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Research Article

Global Research Trends in Quantum Computing: A Scientometric Analysis of 50 Years Using the Dimensions Database

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ABSTRACT

This paper examines global research trends in quantum computing. Quantum computing is a multidisciplinary field that combines elements of mathematics, physics, and computer science. It uses quantum mechanics to solve complicated problems more quickly than traditional computers. Scientometrics is a quantitative and statistical approach that analyses research on specific themes. The study analysed 50 years of quantum computing research from 1977 to 2026. The research publication data were collected from the Dimensions database. The study aims to analyse quantum computing research across the Sustainable Development Goals (SDGs), year-wise distribution of research publications, year-wise distribution of citations, publications with citations by year, year-wise trends of the Field Citation Ratio, year-wise trends of the Relative Citation Ratio (RCR), top ten leading authors, top 25 core source journals, open access publishing patterns, top 25 highly cited research papers, citation analysis networks, and co-authorship analysis networks. The study found that a total of 1,643 quantum computing research publications were published under SDG 9 (Industry, Innovation and Infrastructure), and these publications received the highest number of citations (52,718), with a high mean citation value of 32.09. The majority of 6,773 research papers were published in 2025, receiving 149,986 citations. Zhu Han (University of Houston, United States) has published 179 research publications and received 4,148 citations. The IEEE Access journal has published 1,575 research publications and received 45,857 citations. The article "Computational Thinking," published in Communications of the ACM (2006), has received 6,006 citations.

Keywords: Citation Analysis, Dimensions Database, Quantum Computing, Research Trends, Scientometric Analysis, Sustainable Development Goals (SDGs).

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INTRODUCTION

Quantum computing is a new discipline of computer science and engineering that uses quantum physics' unique properties to solve problems beyond the capabilities of even the most powerful classical computers. The field of quantum computing includes a range of disciplines, including quantum hardware and quantum algorithms (Schneider and Smalley, 2025). Scientometrics is commonly synonymously referred to as informetrics, bibliometry, bibliometrics, bibliometric analysis, science mapping, or knowledge structure in the literature, although these terms are essentially recognized as separate fields (Yang *et al.*, 2018). The term "scientometrics" (also known as "naukometriya") was first used in 1969. Scientometrics is essentially the analysis of big publication data from various sources, such as a certain journal(s), topic(s), or databases (e.g., Web of Science, Scopus, Pubmed, Dimensions, Open Alex, Lens, and Google Scholar (Liu and He, 2023). Numerous studies have compared the coverage of databases used for scientometric analysis and focused on its applications in various disciplines (Kashani and Dastani, 2025; Liu *et al.*, 2025; Monib *et al.*, 2025; Okonta *et al.*, 2025; Razzaq and Shah, 2025; Verma *et al.*, 2025; Arora and Gupta, 2024; Li *et al.*, 2024; Sood *et al.*, 2024; Gomis *et al.*, 2023).

METHODOLOGY

The publication data were collected from the Dimensions database (Dimensions, 2025) as of 05 January 2026. The Dimensions database is a new online scholarly platform for publications, grants, clinical trials, and patents. Dimensions was launched by Digital Science in January 2018 (Dimensions, 2025). The search term used was "Quantum Computing," and free-text searching was applied to the full data, with the field of search selected as "46 Information and Computing Sciences" and the document type selected as "Article." The results showed 23,224

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articles. The study aims to analyse quantum computing research across the Sustainable Development Goals (SDGs), year-wise distribution of research publications, year-wise distribution of citations, publications with citations by year, year-wise trend of Field Citation Ratio, year-wise trend of Relative Citation Ratio (RCR), top ten leading authors, top 25 core source journals, open access publishing pattern, top 25 highly cited research papers, citation analysis network, and co-authorship analysis network. The study used VOSviewer for creating network analyses. VOSviewer is a software tool for constructing and visualizing bibliometric networks (VOSviewer, 2009). R Studio version 4.5.2 was used, along with Biblioshiny 5.0 and MS Excel for this study. Biblioshiny is a Shiny app that provides a web interface for the bibliometrix package (Bibliometrix, 2019). PRISMA guidelines were followed and used to validate the research procedure used in the study (Marín-Marín *et al.*, 2021) Figure 1 provides a detailed description of the methodology of the study, illustrating the research process and data analysis. This study is based exclusively on secondary data collected from the Dimensions database and publicly available bibliographic records. No human participants, animals, or confidential personal data were involved in the research.

Statistical Methods

Descriptive bibliometric and scientometric analyses were performed using the Dimensions database export data. Statistical indicators such as publication count, citation count, Field Citation Ratio (FCR), Relative Citation Ratio (RCR), authorship patterns, source-wise distribution, and open access trends were analysed using MS Excel, R Studio version 4.5.2, and Biblioshiny 5.0. Network visualization analyses, including co-authorship and citation networks, were generated using VOSviewer software.

RESULTS

Quantum Computing Research across Sustainable Development Goals (SDGs)

Table 1 and Figure 2 shows quantum computing research across the Sustainable Development Goals (SDGs). A total of 1,643 quantum computing research publications is indexed under SDG 9 (Industry, Innovation and Infrastructure), and these publications received the highest number of citations (52,718) with a high citation mean of 32.09, followed by SDG 7 (Affordable and Clean Energy), which covers 480 research publications and received 11,595 citations with a citation mean of 24.16. The study observed that 89 quantum computing publications fall under SDG 3 (Good Health and Well-Being) and received a good number of 2,093 citations. SDG 1 (No Poverty) and SDG 5 (Gender Equality) have a very small number of quantum computing publications and received fewer citations.

Year-wise Distribution of Research Publications

Figure 3 shows the year-wise distribution of research publications. The study analysed 50 years of research output in the quantum computing field from 1977 to January 2026. From 1977 to 1988, no research articles were published; from 1989 to 1999, the number of publications remained very low, representing limited research during the initial stage of the quantum computing field. From 2000 to 2019, research productivity slowly increased. From 2020 to 2026, quantum computing research shows an exponential growth trend, indicating a strong expansion of research output and heightened academic interest in the field. The majority of 6,773 research papers were published in this domain.

Year-wise Distribution of Citations

Figure 4 shows the year-wise distribution of citations. The majority of 149,986 citations were received in the year 2025. In 2024, 104,176 citations were received by quantum computing research articles. From 2024 to 2025, the majority of researchers were conducting research in the quantum computing field. The study observed that from 2005 onwards, quantum computing research articles received increased attention and focus for further research. From 1977 to 1993, the research publications received fewer citations.

Publications with Citations by Year

Figure 5 shows the publications with citations by year. From 1977 to 1990, there were fewer publications and no citations. In 1994, the publications with citations show 100%. From 1995 to 2011, the publications with citations slowly increased and decreased. The study observed that from 2013 onwards, quantum computing publications and citations increased, showing the development of quantum computing research.

Year-wise Trend of Field Citation Ratio

Figure 6 indicates the year-wise analysis of the Field Citation Ratio. The Field Citation Ratio (FCR) is a citation-based measure of scientific influence of one or more articles. It is calculated by dividing the number of citations a paper has received by the average number received by documents published in the same year and in the same Fields of Research (FoR) category (Dimensions, 2025). From 1977 to 1999, the FCR shows no publication activity. In 2000, the research publication FCR reached its highest point during this stage. From 2005 to 2015, the FCR values decreased, and from 2018 onwards, the FCR value increased, indicating that quantum computing reached wider recognition.

Year-wise Trend of Relative Citation Ratio (RCR)

Figure 7 shows the year-wise distribution of the RCR. The RCR is a citation-based measure of scientific influence of a publication. It is calculated by the National Institutes of Health (NIH) in the United States as the citations of a paper, normalized to the citations

Table 1: Quantum Computing Research across Sustainable Development Goals (SDGs).

SDG No.	Name	Publications	Citations	Citations mean
9	Industry, Innovation and Infrastructure	1643	52,718	32.09
7	Affordable and Clean Energy	480	11,595	24.16
11	Sustainable Cities and Communities	207	7,701	37.2
4	Quality Education	142	4,218	29.7
13	Climate Action	140	3,254	23.24
12	Responsible Consumption and Production	133	3,134	23.56
16	Peace, Justice and Strong Institutions	122	2,885	23.65
3	Good Health and Well Being	89	2,093	23.52
2	Zero Hunger	72	904	12.56
8	Decent Work and Economic Growth	26	75	2.88
17	Partnerships for the Goals	18	419	23.28
14	Life Below Water	12	48	4
10	Reduced Inequalities	10	143	14.3
6	Clean Water and Sanitation	8	61	7.63
15	Life on Land	8	134	16.75
1	No Poverty	4	88	22
5	Gender Equality	4	6	1.5

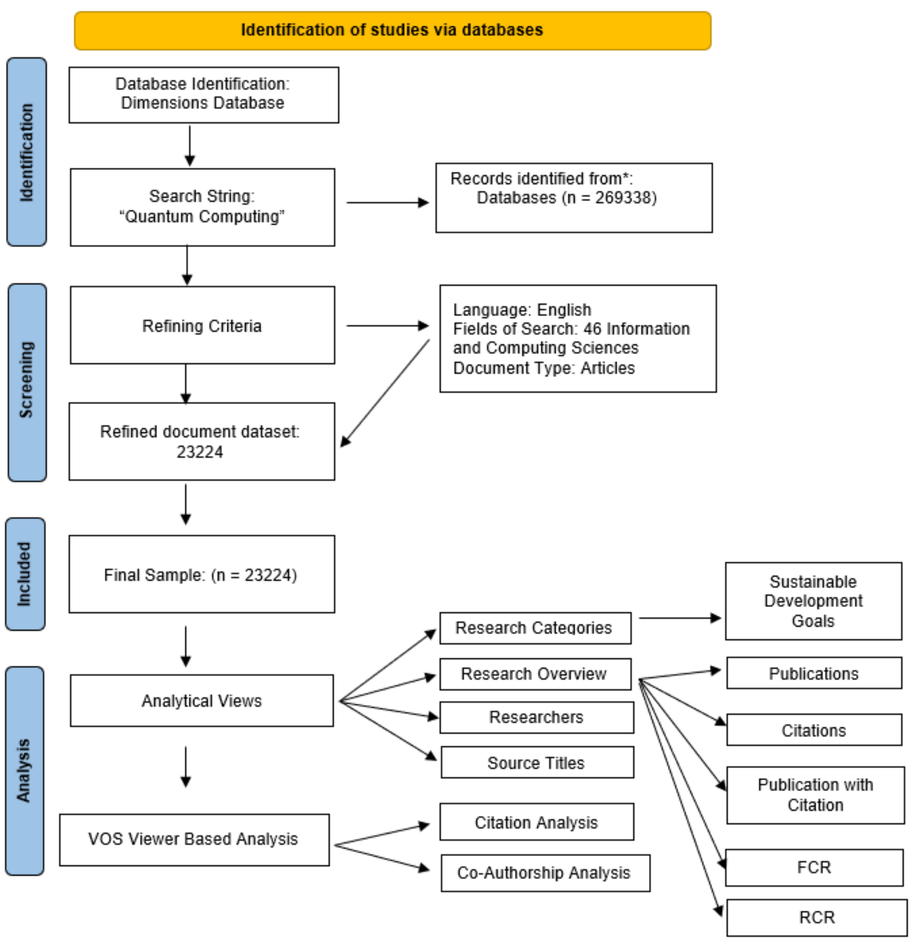

Figure 1: Methodology.

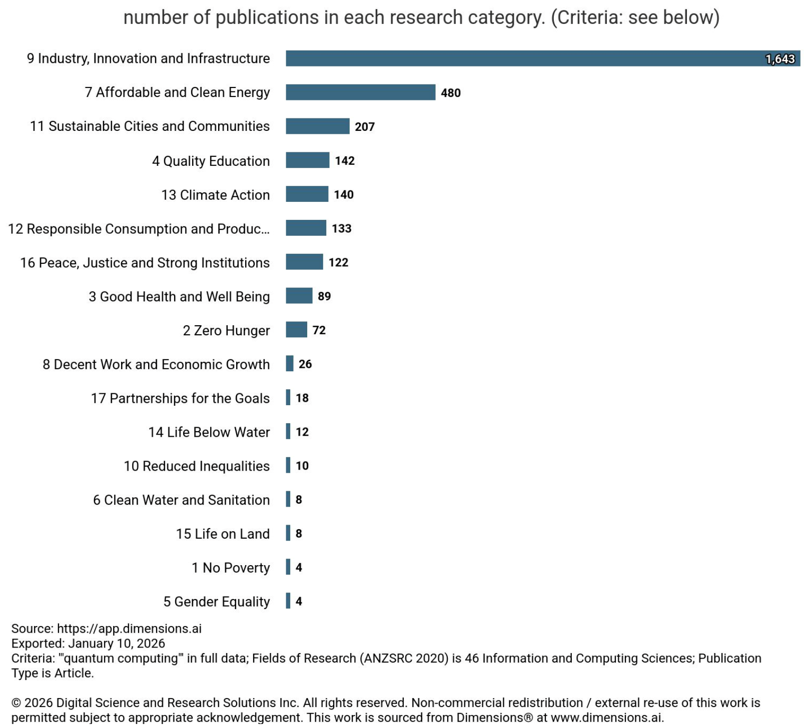

Figure 2: Quantum Computing Research across Sustainable Development Goals (SDGs).

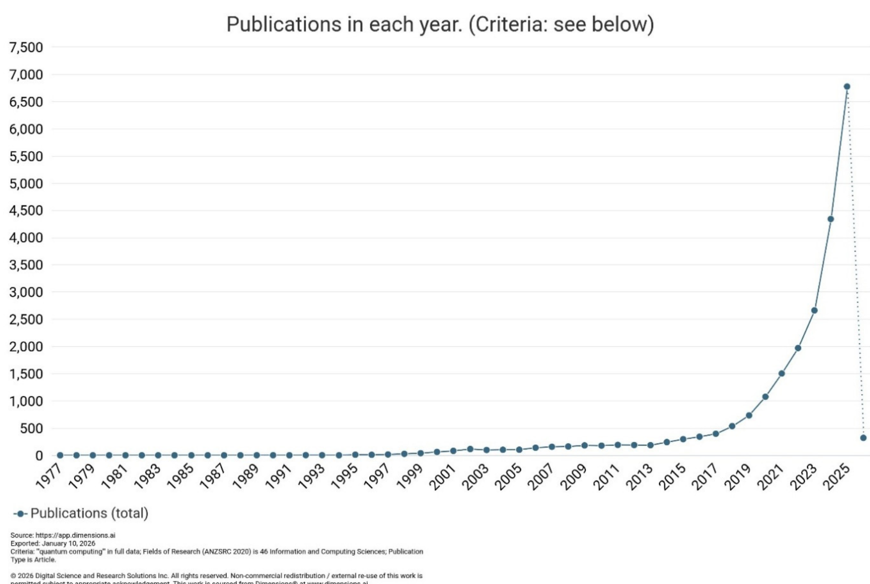

Figure 3: Year wise research publications.

received by NIH-funded publications in the same area of research and year (Dimensions Plus, 2025). In 1935, RCR value showed increased 0.50%. The period between 2018 and 2022 publications consistently higher RCR values, highlighting improved citation performance and stronger influence of recent publications.

Leading Authors

Table 2 indicates the top ten leading authors and their institutions. Zhu Han (University of Houston, United States) has published the highest number of 179 research publications in quantum computing and received the highest number of 4,148 citations with a citation mean of 23.17, followed by Dusit Tao Niyato (Nanyang Technological University, Singapore), who has published 152 research publications and received 1,746 citations. Notably, Xiaodong Wang (Columbia University, United States) and Ashok Kumar Das (International Institute of Information Technology, Hyderabad, India) have published 44 research publications, and Xiaodong Wang has received 3,989 citations. Further, the study found that Hyundong Shin (Kyung Hee University, South Korea) has published a lower number of 37 research papers and received 349 citations.

Table 2: **Top Ten Leading Authors.**

Sl. No.	Name	Organization/Country	Publications	Citations	Citations Mean
1.	Zhu Han	University of Houston, United States	179	4,148	23.17
2.	Dusit Tao Niyato	Nanyang Technological University, Singapore	152	1,746	11.49
3.	Zhu Han	University of Houston, United States	147	549	3.73
4.	Lajos Hanzo	University of Southampton, United Kingdom	46	1,803	39.2
5.	Xiaodong Wang	Columbia University, United States	44	3,939	89.52
6.	Ashok Kumar Das	International Institute of Information Technology, Hyderabad, India	44	633	14.39
7.	Ming-Sheng Ying	University of Technology Sydney, Australia	43	1,158	26.93
8.	Trung Quang Duong	Memorial University of Newfoundland, Canada	39	336	8.62
9.	S-Y Sy-Yen Kuo	National Taiwan University, Taiwan	38	936	24.63
10.	Hyundong Shin	Kyung Hee University, South Korea	37	349	9.43

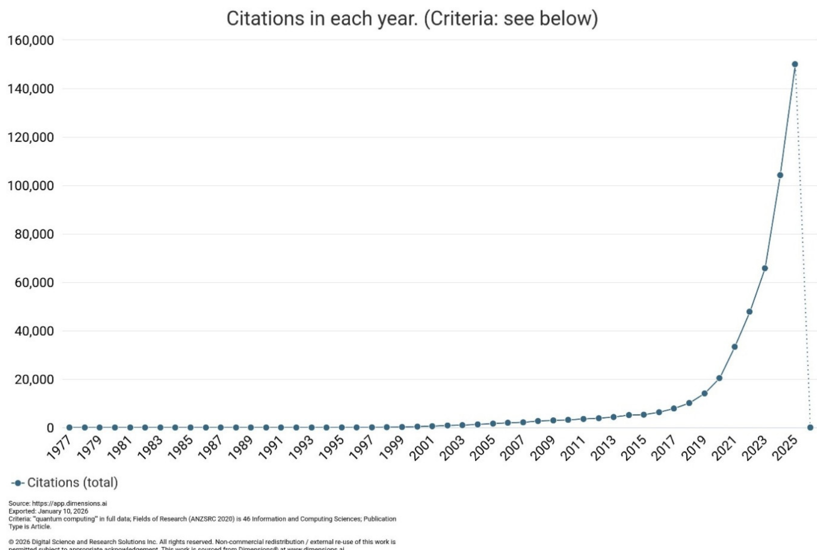

Figure 4: Year-wise distribution of citations.

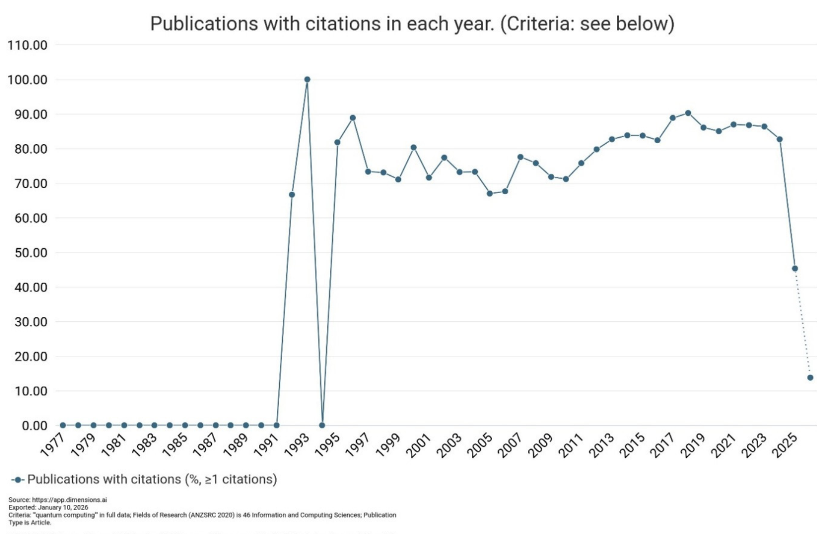

Figure 5: Publications with citations by year.

Core Source Journals

Table 3 shows the top 25 core source journals in quantum computing research. The IEEE Access journal has published the highest number of 1,575 research publications in the quantum computing research field and received the highest number of 45,857 citations, followed by the Scientific Reports journal, which published 501 publications and received 6,875 citations. Specifically, the IEEE Communications Surveys and Tutorials journal has published 120 research publications and received 9,014 citations with a high citation mean of 75.12. The study observed that the Computers Materials and Continua journal has published 119 publications and received a lower number of 713 citations.

Open Access Publishing Pattern

Table 4 shows the Open Access publishing pattern in quantum computing research. Out of the total research publications analysed, 12,909 articles are accessible as All Open Access, while 10,315 publications remain closed. Gold Open Access accounts for 8,361 publications. Hybrid Open Access includes 2,159 publications. Bronze Open Access accounts for 1,414 publications, and Green Open Access is represented by 975 publications.

Highly Cited Research Publications

Table 5 indicates the top 25 highly cited research publications in quantum computing and related domains. The article "Computational Thinking," published in Communications of the ACM (2006), has received the highest number of 6,006 citations, followed by "Polynomial-Time Algorithms for Prime Factorization and Discrete Logarithms on a Quantum Computer," published in the SIAM Journal on Computing (1997), which received 5,994 citations. Notable among these are "Quantum Machine Learning," published in Nature (2017), and "Supervised Learning with Quantum-Enhanced Feature Spaces," published in Nature (2019). The study found that "Computational Thinking and Thinking about Computing," published in Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences (2008), received 1,364 citations.

Co-Authorship Analysis

The co-authorship analysis is displayed in Figure 8. To investigate the pattern of collaboration among researchers in quantum computing research publications, a co-authorship analysis was performed using VOSviewer. Only the largest connected collection of authors was taken into consideration, and the analysis was limited to a maximum of 100 authors. Excluded were publications with more than 25 authors. There are 813 co-authorship relations among the 43 authors in the co-authorship network, which is divided into eight clusters and connected by 120 collaboration links. According to the network, Han, Zhu, and Xiong, Zehui have important positions and collaborate extensively with many authors in various clusters. Their prominent positions demonstrate their active involvement in cooperative field research. Through collaborative papers, other prominent contributors including Wang, Ning, Wang, Xiaodong, Poor, and Harold Vincent also exhibit excellent research.

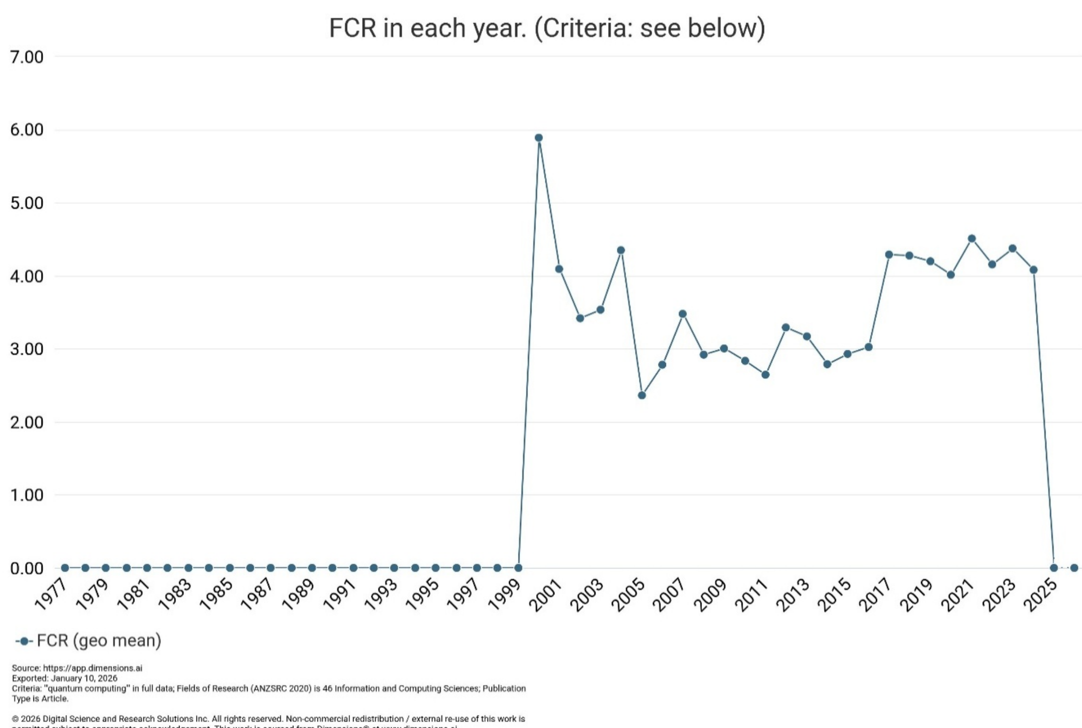

Figure 6: Year-wise trend of Field Citation Ratio (FCR).

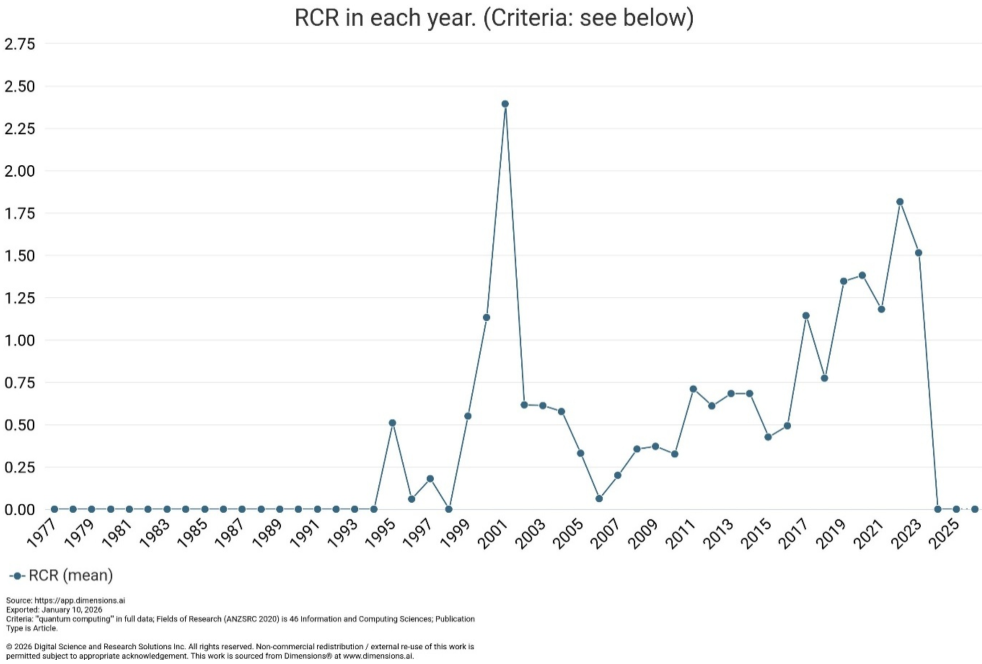

Figure 7: Year-wise trend of Relative Citation Ratio (RCR).

Table 3: Top 25 Core Source Journals.

Sl. No.	Name	Publications	Citations	Citations Mean
1.	IEEE Access	1575	45,857	29.12
2.	Scientific Reports	501	6,875	13.72
3.	IEEE Internet of Things Journal	394	8,100	20.56
4.	IEEE Transactions on Information Theory	295	8,366	28.36
5.	Applied Sciences	276	4,876	17.67
6.	The Journal of Supercomputing	254	2,196	8.65
7.	Sensors	253	6,208	24.54
8.	Computer	250	2,208	8.83
9.	Quantum Machine Intelligence	224	3,636	16.23
10.	Theoretical Computer Science	192	2,946	15.34
11.	Communications of the ACM	168	8,464	50.38
12.	Cluster Computing	154	2,438	15.83
13.	World Journal of Advanced Research and Reviews	154	495	3.21
14.	Procedia Computer Science	147	1,300	8.84
15.	Neurocomputing	146	4,730	32.4
16.	Future Generation Computer Systems	143	4,708	32.92
17.	Multimedia Tools and Applications	141	6,214	44.07
18.	IEEE Transactions on Vehicular Technology	139	2,506	18.03
19.	Applied Soft Computing	138	4,138	29.99
20.	IEEE Transactions on Quantum Engineering	135	3,124	23.14
21.	Expert Systems with Applications	133	6,948	52.24
22.	IEEE Transactions on Wireless Communications	132	3,767	28.54
23.	Machine Learning: Science and Technology	129	1,926	14.93
24.	IEEE Communications Surveys and Tutorials	120	9,014	75.12
25.	Computers Materials and Continua	119	713	5.99

Table 4: **Open Access Publishing Pattern.**

Sl. No.	Open Access	Nos
1.	All OA	12909
2.	Closed	10315
3.	Gold	8361
4.	Hybrid	2159
5.	Bronze	1414
6.	Green	975

Citation Analysis Network

Figure 9 shows the Citation analysis network. The investigation involved up to 100 authors and was limited to the most connected network. The influence of large multi-author studies was diminished by excluding publications with more than 25 authors. With a total of 5,485 citations and 97 scholars connected by 853 citation links, the citation network is organized into seven clusters. According to the network, Han Zhu is the most influential author in terms of citations, holding a prominent position and getting citations from several clusters. Niyato, Dusit Tao, Wang,

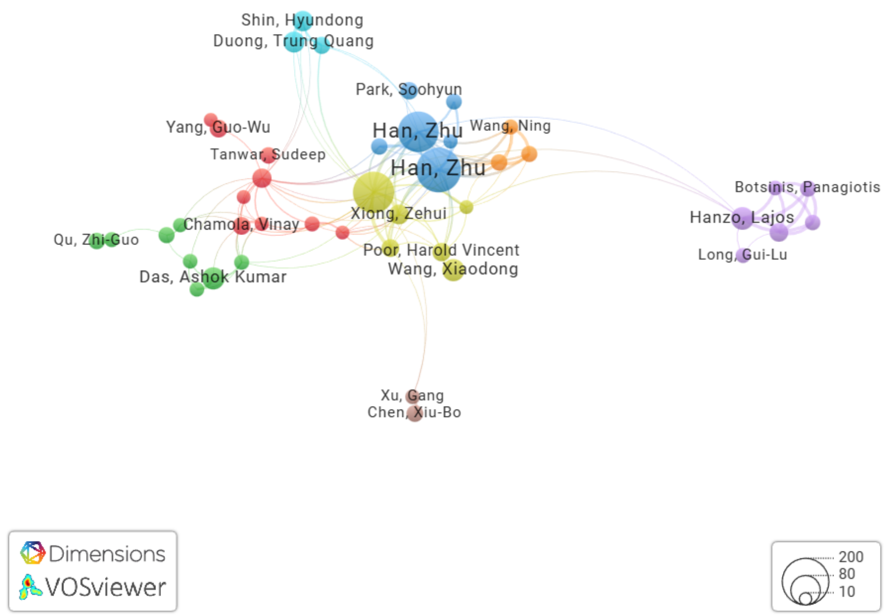

Figure 8: Co-authorship analysis network.

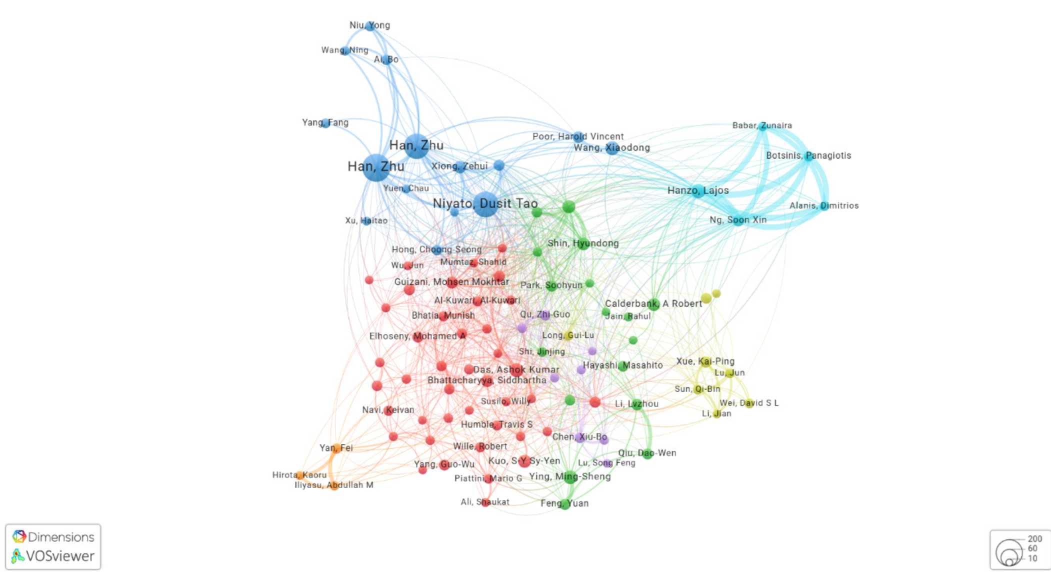

Figure 9: Citation analysis network.

Table 5: Top 25 Highly Cited Research Publications.

Sl. No.	Title	Source title	PubYear	Times cited	RCR	FCR
1.	Computational thinking	Communications of the ACM	2006	6006		1315.4
2.	Polynomial-Time Algorithms for Prime Factorization and Discrete Logarithms on a Quantum Computer	SIAM Journal on Computing	1997	5994		
3.	A review on genetic algorithm: past, present, and future	Multimedia Tools and Applications	2020	4030	35.02	1036.7
4.	Quantum machine learning	Nature	2017	3990	14.25	887.76
5.	A Vision of 6G Wireless Systems: Applications, Trends, Technologies, and Open Research Problems	IEEE Network	2020	3896		1045.9
6.	Basic concepts and taxonomy of dependable and secure computing	IEEE Transactions on Dependable and Secure Computing	2004	3888		877.31
7.	Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy	International Journal of Information Management	2021	3391		955.14
8.	Data-intensive applications, challenges, techniques and technologies: A survey on Big Data	Information Sciences	2014	2494		547.24
9.	6G Wireless Networks	IEEE Vehicular Technology Magazine	2019	2145		536.94
10.	ProtTrans: Toward Understanding the Language of Life Through Self-Supervised Learning	IEEE Transactions on Pattern Analysis and Machine Intelligence	2022	2104	81.6	711.03
11.	Machine learning and the physical sciences*	Reviews of Modern Physics	2019	2097		420.45
12.	Supervised learning with quantum-enhanced feature spaces	Nature	2019	1973	6.57	441.24
13.	A Quantum Adiabatic Evolution Algorithm Applied to Random Instances of an NP-Complete Problem	Science	2001	1840	5.68	456.89
14.	Recent advances in physical reservoir computing: A review	Neural Networks	2019	1829	18.49	421.54
15.	Cloud computing — The business perspective	Decision Support Systems	2011	1771		290.35
16.	Industry 5.0: A survey on enabling technologies and potential applications	Journal of Industrial Information Integration	2022	1716		469.87
17.	On blockchain and its integration with IoT. Challenges and opportunities	Future Generation Computer Systems	2018	1708		347.63
18.	On lattices, learning with errors, random linear codes, and cryptography	Journal of the ACM	2009	1692		445.84
19.	Big data in healthcare: management, analysis and future prospects	Journal of Big Data	2019	1554		319.23
20.	Iterative (turbo) soft interference cancellation and decoding for coded CDMA	IEEE Transactions on Communications	1999	1537		
21.	Digital Twin: Values, Challenges and Enablers from a Modeling Perspective	IEEE Access	2020	1514		389.46
22.	Quantum error correction via codes over GF (4)	IEEE Transactions on Information Theory	1998	1416		
23.	Space-time block coding for wireless communications: performance results	IEEE Journal on Selected Areas in Communications	1999	1402		
24.	Noisy intermediate-scale quantum algorithms	Reviews of Modern Physics	2022	1401		501.19
25.	Computational thinking and thinking about computing	Philosophical Transactions of the Royal Society A Mathematical Physical and Engineering Sciences	2008	1364	0.93	307.8

Xiaodong, and Hanzo, Lajos are among the other frequently cited writers, demonstrating their significant contribution to the advancement of quantum computing research. Authors like Niyato, Dusit Tao; Shin, Hyundong; and Calderbank, A Robert predominate in one cluster, indicating a closely related corpus of widely referenced work. Another cluster with strong internal citation links is Dimitrios, which includes Hanzo, Lajos, Botsinis, Panagiotis, and Alanis.

DISCUSSION

The study shows that quantum computing research has experienced strong growth over the last two decades, especially from 2020 onwards. The increasing number of publications and citations indicates rising academic interest and wider research activity in the quantum computing field. A majority of research publications were associated with SDG 9 (Industry, Innovation and Infrastructure), highlighting the importance of quantum computing in technological development and innovation.

The study observed that citation performance also increased significantly from 2013 onwards, reflecting the growing recognition and influence of quantum computing research. Higher FCR and RCR values in recent years demonstrate improved scientific impact and stronger visibility of publications in this field.

The leading authors and institutions identified in the study indicate that researchers from the United States, Singapore, South Korea, and India contribute actively to quantum computing research. Core journals such as IEEE Access and Scientific Reports play a major role in publishing quantum computing research output.

The open access publishing pattern shows that a large number of quantum computing publications are available through open access models, particularly Gold Open Access. This indicates increasing accessibility and wider dissemination of research findings.

The co-authorship and citation network analyses reveal strong collaborative relationships among researchers. Authors such as Han Zhu, Niyato Dusit Tao, Wang Xiaodong, and Hanzo Lajos occupy central positions in the collaboration and citation networks, showing their major influence in the development of quantum computing research.5.

CONCLUSION

This study provides a comprehensive scientometric overview of global quantum computing research over a 50-year period (1977-2026) using data from the Dimensions database. The study identified quantum computing as a booming field in computer science. In 2025, 6,773 research papers were published and received 149,986 citations. The analysis reveals a significant growth in research output and citation impact, particularly in recent years, highlighting the increasing importance of quantum computing in advancing science and technology. The study observed that Ashok Kumar Das (International Institute of Information Technology, Hyderabad, India) has published 44 research publications in quantum computing, and quantum computing research is focused on SDG 9 (Industry, Innovation and Infrastructure). The study suggested that computer science field experts and scientists should contribute to other research areas and development. The results further identify leading authors, core journals, highly cited papers, and evolving collaboration and citation networks, and this will be helpful for scientists to collaborate and improve quantum computing research.

ACKNOWLEDGEMENT

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ABBREVIATIONS

FCR: Field Citation Ratio; **FoR:** Fields of Research; **NIH:** National Institutes of Health; **OA:** Open Access; **RCR:** Relative Citation Ratio; **SDGs:** Sustainable Development Goals.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

REFERENCES

Arora, M., & Gupta, K. (2024). Quantum computational intelligence techniques: A scientometric mapping. *Archives of Computational Methods in Engineering, 32*(3), 1399-1425. https://doi.org/10.1007/s11831-024-10183-7

Bibliometrix. (2019). *Biblioshiny*. https://www.bibliometrix.org/home/index.php/layout/biblioshiny

Dimensions Plus. (2025). *What is the RCR? How is the RCR score calculated?* https://plus.dimensions.ai/support/solutions/articles/23000018841-what-is-the-rcr-how-is-the-rcr-score-calculated-

Dimensions. (2025). *What is the FCR? How is it calculated?* https://dimensions.freshdesk.com/support/solutions/articles/23000018848-what-is-the-fcr-how-is-it-calculated-

Dimensions. (2025, May 26). *Dimensions AI | The most advanced scientific research database*. https://www.dimensions.ai/

Gomis, M. K. S., Oladinrin, O. T., Saini, M., Pathirage, C., & Arif, M. (2023). A scientometric analysis of global scientific literature on learning resources in higher education. *Heliyon, 9*(4), e15438. https://doi.org/10.1016/j.heliyon.2023.e15438

Kashani, M., & Dastani, M. (2025). Evolution of artificial intelligence in medical sciences: A comprehensive scientometric analysis. *Global Knowledge, Memory and Communication*. https://doi.org/10.1108/GKMC-09-2024-0586

Li, K., Peterson, M., Wang, Q., & Wang, H. (2024). Mapping the research trends of Digital Game-Based Language Learning (DGBLL): A scientometrics review. *Computer Assisted Language Learning, 38*(7), 1393-1422. https://doi.org/10.1080/09588221.2023.2299436

Liu, P., Yang, C., & Wang, K. (2025). The global landscape of emotion recognition research from 2004 to 2023: A scientometric and visualization analysis. *Discover Applied Sciences, 7*(6). https://doi.org/10.1007/s42452-025-07103-0

Liu, Y., & He, H. (2023). Scientometrics of scientometrics based on Web of Science Core Collection data between 1992 and 2020. *Information, 14*(12), 637.

Marín-Marín, J., Moreno-Guerrero, A., Dúo-Terrón, P., & López-Belmonte, J. (2021). STEAM in education: A bibliometric analysis of performance and co-words in Web of Science. *International Journal of STEM Education, 8*(1), 41. https://doi.org/10.1186/s40594-021-00296-x

Monib, W. K., Qazi, A., Jain, J., & Ponniah, L. (2025). A comprehensive scientometric analysis of ChatGPT research global trends and future prospects. *TechTrends, 69*(6), 1260-1278. https://doi.org/10.1007/s11528-025-01110-z

Okonta, E. D., Israel, G. C., & Okeke, F. O. (2025). Scientometric review and visualisation of City Information Modeling (CIM) trends and future directions. *Discover Cities, 2*(1). https://doi.org/10.1007/s44327-025-00072-4

Razzaq, K., & Shah, M. (2025). Advancing cybersecurity through machine learning: A scientometric analysis of global research trends and influential contributions. *Journal of Cybersecurity and Privacy, 5*(2), 12. https://doi.org/10.3390/jcp5020012

Schneider, J., & Smalley, I. (2025, December 17). Quantum computing. IBM. https://www.ibm.com/think/topics/quantum-computing

Sood, K., Monika, & Sood, S. K. (2024). Mapping the future: A scientometric review of 3D/4D printing research trends. *Progress in Additive Manufacturing, 10*(5), 3305-3319. https://doi.org/10.1007/s40964-024-00845-0

Verma, R., Kadyan, S., & Kumar, A. (2025). Research trends in Internet of Things (IoT): A scientometric analysis. *The Serials Librarian, 86*(3-4), 190-212. https://doi.org/10.1080/0361526X.2025.2521385

VOSviewer. (2009). *Visualizing scientific landscapes*. https://www.vosviewer.com/

Yang, S., Yuan, Q., & Yu, Y. (2018). Are scientometrics, informetrics, and bibliometrics different? In *16th International Conference on Scientometrics & Informetrics (ISSI 2017)* (pp. 1507-1518). https://doi.org/10.13140/RG.2.2.22435.50726

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