Muhyaddin Rawa

List of Publications by Year
in descending order

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84	1,137	430874 18	501196 28
papers	citations	h-index	g-index

84	84	84	806
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Heat recovery application of nanomaterial with existence of turbulator. Journal of Molecular Liquids, 2021, 326, 115268.	4.9	103
2	Economical-technical-environmental operation of power networks with wind-solar-hydropower generation using analytic hierarchy process and improved grey wolf algorithm. Ain Shams Engineering Journal, 2021, 12, 2717-2734.	6.1	61
3	A Significant Solar Energy Note on Powell-Eyring Nanofluid with Thermal Jump Conditions: Implementing Cattaneo-Christov Heat Flux Model. Mathematics, 2021, 9, 2669.	2.2	51
4	Dual input switchedâ€capacitorâ€based singleâ€phase hybrid boost multilevel inverter topology with reduced number of components. IET Power Electronics, 2020, 13, 881-891.	2.1	48
5	A novel hybrid deep learning approach including combination of 1D power signals and 2D signal images for power quality disturbance classification. Expert Systems With Applications, 2021, 174, 114785.	7.6	46
6	Extended Multilevel Inverter Topology With Reduced Switch Count and Voltage Stress. IEEE Access, 2020, 8, 201835-201846.	4.2	40
7	A detailed hydrothermal investigation of a helical micro double-tube heat exchanger for a wide range of helix pitch length. Case Studies in Thermal Engineering, 2021, 28, 101413.	5.7	39
8	A techno-economic analysis of a hybrid energy system for the electrification of a remote cluster in western Saudi Arabia. AEJ - Alexandria Engineering Journal, 2022, 61, 5183-5202.	6.4	32
9	A new cascaded asymmetrical multilevel inverter based on switched dc voltage sources. International Journal of Electrical Power and Energy Systems, 2021, 128, 106730.	5.5	30
10	Single-Phase Boost Switched-Capacitor-Based Multilevel Inverter Topology With Reduced Switching Devices. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 4336-4346.	5.4	28
11	Optimal Allocation and Economic Analysis of Battery Energy Storage Systems: Self-Consumption Rate and Hosting Capacity Enhancement for Microgrids with High Renewable Penetration. Sustainability, 2020, 12, 10144.	3.2	27
12	Optoelectronic properties of electron beam-deposited NiOx thin films for solar cell application. Results in Physics, 2020, 17, 103122.	4.1	26
13	Random fully connected layered 1D CNN for solving the Z-bus loss allocation problem. Measurement: Journal of the International Measurement Confederation, 2021, 171, 108794.	5.0	26
14	Energy management strategy based on short-term resource scheduling of a renewable energy-based microgrid in the presence of electric vehicles using Î¸-modified krill herd algorithm. Neural Computing and Applications, 2021, 33, 10005-10020.	5.6	22
15	Design and Implementation of a Hybrid Single T-Type Double H-Bridge Multilevel Inverter (STDH-MLI) Topology. Energies, 2019, 12, 1810.	3.1	21
16	Critical evaluation and review of partial shading mitigation methods for grid-connected PV system using hardware solutions: The module-level and array-level approaches. Renewable and Sustainable Energy Reviews, 2021, 146, 111138.	16.4	21
17	Stochastic optimization for the scheduling of a grid-connected microgrid with a hybrid energy storage system considering multiple uncertainties. Energy Reports, 2022, 8, 7444-7456.	5.1	20
18	Switchedâ€capacitor multilevel inverter with selfâ€voltageâ€balancing for highâ€frequency power distribution system. IET Power Electronics, 2020, 13, 1807-1818.	2.1	19

#	Article	IF	Citations
19	Annual performance analysis of small scale industrial waste heat assisted solar tower power plant and application of nanofluid. Journal of the Taiwan Institute of Chemical Engineers, 2021, 124, 216-227.	5.3	18
20	An adaptive deep learning framework to classify unknown composite power quality event using known single power quality events. Expert Systems With Applications, 2021, 178, 115023.	7.6	18
21	Predictive Flux Control for Induction Motor Drives With Modified Disturbance Observer for Improved Transient Response. IEEE Access, 2020, 8, 112484-112495.	4.2	17
22	Organosoluble Starch-Cellulose Binary Polymer Blend as a Quasi-Solid Electrolyte in a Dye-Sensitized Solar Cell. Polymers, 2020, 12, 516.	4.5	16
23	The effect of nanoparticle shape on alumina/EG-water (50:50) nanofluids flow within a solar collector: Entropy and exergy investigation. Case Studies in Thermal Engineering, 2021, 28, 101510.	5.7	15
24	Personalized Route Planning System Based on Driver Preference. Sensors, 2022, 22, 11.	3.8	15
25	Estimation of Parameters of Different Equivalent Circuit Models of Solar Cells and Various Photovoltaic Modules Using Hybrid Variants of Honey Badger Algorithm and Artificial Gorilla Troops Optimizer. Mathematics, 2022, 10, 1057.	2.2	14
26	A techno-economic planning model for integrated generation and transmission expansion in modern power systems with renewables and energy storage using hybrid Runge Kutta-gradient-based optimization algorithm. Energy Reports, 2022, 8, 6457-6479.	5.1	14
27	Underactuated rotary inverted pendulum control using robust generalized dynamic inversion. JVC/Journal of Vibration and Control, 2020, 26, 2210-2220.	2.6	13
28	A New Multilevel Inverter Topology with Reduced DC Sources. Energies, 2021, 14, 4709.	3.1	13
29	Impact of Phase Locked Loop with Different Types and Control Dynamics on Resonance of DFIG System. Energies, 2020, 13, 1039.	3.1	12
30	Optimal feature selection using modified cuckoo search for classification of power quality disturbances. Applied Soft Computing Journal, 2021, 113, 107897.	7.2	12
31	Singleâ€phase hybrid multilevel inverter topology with low switching frequency modulation techniques for lower order harmonic elimination. IET Power Electronics, 2020, 13, 4117-4127.	2.1	12
32	Current-voltage curves of planar heterojunction perovskite solar cells â€“ Novel expressions based on Lambert W function and Special Trans Function Theory. Journal of Advanced Research, 2023, 44, 91-108.	9.5	12
33	Towards Avoiding Cascading Failures in Transmission Expansion Planning of Modern Active Power Systems Using Hybrid Snake-Sine Cosine Optimization Algorithm. Mathematics, 2022, 10, 1323.	2.2	12
34	Interleaved step-up soft-switching DCâ€“DC Boost converter without auxiliary switches. Energy Reports, 2022, 8, 6499-6511.	5.1	12
35	Single Diode Solar Cellsâ€”Improved Model and Exact Currentâ€“Voltage Analytical Solution Based on Lambertâ€™s W Function. Sensors, 2022, 22, 4173.	3.8	12
36	Experimental Measurements and Computer Simulations of Home Appliances Loads for Harmonic Studies. , 2014, , .		11

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37	A Systematic PVQV-Curves Approach for Investigating the Impact of Solar Photovoltaic-Generator in Power System Using PowerWorld Simulator. Energies, 2020, 13, 2662.	3.1	11
38	Frequency-Locked Loops in Electrical Power and Energy Systems: Equivalent or Different to Phase-Locked Loops?. IEEE Industrial Electronics Magazine, 2021, 15, 54-64.	2.6	11
39	Optimal Parameter Estimation Methodology of Solid Oxide Fuel Cell Using Modern Optimization. Mathematics, 2021, 9, 1066.	2.2	11
40	The effects of incident solar radiation on the collector efficiency using coolant hybrid nanofluid via simulation of solar tower system with the parallel heat exchangers. Journal of the Taiwan Institute of Chemical Engineers, 2021, 124, 106-115.	5.3	11
41	Hybrid Islanding Detection Technique for Malaysian Power Distribution System. , 2020, , .		11
42	A New Hybrid Multilevel Inverter with Extended Number of Voltage Steps. International Journal of Electrical and Electronic Engineering and Telecommunications, 2020, , 223-230.	3.6	11
43	Asymmetrical Multilevel Inverter Topology with Reduced Number of Components. , 2018, , .		10
44	Intelligent Machine Learning With Evolutionary Algorithm Based Short Term Load Forecasting in Power Systems. IEEE Access, 2021, 9, 100113-100124.	4.2	10
45	Carbon Trading Analysis and Impacts on Economy in Market-to-Market Coordination With Higher PV Penetration. IEEE Transactions on Industry Applications, 2021, 57, 5582-5592.	4.9	10
46	Thermal model of supercapacitors operating in constant power applications: New mathematical expressions for precise calculation of temperature change. Journal of Energy Storage, 2022, 49, 104121.	8.1	10
47	Analysis and Design of Series-LC-Switch Capacitor Multistage High Gain DC-DC Boost Converter for Electric Vehicle Applications. Sustainability, 2022, 14, 4495.	3.2	9
48	Analysis of LC-LC2 Compensated Inductive Power Transfer for High Efficiency and Load Independent Voltage Gain. Energies, 2018, 11, 2883.	3.1	8
49	Transient Faults in Wind Energy Conversion Systems: Analysis, Modelling Methodologies and Remedies. Energies, 2018, 11, 2249.	3.1	8
50	Background voltage distortion and percentage of nonlinear load impacts on the harmonics produced by a group of Personal Computers. , 2014, , .		7
51	Hardware Approach to Mitigate the Effects of Module Mismatch in a Grid-connected Photovoltaic System: A Review. Energies, 2019, 12, 4321.	3.1	7
52	Switched-Capacitor Based Seven-Level Triple Voltage Gain Boost Inverter (7L-TVG-BI). , 2020, , .		7
53	Use of artificial neural network in forecasting optimal distance of enclosures containing PCM-introduced for improving the performance of the evacuated tube solar collectors. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2177-2190.	3.6	6
54	Analysis and Small Signal Modeling of Five-Level Series Resonant Inverter. IEEE Access, 2021, 9, 109384-109395.	4.2	6

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55	Harmonics attenuation of nonlinear loads due to linear loads. , 2012, , .		5
56	An investigation on effects of blade angle and magnetic field on flow and heat transfer of non-Newtonian nanofluids: A numerical simulation. International Communications in Heat and Mass Transfer, 2021, 120, 105074.	5.6	5
57	Applying a Theta-Krill Herd Algorithm to Energy Management of a Microgrid Considering Renewable Energies and Varying Weather Conditions. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	5
58	In-Loop Filters and Prefilters in Phase-Locked Loop Systems: Equivalent or Different Solutions?. IEEE Industrial Electronics Magazine, 2022, 16, 23-35.	2.6	5
59	Reliability Assessment under High Penetration of EVs including V2G Strategy. Energies, 2022, 15, 1585.	3.1	5
60	<scp>Selfâ€healing</scp> strategy to enhance microgrid resilience during faults occurrence. International Transactions on Electrical Energy Systems, 2021, 31, .	1.9	5
61	Power quality of a voltage source converter in a smart grid. , 2013, , .		4
62	Factors affecting the harmonics generated by a cluster of personal computers. , 2014, , .		4
63	Reducing Fault Current by Using FACTS Devices to Improve Electrical Power Flow. Mathematical Problems in Engineering, 2021, 2021, 1-9.	1.1	4
64	Competition of ANN and RSM techniques in predicting the behavior of the CuO-liquid paraffin. Chemical Engineering Communications, 2023, 210, 880-892.	2.6	4
65	Hybrid islanding detection technique for distribution network considering the dynamic behavior of power and load. International Journal of Circuit Theory and Applications, 2022, 50, 1317-1341.	2.0	4
66	Enhancement of heat extraction from solar ponds by using twisted coilâ€tubes. Environmental Progress and Sustainable Energy, 2021, 40, e13604.	2.3	3
67	Multi-objective optimization of heat transfer through the various types of tube banks arrangements. AEJ - Alexandria Engineering Journal, 2021, 60, 2905-2919.	6.4	3
68	Engineering entanglement, geometric phase, and quantum Fisher information of a threeâ€level system with energy dissipation. Mathematical Methods in the Applied Sciences, 2020, 44, 12120.	2.3	2
69	Analysis of Market to Market Interconnection Points during Overgeneration Scenario in a Market. , 2020, , .		2
70	An Efficient Scheme for Determining the Power Loss in Wind-PV Based on Deep Learning. IEEE Access, 2021, 9, 9481-9492.	4.2	2
71	Modelling and Simulation of a 3kW Residential Photovoltaic for Harmonics Analysis. , 2013, , .		1
72	Mathematical Modeling of the Harmonic Distortion Caused by a Group of PCs Using Curve Fitting Technique. , 2015, , .		1

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73	Spaceâ€vector current control of cascaded halfâ€bridge threeâ€phase threeâ€wire voltage source inverter. IET Power Electronics, 2021, 14, 201-210.	2.1	1
74	Experimental Measurements and Computer Simulations of FL and CFL for Harmonic Studies. , 2014, , .		0
75	WED-PM-5-4 Characterisation of Low Frequency Disturbances on AC and DC Systems. , 2018, , .		0
76	Predicting Solar Insolation and Energy Harvest of PV Modules in Saudi Arabia. , 2019, , .		0
77	Addendum: Abubakar, U.; Mekhilef, S.; Mokhlis, H.; Seyedmahmoudian, M.; Horan, B.; Stojcevski, A.; Bassi, H.; Rawa, M.J.H. Transient Faults in Wind Energy Conversion Systems: Analysis, Modelling Methodologies and Remedies. Energies 2018, 11, 2249. Energies, 2019, 12, 286.	3.1	0
78	The Digital Current Control of Single-Phase Cascaded Half-Bridge Voltage Source Inverter. , 2020, , .		0
79	Electrical Power Flow Improvement by Reducing Fault Current using FACTS Devices. , 2021, , .		0
80	Characteristic and Surge Impedance Variation Impact on Transmission Line Performance. International Journal of Electrical and Computer Engineering, 2018, 8, 2602.	0.7	0
81	Power Quality Disturbances of Electrified Railway. International Journal of Engineering Research and Technology, 2020, 13, 3020.	0.3	0
82	Nanomaterial heat transfer through a complex shaped solar system considering variable magnetic field. Applied Nanoscience (Switzerland), 0, , 1.	3.1	0
83	Solar system treatment with incorporating nanomaterial within the absorber tube employing turbulator. Applied Nanoscience (Switzerland), 0, , 1.	3.1	0
84	Solar radiation impact on ferrofluid convection with applying electric field. Applied Nanoscience (Switzerland), 0, , 1.	3.1	0