Google Scholar Profile for Institutions: A Sample Study

Vivekanand Education Society's
Institute *of* **Management**
Studies & Research

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Abstract

This study examines the Google Scholar profile for Gandhigram Rural Institute. Gandhigram Rural Institute (deemed to be university) has established a Google Scholar profile for their research. The Gandhigram Rural Institute's faculty publications information was collected from Web of Science and Scopus as of 22 January 2021. After consolidating the data from Web of Science and Scopus, a Google Scholar profile was created. After generating a profile, missing publication data were added to the profile as a sample for the year 2020. The present study information was obtained from Gandhigram Rural Institute Google Scholar profile. It was examined using data from Google Scholar, Web of Science and Scopus. Department publications, Google Scholar citations, the top 15 highly cited papers, and the citations and h-index of the top 15 faculty members were all analysed. It is discovered that 'Department of Chemistry' has published 78 (33.77%) publications and has received the greatest number of citations from Google Scholar, 294 (64.19%) citations from Web of Science and 96 (50.79%) citations from the Scopus database. It is found that Faculty S. Meenakshi has received the highest number of 232 (27.10%) citations from Google Scholar, 134 (29.26%) citations from the Web of Science and 47 (28.87%) citations from Scopus. It concluded that having an institution profile in the Google Scholar profile makes it very difficult to update and strengthen all the data in the profile. A Google Scholar profile can be useful as an individual profile if the data are kept up-to-date and maintained.

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Introduction

The productivity of research is most important for higher educational institutions. All higher education institutions now have an internal quality assessment cell (IQAC) that updates institute data on a monthly and annual basis. In an earlier stage, identifying the individual faculty publications was very difficult. The IQAC section requests faculty publications from databases such as Web of Science and Scopus. The purpose of the study is to create a Google Scholar profile for the institute. Based on the profile, it helps submit the faculty publications and metrics to IQAC, NIRF and other accreditations. The institute Google Scholar profile is a very simple, scalable and economical way to track faculty publications from different publisher groups, and these institute profiles give the latest updates on faculty publication alerts. Google Scholar automatically tracks the scholarly output and citation counts of individual researchers, and this facility helps to create a Google Scholar profile for the institute and provides the latest publication information to faculty members, research scholars and students.

Google Scholar makes it simple to search for scholarly literature. From one place, one can search across many disciplines. At the same time, the types of documents are articles, theses, books, abstracts and court opinions, with sources from academic publishers, professional societies, online repositories, universities and other websites. Google Scholar helps one find relevant work across the globe in scholarly research articles. Google Scholar always ranks documents based on the available publication details, as well as those that have recently been cited in other scholarly literature. It provides as many links to an article available on the Internet as free access permits (Google Scholar, 2021). Elango and Bornmann (2021) recently added information on funded details in the Google Scholar search results items. One of the main functions of Google Scholar is to update in all respects. It is an attempt to research and a possible method of gathering data for an institution's profile.

Features of Google Scholar

- Search all scholarly literature bring into one place.
- Explore related works details, citations, author names and the publications.
- Locate all the documents through in your library or on the web.
- Update the recent developments in any area of research.
- Check the citations of your publications and create a public author profile.
- View any author profile if it provided in public access.
- Create alerts from a particular author profile.

Review of Literature

Cortés et al. (2021) compared region-wise development on management and technology with the framework using three bibliographic databases/search

engines of Google Scholar, Dimensions and Microsoft Academic. Martín-Martín et al. (2020) investigated Google Scholar found 88% of all citations. Microsoft Academic is the second biggest overall (60% of all citations), including 82% of Scopus citations and 86% of WoS citations. Microsoft Academic and Dimensions are great options in contrast to Scopus and WoS as far as inclusion in many subject categories. Pölönen and Hammarfelt (2020) investigated the historical and linguistic coverage of Google Scholar, using publications in the field of Roman law as an example.

Thoma and Chan (2019) created sample Google Scholar profiles to track the scholarly productivity of five research groups in an institutional, educational research program. It added the publications of each group member to their respective group Google Scholar profiles and monitored the suggested citations. Zientek et al. (2018) discuss the benefits of Google Scholars and the use of Google Scholar to disseminate one's research using social media. Mingers et al. (2017) collected citations from Google Scholar for all 130 UK universities for evaluation. It compared with various rankings based on 2014 UK Research Excellence Framework (REF) data rankings. The rankings are demonstrated to be dependable and avoid some of the obvious problems of the REF ranking and be highly efficient and cost-effective. Orduña-Malea et al. (2016) attempted to identify specific characteristics of the Google Scholar profile tested in the Spanish academic system.

Tamizhchelvan and Dhanavandan (2015) analysed publications of faculty members in Gandhigram Rural Institute. Haddaway et al. (2015) found that Google Scholar can also find much grey literature and specific, known studies; it may not be used alone for systematic review searches. Rather, it forms a powerful addition to other traditional search methods. In addition, it advocates using tools to transparently document and catalogue Google Scholar search results to maintain high levels of transparency and the ability to be updated, critical to systematic reviews.

Lewandowski (2010) measured the coverage of Google Scholar for the Library and Information Science (LIS) journal literature. It is found that Google Scholar completely indexes only some journals, and the ratio of versions available depends on the type of publisher. The availability of that data varies depending on the article. Google Scholar cannot replace abstracting and indexing services because it does not cover the entire body of literature on the topic. This research differs from previous Google Scholar coverage studies. It takes into account whether or not an article is indexed in Google Scholar at all, as well as the sort of availability. Kulkarni (2009) compared the citation count profiles of articles published in general medical journals among the citation databases of Web of Science, Scopus and Google Scholar. In multivariable analysis, group authorship was the only characteristic that differed among the databases; Google Scholar had significantly fewer citations to group-authored articles (−0.30; 95% CI, −0.36 to −0.23) compared with Web of Science. Web of Science, Scopus and Google Scholar produced quantitatively, and qualitatively different citation counts for articles published in three general medical journals. Kousha and Thelwall (2007) attempted a new approach to finding citation patterns. From their study, Google Scholar citations were more various than ISI references in the four sociology disciplines just as in computer science, recommending that Google Scholar is a more exhaustive tool for citation following

in the sociologies and may be like wise in quick fields where conference papers are exceptionally esteemed and distributed on the web. The outcomes for Web/URL citations proposed that counting a limit of one hit for every webpage creates a superior measure for evaluating the effect of open access journals or articles because replicated web citations are very common within individual sites. The results can be considered additional evidence that there is some commonality between traditional and web-extracted citations.
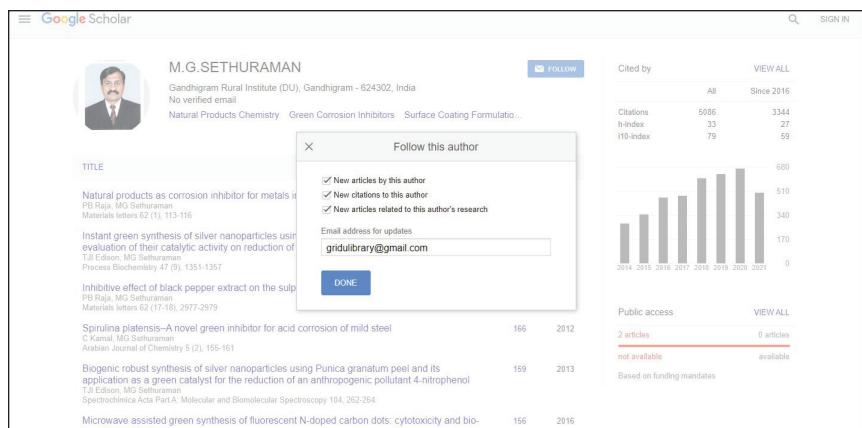
Creation of Google Scholar Profile

Gandhigram Rural Institute (GRI) Google Scholar Profile
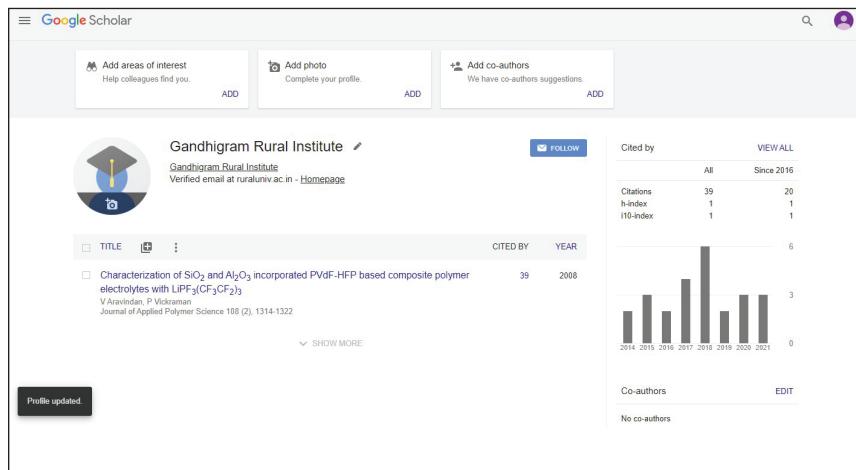
Institute Publications Collecting Methods

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Research Methodology

The data were extracted from Gandhigram Rural Institute Google Scholar Profile (2021) (https://scholar.google.com/citations?user=NnHr3NoAAAAJ&hl=en). The Gandhigram Rural Institute faculty data is taken from the Gandhigram Rural Institute (deemed to be university) (n.d.) website (https://www.ruraluniv.ac.in/). The publication data were collected from the Web of Science and Scopus databases for 2020. The publications from Web of Science and Scopus have been combined, and the final publication data have been uploaded to the Google Scholar profile. The study analyses department-wise publications, citations from Google Scholar, Web of Science and Scopus, the top 15 highly cited publications, the top 15 faculty members' citations from various databases, and the top 15 faculty members' Google Scholar citations and h-index.

Objectives of the Study

These are the major objectives of the study.
- To analyse the department-wise publications of the Gandhigram Rural Institute Google Scholar profile.
- To identify the citations in various databases (Google Scholar, Web of Science and Scopus).
- To find out the top 15 highly cited papers for 2020.
- To identify the top 15 faculty members' publications and citations for 2020.
- To analyse the top 15 faculty members' citations and h-index (Google Scholar, Scopus and Web of Science).
- To identify the collaboration of Gandhigram Rural Institute with other institutions.

Data Analysis and Interpretation

The data have been analysed based on publications and citations by department, highly cited articles and top-ranked 15 faculty members.

Department-wise Publications

Table 1 shows the department-wise publications of the Gandhigram Rural Institute Google Scholar Profile. It is found that the 'Department of Chemistry' has published 78 (33.77%) publications and placed first. It is followed by the 'Department of Physics', which has published 45 (19.48%) publications and is in second place. It is further found that the 'Centre for Applied Research', 'Department of Economics' and 'Department of Home Science' have published the least number of publications and are in the fourteenth position.

Table 1. Department-wise Publications.

S. No.	Department	Publications	%	Rank
1	Centre for Applied Geology	3	1.30	8
2	Centre for Applied Research	1	0.43	14
3	Centre for Geoinformatics	2	0.87	9
4	Centre for Rural Energy	11	4.76	5
5	Centre for Rural Technology	2	0.87	9
6	Department of Biology	24	10.39	4
7	Department of Chemistry	78	33.77	1
8	Department of Computer Science and Applications	10	4.33	6
9	Department of Economics	1	0.43	14
10	Department of Fine Arts	2	0.87	9
11	Department of Home Science	1	0.43	14
12	Department of Library	2	0.87	9
13	Department of Mathematics	42	18.18	3
14	Department of Physics	45	19.48	2
15	Department of Rural Industries and Management	5	2.16	7
16	School of Agriculture and Animal Sciences	2	0.87	9
	Total	231	100	

Department-wise Citations from Various Databases (Google Scholar, Web of Science and Scopus)

Table 2 indicates department-wise citations from various databases (Google Scholar, Web of Science and Scopus). It is found that the 'Department of Chemistry' has received the highest number of 478 (55.84%) citations from Google Scholar, 294 (64.19%) citations from Web of Science and 96 (50.79%) citations from the Scopus database and placed first. It is followed by the 'Department of Physics', which has received 151 (17.64%) citations from Google Scholar, 87 (19.00%) citations from the Web of Science and 41 (21.69%) citations from the Scopus database, placing it in second place.

It is further found that 'Centre for Applied Research', 'Department of Economics', 'Department of Home Science' and 'Department of Library' have received a lower number of citations from Google Scholar. It is further found that 'Centre for Applied Geology', 'Centre for Applied Research', 'Centre for Rural Technology', 'Department of Economics', 'Department of Fine Arts', 'Department of Home Science' and 'Department of Library' have received the least number of citations from the Web of Science database and are ranked ninth. It is further found that 'Centre for Applied Research', 'Centre for Geoinformatics', 'Centre for Rural Technology', 'Department of Economics', 'Department of Home Science', 'Department of Library' and 'Department of Rural Industries and Management' have received fewer citations from Scopus and placed in the tenth rank.

Table 2. Department-wise Citations from Various Databases.

S. No.	Department	Google Scholar		Web of Science		Scopus	
		Citation and %	Rank	Citation and %	Rank	Citation and %	Rank
1	Centre for Applied Geology	2 (0.23)	10	0 (0.00)	9	1 (0.53)	6
2	Centre for Applied Research	0 (0.00)	13	0 (0.00)	9	0 (0.00)	10
3	Centre for Geoinformatics	5 (0.58)	7	3 (0.66)	6	0 (0.00)	10
4	Centre for Rural Energy	5 (0.58)	7	1 (0.22)	8	1 (0.53)	6
5	Centre for Rural Technology	2 (0.23)	10	0 (0.00)	9	0 (0.00)	10
6	Department of Biology	79 (9.23)	4	30 (6.55)	4	28 (14.81)	3
7	Department of Chemistry	478 (55.84)	1	294 (64.19)	1	96 (50.79)	1
8	Department of Computer Science and Applications	31 (3.62)	5	5 (1.09)	5	7 (3.70)	5
9	Department of Economics	0 (0.00)	13	0 (0.00)	9	0 (0.00)	10
10	Department of Fine Arts	1 (0.12)	12	0 (0.00)	9	1 (0.53)	6
11	Department of Home Science	0 (0.00)	13	0 (0.00)	9	0 (0.00)	10
12	Department of Library	0 (0.00)	13	0 (0.00)	9	0 (0.00)	10
13	Department of Mathematics	87 (10.16)	3	35 (7.64)	3	13 (6.88)	4
14	Department of Physics	151 (17.64)	2	87 (19.00)	2	41 (21.69)	2
15	Department of Rural Industries and Management	5 (0.58)	7	2 (0.44)	7	0 (0.00)	10
16	School of Agriculture and Animal Sciences	10 (1.17)	6	1 (0.22)	8	1 (0.53)	6
	Total	856		458		189	

Table 3. Top 15 Highly Cited Articles.

S. No.	Source Details	Author and Department	Citations			R
			GS	WoS	Scopus	
1	Near-infrared (NIR) absorbing dyes as promising photosensitizers for photodynamic therapy. *Coordination Chemistry Reviews, 411*, 213233 (2020). Article has read in 59 readers in Mendeley and three tweets in social media. (Plumx Matrics)	G. Sivaraman (Chemistry)	47	32	0	1
2	Mechanistic performance of polyaniline-substituted hexagonal boron nitride composite as a highly efficient adsorbent for removing phosphate, nitrate, and hexavalent chromium ions from an aqueous environment. *Applied Surface Science, 511*, 145543 (2020).	S. Meenakshi (Chemistry)	30	21	0	2
3	Structural, elastic, optical and -ray shielding behaviour of Dy3+ ions doped heavy metal incorporated borate glasses. *Journal of Non-Crystalline Solids, 545*, 120269 (2020).	K. Marimuthu (Physics)	25	21	0	3
4	Structural, elastic, optical and -ray shielding behavior of Dy3+ ions doped heavy metal incorporated borate glasses. *Journal of Non-Crystalline Solids, 545*, 120269 (2020).	K. Marimuthu (Physics)	25	0	23	3
5	A simple pyrazine based ratiometric fluorescent sensor for Ni2+ ion detection. *Dyes and Pigments, 173*, 107897 (2020).	G. Sivaraman (Chemistry)	20	18	0	5
6	Physical and structural effect of modifiers on dysprosium ions incorporated boro-tellurite glasses for radiation shielding purposes. *Ceramics International, 46*(11), 17929–17937 (2020).	K. Marimuthu (Physics)	20	14	0	5
7	Adsorptive performance of lanthanum encapsulated biopolymer chitosan-kaolin clay hybrid composite for the recovery of nitrate and phosphate from water. *International Journal of Biological Macromolecules, 154*, 188–197 (2020).	S. Meenakshi (Chemistry)	19	10	0	7

(Table 3 continued)

(Table 3 continued)

S. No.	Source Details	Author and Department	Citations			
			GS	WoS	Scopus	R
8	Lanthanum (III) incorporated chitosan-montmorillonite composite as flexible material for adsorptive removal of azo dyes from water. *Materials Today: Proceedings, 27,* 318–326 (2020).	S. Meenakshi (Chemistry)	18	0	14	8
9	Effective removal of organic pollutants by adsorption onto chitosan supported graphene oxide-hydroxyapatite composite: A novel reusable adsorbent. *Journal of Molecular Liquids*, 318, 114200 (2020).	S. Meenakshi (Chemistry)	17	15	0	9
10	*In situ* fabrication of magnetic particles decorated biopolymeric composite beads for the selective remediation of phosphate and nitrate from aqueous medium. *Journal of Environmental Chemical Engineering, 8*(2), 103530 (2020).	S. Meenakshi (Chemistry)	15	11	0	10
11	Mechanistic performance of organic pollutants removal from water using Zn/Al layered double hydroxides imprinted carbon composite. *Surfaces and Interfaces, 20*, 100581 (2020).	S. Meenakshi (Chemistry)	15	9	0	11
12	Effect of different modifier oxides on the synthesis, structural, optical and gamma/beta shielding properties of bismuth lead borate glasses doped with europium. *Journal of Materials Science: Materials in Electronics 31*, 21486–21501 (2020).	K. Marimuthu (Physics)	15	8	0	11
13	Biopolymer K-carrageenan wrapped ZnO nanoparticles as drug delivery vehicles for anti MRSA therapy. *International Journal of Biological Macromolecules, 144*, 9–18 (2020).	Balasubramanian Malaikozhundan (Biology)	14	9	0	13
14	Tunable electrochemical synthesis of 3D nucleated microparticles like Cu-BTC MOF-carbon nanotubes composite: Enzyme free ultrasensitive determination of glucose in a complex biological fluid. *Electrochimica Acta, 354*, 136673 (2020).	J. S. Abraham (Chemistry)	13	10	0	14

(Table 3 continued)

(Table 3 continued)

S. No.	Source Details	Author and Department	Citations			
			GS	WoS	Scopus	*R*
15	Sol–gel based hybrid silane coatings for enhanced corrosion protection of copper in aqueous sodium chloride. *Journal of Molecular Liquids, 302*, 112551 (2020).	M. G. Sethuraman (Chemistry)	13	10	0	14

Note: GS: Google Scholar; WoS: Web of Science.

Top 15 Highly Cited Articles

Table 3 indicates the 15 most highly cited articles. It is found that 'Near-infrared (NIR) Absorbing Dyes as a Promising Photosensitizer for Photodynamic Therapy' has received 42 citations from Google Scholar and 32 citations from the Web of Science and shared two altmetric scores that have placed it in the first rank, followed by 'Mechanistic Performance of Polyaniline-Substituted Hexagonal Boron Nitride Composite as a Highly Efficient Adsorbent for the Removal of Phosphate, Nitrate, and Hexavalent Chromium Ions from an Aqueous Environment' (placed second), which received 30 citations from Google Scholar and 21 citations from the Web of Science. It was discovered that the papers 'Tunable Electrochemical Synthesis of 3D Nucleated Microparticles Like Cu-BTC MOF-Carbon Nanotubes Composite: Enzyme Free Ultrasensitive Determination of Glucose in a Complex Biological Fluid' and 'Sol–Gel Based Hybrid Silane Coatings for Enhanced Corrosion Protection of Copper in Aqueous Sodium Chloride' received 13 citations from Google Scholar and ten citations from Web of Science, respectively, and were ranked 14th.

Top 15 Faculty Members' Citations for the Year 2020

Table 4 shows the top 15 faculty member citations. It is found that 'S. Meenakshi' has received the highest number of 232 (27.10%) citations from Google Scholar, 134 (29.26%) citations from the Web of Science and 47 (28.87%) citations from Scopus and placed first. It is followed by 'K. Marimuthu', who has 100 (11.68%) citations from Google Scholar, 52 (11.35%) citations from the Web of Science and 26 (13.76%) citations from the Scopus database, and is ranked second. It is also discovered that 'G. Mahadevan' has received fewer citations from Google Scholar and is near the bottom of the list on Web of Science. It is further found that 'S. Abraham John, 'P. Nithiananthi' and 'G. Nagamani' have received the least number of citations and are ranked 13th.

Table 4. Top 15 Faculty Members Citations for the Year 2020.

S. No.	Author	Google Scholar			Web of Science			Scopus		
		NoP	Citation and %	Rank	NoP	Citation and %	Rank	NoP	Citation and %	Rank
1	S. Meenakshi	25 (16.67)	232 (27.10)	1	17 (18.89)	134 (29.26)	1	7 (12.07)	47 (24.87)	1
2	Balasubramanian Malaikozhundan	12 (8.00)	75 (8.76)	3	7 (7.78)	28 (6.11)	5	5 (8.62)	24 (12.70)	3
3	M. G. Sethuraman	11 (7.33)	62 (7.24)	4	9 (10.00)	38 (8.30)	3	2 (3.45)	9 (4.76)	5
4	S.A. John	11 (7.33)	30 (3.50)	7	11 (12.22)	35 (7.64)	4	0 (0.00)	0 (0.00)	13
5	V. Kirubakaran	11 (7.33)	5 (0.58)	14	2 (2.22)	1 (0.22)	13	9 (15.52)	1 (0.53)	12
6	K. Marimuthu	10 (6.67)	100 (11.68)	2	6 (6.67)	52 (11.35)	2	4 (6.90)	26 (13.76)	2
7	K. P. Elango	10 (6.67)	38 (4.44)	5	6 (6.67)	16 (3.49)	6	4 (6.90)	14 (7.41)	4
8	P. Balasubramaniam	9 (6.00)	18 (2.10)	9	5 (5.56)	5 (1.09)	10	3 (5.17)	4 (2.12)	8
9	P. Muthukumar	8 (5.33)	14 (1.64)	10	5 (5.56)	5 (1.09)	10	3 (5.17)	4 (2.12)	8
10	P. Nithiananthi	8 (5.33)	9 (1.05)	11	5 (5.56)	10 (2.18)	8	3 (5.17)	0 (0.00)	13
11	R. Uthayakumar	8 (5.33)	7 (0.82)	12	3 (3.33)	3 (0.66)	12	5 (8.62)	2 (1.06)	11
12	G. Nagamani	7 (4.67)	36 (4.21)	6	7 (7.78)	16 (3.49)	6	0 (0.00)	0 (0.00)	13
13	G. Muralidharan	7 (4.67)	19 (2.22)	8	4 (4.44)	10 (2.18)	8	3 (5.17)	5 (2.65)	6
14	G. Mahadevan	7 (4.67)	3 (0.35)	15	1 (1.11)	0 (0.00)	15	6 (10.34)	3 (1.59)	10
15	P. Vickraman	6 (4.00)	6 (0.70)	13	2 (2.22)	1 (0.22)	13	4 (6.90)	5 (2.65)	6

Table 5. Top 15 Faculty Google Scholar Citations and h-Index.

S. No.	Author	Google Scholar				Scopus				Web of Science			
		NoP	Citations	h-Index	Rank	NoP	Citations	h-Index	Rank	NoP	Citations	h-Index	Rank
1	S. Meenakshi	192	7,495	46	2	188	5,968	40	2	144	5,249	38	2
2	Balasubramanian Malaikozhundan	46	1,188	19	10	36	904	17	11	8	56	4	14
3	M. G. Sethuraman	153	5,086	33	3	117	3,536	27	4	107	2,982	25	5
4	S. A. John	196	4,762	37	4	181	4,161	33	3	153	3,780	32	3
5	V. Kirubakaran	131	994	10	11	74	605	8	13	13	432	6	12
6	K. Marimuthu	152	3,624	39	6	125	3,141	37	6	91	2,880	35	6
7	K. P. Elango	222	3,013	29	7	202	2,686	26	7	195	2,475	26	7
8	P. Balasubramaniam	354	8,251	50	1	293	6,673	46	1	243	5,723	43	1
9	P. Muthukumar	77	692	17	13	81	991	24	10	60	852	18	9
10	P. Nithiananthi	70	364	11	15	62	357	11	14	33	315	11	13
11	R. Uthayakumar	259	2,714	25	8	181	1,640	20	8	51	605	14	10
12	G. Nagamani	45	702	15	12	39	607	14	12	38	557	14	11
13	G. Muralidharan	152	4,228	34	5	127	3,465	34	5	107	3,348	31	4
14	G. Mahadevan	134	419	10	14	53	144	8	15	–	–	–	15
15	P. Vickraman	74	1,319	22	9	65	1,027	19	9	54	973	19	8

Table 6. The Collaboration of Gandhigram Rural Institute with Other Institutions.

S. No.	Scopus		Web of Science	
	Institution	No P and %	Institution	No P and %
1	Alagappa University	8 (4.19)	Alagappa University	9 (6.67)
2	Pocker Sahib Memorial Orphanage College	8 (4.19)	Madurai Kamaraj University	6 (4.44)
3	Madurai Kamaraj University	6 (3.14)	Pocker Sahib Memorial Orphanage College	6 (4.44)
4	Kunsan National University	5 (2.62)	Kyungpook National University	5 (3.70)
5	Kyungpook National University	5 (2.62)	Bharathidasan University	4 (2.96)
6	National Institute of Technology Tiruchirappalli	4 (2.09)	Kunsan National University	4 (2.96)
7	Anna University	4 (2.09)	Imam Abdul Rahman Bin Faisal University	3 (2.22)
8	Kalasalingam Academy of Research and Education	4 (2.09%)	Kalasalingam Academy of Research and Education	3 (2.22)
9	Kangwon National University	3 (1.57)	Kangwon National University	3 (2.22)
10	National Institute for Materials Science	3 (1.57)	King Saud University	3 (2.22)
11	Universiti Putra Malaysia	3 (1.57)	National Institute for Materials Science	3 (2.22)
12	Bharathidasan University	3 (1.57)	Shanmuga Arts and Science Technology Research Academy Sastra	3 (2.22)
13	Shandong University, Weihai	3 (1.57)	Universiti Putra Malaysia	3 (2.22
14	Vishwa Bharathi College of Pharmaceutical Sciences	2 (1.05)	Anna University	2 (1.48
15	Yeungnam University	2 (1.05)	Chonnam National University	2 (1.48)

Top 15 Faculty Google Scholar Citations and h-Index

Table 5 indicates the top 15 faculty members by Google Scholar, Web of Science, Scopus citations and h-index. It is found that 'P. Balasubramaniam' has received the highest number of 8,251 Google Scholar citations with a 50 h-index and has placed the first rank; it is followed by 'S. Meenakshi', who has received 7,495 Google Scholar citations with a 46 h-index and has placed the second rank. It is further found that 'G. Mahadevan' has received less than 419 Google Scholar citations with a 10 h-index and is ranked 14th.

It is discovered that 'P. Balasubramaniam' has received 6,673 citations from Scopus with a 46 h-index and is ranked first. It is followed by 'S. Meenakshi',

Table 7. Authorship Pattern.

S. No.	Authors	Frequency	%	Cumulative %
1	Single author	3	1.30	1.3
2	Two authors	64	27.71	29
3	Three authors	56	24.24	53.2
4	Four authors	44	19.05	72.3
5	Five authors	20	8.66	81
6	Six authors	44	19.05	100
	Total	231	100	

which has received 5,968 Scopus citations with a 40 h-index and placed second. It is further found that 'G. Mahadevan' has received less than 144 Scopus citations with an 8 h-index and is ranked 15th.

It is found that 'P. Balasubramaniam' has received the highest number of 5,723 Web of Science citations with a 43 h-index and has placed first and it is followed by 'S. Meenakshi', who has received 5,249 Web of Science citations with a 38 h-index and has placed second. It is also discovered that 'Balasubramanian Malaikozhundan' has only 56 Web of Science citations with 4 h-index and is ranked 14th.

The Collaboration of Gandhigram Rural Institute with Other Institutions

Table 6 reveals the collaboration of Gandhigram Rural Institute with other institutions. Table 6 shows that Gandhigram Rural Institute collaborated with institutions in the Web of Science and Scopus. The study reveals that the authors of Gandhigram Rural Institute collaborated on 8 (4.19%) Scopus publications with Alagappa University, Pocker Sahib Memorial Orphanage College, followed by Madurai Kamaraj University (6 (3.14%) publications), Vishwabharathi College of Pharmaceutical Sciences and Yeungnam University (2 (1.05%) publications).

The study reveals that the authors of Gandhigram Rural Institute collaborated on 9 (6.67%) Web of Science publications with Alagappa University, followed by Madurai Kamaraj University, Pocker Sahib Memorial Orphanage College (6 (4.44%) Web of Science publications). It is further found that Gandhigram Rural Institute authors collaborated on 2 (1.48%) publications at Anna University and Chonnam National University.

Authorship Pattern

Table 7 indicates the authorship pattern of Gandhigram Rural Institute Google Scholar author profiles. Out of 231 publications, 64 (27.71%) were contributed by two authors, followed by 56 (24.24%) were contributed by three authors. The

most accepted type of collaboration was notably between two authors, three authors, four authors and six authors.

Conclusion

In the current scenario, Google Scholar profiles are important for academic and higher learning institutions, and Google Scholar provides profile metrics like publication citations, h-index and i10-index. Anyone can create a Google Scholar account, even if one does not have an article published that has been indexed in the citation database but has been published in an online journal. Then he may receive citations through Google Scholar. Google Scholar recently added funding publication details to the Google Scholar profile. The profiles of institutions in Google Scholar are extremely difficult to update and strengthen with all of the data. The Google Scholar profile is a good individual profile if its data is kept up-to-date and maintained and if it has a high impact. The Google Scholar profile helps to submit the faculty publications and metrics to IQAC, NIRF and other accreditations, and these institute profiles give the latest updates on faculty publication alerts and help to provide the latest research activities to faculty members, research scholars and students.

Declaration of Conflicting Interests

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