## C Gomes

## List of Publications by Year in descending order

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190	4,227	27 h-index	60
papers	citations		g-index
191	191	191	4209
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Hydrogen as an energy carrier: Prospects and challenges. Renewable and Sustainable Energy Reviews, 2012, 16, 3024-3033.	8.2	1,021
2	Power loss due to soiling on solar panel: A review. Renewable and Sustainable Energy Reviews, 2016, 59, 1307-1316.	8.2	684
3	Estimation of Hourly, Daily and Monthly Global Solar Radiation on Inclined Surfaces: Models Re-Visited. Energies, 2017, 10, 134.	1.6	165
4	Multi-objective optimization and multi-criteria decision-making methods for optimal design of standalone photovoltaic system: A comprehensive review. Renewable and Sustainable Energy Reviews, 2021, 135, 110202.	8.2	138
5	Artificial Neural Networks in Image Processing for Early Detection of Breast Cancer. Computational and Mathematical Methods in Medicine, 2017, 2017, 1-15.	0.7	97
6	Non-destructive techniques of detecting plant diseases: A review. Physiological and Molecular Plant Pathology, 2019, 108, 101426.	1.3	85
7	New approaches in harnessing wave energy: With special attention to small islands. Renewable and Sustainable Energy Reviews, 2014, 29, 345-354.	8.2	80
8	A theoretical approach to estimate the annual lightning hazards on human beings. Atmospheric Research, 2011, 101, 719-725.	1.8	78
9	Comparison of preliminary breakdown pulses observed in Sweden and in Sri Lanka. Journal of Atmospheric and Solar-Terrestrial Physics, 1998, 60, 975-979.	0.6	61
10	Concepts of lightning return stroke models. IEEE Transactions on Electromagnetic Compatibility, 2000, 42, 82-96.	1.4	59
11	Hybrid energy management with respect to a hydrogen energy system and demand response. International Journal of Hydrogen Energy, 2020, 45, 1499-1509.	3.8	49
12	Electrical earthing in troubled environment. International Journal of Electrical Power and Energy Systems, 2013, 47, 117-128.	3.3	46
13	Estimation of photovoltaic module model's parameters using an improved electromagnetic-like algorithm. Neural Computing and Applications, 2020, 32, 12627-12642.	3.2	46
14	Focal and Non-Focal Epilepsy Localization: A Review. IEEE Access, 2018, 6, 49306-49324.	2.6	44
15	AN ANALYTICAL SECOND-FDTD METHOD FOR EVALUATION OF ELECTRIC AND MAGNETIC FIELDS AT INTERMEDIATE DISTANCES FROM LIGHTNING CHANNEL. Progress in Electromagnetics Research, 2010, 110, 329-352.	1.6	43
16	EVALUATION OF ELECTROMAGNETIC FIELDS ASSOCIATED WITH INCLINED LIGHTNING CHANNEL USING SECOND ORDER FDTD-HYBRID METHODS. Progress in Electromagnetics Research, 2011, 117, 209-236.	1.6	42
17	Sizing and implementing off-grid stand-alone photovoltaic/battery systems based on multi-objective optimization and techno-economic (MADE) analysis. Energy, 2020, 207, 118163.	4.5	41
18	Numerical expressions in time domain for electromagnetic fields due to lightning channels. International Journal of Applied Electromagnetics and Mechanics, 2011, 37, 275-289.	0.3	40

#	Article	IF	CITATIONS
19	A multi-layer perceptron for scheduling cellular manufacturing systems in the presence of unreliable machines and uncertain cost. Applied Soft Computing Journal, 2016, 49, 27-55.	4.1	40
20	Multiple scenarios multi-objective salp swarm optimization for sizing of standalone photovoltaic system. Renewable Energy, 2020, 153, 1330-1345.	4.3	40
21	Signatures of electric field pulses generated by cloud flashes. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 413-422.	0.6	39
22	Radiation field pulses associated with the initiation of positive cloud to ground lightning flashes. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 1047-1055.	0.6	37
23	Lightning safety of animals. International Journal of Biometeorology, 2012, 56, 1011-1023.	1.3	36
24	Correlation between the optical signatures and current wave forms of long sparks: applications in lightning research. Journal of Electrostatics, 1998, 43, 267-274.	1.0	33
25	Characteristics of chaotic pulse trains generated by lightning flashes. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 1733-1743.	0.6	33
26	Review of evolution of cellular manufacturing system's approaches: Material transferring models. International Journal of Precision Engineering and Manufacturing, 2016, 17, 131-149.	1.1	32
27	Recent statistics on lightning fatalities in Malaysia. , 2012, , .		30
28	Evaluation of the 2013 Southeast Asian Haze on Solar Generation Performance. PLoS ONE, 2015, 10, e0135118.	1.1	30
29	A multi-period scheduling of dynamic cellular manufacturing systems in the presence of cost uncertainty. Computers and Industrial Engineering, 2016, 100, 110-132.	3.4	29
30	Lightning protection scenarios of communication tower sites; human hazards and equipment damage. Safety Science, 2011, 49, 1355-1364.	2.6	27
31	Analytical Expressions for Electromagnetic Fields Associated with the Inclined Lightning Channels in the Time Domain. Electric Power Components and Systems, 2012, 40, 414-438.	1.0	27
32	Concerns of corrosive effects with respect to lightning protection systems. Engineering Failure Analysis, 2015, 57, 434-443.	1.8	27
33	Lightning safety of under-privileged communities around Lake Victoria. Geomatics, Natural Hazards and Risk, 2015, 6, 669-685.	2.0	25
34	Qualitative and quantitative analysis of solar hydrogen generation literature from 2001 to 2014. Scientometrics, 2015, 105, 759-771.	1.6	24
35	EVALUATION OF LIGHTNING CURRENT AND VELOCITY PROFILES ALONG LIGHTNING CHANNEL USING MEASURED MAGNETIC FLUX DENSITY. Progress in Electromagnetics Research, 2012, 130, 473-492.	1.6	22
36	EVALUATION OF LIGHTNING RETURN STROKE CURRENT USING MEASURED ELECTROMAGNETIC FIELDS. Progress in Electromagnetics Research, 2012, 130, 581-600.	1.6	22

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37	A Case Study on 500 kV Line Performance Related to Lightning in Malaysia. IEEE Transactions on Power Delivery, 2018, 33, 2180-2186.	2.9	22
38	Lightning-induced transient effects in a hybrid PV–wind system and mitigation strategies. Electric Power Systems Research, 2019, 174, 105882.	2.1	21
39	Lightning safety scheme for sheltering structures in low-income societies and problematic environments. , 2012, , .		20
40	Lightning incidents in Mongolia. Geomatics, Natural Hazards and Risk, 2015, 6, 686-701.	2.0	19
41	Mechanisation of large-scale agricultural fields in developing countriesÂ-Âa review. Journal of the Science of Food and Agriculture, 2016, 96, 3969-3976.	1.7	19
42	Multihazard Weather Risk Perception and Preparedness in Eight Countries. Weather, Climate, and Society, 2018, 10, 501-520.	0.5	19
43	Optimum Design of a Standalone Solar Photovoltaic System Based on Novel Integration of Iterative-PESA-II and AHP-VIKOR Methods. Processes, 2020, 8, 367.	1.3	19
44	The Fine Structure of Positive Lightning Return-Stroke Radiation Fields. IEEE Transactions on Electromagnetic Compatibility, 2004, 46, 87-95.	1.4	17
45	Lightning protection techniques for roof-top PV systems. , 2013, , .		17
46	Role of FACTS devices in improving penetration of renewable energy. , 2013, , .		17
47	On the selection and installation of surge protection devices in a TT wiring system for equipment and human safety. Safety Science, 2011, 49, 861-870.	2.6	16
48	Lightning accidents in Uganda. , 2012, , .		16
49	Optimal Design of Standalone Photovoltaic System Based on Multi-Objective Particle Swarm Optimization: A Case Study of Malaysia. Processes, 2020, 8, 41.	1.3	16
50	Characterization of measured lightning electric fields observed in Malaysia. , 2014, , .		15
51	Remote sensing of ESD through optical and magnetic radiation fields. IEEE Transactions on Dielectrics and Electrical Insulation, 1999, 6, 896-899.	1.8	14
52	Improvement of earthing systems with backfill materials. , 2010, , .		14
53	Public perceptions and lightning safety education in Sri Lanka. , 2012, , .		14
54	Long impulse currents associated with positive return strokes. Journal of Atmospheric and Solar-Terrestrial Physics, 1998, 60, 693-699.	0.6	13

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55	A multidisciplinary forensic analysis of two lightning deaths observed in South Africa. International Journal of Disaster Risk Reduction, 2020, 51, 101814.	1.8	13
56	PROTECTION OF NAVAL SYSTEMS AGAINST ELECTROMAGNETIC EFFECTS DUE TO LIGHTNING. Progress in Electromagnetics Research, 2011, 113, 333-349.	1.6	12
57	Hierarchy of hazard control to minimize lightning risk. , 2014, , .		12
58	Impact of dust on solar energy generation based on actual performance. , 2014, , .		11
59	Modelling of lightning current in the case of striking to a tall structure. , 2014, , .		11
60	Lightning Strike Impacts on Hybrid Photovoltaic-Wind System. Indonesian Journal of Electrical Engineering and Computer Science, 2017, 8, 115.	0.7	11
61	The influence of lightning induced voltage on the distribution power line polymer insulators. PLoS ONE, 2017, 12, e0172118.	1.1	11
62	Lightning Protection: Getting It Wrong. IEEE Technology and Society Magazine, 2011, 30, 12-21.	0.6	10
63	Case studies of lightning related injuries and property damage in Zambia. , 2012, , .		10
64	Lightning hazard mitigation in Uganda. , 2014, , .		10
65	Surface arcing of insulators due to bentonite contamination. Journal of Electrostatics, 2015, 76, 73-77.	1.0	10
66	High power microwave devices: Development since 1880. , 2017, , .		10
67	Kriging and Latin Hypercube Sampling Assisted Simulation Optimization in Optimal Design of PID Controller for Speed Control of DC Motor. Journal of Computational and Theoretical Nanoscience, 2018, 15, 1471-1479.	0.4	10
68	Modelling and analysis of different aspect of mechanisms in lightning injury. , $2011, \ldots$		9
69	Comparative Study on Lightning Fatality Rate in Malaysia between 2008 and 2017., 2018, , .		9
70	A Study on Bentonite and Kenaf Properties for Grounding Purposes. , 2018, , .		9
71	An overview of the global statistics on lightning fatalities. , 2010, , .		8
72	Improved algorithm for evaluation of lightning current using measured field at far distances from lightning channel. , 2012, , .		8

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73	Lightning current and voltage distribution of large axially symmetric buddhist stupa in Sri Lanka. , 2014, , .		8
74	Lightning; Gods and sciences. , 2014, , .		8
75	Unusually long duration lightning electric field return strokes in Malaysia. , 2014, , .		8
76	Analysis of wavelet based denoising methods applied to measured lightning electric fields. , 2010, , .		7
77	Performance of backfill materials under impulse and AC testings. , 2012, , .		7
78	A simulation tool to assess the lightning induced over-voltages on dc cables of photovoltaic installations. , $2014, \ldots$		7
79	Significance of localized soil resistivity in designing a grounding system. , 2014, , .		7
80	Design of 24 Hour Energy Generation from Renewable Energy. , 2015, , .		7
81	Receptor Sizes and Its Effect on Lightning Protection of Modern Wind Turbines. Journal of Green Engineering (discontinued), 2017, 7, 401-420.	0.7	7
82	Experimental investigation on breakdown characteristics of sand, bentonite and their mixes. Journal of Electrostatics, 2018, 93, 79-84.	1.0	7
83	Performance of Bentonite, Fly Ash and Wood Ash Mixtures as Grounding Enhancement Materials. , 2018, , .		7
84	Analysis of Lightning Transient Effects on Hybrid Renewable Energy Sources. , 2018, , .		7
85	Effects of microwave radiation on micro-organisms in selected materials from healthcare waste. International Journal of Environmental Science and Technology, 2019, 16, 1277-1288.	1.8	7
86	Lightning Caused Multiple Deaths: Lethality of Taking Shelter in Unprotected Buildings. , 2019, , .		7
87	Energy-saving method for technogenic waste processing. PLoS ONE, 2017, 12, e0187790.	1.1	7
88	ELECTROMAGNETIC TRANSIENTS IN RADIO/MICROWAVE BANDS AND SURGE PROTECTION DEVICES. Progress in Electromagnetics Research, 2010, 108, 101-130.	1.6	6
89	On the influence of inclined lightning channel on lightning induced voltage evaluation. , 2012, , .		6
90	Protection of oil storage tanks against direct lightning strikes: Self protection scheme or standalone LPS?. , 2013, , .		6

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91	Modelling of photovoltaic array temperature in a tropical site using generalized extreme value distribution. Journal of Renewable and Sustainable Energy, 2014, 6, 033134.	0.8	6
92	Analysis on magnetic flux density and core loss for hexagonal and butt-lap core joint transformers. , 2016, , .		6
93	A new approach of core structure model for 3-phase distribution transformer. International Transactions on Electrical Energy Systems, 2018, 28, e2572.	1.2	6
94	Public Beliefs about Lightning in Malaysia. , 2019, , .		6
95	Estimation of peak return stroke currents, current time derivatives and return stroke velocities from measured fields. Journal of Electrostatics, 1998, 43, 163-172.	1.0	5
96	Lightning accidents in Nigeria: With special attention to aviation mishaps. , 2012, , .		5
97	Analytical fields expressions due to lightning channel considering variation of return stroke velocities along the lightning channel. , 2012, , .		5
98	Breakdown characteristics and optically visible discharge paths of surface flashover. , 2012, , .		5
99	On the consideration of the channel angle effects on the electromagnetic fields associated with inclined lightning channel. , $2012,  ,  .$		5
100	Lightning environment in Burundi. , 2014, , .		5
101	Design of distribution substation earth grid in high resistivity soil using CDEGS., 2014,,.		5
102	Characteristics and performance of soil, bentonite and conductive cement during impulse tests in Swaziland. , $2016$ , , .		5
103	Lightning safety psyche. , 2016, , .		5
104	On the comparison of lightning fatality rates between states in Malaysia from 2008–2019. , 2019, , .		5
105	Impacts of Earthing Arrangement on Lightning Protection Efficiency of Grid Connected PV System. , 2021, , .		5
106	Analysis of earth resistance of electrodes and soil resistivity at different environments. , 2012, , .		4
107	Environmental effects on the performance of electrical grounding systems. , 2013, , .		4
108	The influence of socio demographic factors on severe weather concern, knowledge and preparedness among Malaysians. , $2014$ , , .		4

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109	The effect of electromagnetic fields due to hv line on the parallel pipeline. , 2014, , .		4
110	Effect of earth grid conductor spacing on the safety criteria of substation earthing. , 2014, , .		4
111	Steady state performance of improvised ufer grounding practice. , 2014, , .		4
112	Effect of the grounding system on the lightning current profile along a tall structure. IET Science, Measurement and Technology, 2015, 9, 717-727.	0.9	4
113	Characteristics of fulgurite-like structures under HV conditions: Effects on electrical earthing systems. , 2016, , .		4
114	Evaluation of lightning protection systems proposed for small structures by electromagnetic simulation. , 2016, , .		4
115	Concerns of the application of lightning protection risk assesment for small structures. , 2016, , .		4
116	Modifications Required for Palm Oil to be Qualified as a Mechanical Lubricant. International Journal of Manufacturing, Materials, and Mechanical Engineering, 2019, 9, 50-66.	0.3	4
117	Evaluation of Lightning Induced Voltage due to the Effect of Design Parameters on Medium Voltage Distribution Line. Jurnal Teknologi (Sciences and Engineering), 2013, 64, .	0.3	4
118	Lightning protection of communication sites: Revisited. , 2010, , .		3
119	A tutorial on the selection and installation of surge protection devices in a TT wiring system. , 2010, , .		3
120	Lightning related effects on the neighborhood of telecommunication tower sites. , 2012, , .		3
121	Preliminary results of the performance of grounding electrodes encased in bentonite-mixed concrete. , 2012, , .		3
122	Evaluation of lightning induced over-voltage due to variations of channel angle., 2013,,.		3
123	VERTICAL ELECTRIC FIELDS AND FIELD CHANGE PARAMETERS DUE TO PARTLY INCLINED LIGHTNING LEADER CHANNELS. Progress in Electromagnetics Research, 2013, 135, 55-80.	1.6	3
124	Analysis of lightning occurence in Zambia. , 2014, , .		3
125	Short Circuit Power based fault location algorithm in distribution networks. , 2014, , .		3
126	On the fault location algorithm for distribution networks in presence of DG. , 2014, , .		3

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127	On the bending effects of a copper-type down conductor. , 2014, , .		3
128	Lightning fatalities and injuries in Malaysia from 2008 to 2015. , 2016, , .		3
129	A comparison of lightning human fatalities between Malaysia and United States. , 2016, , .		3
130	Development of A Portable Type I to III Lightning Surge Protective Device for Compact Structures. , 2018, , .		3
131	Lightning Damages in Glass Fiber-Epoxy Composite Material used for Aerospace Applications. , 2018, , .		3
132	Concerns on the Risk of Malaysian Civil and Defense Systems Due to Intentional Electromagnetic Interference., 2019,,.		3
133	Frequency Dependent Permittivity of Soil and Bentonite: For Lightning Protection and High Frequency Earthing Systems. , 2019, , .		3
134	Electrical Isolation of Two Earthing Systems under Lightning Conditions with TiO2 Nano Fluid Barrier. , 2019, , .		3
135	Response of a 25 kV AC railway traction system to lightning current transients and mitigation measures. , 2021, , .		3
136	Nano and bio-composites and their applications: A review. IOP Conference Series: Materials Science and Engineering, 2021, 1067, 012093.	0.3	3
137	Lightning related fish mortality: Case study From Bangladesh. , 2012, , .		2
138	Safety issues of capacitor banks in medium voltage systems. , 2013, , .		2
139	Effect of soil resistivity on the lightning current along tall towers. , 2014, , .		2
140	Lightning occurrence density in Guinea., 2014,,.		2
141	Lightning safety against side flashes: Influence of floating electrodes on gap breakdown. , 2014, , .		2
142	Effect of the grounding system arrangement on the lightning current along tall structures. , 2014, , .		2
143	The Electric Field Effect on Angles of Copper-Type Down-Conductor. Applied Mechanics and Materials, 2015, 793, 24-28.	0.2	2

The Influence of a Curved on Copper-type Down Conductor. Jurnal Teknologi (Sciences and) Tj ETQq0.0 0 rgBT /Overlock 10 Tf 50 62 Td 0.3

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145	Lightning related human casualties in Mongolia. , 2016, , .		2
146	Portable Natural Enhancement Material Resistivity Meter: A Prototype., 2018,,.		2
147	Energy Efficient System for Galena Concentrate Processing. IEEE Access, 2019, 7, 23388-23395.	2.6	2
148	Coordinated Surge Protection System in a TT Wiring System: A Comprehensive Analysis of Performance. , 2019, , .		2
149	Design and implementation of an energy-saving melting reactor. Case Studies in Thermal Engineering, 2021, 26, 101003.	2.8	2
150	Optimum Receptor Location for Efficient Lightning Protection of Modern Wind Turbines. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	2
151	Front-end electronics for the silicon partition of the Phobos detector at RHIC. , 0, , .		1
152	Transients that may affect low voltage electrical systems. , 2010, , .		1
153	Modifications proposed to the concepts of structural protection. , 2010, , .		1
154	Ambiguity of grounding specifications: IEC 62305 revisited., 2012,,.		1
155	Corona losses: Issues and solutions. , 2013, , .		1
156	Variation of minimum safety separation for non-conducting lightning targets. , 2014, , .		1
157	Impact of energization current on the safe design of distribution substation earth grid., 2014,,.		1
158	The position of the media as a tool of communication and education on severe weather in Malaysia. , 2014, , .		1
159	Effects of the presence of insulated and non-insulated floating electrodes on side flashing. , 2014, , .		1
160	Characterizing the breakdown behavior of rodplane air gap under impulse over-voltage. , 2014, , .		1
161	Considering the effect of angle on polymer insulator performance under wet condition. , 2015, , .		1
162	Mathematical Relationship Identification for Photovoltaic Systems under Dusty Condition., 2015,,.		1

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163	Intelligent Short Circuit Power Based Fault Location Algorithm in Distribution Network Excluding and Including DG Unit. Applied Mechanics and Materials, 0, 793, 516-520.	0.2	1
164	Hybrid renewable energy as power supply for shelter during natural disasters. , 2016, , .		1
165	Variations in return stroke velocity and its effect on the return stroke current along lightning channel. , $2016, $		1
166	Evaluation of lightning location and lightning current wave shape using measured lightning magnetic fields at two stations. , $2016$ , , .		1
167	Minimum Separation Between Lightning Protection System And Non-Integrated Metallic Structures. , 2018, , .		1
168	Impulse Flashover Characteristics Of Oil Palm Trunk (OPT) Veneer Plywood., 2018,,.		1
169	A new method for minimizing cell underutilization in the process of dynamic cell forming and scheduling using artificial neural networks. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2019, 13, JAMDSM0021-JAMDSM0021.	0.3	1
170	Performance Enhancement of Lightning Protection Systems for Offshore Wind Turbine Blades. , 2019, , .		1
171	Testing of Wind Turbine Lightning Protection Systems - Comparison of Testing the Full-Scale Blade Length and a Small Section of the Blade Tip. , 2019, , .		1
172	Effects of electrical stimulation on the yield of tuber of tiger's milk mushroom. Engineering in Agriculture, Environment and Food, 2019, 12, 526-533.	0.2	1
173	The Behaviour of Three Phase Three- Leg $11{\rm KV}$ Transformer Core Type Design Under Sinusoidal and Non-Sinusoidal Operating Conditions for Different Core Materials. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	1
174	Voltage Distribution of a Wind Turbine Transformer Under Direct Lightning Strike: Effects of the Grounding of Cable Shield. Advanced Science Letters, 2016, 22, 1800-1804.	0.2	1
175	On theoretical approaches to estimate the lightning return stroke current parameters. , 1999, , .		0
176	Surge protection of low voltage systems and relevant standards. , 2010, , .		0
177	Challenges in the promotion of lightning protection know-how in developing world. , 2010, , .		O
178	Optimal power demand curve: A case study in Universiti Putra Malaysia. , 2012, , .		0
179	The Development of GPS Navigation Systems in Civil Aircraft. Applied Mechanics and Materials, 0, 390, 512-517.	0.2	0
180	Impact of split factor value on the safe design of distribution substation earth grid. , 2014, , .		0

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181	On the behavior of lightning current and charge density in the case of tall tower. , 2014, , .		0
182	Consideration of Lightning Current along a Tall Structure in the Presence of Horizontal Arrangement Grounding. Applied Mechanics and Materials, 2015, 793, 34-38.	0.2	0
183	Review and Evaluation of Characterization First Return Stroke in the Measured Lightning Electric Fields on Malaysia Data. Applied Mechanics and Materials, 2015, 793, 44-48.	0.2	0
184	Effects of air humidity on the performance of a polymer insulator under lightning induced voltage conditions. , 2016, , .		0
185	Evaluation of electromagnetic fields on polluted polymer insulator under lightning impulse current. , 2016, , .		0
186	Malaysia solar energy experience: Intelligent fault location algorithm for unbalanced radial distribution network including PV systems. Journal of Renewable and Sustainable Energy, 2016, 8, .	0.8	0
187	Effect of soil resistivity on magnetic field in the case of lightning strike to a tall structure. , 2016, , .		0
188	Switching Transients due to a Power Factor Correction Capacitor Bank in LV Power System and Their Comparison with Lightning Impulses. , 2019, , .		0
189	Impact of electrical stimulation on the growth of mycelium of lignosus rhinocerus (cooke) ryvarden. Electromagnetic Biology and Medicine, 2020, 39, 356-363.	0.7	0
190	Leader fields due to a lightning channel with an inclined upper section. Sri Lankan Journal of Physics, 2008, 2, 31.	0.4	0