# Information Literaacy ICI
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# Why do a literature review?

Helps to develop an understanding of relevant previous research

# How to do a literature review?

•What are the databases I can use to search for relevant information

•What are the key resources on my topic (books, journals, reports)

•What research, methods and theory are there on my topic

•Who are the main researchers in my field

•What is the history, the chronological development of my topic
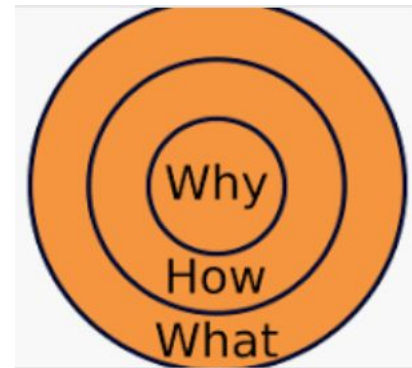
## Keywords

Key phrases



- Using keywords is a vital part of research and writing, because of the practice of retrieving information electronically: keywords act as the search term. Use keywords that are specific, and that reflect what is essential about your research.

# Boolean operators:
# Combination / Phrase / Truncated / Wildcards

- https://www.youtube.com/watch?v=cr7LscBEYC8

- https://www.youtube.com/watch?v=r8Zei_azjX0

- Combination
  AND (to focus), OR (to broaden) , NOT (to exclude)

- Phrase
  "MMMMMM"

- Truncate
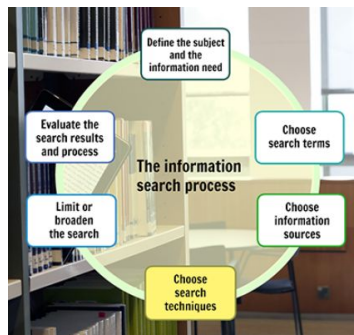  Engine*

- Wildcards
  Col?r   Wom#n

**Bibliometric databases –what do they do?**

- Give access to abstract and citation databases of peer-reviewed literature : scientific journals, books and conference proceedings

- Track, analyse and visualise research

- Key research impact metrics (impact factor, h-index, citations, publications)
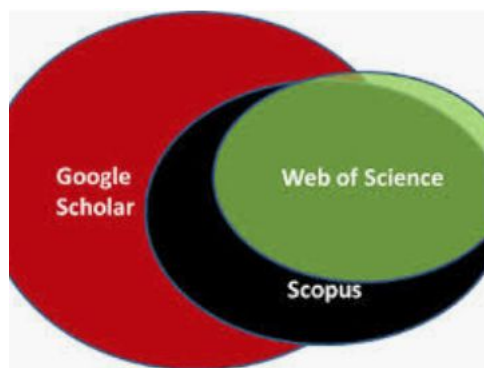


Research Data | Analysis, Planning and

# Searching Techniques



- Article databases, online library catalogues, and many popular search engines share several general searching techniques. Once you master these common searching techniques, you will save yourself time and find more relevant results.

# Google Scholar

earthquake induced vibrations

# From 3ml to 192 hits. How?                    Where

group **cable**-stayed                          [HTML] sciencedirect.com

## Advanced search

**Find articles**

| | |
|---|---|
| with **all** of the words | earthquake induced vibrations pile |
| with the **exact phrase** | cable stayed bridge |
| with **at least one** of the words | |
| **without** the words | buildings |

where my words occur
  ⦿ anywhere in the article
  ○ in the title of the article

Return articles **authored** by
  _e.g., "PJ Hayes" or McCarthy_

Return articles **published** in
  _e.g., J Biol Chem or Nature_

Return articles **dated** between   2015 — 2020
  _e.g., 1996_

y curve of the input
vidual and joint action
wave …

with heavyweight                                [PDF] ascelibrary.org

on is the intensity of
.. Many researchers
g-span …

bridges subjected                               [HTML] sciencedirect.com

iakes may not … Under
i to … To reasonably

# Exercise

- Cable-stayed bridges

- Cable-stayed bridges -long

- Cable-stayed and girder
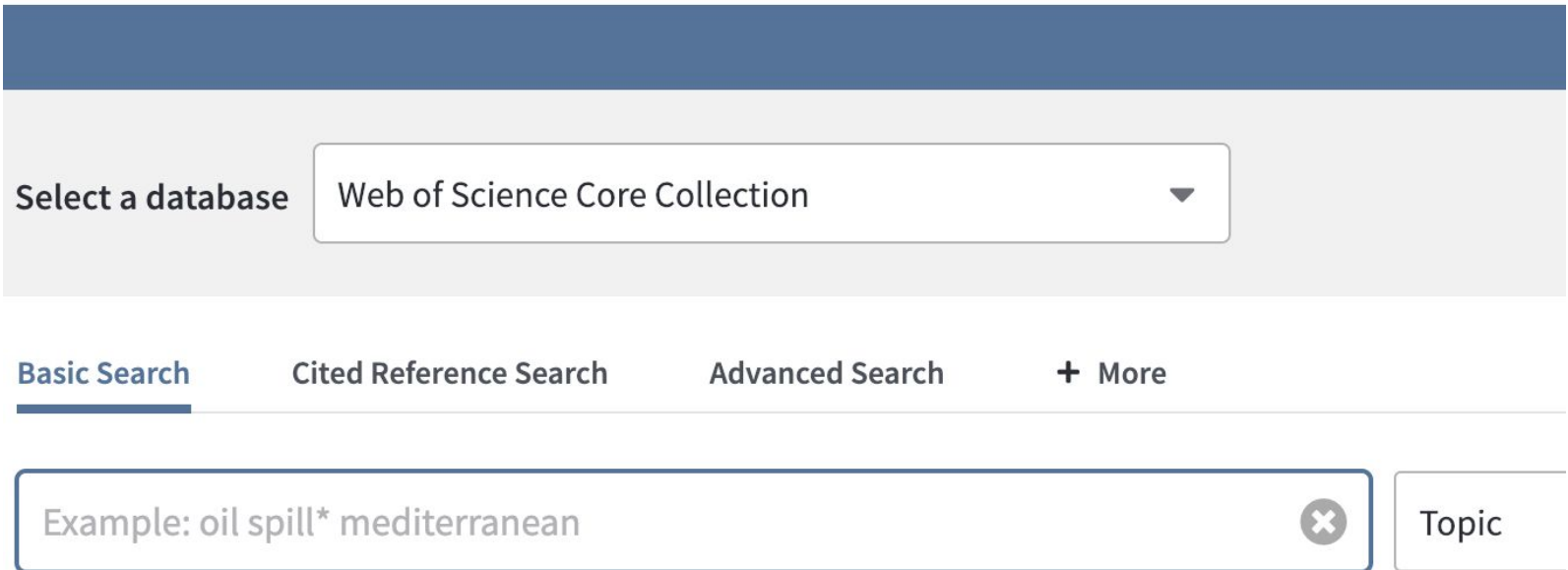
# Exercise – search in google scholar

- Choose keyword

- Open Full Text

- Create Alert

- Number of citations for your supervisor

# SCOPUS

# Web of science



Web of Science

Select a database | Web of Science Core Collection ▾

Basic Search    Cited Reference Search    Advanced Search    + More

Example: oil spill* mediterranean ⊗ | Topic

# Citation overview

- Citation count is a widely used measure and constitutes a basis for calculating h-index and journal imact.

- Create alerts

- See collaborators and similar articles

- Scopus, WOS, Google Scholar

# How to generate a Citation Overview and get the h-index of an author?
**Perform an Author Search** to search for your

Scopus                                                    Search    Sources

## Author search

| i | To determine which author names should be grouped together under a single identifier number, the Scopus Author Identifier uses an algorithm that matches author names based on their affiliation, address, subject area, source title, dates of publication, citations, and co-authors. Documents with insufficient data may not be matched, this can lead to more than one entry in the results list for the same author. By default, only details pages matched to more than one document in Scopus are shown in search results. About Scopus Author Identifier |

Documents    Authors    Affiliations    Advanced

Author last name
Gaudio                                                    ✕

Author first name
E

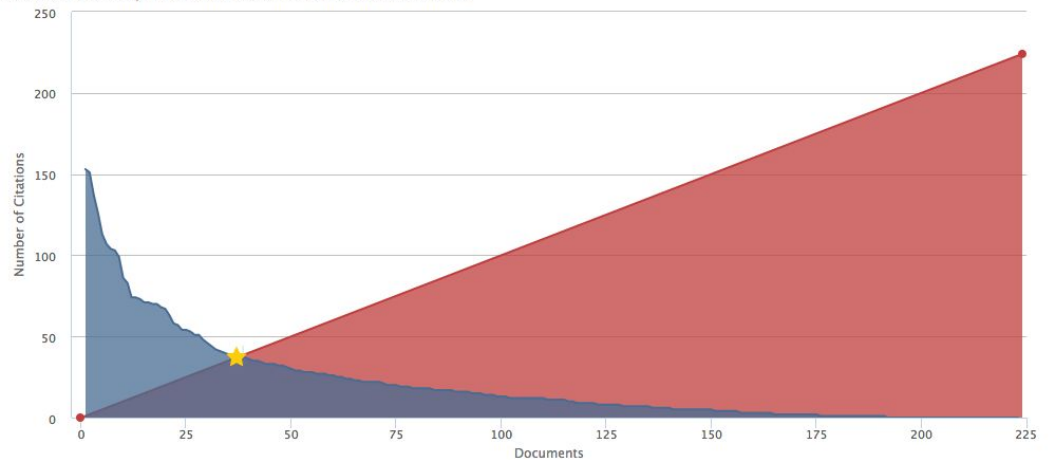e.g. Smith                                                e.g. J.L.

# H-index – author evaluator

A scientist has index *h* if *h* of his or her Np papers have at least *h* citations each.

In this chart the author has 223 documents, 37 of which have been cited at leat 37 times.

## This author's *h*-index is 37
The *h*-index is based upon the number of documents and number of citations.

- Twitter, Facebook, Pinterest, Google+ Tumblr…., science blogs, many mainstream media outlets (including the NY Times, The Guardian, non-English language publications like Die Zeit & Le Monde and special interest publications like Scientific American, New Scientist) and reference managers (including Mendeley)

-

## Exercise

**Web of Science**

Find h-index for Francesco Romeo

**Scopus**

Set up alert/rss for my supervisor or another author

How many Mendeley readers does this article have 10.1016/j.compscitech.2014.02.007

**What is the call number of this book:**

- Lezioni di scienza delle costruzioni, Viola, Erasmo

**Scopus / WOS**

Find h-index without self citations for Giuseppe Rega

Find most recent article in your field