Muhyaddin Rawa

List of Publications by Year
in descending order

84 papers	1,137 citations	430874 18 h-index	501196 28 g-index
84 all docs	84 docs citations	84 times ranked	806 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	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
6	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
7	Reliability Assessment under High Penetration of EVs including V2G Strategy. Energies, 2022, 15, 1585.	3.1	5
8	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
9	Personalized Route Planning System Based on Driver Preference. Sensors, 2022, 22, 11.	3.8	15
10	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
11	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
12	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
13	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
14	Interleaved step-up soft-switching DCâ€"DC Boost converter without auxiliary switches. Energy Reports, 2022, 8, 6499-6511.	5.1	12
15	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
16	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
17	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
18	An Efficient Scheme for Determining the Power Loss in Wind-PV Based on Deep Learning. IEEE Access, 2021, 9, 9481-9492.	4.2	2

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19	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
20	Intelligent Machine Learning With Evolutionary Algorithm Based Short Term Load Forecasting in Power Systems. IEEE Access, 2021, 9, 100113-100124.	4.2	10
21	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
22	Enhancement of heat extraction from solar ponds by using twisted coilâ€‘tubes. Environmental Progress and Sustainable Energy, 2021, 40, e13604.	2.3	3
23	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
24	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
25	Heat recovery application of nanomaterial with existence of turbulator. Journal of Molecular Liquids, 2021, 326, 115268.	4.9	103
26	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
27	Electrical Power Flow Improvement by Reducing Fault Current using FACTS Devices. , 2021, , .		0
28	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
29	Optimal Parameter Estimation Methodology of Solid Oxide Fuel Cell Using Modern Optimization. Mathematics, 2021, 9, 1066.	2.2	11
30	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
31	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
32	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
33	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
34	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
35	A New Multilevel Inverter Topology with Reduced DC Sources. Energies, 2021, 14, 4709.	3.1	13
36	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

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37	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
38	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
39	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
40	Reducing Fault Current by Using FACTS Devices to Improve Electrical Power Flow. Mathematical Problems in Engineering, 2021, 2021, 1-9.	1.1	4
41	Optimal feature selection using modified cuckoo search for classification of power quality disturbances. Applied Soft Computing Journal, 2021, 113, 107897.	7.2	12
42	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
43	Analysis and Small Signal Modeling of Five-Level Series Resonant Inverter. IEEE Access, 2021, 9, 109384-109395.	4.2	6
44	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
45	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
46	<scp>Selfâ€healing</scp> strategy to enhance microgrid resilience during faults occurrence. International Transactions on Electrical Energy Systems, 2021, 31, .	1.9	5
47	Extended Multilevel Inverter Topology With Reduced Switch Count and Voltage Stress. IEEE Access, 2020, 8, 201835-201846.	4.2	40
48	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
49	Analysis of Market to Market Interconnection Points during Overgeneration Scenario in a Market. , 2020, , .		2
50	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
51	The Digital Current Control of Single-Phase Cascaded Half-Bridge Voltage Source Inverter. , 2020, , .		0
52	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
53	Predictive Flux Control for Induction Motor Drives With Modified Disturbance Observer for Improved Transient Response. IEEE Access, 2020, 8, 112484-112495.	4.2	17
54	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

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55	Underactuated rotary inverted pendulum control using robust generalized dynamic inversion. JVC/Journal of Vibration and Control, 2020, 26, 2210-2220.	2.6	13
56	Impact of Phase Locked Loop with Different Types and Control Dynamics on Resonance of DFIG System. Energies, 2020, 13, 1039.	3.1	12
57	Organosoluble Starch-Cellulose Binary Polymer Blend as a Quasi-Solid Electrolyte in a Dye-Sensitized Solar Cell. Polymers, 2020, 12, 516.	4.5	16
58	Switchedâ€capacitor multilevel inverter with selfâ€voltageâ€balancing for highâ€frequency power distribution system. IET Power Electronics, 2020, 13, 1807-1818.	2.1	19
59	Optoelectronic properties of electron beam-deposited NiOx thin films for solar cell application. Results in Physics, 2020, 17, 103122.	4.1	26
60	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
61	Switched-Capacitor Based Seven-Level Triple Voltage Gain Boost Inverter (7L-TVG-BI). , 2020, , .		7
62	Hybrid Islanding Detection Technique for Malaysian Power Distribution System. , 2020, , .		11
63	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
64	Power Quality Disturbances of Electrified Railway. International Journal of Engineering Research and Technology, 2020, 13, 3020.	0.3	0
65	Hardware Approach to Mitigate the Effects of Module Mismatch in a Grid-connected Photovoltaic System: A Review. Energies, 2019, 12, 4321.	3.1	7
66	Predicting Solar Insolation and Energy Harvest of PV Modules in Saudi Arabia. , 2019, , .		0
67	Design and Implementation of a Hybrid Single T-Type Double H-Bridge Multilevel Inverter (STDH-MLI) Topology. Energies, 2019, 12, 1810.	3.1	21
68	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
69	Asymmetrical Multilevel Inverter Topology with Reduced Number of Components. , 2018, , .		10
70	Analysis of LC-LC2 Compensated Inductive Power Transfer for High Efficiency and Load Independent Voltage Gain. Energies, 2018, 11, 2883.	3.1	8
71	WED-PM-5-4 Characterisation of Low Frequency Disturbances on AC and DC Systems. , 2018, , .		0
72	Transient Faults in Wind Energy Conversion Systems: Analysis, Modelling Methodologies and Remedies. Energies, 2018, 11, 2249.	3.1	8

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73	Characteristic and Surge Impedance Variation Impact on Transmission Line Performance. International Journal of Electrical and Computer Engineering, 2018, 8, 2602.	0.7	0
74	Mathematical Modeling of the Harmonic Distortion Caused by a Group of PCs Using Curve Fitting Technique. , 2015, , .		1
75	Experimental Measurements and Computer Simulations of Home Appliances Loads for Harmonic Studies. , 2014, , .		11
76	Experimental Measurements and Computer Simulations of FL and CFL for Harmonic Studies. , 2014, , .		0
77	Background voltage distortion and percentage of nonlinear load impacts on the harmonics produced by a group of Personal Computers. , 2014, , .		7
78	Factors affecting the harmonics generated by a cluster of personal computers. , 2014, , .		4
79	Modelling and Simulation of a 3kW Residential Photovoltaic for Harmonics Analysis. , 2013, , .		1
80	Power quality of a voltage source converter in a smart grid. , 2013, , .		4
81	Harmonics attenuation of nonlinear loads due to linear loads. , 2012, , .		5
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