

**A BIBLIOMETRIC ANALYSIS OF SECURITY FOR DATA ACCESS AND
CONTROL IN CLOUD COMPUTING USING VOSVIEWER**

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Abstract: Security is the measure challenge while access the data on cloud. Every day there is at least more than 27 cases in India reported on the data hacking while accessing on cloud. The Vosviewer software was used to extract search results. Later, the results of Bibliometric mapping were examined in greater detail. As per our research this is the first study conducted with the help of VosViewer to do the Bibliometric analysis of security of data access on cloud in India.

Keywords: Security, Data Access, Cloud Computing.

1. Introduction:

Cloud computing is a relatively recent distributed computing technology. L. Kleinrock stated in 1969 [1] that computer networks are still in their infancy. However, as they mature and become more sophisticated, we should expect to see the proliferation of 'computer utilities,' which, like current electric and telephone utilities, will serve individual homes and workplaces across the country." His concept accurately reflected today's utility-based computing paradigm. The beginnings of cloud computing may be traced back to grid computing technology. [4]

2. Materials and Methods :

The SCOPUS database was examined between 2012 and 2022, according to the findings (TITLE-ABS-KEY (security) AND TITLE-ABS-KEY (data AND access) AND TITLE-ABS-KEY (cloud AND computing)). A CSV file was created using the information extracted from the documents, which included the author, year of publication, language of publishing, journal, title, affiliation, keywords, and kind of document. Recovered data was made available to the public on March 30th, 2022. Study of bibliographic coupling, co-authorship, co-occurrence, citations and co citations was carried out with the aid of the software VosViewer. (1.6.18). [2]

Table 1- Describe the top 10 Journal in the field of working pregnant Cloud Computing.

Selected	Source	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	ieee access	70	490	60
<input checked="" type="checkbox"/>	future generation computer systems	27	493	26
<input checked="" type="checkbox"/>	ieee internet of things journal	46	368	23
<input checked="" type="checkbox"/>	information sciences	11	258	22
<input checked="" type="checkbox"/>	computer communications	8	224	13
<input checked="" type="checkbox"/>	electronics (switzerland)	11	68	13
<input checked="" type="checkbox"/>	ieee transactions on services comp...	23	295	13
<input checked="" type="checkbox"/>	ieee transactions on cloud comput...	24	228	12
<input checked="" type="checkbox"/>	journal of ambient intelligence an...	17	110	12
<input checked="" type="checkbox"/>	ieee communications surveys and ...	5	402	11

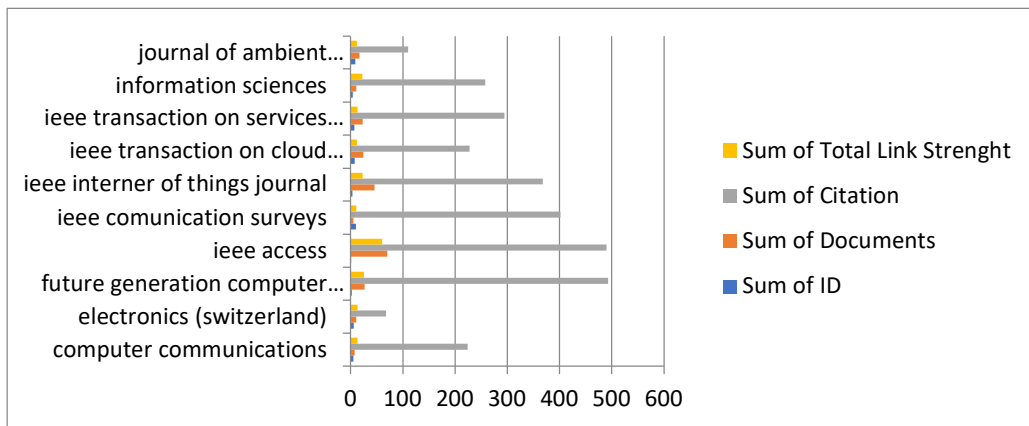


Fig-3.2.-The top ten most active journals in the world

Table 2 –In the field of Cloud Computing, these ten countries have the best records for innovation.

Country	Documents	Citations	Total link strength
china	575	4271	257
united states	201	2200	189
india	752	2291	152
saudi arabia	86	332	105
united kingdom	67	654	102
australia	68	1373	76
pakistan	56	174	73
canada	41	1138	55
germany	41	412	47
singapore	30	414	45

Table 2- Shows the list of top 10 Countries contributing in this domain related with Cloud computing

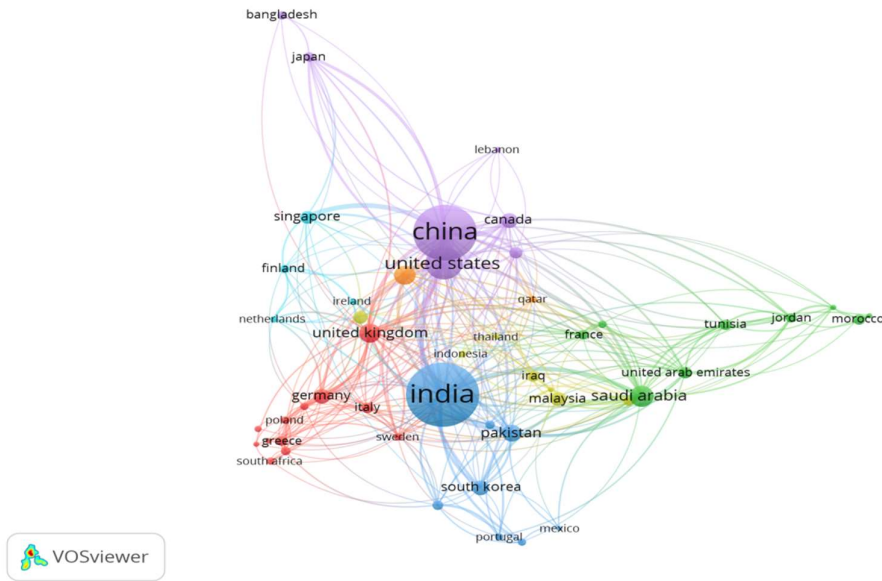


Figure – 3.3.1(A)

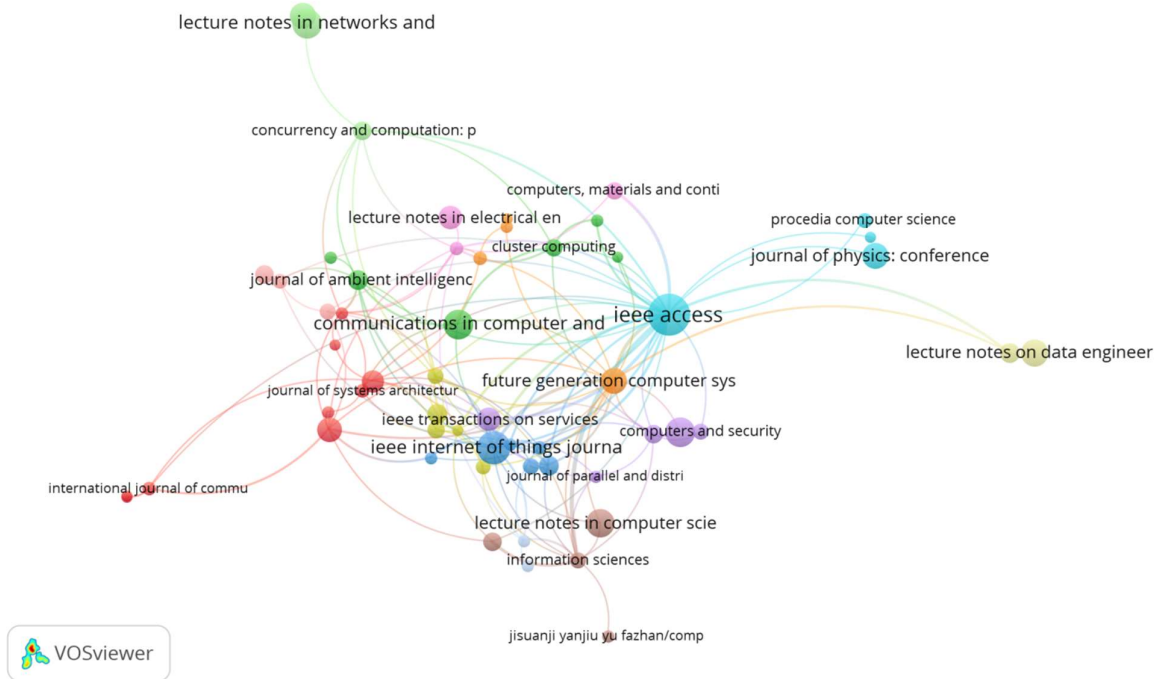


Figure – 3.3.2.(B)

Fig-3 Illustrates the bibliographic connection of – (A) contains country references. The different colours represent the different groups, while the diameter of the circles represents the frequency of referrals. (B) Citations of the sources The circle's diameter

denotes the frequency of references, while the various colours represent the various categories

3.2. Bibliometric Examination of the Co-Citation

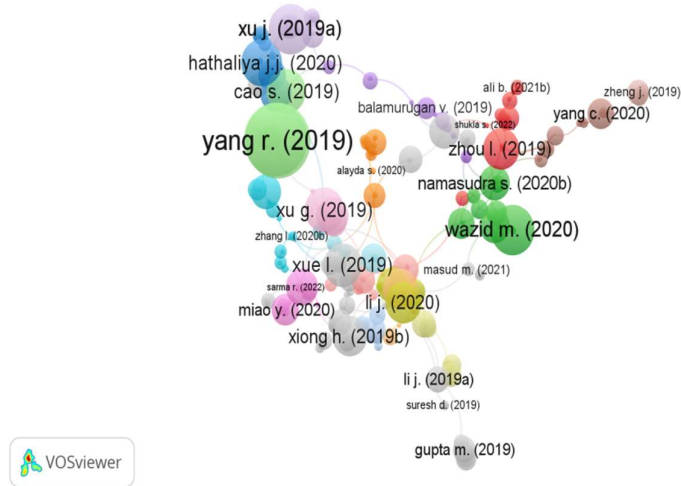


Figure-3.4.1(A)

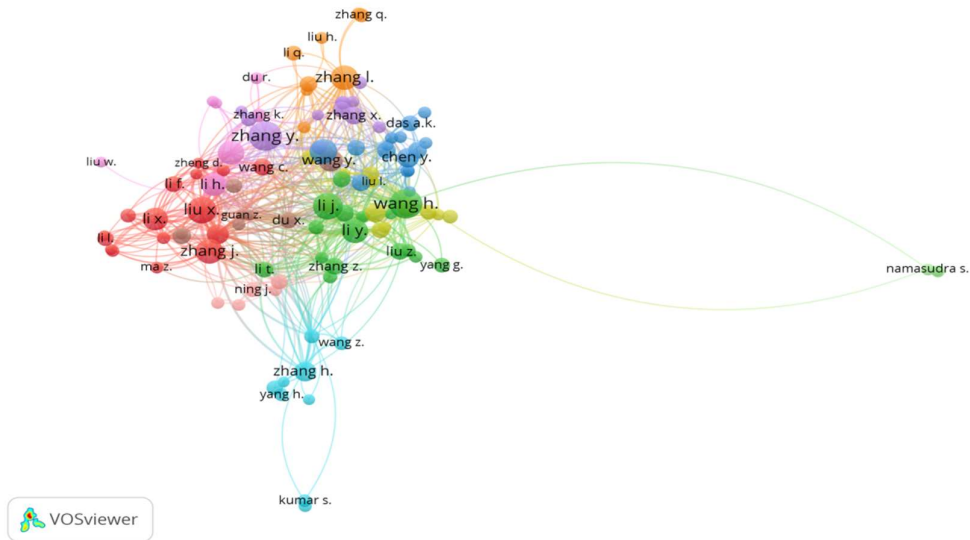


Figure-3.4.1(B)

As seen in Figure, the records and sources used to construct a bibliography are linked together.4 (A), nineteen groups were obtained. Figure 4(B) – shows the co-citation of authors Glover, v. has 57 citations with 5116 link strength.

Fig-5 The Bibliometric analysis of the co-citation and bibliographic coupling is shown.

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