



How to conduct a literature review effectively



Paulina Milewska
Customer Consultant
Elsevier



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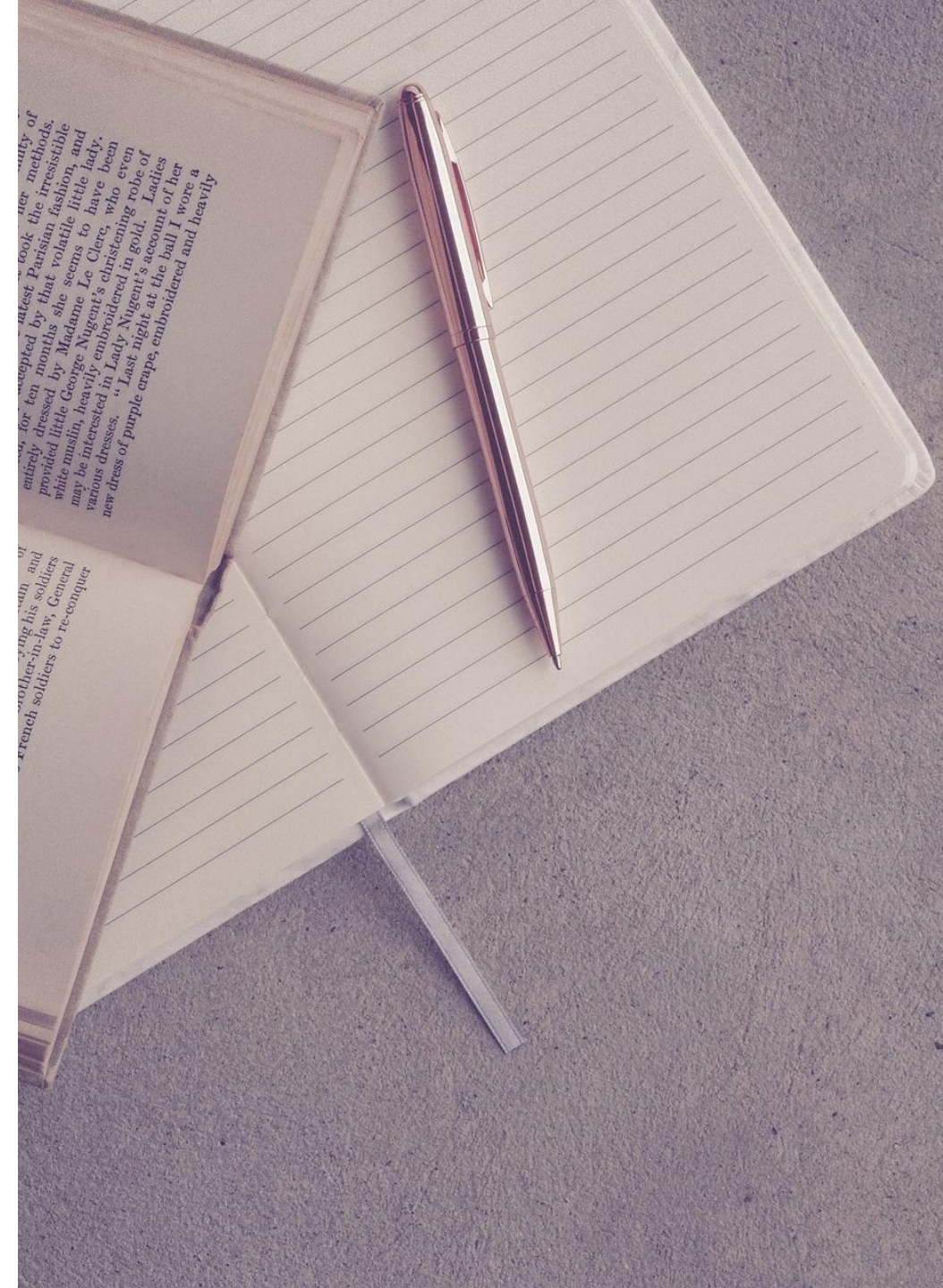
Would you like to ask a question?

- You can ask the host a question during the session
- Please use the Q & A feature on your screen to ask your question
- The host will answer relevant questions during the training

Q&A

Agenda

1. Before searching:
 - a. Keywords, Operators & Filters
 - b. Search Tools
 - c. Types of Literature
 - d. Evaluate Information
 - e. Organize Research
2. Examples of solutions – search and organise
3. How to search for scientific literature?
4. Online demonstration
5. Q&A session



Keywords, operators and filters

Brainstorm
keywords



Expand
your keywords



Use
boolean operators



Refine
your search results

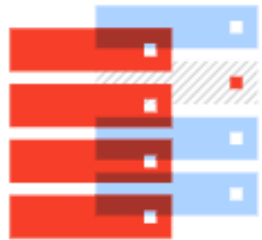


At the library:
Consult a liaison
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specialist.

Search Tools

Select the best tools:

Abstract and
citation database



Full-text
database



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Library
catalog



Institutional
Repository (IR)



Web search
engine



At the library:
Find
research/subject
guides online.

Types of literature

You should find:

Articles

- Journal
- Magazine
- Newspaper

Books

- Monograph
- Ebook
- Reference work

Data

Types of available data:

- Equations
- Charts and Graphs
- Chemical Reactions
- Data Sets
- Maps /geographic data

**A name for other research material such as:*

Grey Literature*

- Conference proceeding
- White paper
- Dissertation or thesis
- Patent
- Other publication
- Published report or dataset

At the library:
Get help via email
and online chat.

Evaluate information

To determine trustworthiness of the material, try the CRAAP test developed by the *Meriam Library* at California State University, Chico¹

Currency

- When was the information published and is that important to know?

Relevance

- How important is the information to your needs?

Authority

- Who is the author and what are their credentials?
- Do they work for a reputable institution?
- Was the information published in a peer-reviewed journal?

Accuracy

- How reliable is the information?
- Does it lack citations?
- Are there spelling errors?

Purpose

- Is it a well-balanced independent piece of research, or intended to sell a product or idea?

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Organize research

Save materials such as article PDFs into a document library and/or download the citation information

Citation Manager / Reference Manager / Document Library

An online tool or desktop software used to organize and store citations and full-text articles or other documents, create bibliographies, insert in-text citations into a paper, and share references with research partners.

At the library:
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information skills
workshop.

Citation

The act of explaining the source of the information found during the course of your research. Citation is a mandatory scholarly practice that gives credit and helps prevent plagiarism. Citations may be used in bibliographies, footnotes and within the body of your text. Common citation formats are APA, MLA and Chicago style.

Example:

Crystal Renfro, The Use of Visual Tools in the Academic Research Process: A Literature Review, The Journal of Academic Librarianship, Volume 43, Issue 2, March 2017, Pages 95-99, ISSN 0099-1333,
<http://dx.doi.org/10.1016/j.acalib.2017.02.004>



Search and organize tools

Examples



Why should I use ScienceDirect or Scopus instead of Google?

designed for researchers

only peer-reviewed literature

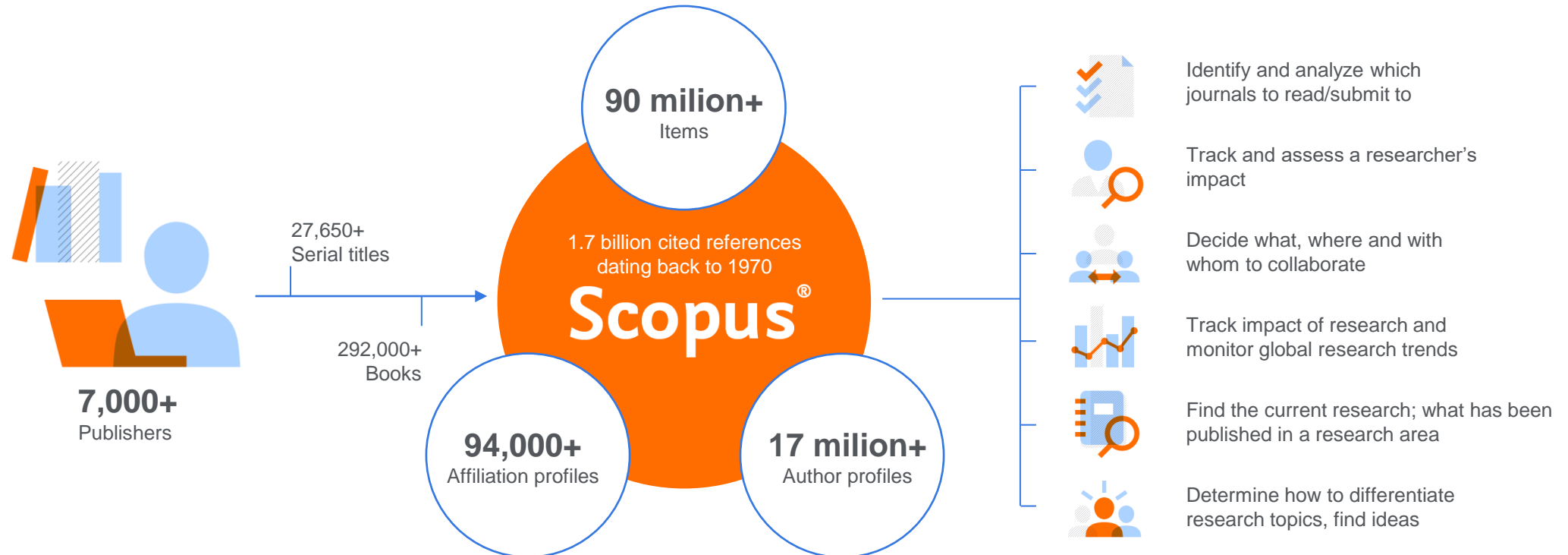
Scopus abstract database has the broadest coverage of peer reviewed sources

20% of global market share.
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NO mystery in Scopus and ScienceDirect search

good practices from the early stage of scientific career

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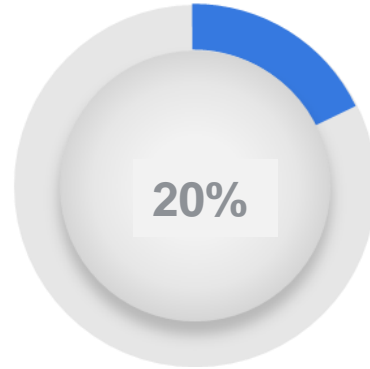
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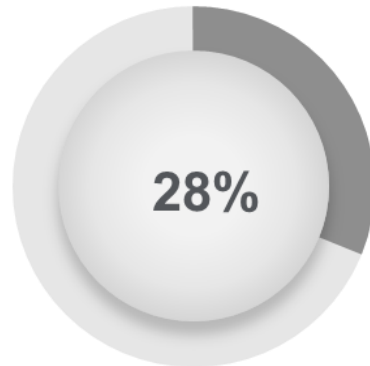
> 19M
articles



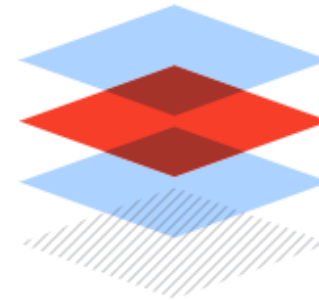
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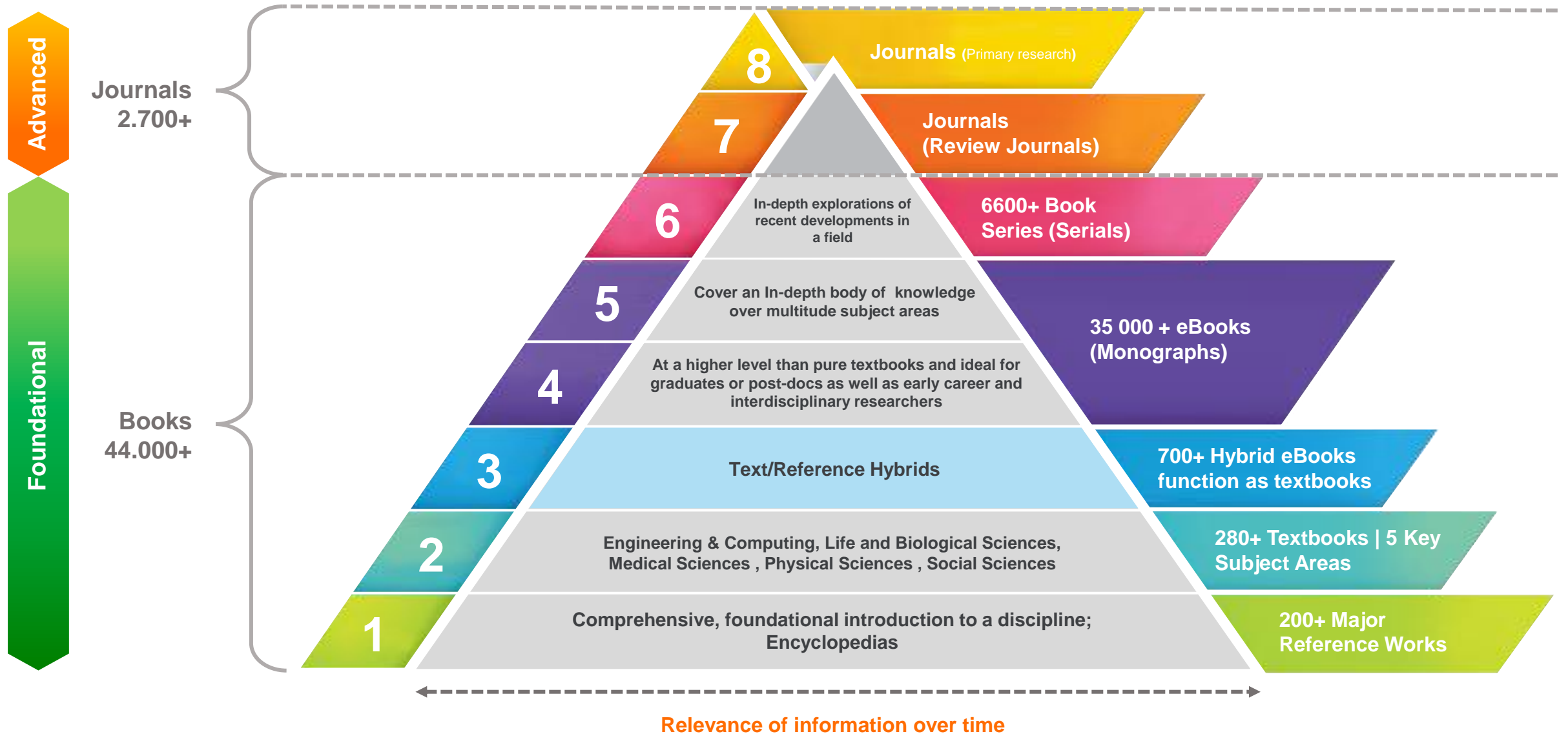


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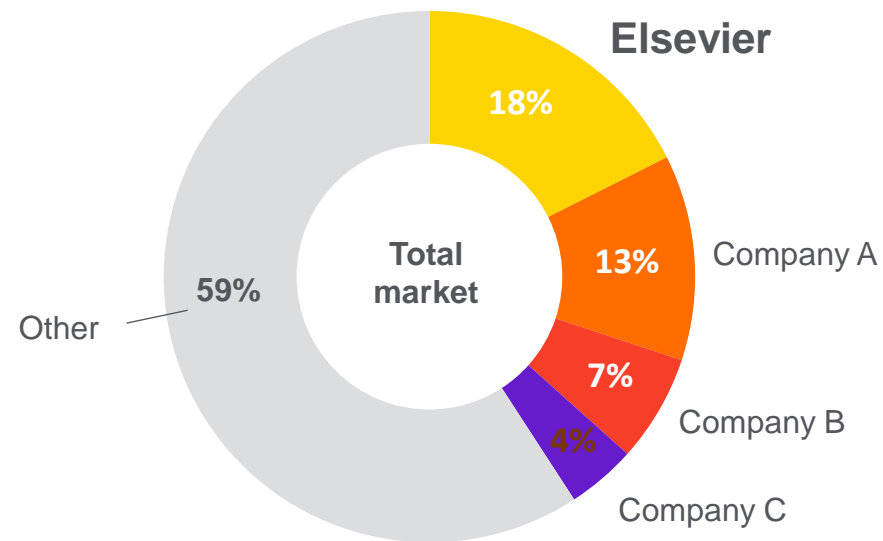


ScienceDirect and Scopus – sources quality

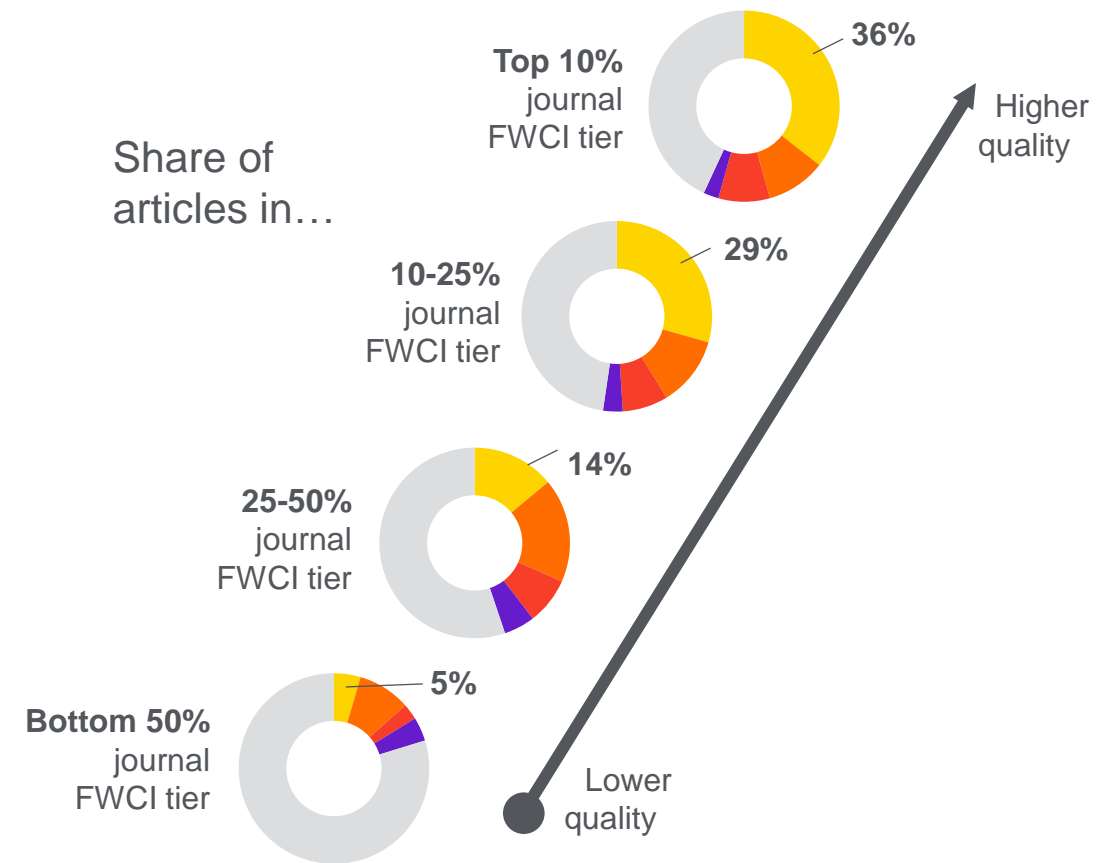


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Share of articles per journal Field Weighted Citation Impact Tier*



Share of articles in...



*Article share (articles published in 2020) per journal Field Weighted Citation Impact (FWCI) tier.

Field Weighted Citation Impact (FWCI) is calculated on the basis of citations in 2016-20 to articles published in 2016-20 and accounts for article type, publication year and subject field. Source: Scopus data updated Feb 2022

Scopus

28,100+ active titles

333 categories

TOP MOVERS

1,066
titles

saw their CiteScore
more than double
between 2021-2022

21,209
titles

saw their CiteScore
increase or stay the
same from 2021-2022

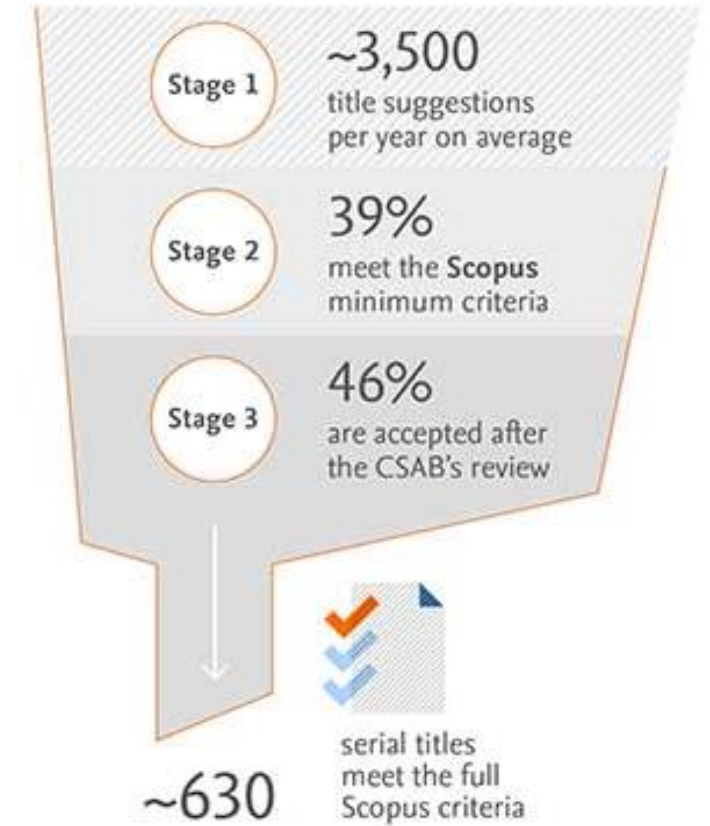


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Subject Area
1,599
titles

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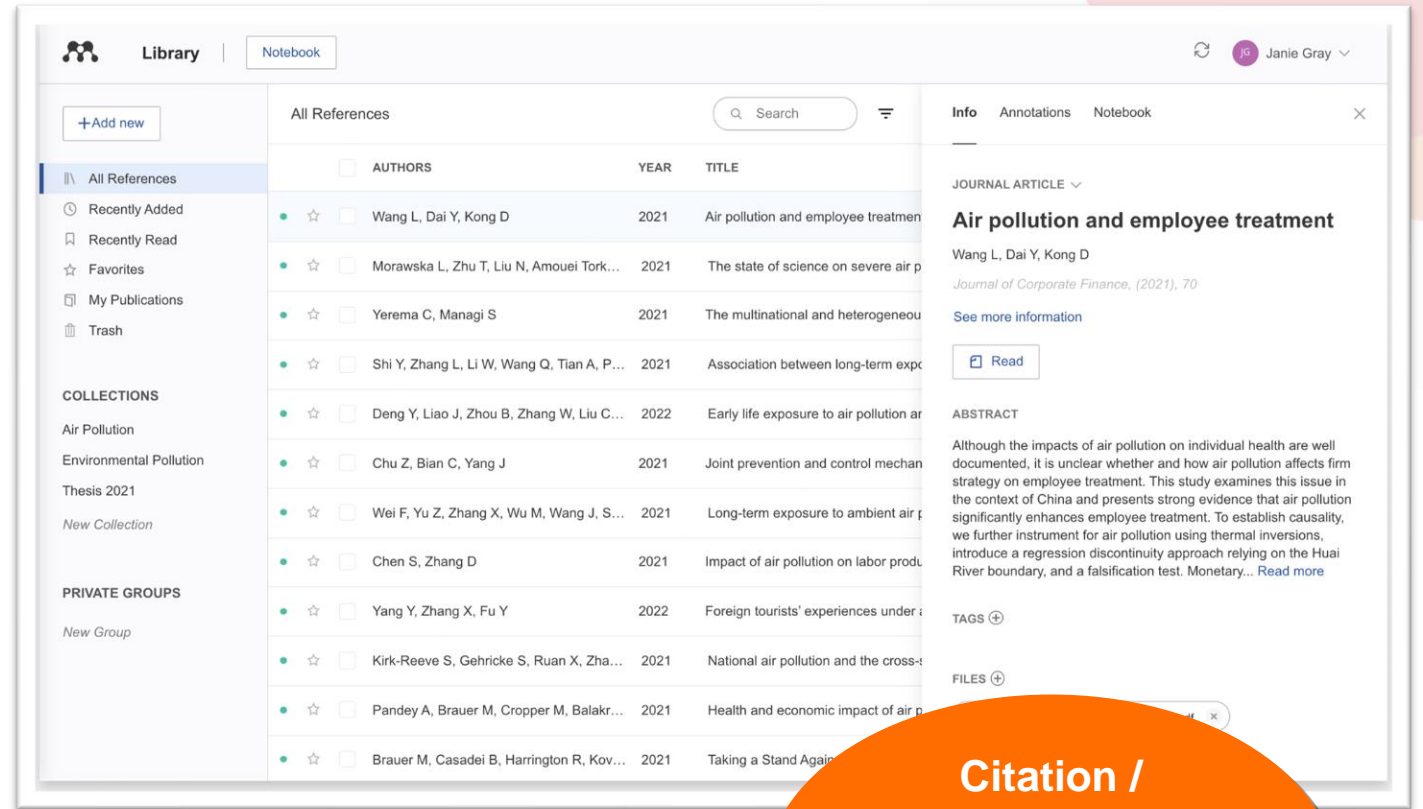
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Seamlessly cite references as you write, and create bibliographies

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Document
Library





How to search?



Searching strategies on Scopus and ScienceDirect

You can start broadly and then filter the results
OR
you can predefine the criteria and receive precise results

Document search

☒ Documents ☐ Authors ☐ Affiliations [Advanced](#)

Search
"air pollution" AND respiratory × Article title, Abstract, Keywords ▼ +
E.g., "Cognitive architectures" AND robots

> Limit

Reset form Search Q

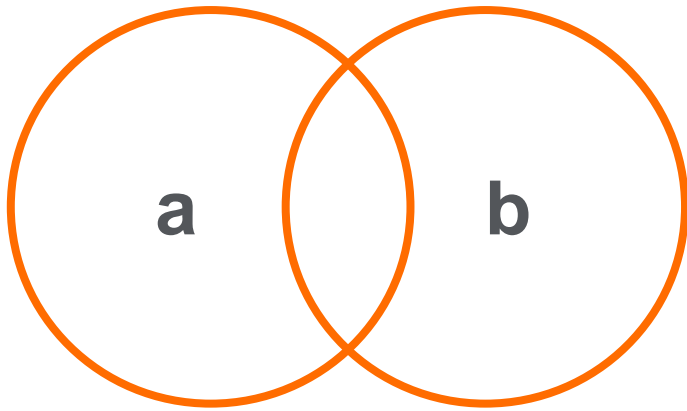
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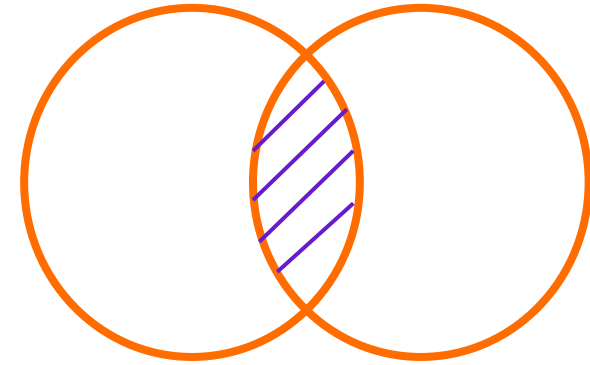
Enter query string
TITLE-ABS-KEY("air pollution" AND respiratory) AND PUBYEAR <2020 AND AFFILCOUNTRY(Poland) AND
SUBJAREA(MEDI OR NURS OR VETE OR DENT OR HEAL OR MULT)

Outline query Add Author name / Affiliation Clear form Search Q

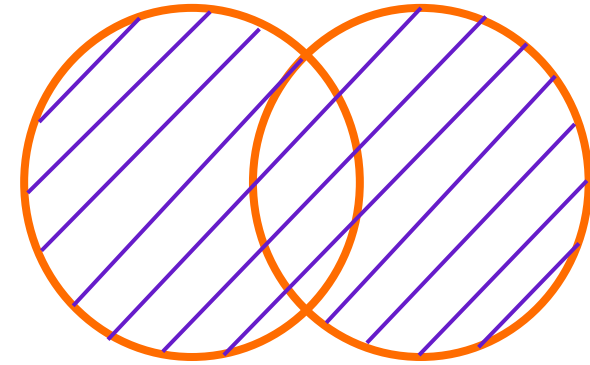
2. Boolean operators



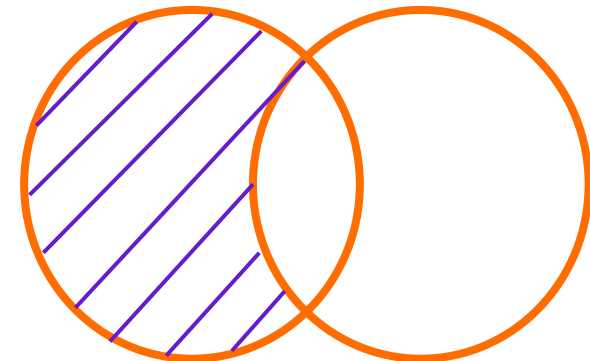
a AND b



a OR b



a NOT b



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Author(s)


Author affiliation

Volume(s)

Issue(s)

Page(s)

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Search 

Our Advanced Search supports

- ✓ Boolean operators including:
AND, OR, AND NOT, NOT (-),
- ✓ Nested clauses using parenthesis, for example:
(((“heart attack” OR “myocardial infarction” OR cardiac) AND diabetes) OR ischemia)

ScienceDirect – advanced search

Find articles with these terms

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Year(s)

Author(s)


Author affiliation

Volume(s)

Issue(s)

Page(s)

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Search 

You can combine terms using up to 8 Boolean operators AND, OR and NOT. Grouping terms using parentheses is also possible, as well as creating multi-level nested clauses. For example: (“black hole” OR radiation) AND gravity.

Our Advanced Search offers you the possible to exclude terms by using the minus-hyphen operator. For example, to find articles related to depression but not economic depression, search for: depression-economics.

You can always use an option: Title, abstract, key words, to narrow your search queries.

'I want to understand unfamiliar terms and concepts'





Neuroscience

Volume 172, 13 January 2011, Pages 196–204

Cognitive, Behavioral, and Systems Neuroscience

A sex comparison of the anatomy and function of the main olfactory bulb–medial amygdala projection in mice

N. Kang^a, E.A. McCarthy^a, J.A. Cherry^b, M.J. Baum^a  

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<http://dx.doi.org/10.1016/j.neuroscience.2010.11.003>

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Abstract

We previously reported that some main olfactory bulb (MOB) mitral/tufted (M/T) cells send a direct projection to the “vomeronasal” amygdala in female mice and selectively respond to volatile male mouse urinary odors. We asked whether MOB M/T cells that project to the vomeronasal amygdala exist in male mice and whether there is a sexually dimorphic response of these neurons to volatile male urinary pheromones. Gonadectomized male and female mice received bilateral injections of the retrograde

Amygdala

The amygdala is an almond-shaped structure located within the anterior portion of the temporal lobes, comprising a component of the limbic system and known to play a part in controlling emotion, motivation, and memory.

From: *Social Anxiety* (Third Edition), 2014

Related terms:
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[Hippocampus](#), [Eicosanoid Receptor](#), [Thalamus](#), [Depression](#), [Memory](#)

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Learn more about Amygdala

Amygdala

Deniz M. Yilmazer-Hanke, in *The Human Nervous System* (Third Edition), 2012

The human amygdala is a high-order limbic brain region almost exclusively of telencephalic origin, which is located in the mesiotemporal region and extends into the basal forebrain. It is a nuclear complex composed of cell groups sharing similarities with neurons in the cerebral cortex, striatum, pallidum, anterior peduncular region, and preoptic area. The deep and superficial cortex-like nuclei containing glutamatergic spiny pyramidal and stellate projection neurons as well as non-pyramidal GABAergic interneurons are the sensory input stations for cortical and subcortical afferents. Both the deep and superficial cortex-like nuclei

Affective System

Juri D. Kropotov, in *Quantitative EEG, Event-Related Potentials and Neurotherapy*, 2009

D Amygdala

Amygdala is a relatively small nucleus that lies deep inside the antero-inferior region of the medial temporal lobe²⁰. Amygdala could be considered as an interface between sensory world²¹ and emotions. Amygdala receives sensory information through the hippocampus from polymodal areas of the temporal and parietal cortex, extracts memories stored in the amygdala, and sends the results of the extraction to the prefrontal cortex through the dorso-medial nucleus of the thalamus.

Recordings in the human amygdala show that many neurons in it



ScienceDirect Topics help researchers and students get a quick overview on a topic and related content

The screenshot shows the ScienceDirect Topics page for 'Encephalitis'. The page layout includes a top navigation bar with 'ScienceDirect', 'Journals', and 'Books'. Below this is a breadcrumb trail 'Back to article > Encephalitis:'. The main content area is divided into several sections. A large box on the left contains the title 'Encephalitis' and a definition: 'Encephalitis is an acute inflammation of the brain, commonly caused by a viral infection. From: Encyclopedia of Neuroscience, 2009'. To the right of this is a 'Related terms' box listing 'Enterovirus, HSV, Herpes simplex virus type 1, Viral encephalitis, Bulbar polio, Epidemiology, VZV, Aseptic meningitis, Flavivirus, Herpes simplex virus 1'. Below these is a section titled 'Learn more about Encephalitis' which contains two columns of text. The left column is titled 'Encephalitis' and the right column is titled 'Viral Infections'. Both columns contain short extracts from books, with the left column specifically mentioning 'Handbook of Clinical Neurology, 2014' and the right column mentioning 'Textbook of Clinical Neurology (Third Edition), 2007'. The page is branded with the Elsevier logo at the bottom left.

ScienceDirect Journals Books

Back to article > Encephalitis:

Encephalitis

Encephalitis is an acute inflammation of the brain, commonly caused by a viral infection.
From: [Encyclopedia of Neuroscience](#), 2009

Related terms

Enterovirus, HSV, Herpes simplex virus type 1, Viral encephalitis, Bulbar polio, Epidemiology, VZV, Aseptic meningitis, Flavivirus, Herpes simplex virus 1

Learn more about Encephalitis

Encephalitis

Karen L. Roos, in *Handbook of Clinical Neurology*, 2014.

Introduction

Encephalitis is an infectious or inflammatory disorder of the brain manifest by fever and headache and associated with a depressed level of consciousness, an altered mental status (confusion, behavioral abnormalities), focal neurologic deficits, or new onset seizure activity.

This chapter will address the viral etiologies of encephalitis. Other chapters in this volume address the bacterial, fungal, spirochetal, and parasitic etiologies of encephalitis. The California Encephalitis Project was initiated in 1998 to improve the

Viral Infections

Karen L. Roos, in *Textbook of Clinical Neurology (Third Edition)*, 2007.

Western Equine Encephalitis

Western equine encephalitis tends to occur in children younger than age 1 year and in adults older than age 50.⁵⁴ Inapparent infections with western equine encephalitis virus are more common than symptomatic cases. Like the other arthropod-borne encephalitides, western equine encephalitis begins with an influenza-like syndrome of fever, malaise, myalgias, pharyngitis, and vomiting. As the disease progresses, irritability, convulsions, or coma develops.⁴⁹

ELSEVIER

1

Clear definition
extracted from books

2

Related terms to explore
more

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most relevant
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