; Wikipedia can also be of help.
- In its default setting WoS (Core Collection) searches within all available fields (also including e.g. the authors' address field) and not just the topic fields. Depending on your search query this could produce many unwanted hits.

Suppose you are looking for scholarly articles and conference contributions in Web of Science (Core Collection) on the topic «Sustainable Energy in Switzerland». This topic is comprised of the three search terms «sustainable», «energy» and «Switzerland». Bibliographic databases such as «Web of Science (WoS)» typically allow to search for matching entries in their indexed fields «Title», «Abstract» and «Keywords». Synonyms or related terms are usually not taken into account and need to be explicitly added to your search query. Please note that many scientific databases are indexed in English.

Sustainable	Energy	Switzerland
sustainability	energy resources	switzerland
renewal	energy sources	swiss
regeneration	energy supply	
	power	

Truncation, wildcards & phrase search

Tip:

- Symbols and their application rules are database specific. They are readily available via the online help of each search portal.

Different spellings and grammatical forms can be taken into account by applying appropriate truncation or the usage of wildcards. Symbols used in WoS are eg the Asterisk «*» covering any number of characters, the question mark «?» replacing exactly one single character, and the dollar sign «$», representing one single or no character. Should you search for a sequence of words as one whole phrase, it needs to be embedded in quotation marks «" "».

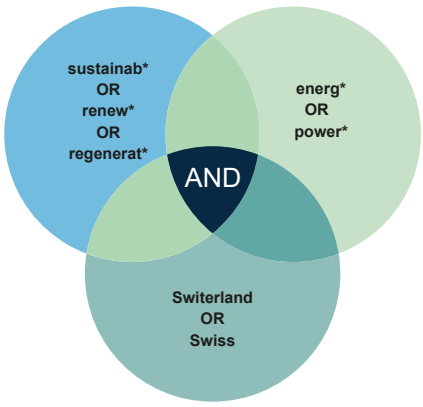
Sustainable	Energy	Switzerland
sustainab*	energ*	switzerland
renew*	power	swiss
regenerat*		

Boolean operators

Tip:

- In many databases a blank is equivalent to the «AND» operator.

Operators such as «AND», «OR» and «NOT» allow the logical combination of search terms (including synonyms). Terms linked with «OR» will lead to results that contain at least one of these terms / words within the chosen search fields (here «Title», «Abstract» and «Keywords»). With «AND» combinations all terms need to be present, and by using the «NOT» operator you can explicitly exclude terms.

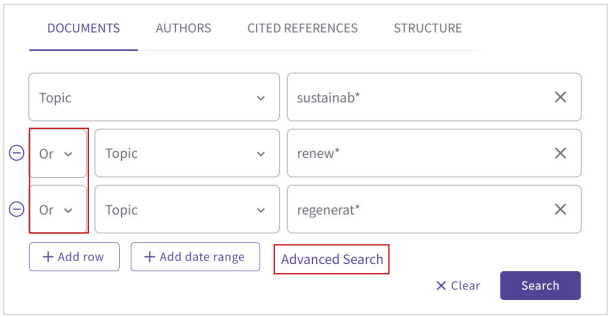


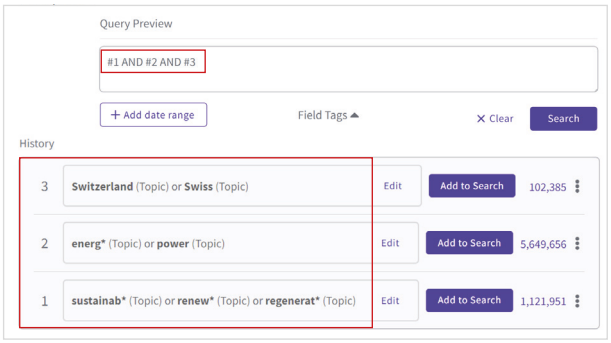
Observe the operators' effect in the search history

Tips:

- While in an active session, clicking on the number of results will reproduce the corresponding hits.
- Vary individual search queries and observe the effects in the result list.

It is very useful to gradually explore the effect of the Boolean operators on your search results. So, for each of your search terms, first combine synonyms and related terms by the Boolean «OR».
The search history including an overview of the corresponding number of hits can be found in the «Advanced Search». Here you can easily combine previous search queries. The combination with the «AND» operator will find the intersection, ie those publications that are common hits to all individual search queries.



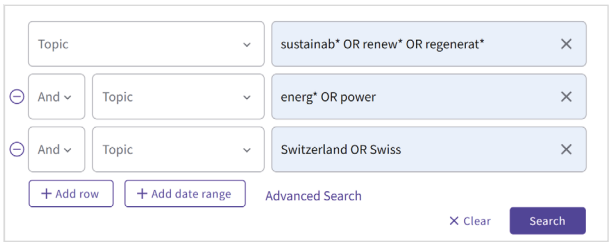


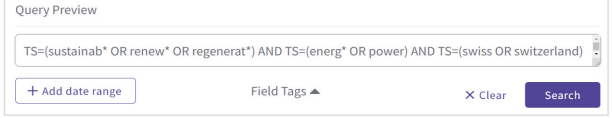
Basic or advanced search

Tip:

- Different operators are processed according to priority rules (eg in WoS, «NOT» before «AND», «AND» before «OR»). The appropriate use of parentheses allows these priorities to be overruled.

Bibliographic databases often differentiate in their graphical user interfaces between basic and advanced search. In the basic mode eg of WoS, you can – via the menu – not only combine individual search terms (as above) but also link search strings and assign them to specific search fields. More options and flexibility are available in advanced mode. Then however, the whole search string needs to be entered in a defined syntax (in WoS, TS=Topic Search).



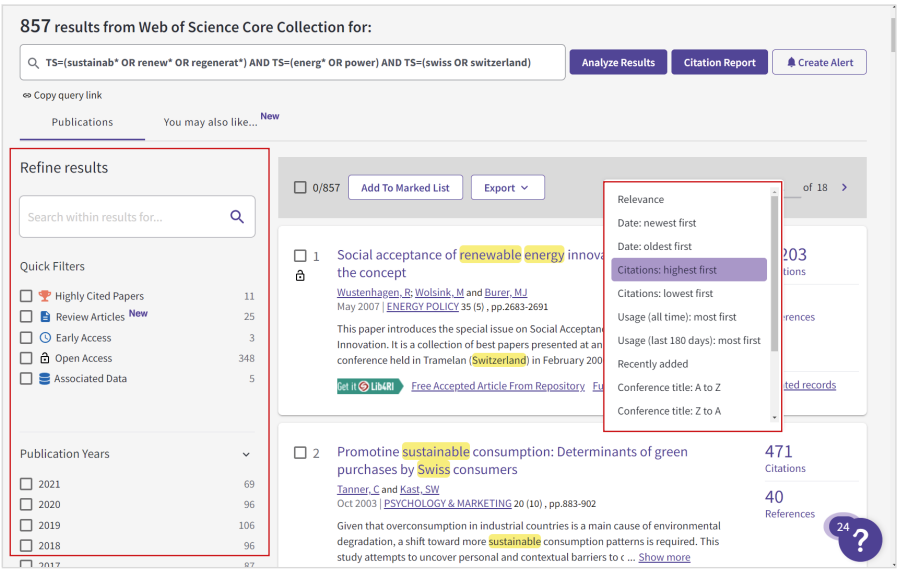


Analysis of results

Tip:

- Sometimes it is very useful to initially pick just a few relevent hits (eg recent reviews or frequently cited articles) and then revise your search strategy employing some of the key terms found therein.

Too few (relevant) hits? This can be due to typographical or logical errors within the search string, or maybe because your search topic was too narrowly defined. Also double-check the suitability of the chosen database. Too many (incl. irrelevant) hits? Use options available in WoS and many other databases that allow your hits to be sorted (eg by the number of citations or relevance) or to be filtered (eg by document type or publication year). Moreover, your search topic may be too broad and needs to be defined more precisely.

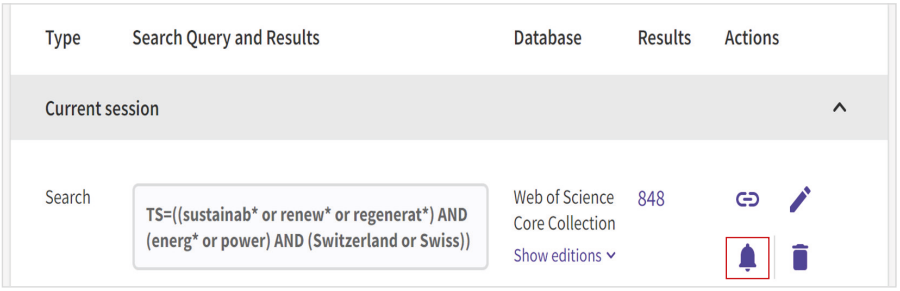


Topic alerts

Tips:

- In WoS alerts can be setup in the search history as well as in the «Advanced Search».
- In WoS you can additionally define citation and journal alerts.

In WoS (as in Scopus, swisscovery and many other databases) you can setup an e-mail alert allowing you to be periodically briefed on new research publications or save your search queries. This generally requires a one-off and free registration with the database provider.



Export of metadata

Tip:

- Should your reference management software not explicitly be stated, try the RIS- oder BibTeX format for export and subsequent import.

Metadata for your search results can be directly exported to po pular reference management software (eg Endnote). Usually you will find a «Save to» or «Export» button prominently located on the results page.