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Research Article

Sixty Years of Academic Excellence: A Scientometric Study of Dr. Babasaheb Ambedkar Marathwada University (1963-2023)

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ABSTRACT

This study examines the scientific productivity of Dr. Babasaheb Ambedkar Marathwada University (BAMU) from 1963 to 2023, using the Scopus citation database. A total of 4,428 publications were analyzed using various scientometric indicators. The results show an annual growth rate of 9.92%, with 64,632 citations received, averaging 14.6 citations per paper. The Science faculty contributed the largest share of publications (95.25%), followed by multi-disciplinary fields (1.82%) and Social Sciences (1.80%). K.M. Jadhav (237 publications, 9,202 citations), M.S. Shingare (192 publications, 4,182 citations), and M.D. Shirsath (183 publications, 4,224 citations) were identified as the most prolific authors. Multi-authorship was prevalent, with a strong collaborative research culture, as evidenced by 161 institutional partnerships and international collaborations with 71 countries, notably Yemen, Saudi Arabia, and Taiwan. 8,767 unique keywords were identified, with "Time Domain Reflectometry" emerging as a key research focus. The application of Bradford's Law of Scattering revealed that AIP Conference Proceedings is the most preferred journal in the Zone 1 category. The analysis of top-cited papers further highlights BAMU's significant contributions to global research.

Keywords: Scientometrics, BAMU, Dr. Babasaheb Ambedkar Marathwada University, Authorship pattern, Most relevant affiliation, International collaboration.

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INTRODUCTION

Education has always been a foundation of human progress, Higher education, in particular, plays a critical role in shaping the intellectual and social fabric of society, equipping individuals with the knowledge and skills necessary for personal growth and societal advancement. Indian universities have been at the forefront of this educational mission, providing quality education through innovative curricula, new pedagogies, and the application of IoT-enabled technologies. The introduction of the National Education Policy (NEP) 2020 is poised to transform Indian Higher Education Institutions (HEIs) into world-class learning centers by promoting interdisciplinary learning, research-driven teaching, and the integration of technology in education. To measure the quality of education, several benchmark systems, including research output, faculty's Academic Performance Indicators (API), and student enrollment ratios, have been implemented. Statutory bodies like the National Assessment and Accreditation Council (NAAC) and the National Institutional Ranking Frame Work (NIRF) play pivotal roles in evaluating Indian HEIs against these benchmarks, ensuring that they adhere to the standards required for global recognition. Scientometric studies offer valuable insights into the research output of HEIs, enabling institutions to identify areas for improvement and to strategically focus on enhancing their academic and research performance. This paper aims to analyze the research output of Dr. Babasaheb Ambedkar Marathwada University from 1963 to 2023, offering a comprehensive overview of its contributions to academia and identifying trends and areas for future growth. For consistency, the abbreviation BAMU will be used throughout the study.

LITERATURE REVIEW

The role of scientometric studies in evaluating and understanding the research output of Higher Education Institutions (HEIs) has been well-documented in academic literature. These studies

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are instrumental in assessing research productivity, identifying influential research trends, and providing a framework for strategic planning within universities (Hood and Wilson, 2001). Over the past few decades, numerous universities worldwide have been the subject of scientometric analyses, focusing on various aspects such as publication output, citation patterns, and research collaborations (Moed, 2005). These studies provide valuable insights into the strengths and weaknesses of research activities, guiding policy formulation and institutional development. In India, scientometric studies have been conducted on several prominent universities, such as Jawaharlal Nehru University, University of Delhi, and Banaras Hindu University, among others (Mishra and Ahmad, 2016). These studies have examined a wide range of indicators, including publication output, authorship patterns, citation impact, and the influence of research on national and international levels. Such analyses are crucial for understanding the contributions of Indian universities to global research and their alignment with national research priorities (Gupta and Dhawan, 2008). The list from Sr. No. 1 to 25 are the examples of such studies.

SIGNIFICANCE OF STUDY

Although many scientometric studies have focused on Indian universities, a notable gap exists concerning Dr. Babasaheb Ambedkar Marathwada University's (BAMU). No comprehensive analysis has focused on BAMU's research output from 1963 to 2023, which is striking given the university's important role in the Marathwada region's academic and socio-economic development. This lack of research limits our understanding of BAMU's impact and position in Indian higher education. This literature review aims to fill this gap by providing a detailed scientometric analysis of BAMU's research contributions over the past sixty years, contributing valuable insights for future initiatives to enhance the university's academic profile.

Brief Profile of Dr. Babasaheb Ambedkar Marathwada University (BAMU), Chhatrapati Sambhaji Nagar

Dr. Babasaheb Ambedkar Marathwada University (BAMU), established on 23 August 1958, is a premier higher education institution located in Chhatrapati Sambhaji Nagar, Maharashtra. Initially founded as Marathwada University, it was renamed in 1994 in honor of Dr. B.R. Ambedkar, a key figure in Indian history known for his contributions to social justice and his role as the principal architect of the Indian Constitution. BAMU is a significant educational hub in the Marathwada region, offering a diverse range of undergraduate, postgraduate, and doctoral programs. The university comprises 50 academic departments across disciplines such as Science, Arts, Commerce, Social Sciences, Law, Engineering, Management, and Technology. It affiliates over 450 colleges spread across 12 districts in the Marathwada region, including Chhatrapati Sambhaji Nagar, Jalna, Beed, and Usmanabad (Dharashiv), among others, catering to the educational needs of a vast student population. The university has a student enrollment of approximately 35,000 across various programs, the student-to-faculty ratio of 14:1, with over 2,500 faculty members contributing to high-quality education and research. The university has established itself as a significant player in research and innovation, particularly in areas like Biotechnology, Environmental Science, Social Work, and Information Technology. The university has 15 specialized research centers and actively engages in national and international research collaborations. The University campus at Chhatrapati Sambhaji Nagar is equipped with modern infrastructure. Dr. Babasaheb Ambedkar Marathwada University (BAMU) has been ranked in the 101-150 band in the 2023 National Institutional Ranking Framework (NIRF) for Indian universities, with a notable 46th position among public universities in 2024. The university holds an 'A' Grade accreditation from NAAC with a CGPA of 3.45/4.00, reflecting its dedication to quality education and research. BAMU is also active in community engagement through collaborations and outreach programs aimed at socio-economic development. The university's academic excellence and societal contributions have earned it multiple recognitions, and it boasts accomplished alumni in various fields.

STUDY OBJECTIVES

To examine the growth pattern in publications and citations of Dr. Babasaheb Ambedkar Marathwada University (BAMU) over the specified period

To identify and evaluate the most influential authors based on their research publications, h-index, and authorship patterns.

To study the types of publications produced and languages used for science communications

To assess the research output by examining the distribution of publications across various departments and faculty members.

To study the Co-occurrence of keywords and subject trends in research publications

To analyze the extent of collaboration with other institutions and examine the pattern of international collaboration based on country-wise distribution.

To determine the most relevant and frequently preferred sources of publication among authors affiliated with BAMU.

METHODOLOGY

For the present study the bibliographic data of research publications generated by authors from Dr. Babasaheb Ambedkar Marathwada University (BAMU) were extracted from 1963 to 2023 using Affiliation based search option in the Scopus international citation database. Following search query was constructed in advanced search window:

AF-ID ("Dr. Babasaheb Ambedkar Marathwada University" 60017659) AND

(PUBYEAR< 2024) AND (LIMIT-TO (PUBSTAGE, "final")

A total of 4428 records were retrieved, and the bibliographic data was exported in .csv file format for further analysis. MS-Excel, Microsoft PowerBi, Bibliometrix R Package, RStudio for Windows (Version 4.4.1), Biblioshiny App etc., software were used for data analysis. For Network visualization, VOSViewer open-source software was used.

DATA ANALYSIS

Block Year wise Distribution of Research Output of BAMU

Table 1 and Figure 1 shows the research output of Dr. Babasaheb Ambedkar Marathwada University (BAMU) from 1963 to 2023 reveals significant trends over the 60-year period. In the initial period (1963-1967), BAMU saw modest research growth, with 77 publications (1.74%) and 76 citations, gradually increasing to 190 publications by 1982, accounting for 4.29% of the total research. In the mid period (1988-2007), although there was a temporary decline in research output (73 publications) during 1988-1992, the Average Citation-per-Publication (ACPP) significantly increased to 13.04, suggesting impactful research despite lower productivity. From 1993-2002, the output steadily increased, reaching 231 publications, with substantial growth in citations and overall impact. The period 2003-2007 marked a significant surge with 283 publications (6.39%) and 5,640 total citations, highlighting this as a key phase of academic contribution. In the recent period (2008-2023), the university experienced its most prolific growth. Between 2008-2012, there was a sharp rise in output with 790 publications (17.84%) and a peak in citations,

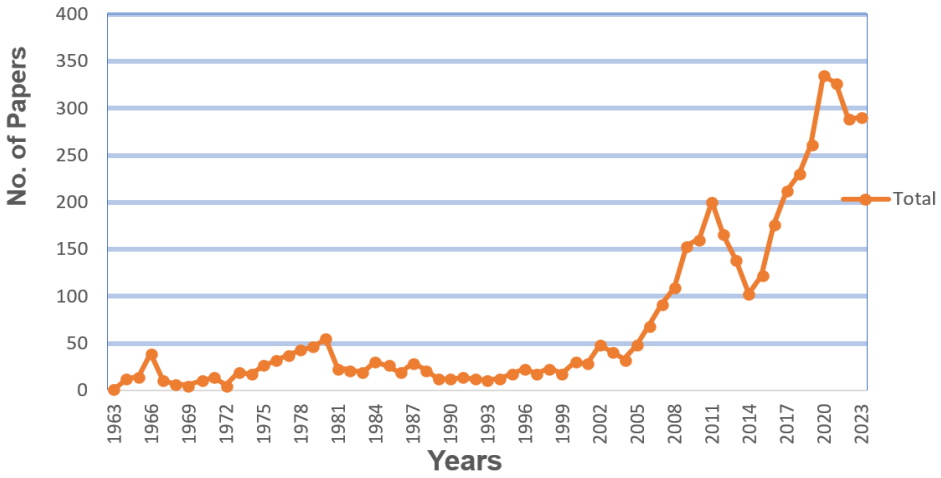

Figure 1: Year wise Output of publications.

Table 1: Year-wise distribution of publications.

Years	TP	Percentage (%) of Total publications	Total Citations	Percentage of Total citations	ACPP
1963-67	77	1.74	76	0.12	0.99
1968-72	43	0.97	141	0.22	3.28
1973-77	133	3	619	0.96	4.65
1978-82	190	4.29	907	1.4	4.77
1983-87	124	2.8	717	1.11	5.78
1988-92	73	1.65	952	1.47	13.04
1993-97	83	1.87	1596	2.47	19.23
1998-02	148	3.34	2392	3.7	16.16
2003-07	283	6.39	5640	8.73	19.93
2008-12	790	17.84	18438	28.53	23.34
2013-17	752	16.98	13354	20.66	17.76
2018-22	1441	32.57	18920	29.27	13.13
2023	291	6.57	880	1.36	3.02
Total	4428	100	64632	100	14.6

(TP: Total number of papers; ACPP: Average citations per paper).

contributing 28.53% of the total. Although the following period (2013-2017) saw a slight decline in output to 752 publications, high citation rates were maintained. The period from 2018-2022 witnessed a substantial rise in research, with 1,441 publications (32.57%), though the citation-per-publication average decreased to 13.13. However, in 2023, there was a decline in output, with only 291 publications. This overview highlights the university's significant academic contributions, particularly during the periods 2003-2007 and 2008-2012, marked by notable increases in both research output and citation impact.

Table 2: Faculty wise Publication Output.

Faculties	Total Publications	Percentage
Chemistry Department	1325	29.92
Physics Department	894	20.18
Mathematics and Statistics Department	548	12.37
Engineering	450	10.16
Chemical Technology Division	306	6.91
Zoology Department	297	6.70
Pharmaceutical Chemistry	139	3.13
Botany Department	135	3.04
Computer Sciences and Information Technology Department	126	2.84
Multi-disciplinary	81	1.82
Social – Behavioral Studies	80	1.80
Arts and Humanities includes (Humanities, Liberal Arts)	36	0.81
Economics and Business Finance	11	0.24
Grand Total	4428	100

Faculty wise Distribution of Publications

Table 2 depicts the faculty wise distribution of publications. The Science faculty has contributed 95.25% (4220 publications) of the total publications followed by multi-disciplinary (81 publications with 1.82%) and Social Sciences (80 publications with 1.80%). Arts, Humanities, Economics and Business Finance Departments have contributed only 1.04% (47 publications) out of total 4428

Table 3: Document Types.

Document Type	Number of Publications
Article	3537
Conference paper	651
Book chapter	116
Review	62
Letter	16
Editorial	13
Erratum	9
Book	8
Note	8
Short survey	3
Data paper	3
Retracted	2
Total	4428

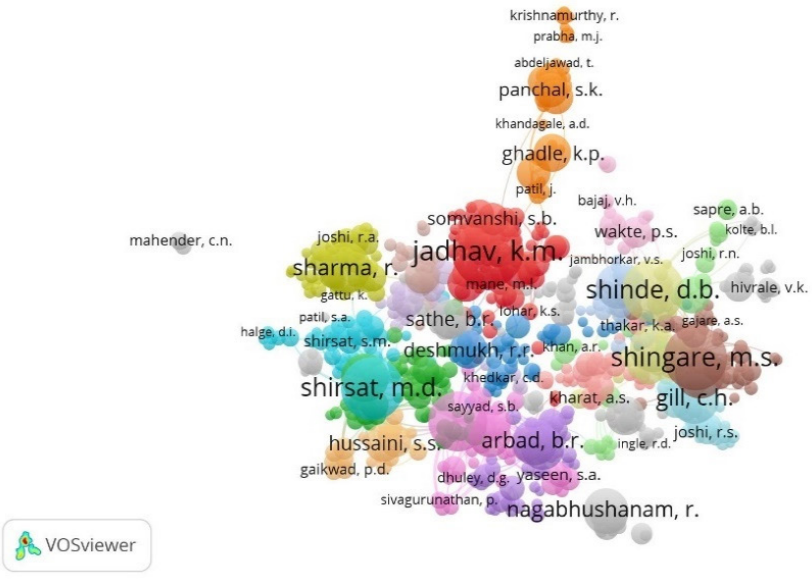

Figure 2: Co-authorship Network.

Table 4: Most Prominent Authors.

Author	*h*_index	TC	NP	PY_start
Jadhav KM	57	9202	237	1991
Shingare MS	35	4182	192	1976
Shirsat MD	35	4224	183	2005
Shinde DB	36	4738	181	1996
Mehrotra SC	34	3340	162	1980
Sharma R	25	2820	123	2007
Shingate BB	33	3278	118	2009
Gill CH	22	1822	118	1983
Kale KV	14	669	107	1999
Sangshetti JN	33	3148	102	2007
Sarkate AP	20	1202	99	2011
Arbad BR	21	1324	96	1980
Nagabhushanam R	11	574	96	1967
Lande MK	22	1346	87	1998
Khirade PW	19	964	85	1999
Sathe BR	24	1736	71	2012
Mane RA	21	1346	70	1999
Ghadle KP	15	723	68	2010
Hussaini SS	24	1572	66	2005
Deshmukh RR	8	178	65	2009

(NP: Number of publications; TC: Total Citations received; PY_start: Publication start year)

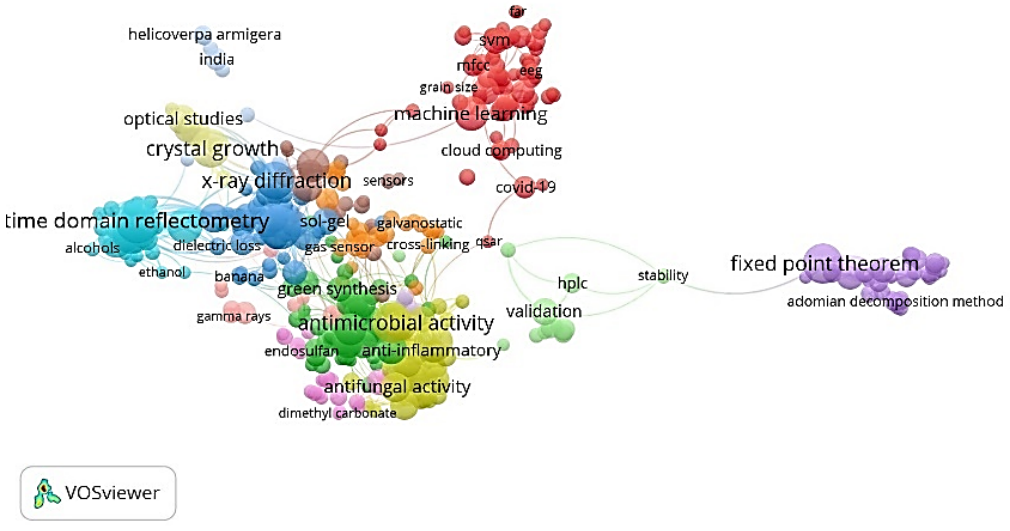

Figure 3: Keyword Co-occurrence Network.

publications during the entire sixty years of study period. It reveals that Science faculty departments have contributed a maximum number of research papers published in various national and international journals.

Document Types and Language of Scientific Communications

Table 3 shows that journal articles (3,537, 80%) out of a total of 4,428 are the most prominent document type, and English is the preferred language for scientific communication, with almost all publications (4,423, 99.99%) being published in English language.

Table 5: Co-authorship Network.

Author	Documents	Total Link Strength
Jadhav, K.M.	237	738
Shirsat, M.D.	183	722
Shingare, M.S.	192	505
Shingate, B.B.	118	434
Sharma, R.	123	427
Shinde, D.B.	181	414
Mehrotra, S.C.	162	394
Gill, C.H.	117	341
Sangshetti, J.N.	102	329
Kale, K.V.	107	317

Most Prominent Authors and Co-authorship Network

Table 4 highlights the top 20 authors who have published 65 or more papers during the study period. In total, 4,588 authors produced 4,428 publications between 1963 and 2023. The most prolific contributor was K.M. Jadhav from the Physics Department, with 237 publications and 9,202 citations, attaining an h-index of 57. M.S. Shingare from the Chemistry Department followed, with 192 papers, 4,182 citations, and an h-index of 35. Additional notable authors from BAMU include M.D. Shirsath, D.B. Shinde, and S.C. Mehrotra.

Co-authorship Network

Co-authorship refers to the collaboration among multiple authors, representing a shared effort in knowledge dissemination, task distribution, and collective learning. As shown in Figure 2, the co-authorship network was created using data from Scopus and visualized using VOSviewer. The network criteria included papers authored by up to 25 individuals and authors who had written at least 5 publications, each receiving a minimum of 5 citations. Out of a total of 4,588 authors, 686 met these thresholds. For these 686 authors, the cumulative strength of their co-authorship connections was measured, and those with the highest linkage strengths were selected for detailed analysis. Table 5 depicts that Jadhav K M, Shirsath M.D., Shingare M.S. and Shinage B.B are the authors who produced the maximum number of papers in collaborations.

Table 6: Authorship Pattern of Dr Babasaheb Ambedkar Marathwada University (BAMU).

Year	1963-67	1968-72	1973-77	1978-82	1983-87	1988-92	1993-97	1998-2002	2003-07	2008-12	2013-17	2018-22	2023	Total	%
1	39	18	30	37	40	7	14	19	6	18	23	20	6	277	6.26
2	38	20	80	99	60	38	21	32	68	128	116	295	48	1043	23.55
3	0	3	17	47	19	20	13	41	72	165	148	287	49	881	19.9
4	0	2	6	5	4	4	11	22	56	199	187	265	57	818	18.47
5	0	0	0	0	1	2	14	21	35	154	126	194	28	575	12.99
6	0		0	2	0	2	8	10	18	75	77	162	45	399	9.01
7	0	0	0	0	0	0	1	1	18	32	38	78	19	187	4.22
8	0	0	0	0	0	0	1	2	5	4	23	76	12	123	2.78
9	0	0	0	0	0	0	0	0	4	7	8	38	13	70	1.58
10	0	0	0	0	0	0	0	0	0	6	4	15	8	33	0.75
11	0	0	0	0	0	0	0	0	0	1	2	4	2	9	0.2
12	0	0	0	0	0	0	0	0	0	1	0	1	2	4	0.09
13	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0.09
14	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.02
15	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0.05
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.02
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.02
Total	77	43	133	190	124	73	83	148	283	790	752	1441	291	4428	100.00%

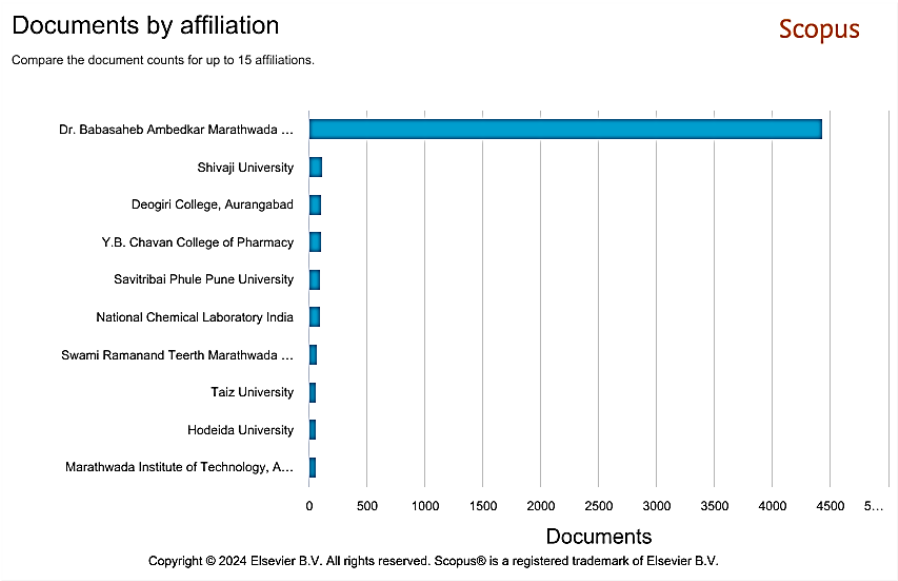

Figure 4: Most Relevant Affiliations.

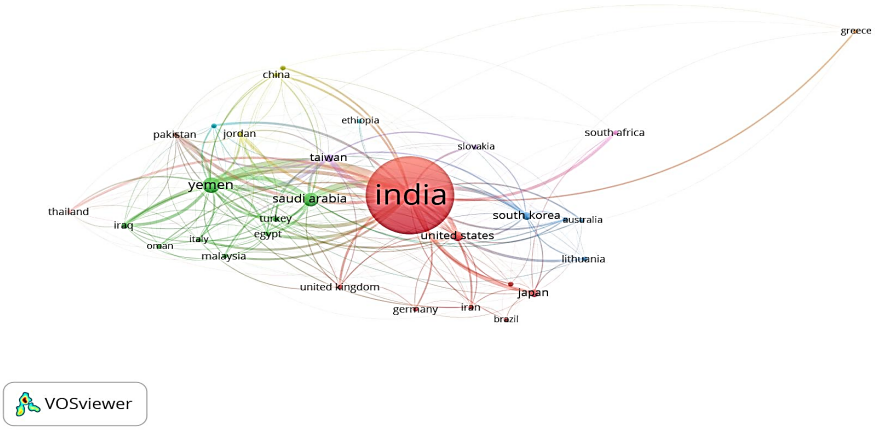

Figure 5: Collaborative Country Network.

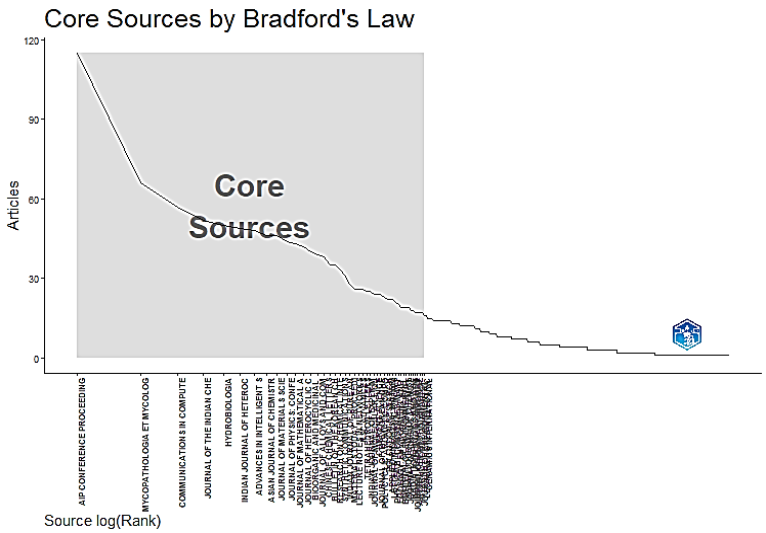

Figure 6: Core Sources by Bradford's Law.

Authorship Pattern of Dr. B.A.M. University (BAMU)

The authorship pattern illustrated in Table 6 indicates that publications with two authors were the most common, totaling 1,043 (24%), followed by those with three authors, accounting for 881 (20%) publications. Single-author contributions amounted to 277 (6%). This data suggests that researchers at Dr. B.A.M. University tend to engage in collaborative research

Keyword Co-occurrence Network

Keywords are keys to identifying the central concepts and methodologies outlined by the authors in their publications (Leon-Garcia, R.A., *et al.*, 2020). The analysis identified that, of 8,767 keywords, 420 met the inclusion standards. The co-occurrence strength between keywords was calculated, and the most prominent ones were selected. Table 7 and Figure 3 depict the top 20 keywords, with 'Time Domain Reflectometry' being the most frequently occurring term throughout the study.

Most Relevant Affiliation with other Institutes in India

Table 8 and Figure 4 illustrates Dr. Babasaheb Ambedkar Marathwada University's (BAMU) collaborative efforts with various institutions across India and internationally. The analysis shows that BAMU researchers co-authored 110 publications with Shivaji University, Kolhapur, followed by 98 publications each with Deogiri College and Y.B. Chavan College of Pharmacy. In total, BAMU has partnered with 161 institutions, both domestic and international. Among the top 10 collaborators, two institutions from Yemen, Taiz University and Hodeida University are notable.

Table 7: Keyword Co-occurrences.

Keyword	Occurrences	Total Link Strength
Time Domain Reflectometry	59	93
Kirkwood Correlation Factor	44	85
Dielectric Relaxation	39	60
Crystal Growth	46	55
Dielectric Studies	27	40
Optical Studies	26	39
Dielectric Constant	39	38
FTIR	27	38
Bruggeman Factor	23	34
X-Ray Diffraction	43	32
Excess Parameters	23	28
Optical Properties	32	25
Molecular Docking	45	23
Chemical Synthesis	28	19
XRD	55	17
Antifungal Activity	27	16
Cytotoxicity	23	11
1,2,3-Triazole	24	9
Antimicrobial Activity	49	8
Fixed Point Theorem	48	0

Country Collaborations

Table 9 and Figure 5 illustrate the international collaborations with Dr. Babasaheb Ambedkar Marathwada University (BAMU). Over the study period, researchers from 71 countries collaborated with BAMU. The bibliographic data was analyzed using VOSviewer software. Out of these 71 countries, 31 met the criteria of having at least 5 publications and 5 citations. Yemen led with 187 collaborative publications, receiving 2,289 citations and a total link strength of 41,891, followed by Saudi Arabia with 143 publications and 3,535 citations. Taiwan ranked third with 52 publications and 977 citations. Detailed information on other countries can be found in Table 9.

Figure 4 illustrates the countries collaboration network map with BAMU categorized in 10 Clusters. Cluster 2 represents Country, Yemen with a thick line representing highest collaborated publications with BAMU (187, 41891 total link strength) followed by Saudi Arabia (143, 27044).

Most Relevant Sources

Table 10 presents the top 10 journals favored by researchers at Dr. Babasaheb Ambedkar Marathwada University (BAMU). The AIP Conference Proceedings, published by the American Institute of Physics, USA, was the leading publication venue with 115 papers, followed by Mycopathologia et Mycologia Applicata with 66 papers and Communications in Computer and Information Science with 57. When Bradford's Law of Scattering is applied to BAMU's research output, it reveals that a core set of journals

Table 8: Most Relevant Collaborative Institutions.

Affiliation	Total Publications
Shivaji University	110
Deogiri College, Aurangabad	98
Y.B. Chavan College of Pharmacy	98
Savitribai Phule Pune University	92
National Chemical Laboratory India	87
Swami Ramanand Teerth Marathwada University	63
Taiz University	59
Hodeida University	57
Marathwada Institute of Technology, Aurangabad	56

Table 9: **Collaborative Countries.**

Sl. No.	Country	Documents	Citations	Total Link Strength
1	Yemen	187	2289	41891
2	Saudi Arabia	143	3535	27044
3	Taiwan	52	977	15028
4	Turkey	28	809	8170
5	United States	79	1896	7989
6	Iraq	27	641	6943
7	Pakistan	14	578	6818
8	South Korea	52	1287	6187
9	Egypt	22	832	5821
10	Japan	45	1514	4681
11	Jordan	14	254	4363
12	Italy	9	79	3311
13	Malaysia	15	366	2465
14	France	6	32	2148
15	South Africa	17	405	2092
16	Lithuania	13	686	2064
17	United Kingdom	16	330	2059
18	Thailand	11	106	2034
19	Canada	10	135	1906
20	Slovakia	10	66	1575

Table 10: **Top Publishing Avenues.**

Source Journals	Rank	Frequency	Cummulative frequency
AIP Conference Proceedings	1	115	115
Mycopathologia Et Mycologia Applicata	2	66	181
Communications In Computer and Information Science	3	57	238
Journal of the Indian Chemical Society	4	52	290
Hydrobiologia	5	50	340
Indian Journal of Heterocyclic Chemistry	6	49	389
Advances In Intelligent Systems and Computing	7	48	437
Asian Journal of Chemistry	8	46	483
Journal Of Materials Science: Materials in Electronics	9	46	529
Journal Of Physics: Conference Series	10	44	573

Table 11: **Core Sources by Bradford's Law.**

Sl. No.	Zones	Total Number of source journals	Percentage of Total
1	Zone 1	45	3.49
2	Zone 2	214	16.70
3	Zone 3	1030	79.90
	Total	1289	100

Table 12: Most Cited Articles.

Rank	Author	Publication Details	No. of Citations
1	V.D. Mote *et al.*	Williamson-Hall Analysis for Estimating Lattice Strain in ZnO Nanoparticles. (Journal of Theoretical and Applied Physics, 2012). [DOI: 10.1186/2251-7235-6-6]	1520
2	C.V. More *et al.*	Review on Polymeric Composite Materials for Radiation Shielding. (Environmental Chemistry Letters, 2021). [DOI: 10.1007/s10311-021-01189-9]	297
3	B.R. Sathe *et al.*	Boron-Doped Graphene for Efficient Electrocatalytic Hydrogen Evolution Reaction	276
4	S.B. Sapkal	Nickel Nanoparticle-Catalyzed One-Pot Synthesis of Polyhydroquinoline Derivatives (Tetrahedron Letters, 2009). [DOI: 10.1016/j.tetlet.2009.01.140]	269
5	M.J. Chavan	Caryophyllene Oxide from Annona Squamosa Bark: Analgesic and Anti-Inflammatory Activity (Phytomedicine, 2010). [DOI: 10.1016/j.phymed.2009.05.016]	264

(Zone 1) accounts for the majority of publications, including high-preference sources like AIP Conference Proceedings and Mycopathologia et Applicata. Journals in Zone 2 have a moderate contribution, while those in Zone 3 are more numerous but represent a smaller share of the output, indicating a wide range of research dissemination across diverse fields. This pattern highlights both the concentration and variety of BAMU's academic publications (Table 11 and Figure 6).

Top cited papers

Table 12 lists the most highly cited papers from Dr. Babasaheb Ambedkar Marathwada University. Among them, the paper authored by V.D. Mote *et al.*, titled Williamson-Hall Analysis in Estimation of Lattice Strain in Nanometer-Sized ZnO Particles, published in 2012 in the Journal of Theoretical and Applied Physics, stands out with 1,520 citations. This is followed by C.V. More *et al.*, whose review on Polymeric Composite Materials for Radiation Shielding, published in 2021 in Environmental Chemistry Letters, has accumulated 289 citations.

RESULTS AND CONCLUSION

This study examines the research productivity of Dr. Babasaheb Ambedkar Marathwada University (BAMU), Chhatrapati Sambhaji Nagar, Maharashtra, over the period from 1963 to 2023, based on 4,428 records indexed in the Scopus database. The findings indicate an annual research publication growth rate of 9.92%. A total of 64,632 citations were accumulated, with an average of 14.6 citations per publication. The majority of the research output came from the Science faculty, which contributed 95.25% of the total publications (4,220), followed by multi-disciplinary fields with 81 publications (1.82%) and Social Sciences with 80 publications (1.80%). Regarding publication types, journal articles dominated, making up 3,537 papers (80%) of the total output. English was the predominant language, representing the vast majority of publications. Contributions came from 4,588 authors for the 4,428 publications analyzed. The study found a strong inclination towards multi-authored papers, with two-authored publications accounting for 1,043 papers (24%) and three-authored papers comprising 881 papers (20%). Single-author publications were less common, totaling 277 papers (6%), and the average number of co-authors per paper was 3.86. The use of 8,767 distinct keywords was observed across the publications, with "Time Domain Reflectometry" emerging as the most frequently used keyword, indicating a key area of focus in BAMU's research. The university also exhibited strong collaborative practices, partnering with 161 institutions within India and internationally. Shivaji University, Kolhapur, and Deogiri College were identified as significant collaborators. On a global scale, BAMU worked with researchers from 71 countries, with Yemen, Saudi Arabia, and Taiwan being the most prominent international partners. Bradford's Law of Scattering was applied to the 1,289 journals in which BAMU's research was published, with AIP Conference Proceedings emerging as the most frequently chosen journal in the Zone 1 category. Analyzing the top-cited papers reveals BAMU's substantial scientific contribution, with several highly cited works demonstrating the university's impact on global research.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ABBREVATIONS

BAMU OR Dr. B.A.M.University: Dr. Babasaheb Ambedkar Marathwada University; **TP:** Total publications; **TC:** Total Citations recieved; **Freq:** Frequency; **Cum.Freq:** Cummulative frequency.

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