

Analysis of Webometric Term in Scopus Database during 2000-2019.

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Abstract - It is a dynamic area of research in which majority of research work is being done. Scopus is a leading research platform, helping to find, analyze and share information in the sciences, social sciences, arts, and humanities. The present study discusses the “Webometric” as reflected in SCOPUS for the period from 2000–2019. This study investigates the highly productive authors, document type etc.

Keywords: Webometric, SCOPUS, databases. Bibliometrics, Bibliometric studies

Introduction

Webometric is concerned with measuring aspects of the web: websites, webpages, parts of webpages, words in web pages, hyperlinks, web search engine results. The importance of the web itself as a communication medium and for hosting an increasingly wide array of documents, from journal article to holiday brochures, needs no introduction. Given this huge and easily accessible source of information, there are limitless possibilities for measuring or counting on a huge scale or on a smaller scale.

Webometrics:

Webometrics is a scientific discipline that studies the quantitative aspects of information sources and their use. In other words, webometrics try to measure the World Wide Web, analyses technology usage and allows us a simple content analysis.

Purpose of Study

The analysis of webometric term in SCOPUS database in various slants by author wise, document type wise, country wise, publication year wise, research area wise, source wise.

- To study the document types and number of documents in which webometric term used.

- To find out highly productive authors on webometric term.
- To know document type geographical distribution by country on webometric term.
- To identify publication year wise documents published in Scopus on webometric.
- To get information writing of research areas.

Scope and Limitation of Study

The scope of the study is limited on the term “webometric” in SCOPUS database during 2000 to 2019.

Methods and Material

The growth of publications in the Bibliometric research was derived from the SCOPUS published by Elsevier. During the period 2000-2019, a total of 243 records were found for the keyword “Webometric”.

Review of Literature

Baskaran C. and Sivakami N. (2014) Quantitative analysis is carried out to identify the literature growth, authorship pattern, collaboration and journal distribution on Swine influenza disease research based on data obtained from Pubmed databases for a period from 2006–2010. A total of 2360 articles were downloaded from Pubmed database using the search term “Swine*” subjected to bibliometric data analysis techniques.

Jeong, GeumHee& Huh, Sun (2017) the aim of this study was to analyze the bibliometric characteristics of publications from North Korea indexed in the Web of Science Core Collection from 1988 to 2016. The Web of Science Core Collection was searched using the terms “North Korea” OR “Democratic People’s Republic of Korea” OR “DPRK” in the address field of the basic search. The country of the co-authors, affiliations, journals, annual number of also the country-wise analysis which provides the percentage of Indian share to this subject. The analysis also includes institution-wise categorization; Degree of Collaboration and also verifies the fitness of Bradford’s Law of Scattering.

KhisteGajanan P. &SurwadeYogesh P. (2018) explained the “Web 3.0” as reflected in Science Direct for the period from 2008-2017. Present paper describes the Document Type, Documents Published by Year wise, highly preferred publications for publishing documents.

Patil Hitendra J. & Surwade, Yogesh .P. (2020) Coronavirus disease (COVID-19) is an infective disease caused by a new virus.Scopus is a leading research platform, helping to find, analyze, and share data in the sciences, social sciences fields. Thus, the present study reflects the “Corona” as replicated in Scopus during the period from 2010-2019. The present study examines the highly productive a authors, Country wise, Document Type wise, publication year wise, Language wise, Journal wise or source wise etc.

DATA ANALYSIS:**Document type distribution:****Table No.1 Types of documents available on Webometric**

DOCUMENT TYPE	No. of Documents	Percentage
Article	184	75.72
Conference Paper	43	17.70
Review	6	2.47
Book Chapter	5	2.06
Conference Review	3	1.23
Editorial	2	0.82
Total	243	100

Table no.1 shows that, document type wise distribution, majority of documents 184 i.e.(75.72%) documents published under the category of Article, 43 i.e. (17.70%) documents published under the category of Conference paper, 6 i.e.(2.47%) documents published under the category of Review, 5 i.e.(2.06%) documents published under the category of Book chapter, 3 i.e.(1.23%) documents published under the category of Conference Review and very less 2 i.e.(0.82%) documents published under the category of Editorials.

Author wise Distribution:**Table No.2 Top 5 Authors which write highest documents on the term webometric**

Author Name	No. of Documents	Rank
Thelwall, M.	31	1
Park, H.W.	19	2
Aguillo, I.F.	7	3
Orduña-Malea, E.	7	3
Gouveia, F.C.	5	4
Khan, G.F.	5	4
Leta, J.	5	4
Ortega, J.L.	5	4
Holmberg, K.	4	5

Table No.2 depicts that, highly productive authors, it has been observed that, Thelwall, M. has contributed maximum number of documents i.e. 31 in rank 1st position, Park, H.W. has contributed 19 documents in rank 2nd position, Aguillo, I.F.& Orduna-Malea, E. has contributed 7 documents in rank 3rd position, Gouveia, F.C., Khan,G.F., Leta,J. and Ortega, J.L. has contributed 5 documents in rank 4th position whereas Holmberg, K. has contributed 5 documents in rank 5th position.

Country wise distribution:

Table No.3 Top 10 Country which highest documents on the term webometric

Country/Territory	No. of Documents
United Kingdom	40
India	25
Iran	25
Spain	24
South Korea	21
United States	16
Brazil	11
China	10
Germany	10
Netherlands	9
Total	191

Table no.3 shows that, country/territory wise distribution of top 10 countries, in country wise distribution of documents out of 243 articles 191 documents published in top 10 countries. United Kingdom tops the list of 40 articles followed by India and Iran which is 25 articles to its credit., Spain has 24 articles, South Korea has 21 articles, United States have 16 articles in its credit, Brazil has 11 articles, China has 10 articles, Germany has 10 articles whereas Netherland has 9 articles which is in last position.

Year wise distribution

Table No.4 Year wise documents published in Scopus on Webometric

Year	Documents	Percentage
2019	25	10.29
2018	18	7.41
2017	19	7.82
2016	12	4.94
2015	21	8.64
2014	23	9.47
2013	15	6.17
2012	19	7.82
2011	18	7.41
2010	14	5.76
2009	9	3.70
2008	12	4.94
2007	9	3.70
2006	9	3.70
2005	11	4.53
2004	3	1.23
2003	3	1.23
2002	1	0.41
2001	1	0.41
2000	1	0.41
Total	243	100

Table no.4 shows that, year wise distribution of documents, The highest number of documents 25 i.e. (10.29%) has been published in the year 2019 followed by 23 i.e. (9.47%), 21 i.e.(8.64%) documents has been published in the year 2015 and very less 1 i.e. (0.41%) documents has been published in the year 2000- 2002. It also seen that there is an increase in the research articles year by year.

Subject wise distribution

Table No.5 Research area used highest number of Webometric term

SUBJECT AREA	Documents	Percentage
Computer Science	149	36.08
Social Sciences	145	35.11
Decision Sciences	22	5.33
Mathematics	22	5.33
Business, Management and Accounting	15	3.63
Arts and Humanities	14	3.39
Medicine	11	2.66
Engineering	10	2.42
Multidisciplinary	5	1.21
Economics, Econometrics and Finance	4	0.97
Agricultural and Biological Sciences	3	0.73
Biochemistry, Genetics and Molecular Biology	3	0.73
Physics and Astronomy	3	0.73
Materials Science	2	0.48
Chemical Engineering	1	0.24
Chemistry	1	0.24
Earth and Planetary Sciences	1	0.24
Environmental Science	1	0.24
Nursing	1	0.24
Total	413	100

Table No. 5 presents the subject-wise categorization of the documents retrieved. Subject-wise analysis indicates that maximum number of contributions was in the area of Computer Science 149 i.e. (36.08%) followed by Social Science with 145(35.11%) records. The document contribution in the area of Chemical engineering, Chemistry, Earth and Planetary Science, Environmental Science and Nursing is very less i.e. (0.24%). The Total no.243 of original documents in SCOPUS on Webometric term and whenever from Table No.5 the Subject wise Total 413 documents are available. The differences between documents are shows because by subject wise many documents overlapping in more than one subjects.

Affiliation wise distribution:**Table no.6 Affiliation wise distribution of Documents**

Affiliation	Documents	Percentage
University of Wolverhampton	30	30.61
Yeungnam University	19	19.39
Universidad de Granada	8	8.16
Consejo Superior de Investigaciones Científicas	7	7.14
Universitat Politècnica de València	7	7.14
Danmarks Biblioteksskole	6	6.12
Fundacao Oswaldo Cruz	6	6.12
Universidade Federal do Rio de Janeiro	5	5.10
Humboldt-Universität zu Berlin	5	5.10
Abo Akademi University	5	5.10
Total	98	100

Table 6 presents the list of top ten organization contributions on the subject webometric. The institution affiliation from the address field is taken as the data for this categorization. Among 160 organizations the top listed institutions are only considered in this study. University of Wolverhampton contributed 30 i.e. (30.61%) articles followed which is the highest while Yeungnam University has 19 i.e. (19.39%) articles to its credit & Universidade Federal do Rio de Janeiro, Humboldt-Universität zu Berlin and Abo Akademi University contributed 5 i.e. (5.10%) articles on its credit.

Findings

- Document-wise study reveals that the maximum numbers of papers 184 i.e. (75.72%) published are under the category article whereas 2 i.e. (0.82%) published under the category of Editorials.
- In Author wise analysis, Highest no. of articles i.e. 31 published by Thelwall, M. and Very less 5 documents have been published by Holmberg, K in rank 5th position.
- Country-wise analysis states that United Kingdom tops the list with 40 whereas Netherland has 9 articles to its credit in last position.
- In Scopus, under the category Webometric, 243 items were retrieved among which maximum number of articles was contributed in the year 2019 and minimum in 2000-2002.
- Subject-wise analysis indicates that maximum number of contributions 149 i.e. (36.08%) was in Computer Science & The document contribution in the area of Chemical engineering, Chemistry, Earth and Planetary Science, Environmental Science and Nursing with 1 i.e. (0.24%) in their record.
- Institution-wise distribution shows that University of Wolverhampton contributed 30 (30.61%) articles which are the highest while Universidade Federal do Rio de Janeiro, Humboldt-Universität zu Berlin Abo Akademi University has 5 (5.10%) articles on its credit.

Conclusion

The data suggest that, there was a significant research activity in the text of Webometric during the study period. It also indicates that, there is an increase in the documents year by year.

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