# An introduction to H.Index

H-index is one of the scientometric indices that measures both the output and the impact of the articles published by a researcher. This index was presented in 2005 by Prof. Hrisch, a physicist at the University of California.

H-index is determined based on the distribution of citations of a researcher's published documents. This index can also be calculated for a group of researchers such as a department, center or university.

According to the definition, if each of the NPs of a researcher's articles have at least H citations, and the rest of his articles, i.e. NP-H of his article, are cited less than H times, then the researcher has a profile equivalent to H. For example, if a researcher's H-index is 5, it means that this researcher has at least 5 published articles, each of which has at least 5 citations. In other words, other articles of this researcher have less than 5 citations.

Therefore, the H-index is the result of the balance between the number of publications and the number of citations per article. This index is designed to enhance other science measurement indicators such as total number of articles and total number of citations to distinguish influential researchers from those who simply publish a large number of articles. This index is used to compare researchers with the same field of work.

Web databases for calculating this index include: ESS: Web of Science, Scopus, and Google Scholar, the first two can be accessed by membership and the last one as free access by using the publish or perish software. Is .

#### **H-index calculation**

In order to determine the H-index, people can calculate their H-index as

follows and print the result based on the Scopus database.

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