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Analysis of Institute of Electrical and Electronics Engineers (IEEE) Publications: An Empirical Study

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ABSTRACT

The study has been conducted with the purpose of clear understanding of world's leading publisher in the area of electrical, electronics, computing and related areas of science and technology. The author is working in a Deemed University, which offered Engineering and Technology courses as main subjects, hence the author has the curiosity to know more about IEEE and its publications.

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Introduction

Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional society, dedicated to advancing innovation and technological excellence for the benefit of humanity. It is designed to serve professionals in all aspects of electrical, electronics and computing fields and related areas of science and technology. IEEE's roots go back to 1884 when electricity began to become a major influence in society. After the invention of telegraph, connecting the world with data communication system faster than the speed of transportation. Though the triple world IEEE represent electrical and electronics engineers, the association membership has gone into scientists, software developers, information technology professionals, medical doctors, physicists and many others in addition to engineers belongs to electrical and electronics. Therefore, the association is been called by its triple name IEEE.

IEEE Publications

Besides developmental activities in the areas of Engineering, Technology and Science, it publishes Journals, Transactions, Magazines, Books, Conference Proceedings, Standards, News Letters, etc. These publications are high standard and widely accessed by researchers, academicians, corporate and student community. After the revolution of ICT, the mode of information exchange has got changed, hence IEEE also comes with open access concept.

Objectives

The objectives of this study have been categorized as follows;

- To know about world's leading publisher, IEEE
- To know the number of publications by IEEE
- To expose ceased publication of IEEE
- To render the association of different publishers with IEEE
- To know the frequency of publications in each transaction/journal/magazine

Area of Study

The study focuses on Journals, Transactions and Magazines and Letters published by IEEE, IET, MIT Press and IBM. It does not include books, conference proceedings, standards, etc. The study also analyses about ceased publication and open access journals of above said publishers.

Methodology

A datasheet was prepared in Ms-Excel to record the data and all the data collected from IEEE Xplore were entered manually. The details, such as publisher, year of publication, journal impact factor, category, etc. were collected for each publication to meet the above said objectives and entered into excel sheet. All the data were analyzed carefully and the results are given below. The above table shows that IEEE publishes 174 transactions, journals, magazines and letters under 16 subject categories. The most number of publications (29) are in the area of computing and processing. The subject nuclear engineering has least number of publications, as four. There are ten transactions, journals, magazines and newsletters have been publishing in three subjects (Fields, Waves & Electromagnetics, Robotics & Control Systems and General Topics for Engineers). Eight subject categories have double digit publications and other eight subject categories are in single digit publications.

The above table reveals that there are 286 transactions, journals, magazines and newsletters have been published by IEEE and it includes ceased publications. The alphabets C and E have more number of publications, 42 each. The second highest number of publications is in the alphabet of P. There are nine alphabets are having IEEE publications in double digits where as fourteen alphabets are in single digit publications. Alphabets F, K, Q and U are publishing least number of publications, one in each. Interesting to note that IEEE do not publishing any transaction, journal, magazine or newsletters in the name starts with X, Y and Z.

Findings of Table - 3

Year of publication

IEEE is publishing 214 transactions, journals, magazines and letters. IEEE has started its publications in the year 1872, from then, new journals, transactions, magazines and newsletters have been started for publication, regularly. There were 109 periodicals have been newly started during the period 2001 – 2015, which is the highest number of publications, among them, six journals have started during the current year (2014). 74 journals have been newly started between 1980 and 2000. During the period 1950 – 1980, 29 journals have been started for publications. It is interesting to note that only two journals have still been continuing its publications, which started prior to 1950.

Publisher

IEEE is publishing periodicals, conference proceedings, standards, books, etc. on its own banner. It is also collaborating with other publishers for joint publications. As for this current study is concern, IEEE has joined with Institution of Engineering and Technology (IET), MIT Press, Association of Computing Machinery (ACM), American Institute of Physics (AIP), IBM and other agency for joint publication of journals, transactions, magazines and letters on their area of interest. The study also reveals that IEEE is publishing 26 numbers of periodicals jointly with IET. There are 8 journals and magazines have been published jointly by IEEE and MIT press and 2 journals and magazines with AIP and American Vacuum Society (AVS). Tsinghua University Press (TUP),

Frequency

IEEE is publishing its periodicals in all types of periodicity. It has weekly, fortnightly, monthly, bi-monthly, quarterly, half yearly and yearly publications. The above table shows that 64 numbers of IEEE periodicals have been published in quarterly and 59 have been published in bi-monthly. The study further reveals that 53 numbers of journals, transactions, magazines and letters of IEEE publications have been published in every month. IEEE is publishing 8 numbers of its periodicals in fortnightly and 4 numbers in half yearly. There are 2 periodicals have been published in weekly and yearly, respectively.

Impact factor

Impact factor is measure reflection the average number of citations to recent articles published in the particular journal. IEEE publications are popular among researchers and academicians of all over the world. The study shows that there are 36 journals are having more than 3 as impact factor, among them Industrial engineering, quarterly journal has the highest number of impact factor as 8.785. There are three journals (Fuzzy systems, Industrial electronics and Wireless communication) are having over 6 as impact factor. The study clearly reveals that there are 131 journals, transactions, magazines and newsletters of IEEE publications are having below 3 as impact factor score.

Eigen factor

Eigen factor is a rating of total importance of a scientific journal. Here, journals are rated according to number of citations, journals which are having high impact factor are having rich Eigen factor scores. The study exposes that there are 23 journals are having over 0.03 as eigen factor score and 55 journals are have less than 0.002 score.

Article influence score

The article influence score will be calculated based on the average influence of journal's over the first five years after its publication. It is further calculated by dividing a journal's eigen factor score by the number of articles in the journal, normalized

as a fraction of all articles in all publications. The mean articles influence score is 1.00. A score greater than 1.00 indicates that each article in the journal has above average influence. A score less than 1.00 indicate that each article in the journal has below average influence. The present study reveals that 60 journals of IEEE publications have over 1.00 as article influence score and remaining 154 journals have lesser article influence score

Category

IEEE is publishing its periodicals in four categories namely Transaction, Journal, Magazine and Letters. The study reveals that Journal is dominating in the above said category as 98 journals are being published by IEEE. Transactions are the second highest publications, which get publishing in 85 numbers. The study further shows that IEEE is publishing 20 magazines and 11The above table reveals that there were 63 number of journals/transactions/magazines and letters have been withdrawn its publications. Most (52) of the ceased publications were published by IET. The study further shows that there are 10 journals have been stopped its publications, which published by IEEE. IBM and AVS have also listed in the above table, they have stopped each one journal from publication. Open access (OA) is important segment in today's publishing industry. The revolution of Information and Communication Technology made tremendous changes in all walks of life particularly in publishing industry. It resulting overloaded of information in all the subject areas, one need not to wait and search for particular information. OA came into picture in early 2000 and its slowly dominating academic and research domains. Hence, all the publishers have OA concept and they do publishing some journals on the above concept. IEEE has eight journals as open access, which mentioned in the above table.

Findings of the Study

- Most of the journals (109) have been started between 2000 and 2015 and 74 journals have been newly started between 1980 and 2000.
- Alphabetical letters 'C' and 'E' have more number of publications, each 42. The second highest number of publications (35) is starting with the letter 'P'.
- Alphabetical letters 'X, Y and Z' don't have any publications.
- The journals, which were started in early period have been withdrawn its publications. Only 2 journals, which were started prior to 1950, are still continuing its publications.
- 64 journals are published in every quarter, 59 journals are in bi-monthly and 53 journals are published in monthly.
- IEEE is publishing journals jointly with other agency like MIT Press, IBM and so on.
- Only 3 journals of 214 are having more than 6 as impact factor score and 131 journals are having less than 3 as impact factor.
- 23 journals are having over 0.03 as Eigen factor score and 55 journals are having less than 0.002 score.
- 60 journals have over 1.00 as article influence score and 154 journals have lesser than 1.00 as article influence score.
- There are 9 journals from IEEE are being published as open access.
- 64 journals have been ceased its publications, among them, 52 were published by IET.

Conclusion

IEEE journals are widely used by the researchers and academicians across the world. The people who belong to electrical, electronics and computers science domains are mostly depending on IEEE publications for their research and academic needs, which is the importance of IEEE.

Analysis & Findings
Table 1. Periodicals Publication - Subject Wise

Subject	No of Publications
Computing & Processing	29
Communication, Networking & Broadcasting	25
Signal processing & Analysis	16
Components, circuits, device & systems	14
Bioengineering	12
Fields, waves & Electromagnetics	10
Robotics & Control Systems	10
General Topics for Engineers (Maths, Science & Engineering)	10
Power, Energy & Industry Applications	9
Photonics & Electro – Optics	7
Engineering Materials, Dielectrics & Plasmas	6
Transportation	6
Engineering Profession	6
Geosciences	5
Aerospace	5
Nuclear Engineering	4
Total	174

Table 2. No of Publications in Alphabet

Alphabet	No of Publications	Alphabet	No of Publications
A	15	B	8
C	42	D	7
E	42	F	1
G	4	H	2
I	24	J	4
K	1	L	5
M	17	N	12
O	3	P	35
Q	1	R	12
S	30	T	9
U	1	V	4
W	7	X	0
Y	0	Z	0
Total			286

Table 3

Sl.No	Journal name	Year	Publisher	Frequency	Impact factor	Eigen factor	Article influence score	Category*
1.	Aerospace and electronic systems	1986	IEEE	Monthly	0.438	0.00093	0.165	M
2.	Aerospace and electronic systems	1965	IEEE	Quarterly	1.394	0.00937	0.648	T
3.	Affective computing	2010	IEEE	Quarterly	3.466	0.00173	1.479	T
4.	Annals of the history of computing	1992	IEEE	Quarterly	0.524	0.00037	0.207	J
5.	Antennas and propagation	1990	IEEE	Bi-monthly	1.18	0.00462	0.587	M
6.	Antennas and propagation	1963	IEEE	Monthly	2.459	0.0407	0.85	T
7.	Antennas and wireless propagation	2002	IEEE	Yearly	1.152	0.00469	0.643	L
8.	Applied physics	1962	AIP	Weekly	3.515	0.4864	1.212	L
9.	Applied superconductivity	1991	IEEE	Bi-monthly	1.324	0.01376	0.255	T
10.	Artificial life	1993	MIT	Quarterly	1.93	0.00108	0.587	J
11.	Audio, speech and language processing	2014	IEEE	Monthly				J
12.	Automotive control	1963	IEEE	Monthly	3.167	0.05092	1.753	J
13.	Automation science and engineering	2004	IEEE	Quarterly	2.162	0.00534	0.831	J
14.	Autonomous mental development	2009	IEEE	Quarterly	1.348	0.00069	0.47	J
15.	Bell labs technical	1996	Alcatel-lucent	Quarterly	0.69	0.00162	0.314	J
16.	Biomedical and health informatics	2013	IEEE	Bi-monthly		0.00001		J
17.	Biomedical circuits and systems	2007	IEEE	Bi-monthly	3.149	0.00503	1.268	T
18.	Biomedical engineering	2008	IEEE	Yearly				L
19.	Biomedical engineering	1964	IEEE	Monthly	2.233	0.02313	0767	T
20.	Biometrics	2012	IET	Quarterly	1.412	0.01927	1.547	J
21.	Broadcasting	1963	IEEE	Quarterly	2.652	0.00486	0.726	T

22.	Circuits and systems for video technology	1991	IEEE	Monthly	2.259	0.01609	1.106	T
23.	Circuits and systems I	2004	IEEE	Monthly	2.303	0.0264	1.146	T
24.	Circuits and systems II	2004	IEEE	Monthly	1.187	0.01414	0.839	T
25.	Circuits and systems	2001	IEEE	Quarterly	1.7	0.00167	1.149	M
26.	Circuits, Devices & systems	2007	IET	Bi-monthly	0.912	0.00161	0.358	J
27.	Cloud Computing	2014	IEEE	1 issue				T
28.	Cloud Computing	2013	IEEE	1 issue				J
29.	Cognitive neuroscience	1989	MIT	Monthly	4.687	0.04009	2.209	J
30.	Communications networks	1999	IEEE	Bi-monthly				J
31.	Communications	1999	IEEE	Monthly	1.463	0.01882	0.568	L
32.	Communications	1979	IEEE	Monthly	4.46	0.03153	1.929	T
33.	Communications surveys and tutorials	1998	IEEE	Quarterly	6.490	0.00959	3.220	J
34.	Communications, China	2013	IEEE	Monthly				
35.	Communications	1972	IEEE	Monthly	1.979	0.02953	0.932	M
36.	Communications	2007	IET	Fortnightly	0.72	0.00514	0.25	J
37.	Components, packaging and manufacturing technology	2011	IEEE	Monthly	1.236	0.00942	0.479	T
38.	Computational biology and bioinformatics	2004	IEEE/ACM	Quarterly	1.536	0.00511	0.613	T
39.	Computational intelligence and AI in games	2009	IEEE	Quarterly	1.167	0.00066	0.143	T
40.	Computational intelligence	2006	IEEE	Quarterly	2.706	0.00182	1.146	M
41.	Computational social system	2014	IEEE	1 issue				T
42.	Computer	1970	IEEE	Monthly	1.438	0.00864	1.172	J
43.	Computer architecture	2002	IEEE	Half-yearly	1	0.00085		L
44.	Computer graphics and applications	1981	IEEE	Bi-monthly	1.116	0.00306	0.914	J
45.	Computer music journal	1999	MIT	Quarterly	0.41	0.00027	0.171	J
46.	Computer vision	2007	IET	Bi-monthly	0.758	0.00069	0.254	J
47.	Computer aided design integrated circuits and systems	1982	IEEE	Monthly	1.203	0.00764	0.521	T
48.	Computers & digital techniques	2007	IET	Bi-monthly	0.36	0.00076	0.202	J
49.	Computers	1969	IEEE	Monthly	1.473	0.00997	0.87	T
50.	Computing in science and engineering	1999	IEEE	Bi-monthly				J
51.	Consumer electronics	2012	IEEE	Quarterly				M
52.	Consumer electronics	1975	IEEE	Quarterly	1.157	0.00803	0.325	T
53.	Control of network systems	2014	IEEE	Quarterly				T
54.	Control system technology	1993	IEEE	Bi-monthly	2.521	0.01255	1.04	T
55.	Control systems	1991	IEEE	Bi-monthly	3.386	0.00426	1.943	J
56.	Control theory & Applications	2007	IET	Fortnightly	1.814	0.011	0.634	J
57.	Cybernetics	2013	IEEE	Bi-monthly		0.00004		T
58.	Dependable and secure computer	2004	IEEE	Quarterly	1.137	.00222	0.619	T
59.	Design& Test	2013	IEEE	Bi-monthly	1.14	0.00182	0.491	J
60.	Design issues	2000	MIT	Quarterly				J
61.	Device & Materials reliability	2001	IEEE	Quarterly	1.514	0.00369	0.621	T
62.	Dielectrics and electrical insulation	1994	IEEE	Bi-monthly	1.228	0.00679	0.342	T
63.	Display Technology	2005	IEEE	Monthly	1.686	0.00486	0.646	J
64.	Education	1963	IEEE	Quarterly	1.221	0.00192	0.317	T
65.	Electric Power Applications	2007	IET	Bi-monthly	1.307	0.00262	0.499	J
66.	Electrical and Computer engineering	1988	IEEE	Quarterly		0.00017	0.182	J
67.	Electrical insulation	1985	IEEE	Bi-monthly	1.61	0.00139	0.622	M
68.	Electrical systems in transportation	2011	IEEE	Quarterly				J
69.	Electrification	2013	IEEE	Half-yearly				M

70.	Electromagnetic compatibility	2012	IEEE	Quarterly				M
71.	Electron device	1980	IEEE	Monthly	3.023	0.03719	0.956	L
72.	Electron devices society		IEEE	Monthly				J
73.	Electron devices	1963	IEEE	Monthly	2.358	0.03305	0.808	T
74.	Electronics	2007	IET	3 issues				J
75.	Electronics education	1990	IET	2 issues				J
76.	Electronics	1965	IET	Fortnightly	1.068	0.03211	0.422	L
77.	Embedded systems	2009	IEEE	Quarterly				L
78.	Emerging and selected topics in circuits and systems	2011	IEEE	Quarterly				J
79.	Emerging and selected topics in power electronics	2013	IEEE	Quarterly				J
80.	Emerging and selected topics in computing	2013	IEEE	Half yearly				T
81.	Energy conversion	1986	IEEE	Quarterly	3.353	0.01346	1.334	T
82.	Engineering technology	2006	IET	Monthly				J
83.	Engineering management review	1973	IEEE	Quarterly				J
84.	Engineering management	1963	IEEE	Quarterly	0.938	0.00228	0.539	T
85.	Evolutionary computation	1993	MIT	Quarterly	5.545	0.00931	2.01	T
86.	Evolutionary computation	1997	IEEE	Bi-monthly	5.545	0.00931	2.01	J
87.	Fuzzy systems	1993	IEEE	Bi-monthly	6.306	0.01207	1.382	T
88.	Generation, transmission and distribution	2007	IET	Monthly	1.307	0.00577	0.6	J
89.	Geosciences and remote sensing	2004	IEEE	Monthly	1.809	0.01144	0.69	L
90.	Geosciences and remote sensing	2013	IEEE	Quarterly				M
91.	Geosciences and remote sensing	1980	IEEE	Monthly	2.933	0.03155	0.974	T
92.	Haptics	2008	IEEE	Quarterly	2.03	0.0013	0.615	T
93.	Human machine systems	2013	IEEE			0.00001		T
94.	IBM journal of research and development	1957	IBM	Quarterly	0.504	0.00362	0.713	J
95.	Image processing	1992	IEEE	Monthly	3.111	0.03498	1.516	T
96.	Image processing	2007	IET	Bi-monthly	0.676	0.00087	0.168	J
97.	Industrial electronics	2007	IEEE	Quarterly	5.061	0.00267	1.926	M
98.	Industrial electronics	1982	IEEE	Monthly	6.5	0.0612	1.528	T
99.	Industrial informatics	2005	IEEE	Quarterly	8.785	0.00823	1.679	T
100.	Industrial applications	1995	IEEE	Bi-monthly	0.714	0.00134	0.354	M
101.	Information forensic and security	2006	IEEE	Monthly	2.065	0.00766	0.905	T
102.	Information security	2007	IET	Quarterly	0.631	0.00063	0.29	J
103.	Information theory	1963	IEEE	Monthly	2.65	0.06214	1.529	T
104.	Instrumentation & measurement	1998	IEEE	Bi-monthly	0.474	0.00063	0.215	T
105.	Instrumentation & measurement	1963	IEEE	Monthly	1.710	0.01546	0.461	M
106.	Intelligent systems	2001	IEEE	Bi-monthly	1.92	0.00374	1.054	J
107.	Intelligent transport systems	2007	IET	Quarterly	0.954	0.00123	0.366	T
108.	Intelligent transport systems	2009	IEEE	Quarterly				M
109.	Intelligent transport systems	2000	IEEE	Quarterly	2.472	0.00685	0.784	J
110.	Internet computing	1997	IEEE	Bi-monthly	2.0	0.00465	1.065	J
111.	Internet things	2014	IEEE					J
112.	IT Professional	1999	IEEE	Bi-monthly	0.495	0.00095		J
113.	Applied physics	1937	AIP	Weekly	2.185	0.2539	0.721	J
114.	Vacuum science & technology: A	1983	AVS	Bi-monthly	2.14	0.00865	0.473	J
115.	Vacuum science & technology: B microelectronics	1983	AVS	Bi-monthly	1.358	0.01512	0.379	J
116.	Knowledge and data engineering	1989	IEEE	Monthly	1.815	0.01276	1.13	T
117.	Latin American	2003	IEEE	Bi-monthly	0.186	0.00039		T
118.	Learning technologies	2008	IEEE	Quarterly	1.22	0.00105	0.446	T
119.	Lightwave technology	1983	IEEE	Fortnightly	2.862	0.03583	0.876	J
120.	Linguistic inquiry	1998	MIT press	Quarterly	0.912	0.00143	0.504	J
121.	Megnetics	2010	IEEE	Yearly				L
122.	Mechatronics	1996	IEEE	Bi-	3.652	0.00853	1.036	T

				monthly				
123.	Medical imaging	1982	IEEE	Monthly	3.799	0.02327	1.595	T
124.	Micro-nano letters	2006	IET	Monthly	0.799	0.002	0.162	L
125.	Micro	1981	IEEE	Bi-monthly	1.812	0.00505	1.517	J
126.	Microelectro mechanical Systems	1992	IEEE	Bi-monthly	1.915	0.00996	0.744	J
127.	Microwave and wireless components	2001	IEEE	Monthly	2.236	0.02229	1.104	L
128.	Microwave	2000	IEEE	Bi-monthly	1.674	0.00474	0.965	M
129.	Microwave theory and techniques	1963	IEEE	Fortnightly	2.943	0.03974	1.223	T
130.	Microwave, antennas and propagation	2007	IET	Monthly	0.969	0.0074	0.432	J
131.	Mobile computing	2002	IEEE	Monthly	2.912	0.01381	1.298	T
132.	Multimedia	1994	IEEE	Quarterly	1.767	0.00125	0.489	T
133.	Multimedia	1999	IEEE	Bi-monthly	1.776	0.01036	1.035	J
134.	Nanobioscience	2005	IEEE	Quarterly	1.768	0.00162	0.511	T
135.	Nanobiotechnology	2007	IET	Quarterly	1.723	0.00059	0.437	J
136.	Nanotechnology	2007	IEEE	Quarterly				T
137.	Nanotechnology	2002	IEEE	Bi-monthly	1.619	0.00719	0.621	M
138.	Network and service management	2004	IEEE	Quarterly				T
139.	Network	1987	IEEE	Bi-monthly	3.72	0.00464	1.423	J
140.	Networking	1993	IEEE	Bi-monthly	1.986	0.01588	1.348	T
141.	Networks	2012	IET	Quarterly				J
142.	Neural computation	1989	MIT press	Monthly	1.694	0.01059	1.091	J
143.	Neural networks and learning systems	2012	IEEE	Monthly	4.37	0.01775	1.184	T
144.	Neural systems and rehabilitation engineering	2001	IEEE	Bi-monthly	2.821	0.00634	1.036	T
145.	Nuclear science	1963	IEEE	Monthly	1.455	0.01889	0.451	T
146.	Oceanic engineering	1976	IEEE	Quarterly	1.325	0.00349	0.674	J
147.	Optical communications and networking	2009	IEEE	Monthly				J
148.	Optoelectronics	2007	IET	Bi-monthly	0.966	0.00103	0.318	J
149.	Parallel and distributed systems	1990	IEEE	Monthly	2.173	0.01153	0.862	T
150.	Pattern analysis and machine intelligence	1979	IEEE	Monthly	4.795	.05224	3.240	T
151.	Pervasive computing	2002	IEEE	Quarterly	2.103	0.00463	1.514	J
152.	Photonics	2009	IEEE	Bi-monthly	2.33	0.00799	0.873	J
153.	Photonics technology	1989	IEEE	Fortnightly	2.176	0.03537	0.699	L
154.	Photovoltaics	2011	IEEE	Quarterly	3.0	0.00187	0.9	J
155.	Plasma science	1973	IEEE	Fortnightly	0.95	0.01529	0.338	T
156.	Potentials	1982	IEEE	Bi-monthly				J
157.	Power and energy	2003	IEEE	Bi-monthly	1.43	0.00399	1.198	M
158.	Power delivery	1986	IEEE	Quarterly	1.657	0.01581	0.6	T
159.	Power electronics	2014	IEEE	2 issues				L
160.	Power electronics	1986	IEEE	Monthly	5.726	0.03903	1.332	T
161.	Power electronics	2008	IET	Bi-monthly	1.318	0.00426	0.484	J
162.	Power electronics	2014	IEEE	Quarterly				
163.	Power systems	1986	IEEE	Quarterly	3.53	0.0204	1.042	T
164.	Presence	1998	MIT press	Quarterly	0.912	0.00143	0.504	J
165.	Proceedings of IEEE	1963	IEEE	Monthly	5.466	0.04117	3.501	J
166.	Professional communication	1972	IEEE	Quarterly				T
167.	Pulse	2010	IEEE	Bi-monthly	0.663	0.00036	0.178	J
168.	Quantum electronics	1965	IEEE	Monthly	2.133	0.01215	0.737	J
169.	Radar, sonar and navigation	2007	IET	Bi-monthly	1.028	0.0027	0.413	J
170.	Reliability	1963	IEEE	Quarterly	1.657	0.00518	0.783	T
171.	Renewable power generation	2007	IET	Bi-monthly	2.28	0.00449	1.219	J
172.	Review of scientific instruments	1930	AIP	Monthly	1.584	0.05383	0.620	J
173.	Robotics and automation	1994	IEEE	Quarterly	2.319	0.0025	0.86	M

174.	Robotics	2004	IEEE	Bi-monthly	2.649	0.01405	1.409	T
175.	Science, measurement and technology	2007	IET	Bi-monthly	0.592	0.0012	0.314	J
176.	Security & privacy	2003	IEEE	Bi-monthly	0.721	0.00275	0.514	J
177.	Selected areas in communication	1983	IEEE	Monthly	4.138	0.03185	2.395	J
178.	Selected topics in applied earth observation and remote sensing	2008	IEEE	Bi-monthly	2.827	0.00488	0.733	J
179.	Selected topics in quantum electronics	1995	IEEE	Bi-monthly	3.465	0.02126	1.331	J
180.	Selected topics in signal processing	2007	IEEE	Bi-monthly	3.629	0.01855	2.465	J
181.	Semiconductor manufacturing	1988	IEEE	Quarterly	0.977	0.00174	0.311	T
182.	Sensor	2001	IEEE	Monthly	1.852	0.01545	0.535	J
183.	Services computing	2008	IEEE	Quarterly	1.985	.00183		T
184.	Signal processing	1994	IEEE	Monthly	1.639	0.0145	0.790	L
185.	Signal processing	1991	IEEE	Bi-monthly	4.481	0.02023	3.852	M
186.	Signal processing	1991	IEEE	Fortnightly	3.198	0.07199	1.613	T
187.	Signal processing	2007	IET	Monthly	0.691	0.00178	0.315	J
188.	Smart grid	2010	IEEE	Quarterly	4.334	0.00944	1.598	T
189.	Software engineering	1975	IEEE	Monthly	2.292	0.00611	1.3	T
190.	Software	1984	IEEE	Bi-monthly	1.23	0.00351	0.731	J
191.	Software	2007	IET	Bi-monthly	0.536	0.00062	0.183	J
192.	Solid state circuits	2009	IEEE	Quarterly				J
193.	Solid state circuits	1966	IEEE	Monthly	3.106	0.03703	1.611	M
194.	Spectrum	1964	IEEE	Monthly	0.936	0.00269	0.444	J
195.	Sustainable energy	2010	IEEE	Quarterly	3.842	0.00371	1.275	T
196.	Systems biology	2007	IET	Bi-monthly	1.672	0.00172	0.574	J
197.	Systems engineering and electronics	1999	BIAI	Bi-monthly				J
198.	Systems	2007	IEEE	Quarterly	1.746	0.00272	0.592	J
199.	Systems, man and cybernetics	2013	IEEE	Bi-monthly	2.169	0.00681	0.712	T
200.	Technology and society	1982	IEEE	Quarterly	0.49	0.00049	0.238	M
201.	Technological del aprendiazaje	2013	IEEE	Quarterly				J
202.	Terahertz science and technology	2011	IEEE	Bi-monthly	4.342	0.00365	1.967	T
203.	Translation engineering in health and medicine	2013	IEEE	Yearly				J
204.	Tsinghua science and technology	1996	TUP	Bi-monthly				J
205.	Ultrasonics, ferroelectrics and frequency control	1986	IEEE	Monthly	1.503	0.01728	0.511	T
206.	Vehicular technology	2006	IEEE	Quarterly	1.567	0.00184	0.769	M
207.	Vehicular technology	1967	IEEE	Bi-monthly	2.642	0.03382	0.941	T
208.	VLSI systems	1993	IEEE	Bi-monthly	1.142	0.01044	0.616	T
209.	Visualization and computer graphics	1995	IEEE	Monthly	1.919	0.02137	1.345	T
210.	Wireless communication	2012	IEEE	Bi-monthly				L
211.	Wireless communication	2002	IEEE	Bi-monthly	6.524	0.01190	2.294	J
212.	Wireless communication	2002	IEEE	Monthly	2.762	0.05747	1.291	T
213.	Wireless sensor systems	2011	IET	Quarterly				J
214.	Women in engineering	2007	IEEE	Half yearly				M

*T- Transactions J – Journal M – Magazine L – Letters

Details of Transactions, Journals, Magazines and Newsletters
Table 4. Ceased Publications - IEEE

Sl.No	Journal Name	Year of Publications	Publisher	Frequency
1.	Cable television	1976-1980	IEEE	Quarterly
2.	Circuits and devices magazine	1985-2006	IEEE	Bi-monthly
3.	Computer applications in power	1988-2002	IEEE	Quarterly
4.	Computers and digital techniques	1978-1979	IET	Quarterly
5.	Control & automation	2007-2007	IET	Quarterly
6.	Distributed systems online	2004-2008	IEEE	Quarterly
7.	Electric Power Applications	1978-1979	IET	Quarterly
8.	Electrical Engineers – Part I, General	1941-1948	IET	Monthly
9.	Electrical Engineers – Part II, Power engineering	1941-1948	IET	Bi-monthly
10.	Electrical Engineers – Part IIA-automated regulators and servo mechanisms	1947-1947	IET	Single issue
11.	Electrical Engineers – Part III-communication engineering	1941-1944	IET	Quarterly
12.	Electrical Engineers – Part III- Radio and communication engineering	1945-1948	IET	Bi-monthly
13.	Electrical Engineers – Part IIIA- Radio and communication engineering	1947	IET	Bi-monthly
14.	Electrical Engineers – Part IIIA - Radiolocation	1946	IET	Monthly
15.	Electrical Engineers	1963-1979	IET	Monthly
16.	Electronic and radio engineer	1985-1988	IET	Monthly
17.	Electronic and radio engineer	1964-1968	IET	Quarterly
18.	Electronic and radio engineer	1964-1970	IET	Bi-monthly
19.	Electronic circuits and systems	1976-1979	IET	Bi-monthly
20.	Electronics systems new	1981-1988	IET	Half-yearly
21.	Electronics and power	1964-1987	IET	Monthly
22.	Engineering management	1991-2007	IET	Bi-monthly
23.	Engineering science education	1992-2002	IET	Bi-monthly
24.	IBM systems journal	1962-2008	IBM	Quarterly
25.	India – IEE IERE proceedings	1969-1978	IET	Bi-monthly
26.	Information professional	2004-2007	IET	Bi-monthly
27.	Intelligent systems engineering	1992-1994	IET	Quarterly
28.	Journal of vacuum science & technology: B nano technology	2014-2015	AVS	3 issues
29.	LTS	1991-1992	IEEE	3 issues
30.	Manufacturing	2007	IET	3 issues
31.	Megnetics in Japan	1985-1994	IEEE	Monthly
32.	Microwave, optics acoustics	1976-1979	IET	Quarterly
33.	Power electronics letters	2003-2005	IEEE	3 issues
34.	Power engineer	2003-2007	IET	Bi-monthly
35.	Power engineering review	1981-2002	IEEE	Monthly
36.	Proceedings of IEE-Part A: power engineering	1955-1962	IET	Bi-monthly
37.	Proceedings of IEE-Part B: electronics and communication engineering	1959-1962	IET	Monthly
38.	Proceedings of IEE-Part B: radio and electronic engineering	1955-1959	IET	Monthly
39.	Proceedings of IEE-Part C: monographs	1955-1962	IET	Half yearly
40.	Proceedings of IEE-Part I:general	1949-1954	IET	Bi-monthly
41.	Proceedings of IEE-Part IA: electric railway traction	1950	IET	One issue
42.	Proceedings of IEE-Part II: power engineering	1949-1954	IET	Bi-monthly
43.	Proceedings of IEE-Part IIA: insulating materials	1953	IET	3 issues
44.	Proceedings of IEE-Part III: radio and communication engineering	1949-1954	IET	Bi-monthly
45.	Proceedings of IEE-Part IIIA: television	1952	IET	Fortnightly
46.	Proceedings of IEE-Part IV: institution monographs	1951-1954	IET	3 issues
47.	Production engineer	1960-1989	IET	Monthly
48.	Production engineers journal	1953-1959	IET	Monthly
49.	Production engineers journal	1931-1952	IET	Monthly
50.	Radio and electronic engineer	1963-1984	IET	Monthly
51.	Radio engineers	1939-1962	IET	Monthly
52.	Radio engineers	1963-1964	IET	8 issues
53.	Radio engineers, Indian division	1963	IET	2 issues
54.	Software microsystems	1981-1985	IET	Bi-monthly
55.	Software engineering body of knowledge	2004	IEEE	
56.	Solid state and electron devices	1976-1979	IET	Bi-monthly
57.	Students	1930-1972	IET	Quarterly
58.	Synthetic biology	2007	IET	1 issue
59.	Technology and computer aided design	1996	IEEE	1 issue
60.	Telegraph engineers and electricians	1881-1882	IET	1 issue
61.	Telegraph engineers	1872-1880	IET	Quarterly
62.	Telegraph engineers and electricians	1883-1888	IET	Bi-monthly
63.	Wireless section	1926-1940	IET	3 issues
64.	Writing installations and supplies	1976-1986	IET	3 issues

Table 5. IEEE Open Access Journals

Sl.No.	Name of the Journal
1	Journal of the Electron Devices Society
2	Transaction on Emerging Topics in Computing
3	Photonics Journal
4	Journal of the Traditional Engineering in Health and Medicine
5	Journal of Exploratory Solid State Computational Devices and Circuits
6	Life Science Letters
7	Nano Technology Express
8	Power and Energy Technology Systems Journal
9	Multiphysics simulation

Hence the author felt that the studying about IEEE is an important one to know more about its publications. Home page of IEEE has many innovative features, which simplified the search time of user. Journals are listed alphabetically and recently published journals are given separately. The user can also know about the most popular articles and popular search terms, which are noteworthy to mention.

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