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# THE 2024 RANKING LIST OF HUNGARIAN SCIENTISTS IN THE FIELD OF SCIENTOMETRICS

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#### ABSTRACT

The article presents the 2024 ranking of Hungarian researchers in the field of Scientometrics. The ranking is presented primarily according to the h-index of researchers. Researchers with matching h-index are ranked by the number of citations. The ranking list includes 12 researchers. The h-index can be determined from Web of Science, Scopus, Google Scholar, the Hungarian Science Bibliography - the database of Hungarian Science Publication and the programs Tud-O-Méter, Publish or Perish. The ranking is edited using the Google Scholar web database.

Keywords: Scientific Metrics, ranking list, Hungarian researchers, h-index, Google Scholar.

#### **1. INTRODUCTION**

The article presents the 2024 ranking of Hungarian researchers in the field of Scientometrics. The field of scientometrics includes the following disciplines and topics:

- 1. Scientometrics, Scientometry.
- 2. Citation Analysis.
- 3. Citation Indexing, Indexing of Citations.
- 4. Bibliometrics.
- 5. Research Evaluation.
- 6. Science Studies.
- 7. Webometrics.
- 8. Plagiarism.

First, let's examine the question of who can be considered a Hungarian researcher in the field of science metrics, who can be ranked? In our view, a researcher can be included in the ranking list of Hungarian researchers in the discipline of science metrics if he or she is an author:

- is listed in the Clarivate Analytics Web of Science list with publications in Scientometrics,
- Science metrics publications in the Scopus list,
- has a Google Scholar profile with at least one of the 1-8 science disciplines/topics listed,
- Google Scholar listings or Publish or Perish with a significant number of publications in science metrics,
- the author has a significant number of publications in the field of science metrics,
- in the the Hungarian Science Bibliography the database of Hungarian Science Publication, the author has a considerable number of publications in Science Metrics.

In the field of Scientometrics, Hungarian researchers have achieved outstanding results. Suffice it to mention the publication of Springer Science+Business Media in Germany, a:

Scientometrics

a peer-reviewed, monthly, impact-factor scientific journal in the field of science metrics, edited by Wolfgang Glänzel and Lin Zhang, which publishes original papers, short communications, review papers, letters to the editor and book reviews. The journal is published by Akadémiai Publishers and Springer Science + Business Media and was founded in 1978. Its founder and first editor-in-chief was Tibor Braun from Budapest.

One of the manifestations of scientific creativity is the publication of new scientific results [1-3]. Science metrics, to measure the quantity and quality of scientific output, is essential. Science metrics measure the

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quantity of scientific publications - the number of publications and their quality: citation rate, h-index, gindex. The measurement of citations is an effective way to measure scientific performance, because if someone is cited a lot by other scientists, he is probably a better scientist. The ranking of researchers is primarily presented according to the h-index of researchers [4].

In the case of a matching h-index, researchers are ranked by the number of citations. The ranking is constructed using the Google Scholar database [5]. Google Scholar is Google's scientific search engine, launched in 2004, which displays the researcher's scientific publications, citations, h-index and i10-index. The h-index, also known as the Hirsch index, is based on citations. h-index was published by physicist Jorge E. Hirsch (University of California, San Diego) in 2005:

"A scientist has index hif h of his/her N papers have at least h citations each, and the other (N-h) papers have no more than h citations each".

Thus, the h-index is the largest number h, indicating that h publications have at least h citations, with all other scientific publications having fewer than h citations. Hirsch suggested that the index was originally intended to compare individual performance only, but that it could also be used to determine the h-index of research groups, journals, disciplines, institutions and countries [6-13]. The original h-index does not distinguish between dependent and independent citations, i.e. it also takes self-citations into account [14-18]. The first chapter is the Introduction, the second chapter presents. The 2024 ranking list of Hungarian researchers in the discipline of Scientometrics, and the third chapter is the Summary.

#### 2. THE 2024 RANKING LIST OF HUNGARIAN SCIENTISTS IN THE SCIENTOMETRICS

The 2024 ranking of Hungarian researchers in the discipline of science metrics is presented primarily according to the h-index of researchers. The ranking was constructed using the Google Scholar database. Researchers with matching h-index are ranked by the number of citations. The ranking list includes 12 researchers. We present the researchers' Orcid ID numbers. Here is the ranking:

#### 1. Schubert András

h-index = 60 number of citations: 17434 Orcid ID: 0000-0001-8348-1775

2	András Schubert 🛛 🔀 FOLLOW	Cited by	
	Hungarian Academy of Sciences Verified email at iif.hu - <u>Homepage</u>	Citations	All 17434
	Scientometrics Bibliometrics Information Science	h-index i10-index	60 128
2.	<b>Mester Gyula</b> h-index = 57 number of citations: 5165 Orcid ID: 0000-0001-7796-2820		
	Gyula Mester (Orcid ID: 0000-0001-7796-2820)	Cited by	
100	Professor, Obuda University, University of Szeged, Hungary, University of Novi Sad,		All
	Serbia Verified email at inf.u-szeged.hu - <u>Homepage</u>	Citations h-index	5165 57
6	Self-Driving Cars Flying Cars Unmanned Autonomous Sy Citation Analysis Intelligent Robots	i10-index	95

#### 3. Braun Tibor

h-index = 53

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	number of citations: 11120 Orcid ID: 0000-0003-3861-4975			
	Tibor Braun	FOLLOW	Cited by	
- 0	Hungarian Academy of Sciences			All
	Verified email at mail.if.hu chemistry scientometrics information science		Citations h-index i10-index	11120 53 176
4.	Vinkler Péter			
	h-index = 32			
	number of citations: 3991			
	Orcid ID: 0000-0002-4936-306X			
		Follow	Cited by	
	-	FOLLOW	Cited by	A.II.
	Professor Emeritus <u>Hungarian Academy of Sciences</u> Research Centre for Natural Sciences Verified email at ttk.mta.hu		Citations	All 3991
8	scientometrics science policy chemistry		h-index i10-index	32 66
5.	Kollár István h-index = 24 number of citations: 3608			
	Orcid ID: 0000-0002-4807-0476			
	István Kollár	<b>FOLLOW</b>	Cited by	
and	Professor of Electrical Engineering, Budapest University of Technology and Economics	+		All
1	Verified email at mit.bme.hu - Homepage		Citations	3608
	signal quantization numerical roundoff system identification signal processing		h-index i10-index	24 45
6.	<b>Demeter Márton</b> h-index = 20			
	number of citations: 1390			
	Orcid ID: 0000-0002-9888-9682			
	Márton Demeter	Follow	Cited by	
1	Other names ►			All
ATA	Professor, National University of Public Service		Citations	1390
Car	Verified email at uni-nke.hu		h-index i10-index	20 34
	communication scientometrics global knowledge production academic knowledge produ			
7.	Kóczy Á. László			
	h-index = 18			
	number of citations: 1190 Orcid ID: 0000-0002-8588-6140			
(CEA)	László Á. Kóczy	rollow	Cited by	
Vaga	HUN-REN KRTK Institute of Economics and BME Department of Finance			All
	Verified email at krtk.hu - <u>Homepage</u>		Citations h-index	1190 18
	Game Theory Energy Economics Social Choice Scientometrics		i10-index	35

#### 8. Soós Sándor

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h-index = 14 number of citations: 833 Orcid ID: 0000-0001-7072-6323 Sándor Soós <u>Eötvös Loránd University</u> , Hungarian Academy of Sciences Verified email at ppk.elte.hu scientometrics quantitative science studies psychometrics	Follow	Cited by Citations h-index i10-index	All 833 14 15
<b>9.</b> Doró Katalin h-index = 10 number of citations: 437 Orcid ID: 0000-0001-8085-4839			
Katalin Doró associate professor, <u>University of Szeged</u> Verified email at lit.u-szeged.hu academic writing plagiarism L2 literacy TEFL teacher identity	Follow	Citations h-index i10-index	All 437 10 10
<b>10. Berek László</b> h-index = 5 number of citations: 124 Orcid ID: 0000-0002-4126-1528			
Berek László <u>Obuda University, Budapest</u> , Hungary Verified email at uni-obuda.hu information technology library sceince library and publication secu Citation indexing	Pollowing	Cited by Citations h-index i10-index	All 124 5 3
<b>11. Dudás Anikó</b> h-index = 4 number of citations: 103 Orcid ID: -			
Anikó Dudás Library&Information Science Verified email at btk.ppke.hu cataloguing library metadata publishing bibliometrics research infrastructure	Follow	Cited by Citations h-index i10-index	All 103 4 1
<b>12. Berhidi Anna</b> h-index = 3 number of citations: 235 Orcid ID: 0000-0002-4065-3255			
Anna Berhidi Semmelweis University Verified email at semmelweis.hu bibliometrics bibliographic databases journal analysis	Follow	Citations h-index i10-index	All 235 3 2

#### **3. CONCLUSIONS**

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The scientific communication presented the 2024 ranking of Hungarian researchers in the field of Scientommetrics. The ranking is presented primarily according to the h-index of researchers. Researchers with matching h-index are ranked by the number of citations. The ranking was constructed using the Google Scholar web database. The ranking list includes 12 researchers. The Orcid ID numbers of the researchers are presented.

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