



# Web of Science - Scopus

Searching the databases

Main research indicators

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# Contents



# Designing the search strategy



a) Keywords

b) Boolean operators

c) Exact phrase

d) Truncation

e) Filters or limits

## b) Keywords

Concepts that **better express** what you are looking for



### Keep in mind:

- ✓ Abbreviations and acronyms
- ✓ Synonyms
- ✓ Related concepts

**LED**

- LEDs
- Light emitting diodes
- Light emitting diode

**Optical fiber**

- Optical fibers
- Optical fibre
- Optical fibres

In order to look for synonyms and variations of the keywords, you have to search in general and specialized dictionaries, but also there is a very useful tool:

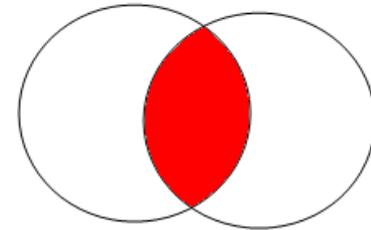
Library of Congress Subject Headings - <http://id.loc.gov/authorities/subjects.html>

## a) Boolean operators

### AND

It retrieves results where **ALL** search terms are present in the same record

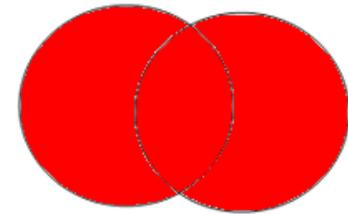
**LED AND Optical fiber**



### OR

It retrieves results that includes **AT LEAST ONE** of the search terms in the resulting records

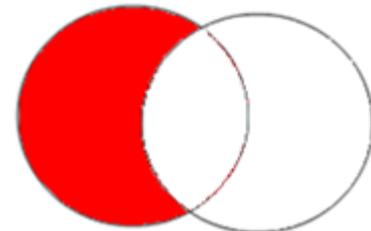
**LEDs OR Light emitting diodes**



### NOT

It **EXCLUDES** the retrieval of terms from your search

**Electroluminescent devices NOT LEDs**



## c) Exact phrase

### “ “ (quotations)

It retrieves only records with the **SAME WORDS IN THE SAME ORDER**

### “Optical fiber”

Scopus Search

"optical fiber"

Structure design and application of hollow core microstructured optical fiber gas sensor: A review	Li, J., Yan, H., Dang, H., Meng, F.	2021	Optics and Laser Technology 135,106658	0
View abstract ▾ Consultar View at Publisher Related documents				

Scopus Search

optical fiber

Long period grating in double cladding fiber coated with graphene oxide as high-performance optical platform for biosensing	Esposito, F., Sansone, L., Srivastava, A., (...), Giannetti, A., Iadicco, A.	2021	Biosensors and Bioelectronics 172,112747	0
View abstract ▾ Consultar View at Publisher Related documents				

## d) Truncation

\*

It is used to search for all terms that begin with a word: truncation broadens your search to include different word endings (singular and plural... all kind of suffixes).

The most common symbol used in truncations is the asterisk

**Transm\***

**Transmission**

**Transmissions**

**Transmit**

**Transmitting**

**Transmitted**

.

.

.

**Transmembrane**

## e) Filters or limits

All databases include tools to refine and filter the search results (by year, subject area, document type, etc.)

# Scopus

Search within results...

Refine results

Limit to Exclude

Year

Author name

Subject area

Document type

Source title

Keyword

Affiliation

Country/territory

Source type

Language

Limit to Exclude



WEB OF SCIENCE

Filtrar resultados por:

Acceso Abierto (685) Refinar

Años de publicación

2020 (13)

2019 (259)

2018 (390)

2017 (376)

2016 (322)

más opciones / valores... Refinar

Categorías de Web of Science

ENGINEERING ELECTRICAL ELECTRONIC (835)

PHYSICS MULTIDISCIPLINARY (694)

TRANSPORTATION SCIENCE TECHNOLOGY (521)

TELECOMMUNICATIONS (453)

PHYSICS MATHEMATICAL (446)

más opciones / valores... Refinar

Tipos de documento

ARTICLE (2,449)

PROCEEDINGS PAPER (1,715)

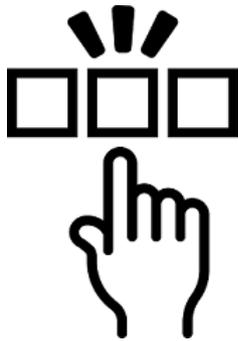
EDITORIAL MATERIAL (62)

REVIEW (59)

LETTER (49)

más opciones / valores... Refinar

# Searching within databases



a) Web of Science (WoS)

b) Scopus

Web of Science platform



# Web of Science Core Collection

- 2.4** billion references from 1900
- **22.171** journal titles, books or proceedings
- More than **97** millions records

November 2025

## WEB OF SCIENCE CORE COLLECTION COVERAGE:

- **Science Citation Index Expanded™** — from 1900 to present  
Fully indexes over 14,900 major journals across 150 disciplines
- **Social Sciences Citation Index®** — from 1900 to present  
Fully indexes over 4,900 journals across 55 social science disciplines, as well as selected items from over 14,920 of the world's leading scientific and technical journals
- **Arts & Humanities Citation Index®** — from 1975 to present  
Fully indexes over 2,500 arts and humanities journals, as well as selected items from over 18,800 scientific and social sciences journals
- **Conference Proceedings Citation Index™** — from 1990 to present  
Fully indexes over 160,000 journal and book-based proceedings in science and social sciences and humanities, across 256 disciplines
- **Book Citation Index<sup>SM</sup>** — from 2005 to present  
Indexes over 60,000 editorially selected books in the sciences, social sciences and humanities, with 10,000 new books added each year

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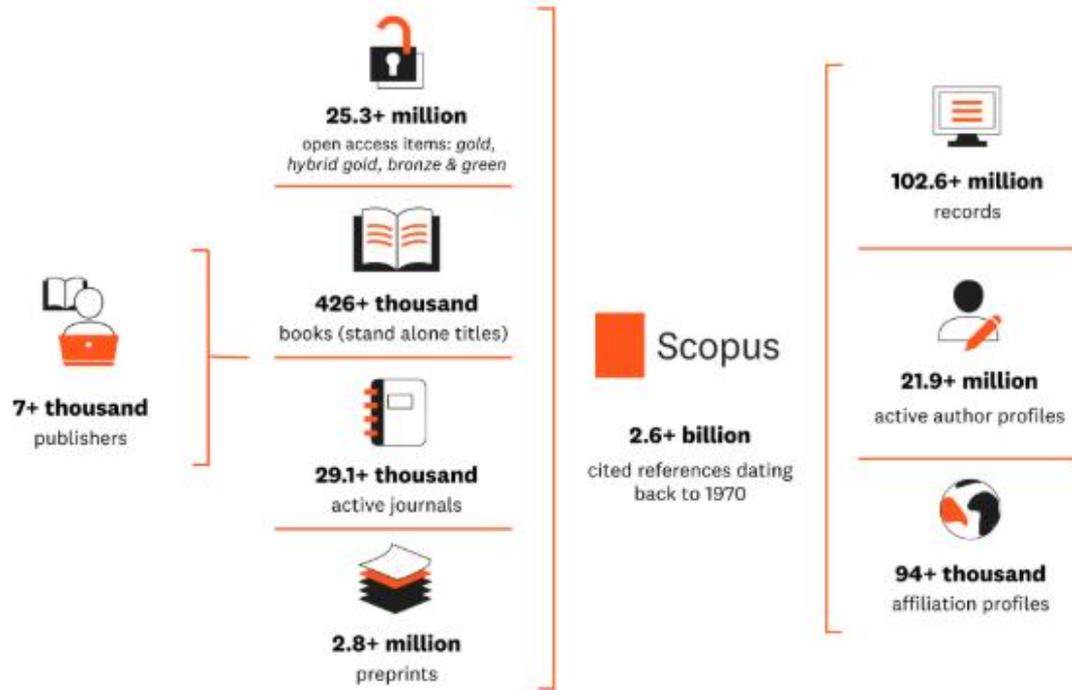
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# Scopus®



Numbers shown are rounded and current as of July 2025. Scopus is updated daily.

# Main research indicators



Authors

**H Index and citations**



Journals

**Impact Factor**

**CiteScore**

# Impact Factor (IF)

## Where?:

✓ *Journal Citation Reports* (Web of Science)

## How?

✓ IF of a journal is calculated:

$$\mathbf{2024\ IF} = \frac{\text{Number of citations in 2024 to articles published by that journal in 2022 and 2023}}{\text{Total articles published by that journal in 2022 and 2023}}$$

# Journal Citation Indicator (JCI)

## Where?:

- ✓ *Journal Citation Reports* (Web of Science)

## How?

- ✓ JCI Calculation:

The citations received during the 4 years prior to the year for which we want to obtain the indicator, the articles and reviews published in a journal during the previous 3 years are collected. Once this information is available, the citations received are related to those expected according to the same type of document, year and category, and the standardized impact for these three years of publication is calculated. The average for these three years will be the Journal Citation Indicator of the year.

# CiteScore

## Where?:

✓ Sources (*Scopus*)

## How?

✓ CiteScore of a journal is calculated:

$$\text{2024 CiteScore} = \frac{\text{Number of citations in 2024 to articles published by that journal from 2021 to 2024}}{\text{Total articles published by that journal from 2021 to 2024}}$$

# H index and citations

## Where?:

✓ *Author search*

Scopus  
Web of Science Core Collection

## How?

- ✓ Citation count: how many times an author has been cited by other authors
- ✓ H-index: an author has index  $H$  if  $h$  of his or her  $N_p$  papers have at least  $h$  citations each and the other  $(N_p - h)$  papers have  $\leq h$  citations each.

*If a researcher has an **H-index = 9**, it means that 9 of their articles have received **at least** 9 citations each. This would mean that the tenth article and the following ones must have received less than 9 citations.*

# Exercises

Please answer the questions regarding the Impact Factor, CiteScore and H Index.

## Exercise 1

### Impact Factor

## Exercise 2

### CiteScore

## Exercise 3

### H Index

# Thank you!

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