

# What is Web of Science?

Impact factor - is the average  
citations per ARTICLES

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# Web of Science

Web of Science (WoS, formerly ISI Web of Knowledge) is a search platform that combines abstract databases of publications in scientific journals and patents, including databases that take into account the mutual citation of publications, developed and provided by Thomson Reuters. Web of Science covers materials on natural, technical, social, humanities and arts. The platform has built-in capabilities to search, analyze and manage bibliographic information.



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# Resources on the Web of Science platform

## Database:

- Web of Science Core Collection
- Current Contents Connect
- BIOSIS Citation Index
- Data Citation index
- KCI-Korean Journal Database
- Russian Science Citation Index
- SciELO Citation Index
- Zoological Record
- Derwent Innovations Index
- Medline



For a formal assessment of the effectiveness of scientific activity of scientists, a number of scientometric indicators are applied (for example, the number of publications, the Hirsch index, the same h-index, etc.). There are several alternative systems that calculate these indicators, each of which has its advantages and disadvantages : eLIBRARY.ru, Google Scholar.





# Impact factor

Impact factor (IF, or IF) is a numerical indicator of the importance of a scientific journal. Since the 1960s, it has been calculated annually by the Institute for Scientific Information (ISI), which was acquired by Thomson Corporation in 1992 and is now called Thomson Scientific, and is published in the journal Journal Citation Report.

According to the IF, the level of journals is assessed, the quality of the articles published in them, provides financial support to researchers and accepts employees for work. Impact factor has, though a large, but ambiguously estimated impact on the evaluation of research results.

# Method of calculation

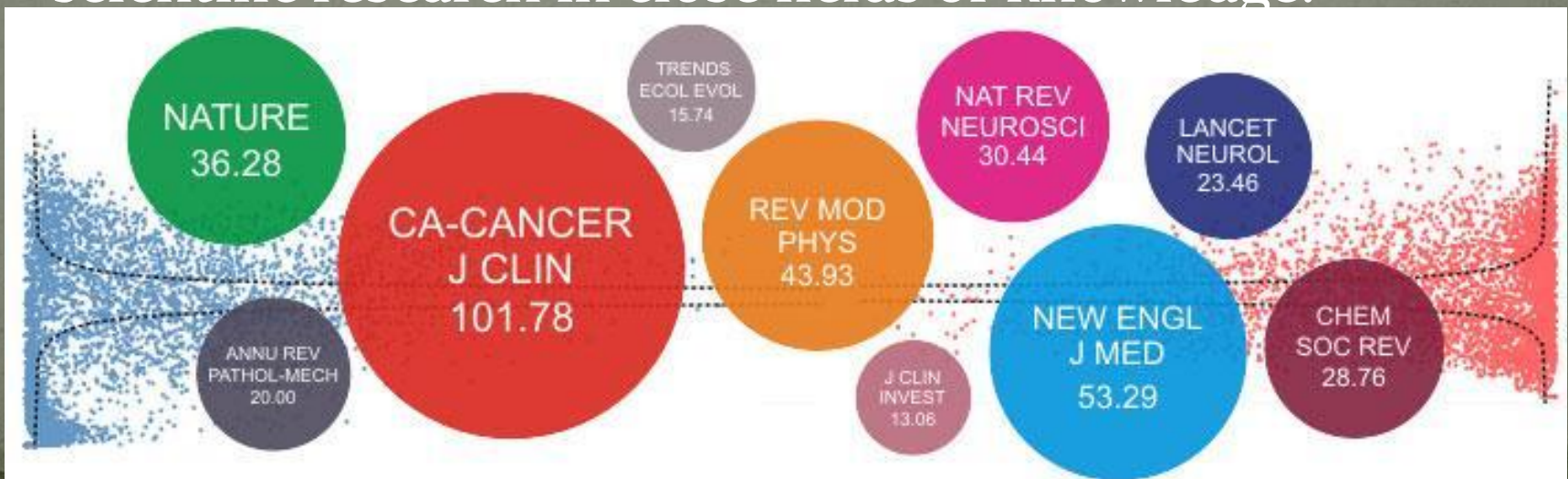
The calculation of the impact factor is based on a three-year period. For example, the impact factor of the magazine in 2014  $I_{2014}$  is calculated as follows:  $I_{2014} = A / B$ , where: A - number of citations during 2014 in Scientific Information, articles published in this journal in 2012-2013; B is the number of articles published in this journal in 2012-2013 .





# Advantages and disadvantages

The journal's IF depends on the field of research and its type; From year to year it can vary significantly, for example, dropping to extremely low values when changing the name of the journal and so on. Nevertheless, for today IF is one of the important criteria by which it is possible to compare the level of scientific research in close fields of knowledge.



## The positive properties of the impact factor:

- Wide coverage of scientific literature - more than 8,400 journals from 60 countries are indexed;
- The results are public and easily accessible;
- Simplicity in understanding and use;
- Journals with high IF usually have a more stringent peer review system than journals with low IF.



Thank you for attention!!!