Ramesh K Rayudu

List of Publications by Year
in descending order

112 papers	2,262 citations	331670 21 h-index	289244 40 g-index
113 all docs	113 docs citations	113 times ranked	2604 citing authors

#	Article	IF	Citations
1	Review of energy storage technologies for sustainable power networks. Sustainable Energy Technologies and Assessments, 2014, 8, 74-91.	2.7	454
2	Forecasting the behavior of an elderly using wireless sensors data in a smart home. Engineering Applications of Artificial Intelligence, 2013, 26, 2641-2652.	8.1	221
3	A review of nanogrid topologies and technologies. Renewable and Sustainable Energy Reviews, 2017, 67, 760-775.	16.4	174
4	Communication technologies for smart grid applications: A survey. Journal of Network and Computer Applications, 2016, 74, 133-148.	9.1	111
5	Wireless sensors network based safe home to care elderly people: Behaviour detection. Sensors and Actuators A: Physical, 2012, 186, 277-283.	4.1	94
6	Global progress in photovoltaic technologies and the scenario of development of solar panel plant and module performance estimation â^ Application in Nigeria. Renewable and Sustainable Energy Reviews, 2015, 48, 112-139.	16.4	79
7	Development of photovoltaic power plant for remote residential applications: The socio-technical and economic perspectives. Applied Energy, 2015, 155, 131-149.	10.1	73
8	Preparation for lifelong learning using ePortfolios. European Journal of Engineering Education, 2007, 32, 653-663.	2.3	61
9	Techno-economic and life cycle environmental performance analyses of a solar photovoltaic microgrid system for developing countries. Energy, 2016, 109, 160-179.	8.8	61
10	Evolution of dispatchable photovoltaic system integration with the electric power network for smart grid applications: A review. Renewable and Sustainable Energy Reviews, 2017, 67, 207-224.	16.4	59
11	Techno-economic analysis of a 10ÂkWp utility interactive photovoltaic system at Maungaraki school, Wellington, New Zealand. Energy, 2017, 120, 573-583.	8.8	55
12	Life cycle impact assessment of photovoltaic power generation from crystalline silicon-based solar modules in Nigeria. Renewable Energy, 2017, 101, 537-549.	8.9	50
13	Comprehensive techno-economic and environmental impact study of a localised photovoltaic power system (PPS) for off-grid communities. Energy Conversion and Management, 2016, 124, 266-279.	9.2	45
14	Strategy for developing energy systems for remote communities: Insights to best practices and sustainability. Sustainable Energy Technologies and Assessments, 2016, 16, 106-127.	2.7	40
15	Rare Event Detection and Propagation in Wireless Sensor Networks. ACM Computing Surveys, 2016, 48, 1-22.	23.0	38
16	Community-based hybrid electricity supply system: A practical and comparative approach. Applied Energy, 2016, 171, 608-628.	10.1	34
17	The impact of single-phase grid-connected distributed photovoltaic systems on the distribution network using P-Q and P-V models. International Journal of Electrical Power and Energy Systems, 2017, 91, 20-33.	5.5	31
18	Sensor data fusion to determine wellness of an elderly in intelligent home monitoring environment. , 2012, , .		27

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19	Weather-Dependent Power Flow Algorithm for Accurate Power System Analysis Under Variable Weather Conditions. IEEE Transactions on Power Systems, 2019, 34, 2719-2729.	6.5	27
20	Impact of Sampling in the Operation of Vehicle to Grid and Its Mitigation. IEEE Transactions on Industrial Informatics, 2019, 15, 3923-3933.	11.3	26
21	Research Insights and Knowledge Headways for Developing Remote, Off-Grid Microgrids in Developing Countries. Energies, 2019, 12, 2008.	3.1	24
22	A comprehensive review of energy extraction from low-temperature geothermal resources in hydrocarbon fields. Renewable and Sustainable Energy Reviews, 2022, 154, 111865.	16.4	24
23	Reliable measurement of Wireless Sensor Network data for forecasting wellness of elderly at smart home. , 2013, , .		22
24	Wireless Sensors Network Based Safe Home to Care Elderly People: Behaviour Detection. Procedia Engineering, 2011, 25, 96-99.	1.2	20
25	Comparative study of photovoltaic technologies based on performance, cost and space requirement: Strategy for selection and application. International Journal of Green Energy, 2016, 13, 1352-1368.	3.8	20
26	A green public transportation system using E-buses: A technical and commercial feasibility study. Sustainable Cities and Society, 2019, 51, 101789.	10.4	18
27	Applying SARIMA time series to forecast sleeping activity for wellness model of elderly monitoring in smart home. , 2012, , .		17
28	Distributed photovoltaic power generation for energy-poor households: The Nigerian perspective. , 2013, , .		17
29	Techno-economic analysis of hybrid renewable energy system for rural electrification in India. , 2017, , .		16
30	Impacts of Power Factor Control Schemes in Time Series Power Flow Analysis for Centralized PV Plants Using Wavelet Variability Model. IEEE Transactions on Industrial Informatics, 2017, 13, 3185-3194.	11.3	15
31	Wellness determination of inhabitant based on daily activity behaviour in real-time monitoring using Sensor Networks. , 2011, , .		13
32	Decentralized energy generation for end-use applications: Economic, social and environmental benefits assessment. , 2014, , .		12
33	Busting myths of energy models for wireless sensor networks. Electronics Letters, 2016, 52, 1412-1414.	1.0	12
34	A knowledge-based architecture for distributed fault analysis in power networks. Engineering Applications of Artificial Intelligence, 2010, 23, 514-525.	8.1	11
35	Power quality indices of Compact Fluorescent Lamps for residential use — A New Zealand study. , 2010, , .		11
36	Use of Maximum Power Point Tracking Signal for Instantaneous Management of Thermostatically Controlled Loads in a DC Nanogrid. IEEE Transactions on Smart Grid, 2018, 9, 6140-6148.	9.0	11

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37	Frequency Domain Analysis of a Wind Turbine Generator Earthing System for Lightning Discharge Currents. IEEE Access, 2019, 7, 60501-60512.	4.2	11
38	A fuzzy logic based cross-layer mechanism for medium access control in WBAN. , 2015, , .		10
39	Transient Stability Study Incorporating Weather Effects on Conductors. , 2018, , .		10
40	Ambient assisted living framework for elderly wellness determination through wireless sensor scalar data. , 2013, , .		9
41	Factors Determining the Effectiveness of a Wind Turbine Generator Lightning Protection System. IEEE Transactions on Industry Applications, 2019, 55, 6585-6592.	4.9	9
42	A new image segmentation algorithm based on modified seeded region growing and particle swarm optimization. , 2013, , .		8
43	Clean development mechanism projects for developing countries: Potential for carbon emissions mitigation and sustainable development. , 2014, , .		8
44	Coverage preservation in energy harvesting wireless sensor networks for rare events. , 2015, , .		8
45	Automatic design of fuzzy logic controllers for medium access control in wireless body area networks â€" An evolutionary approach. Applied Soft Computing Journal, 2017, 56, 245-261.	7.2	8
46	Grid capacity released analysis and incremental addition computation for distribution system planning. Electric Power Systems Research, 2017, 152, 105-121.	3.6	8
47	An efficient algorithm for mining frequent closed itemsets in dynamic transaction databases. International Journal of Intelligent Systems Technologies and Applications, 2008, 4, 313.	0.2	7
48	Modelling and simulation of a solar PV lithium ion battery charger for energy kiosks application. , 2015, , .		7
49	Grid-independent renewable energy solutions for residential use: The case of an off-grid house in wellington, New Zealand. , 2015, , .		7
50	Modelling impacts of utility-scale photovoltaic systems variability using the wavelet variability model for smart grid operations. Sustainable Energy Technologies and Assessments, 2019, 31, 292-305.	2.7	7
51	Communication Architecture for Smart Grid Applications. , 2018, , .		6
52	Solar Atlas of New Zealand from satellite imagery. Journal of the Royal Society of New Zealand, 2020, 50, 572-583.	1.9	6
53	Impacts of distributed PV in a smart grid using temperature-dependent power flow. , 2017, , .		5
54	Introducing ePortfolios to computer science and engineering students: A New Zealand experience. , 2009, , .		4

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55	Severely noisy image segmentation via wavelet shrinkage using PSO and Fuzzy C-Means. , 2016, , .		4
56	Rapid synchronization procedure for a synchronous generator employing ballistic trajectory control. , 2016, , .		4
57	Lightning protection analysis of main shaft bearings in wind turbine generators. , 2016, , .		4
58	Characterization of 400 Volt High Impedance Fault With Current and Magnetic Field Measurements. IEEE Transactions on Power Delivery, 2021, 36, 3538-3549.	4.3	4
59	Work In Progress: E-portfolios in Computer Science and Engineering Education. , 2006, , .		3
60	Single Ended Primary Inductor Converter reliance of efficiency on switching frequency for use in MPPT application. , 2013, , .		3
61	A comparison between temperature and current sensing in photovoltaic maximum power point tracking. , 2014, , .		3
62	Distributed generation nanogrid load control system. , 2015, , .		3
63	Opportunistic Geographic Forwarding in Wireless Sensor Networks for Critical Rare Events. , 2016, , .		3
64	Impact of large-scale integration of distributed photovoltaic with the distribution network. , 2016, , .		3
65	Effect of an electric vehicle bus network on guwahati grid. , 2017, , .		3
66	Feasibility of magnetic signature-based detection of low and high impedance faults in low-voltage distribution networks. , 2017, , .		3
67	Defining a remote village typology to improve the technical standard for off-grid electrification system design. , 2018, , .		3
68	Microgrids for rural schools: An energy-education accord to curb societal challenges for sustainable rural developments. International Journal of Renewable Energy Development, 2019, 8, 231-241.	2.4	3
69	Weather-Dependent Transient Stability Analysis of Single-Machine Infinite-Bus System. , 2019, , .		3
70	Investigation of the Impact of Weather on Multi-Machine Transient Stability Analysis. , 2020, , .		3
71	Identifying issues in geothermal energy production from petroleum fields. , 2021, , .		3
72	A co-operative hybrid algorithm for fault diagnosis in power transmission. , 0, , .		2

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73	Towards finding an optimum wind turbine height for residential and business use. , 2010, , .		2
74	Towards a tool for non-intrusive individual load measurement and identification. , 2011, , .		2
75	Balancing wind intermittency using hydro reserves and demand response. , 2012, , .		2
76	Analysis of linear loss models &#x2014; A New Zealand perspective. , 2014, , .		2
77	Equipment loading and voltage unbalance in the distribution network with distributed PVs. , 2016, , .		2
78	Instantaneous nanogrid control using maximum power point tracking signal. , 2016, , .		2
79	q-Calculus based extended Kalman filter for the dynamic state estimation of a synchronous generator. , 2016, , .		2
80	Evolutionary design of fuzzy logic controllers for medium access control in WBAN. , 2016, , .		2
81	Grid incremental capacity evaluation with an optimally deployed photovoltaic system in distribution network. , 2017, , .		2
82	Rapid synchronisation procedure for a pneumo-hydraulically driven synchronous generator. , 2017, , .		2
83	Influence of fluid selection on synchronous generators power output in compressed air energy storage systems. , 2017, , .		2
84	Coverage Preservation with Rapid Forwarding in Energy-Harvesting Wireless Sensor Networks for Critical Rare Events. Transactions on Embedded Computing Systems, 2018, 17, 1-25.	2.9	2
85	Demonstrated Rapid Ballistic Synchronization From Rest of a Hydraulically-Driven Synchronous Generator. IEEE Access, 2018, 6, 75609-75618.	4.2	2
86	Distributed Generation for Electrification of Rural Primary School and Health Centre: An Indian Perspective. , 2018, , .		2
87	A Facility for Physical Simulation of High Impedance Faults in Low Voltage Networks. , 2019, , .		2
88	A Heuristic Solution for Noisy Image Segmentation using Particle Swarm Optimization and Fuzzy Clustering. , 2015, , .		2
89	A New Modification of Fuzzy C-Means via Particle Swarm Optimization for Noisy Image Segmentation. Lecture Notes in Computer Science, 2016, , 147-159.	1.3	2
90	Effect of multiple compact fluorescent lamp usage on residential power quality. , 2012, , .		1

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91	A feature-based region growing-merging approach to color image segmentation. , 2013, , .		1
92	Inertial support performance of grid connected DFIG. , 2013, , .		1
93	Managing peak demand using direct load monitoring and control. , 2013, , .		1
94	Impact of centralized photovoltaic systems on utility power factor profile using the wavelet variability model. , 2017, , .		1
95	A combined control strategy for load management within an interconnected nanogrid network. , 2017, , .		1
96	An Evaluation of Potential Rise in a Wind Turbine Generator Earthing System During a Direct Lightning Strike. , 2018, , .		1
97	A New Method for Calculating Earth Electrode Length for a Wind Turbine Generator Grounding System based on a Two-Layer Soil Structure. , 2018, , .		1
98	Analysis of Earth Electrodes of Wind Turbine Generator Grounding System Under Lightning Discharge Currents. , 2018, , .		1
99	Greenhouse gas emissions from geothermal powerplants in New Zealand: Is reinjection of gases a solution?. , 2021, , .		1
100	A Distributed Architecture for Power Network Fault Analysis. , 2005, , .		0
101	Training for safety in Deregulated environment. , 2009, , .		0
102	Impact of series active voltage conditioners on modernized grid. , 2015, , .		0
103	Instantaneous control of a DC water heater for a PV system. , 2016, , .		0
104	Testing and validation of FTR results in NZEM. , 2017, , .		0
105	A Proposed Method for Calculating Earth Electrode Length for a Wind Turbine Generator Grounding System. , 2018, , .		0
106	Performance and Stability Analysis of Hydraulically Driven Synchronous Generators in Power Engineering. , 2018, , .		0
107	Analysis of Lightning Generated Over-Voltages on Voltage Regulating Devices in Distribution System with Centralized Wind Turbine Generators. , 2018, , .		0
108	Classification of Stages of a High Impedance Fault Using Sequential Learning Algorithms. , 2020, , .		0

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109	Cooperative Design of Two Level Fuzzy Logic Controllers for Medium Access Control inÂWireless Body Area Networks. Lecture Notes in Computer Science, 2017, , 870-882.	1.3	0
110	A Sensitivity Framework to Assess the Impact of Weather on Electric Power Networks. , 2020, , .		0
111	Weather-Dependent AC Power Flow Algorithms. , 2020, , .		0
112	MÄtauranga MÄori in Power Engineering - Achieving sustainability and zero carbon futures with countries' indigenous knowledge in design. , 2021, , .		0