Irfan Khan

List of Publications by Year
in descending order

94 papers	2,256 citations	257357 24 h-index	254106 43 g-index
94 all docs	94 docs citations	94 times ranked	1431 citing authors

#	Article	IF	Citations
1	The impact of natural resources, energy consumption, and population growth on environmental quality: Fresh evidence from the United States of America. Science of the Total Environment, 2021, 754, 142222.	3.9	367
2	Does energy trilemma a driver of economic growth? The roles of energy use, population growth, and financial development. Renewable and Sustainable Energy Reviews, 2021, 146, 111157.	8.2	154
3	A Comprehensive Review on Structural Topologies, Power Levels, Energy Storage Systems, and Standards for Electric Vehicle Charging Stations and Their Impacts on Grid. IEEE Access, 2021, 9, 128069-128094.	2.6	134
4	Forecasting of COVID-19 cases using deep learning models: Is it reliable and practically significant?. Results in Physics, 2021, 21, 103817.	2.0	112
5	Comprehensive review & impact analysis of integrating projected electric vehicle charging load to the existing low voltage distribution system. Renewable and Sustainable Energy Reviews, 2022, 153, 111756.	8.2	64
6	State-of-the-art sustainable approaches for deeper decarbonization in Europe â€" An endowment to climate neutral vision. Renewable and Sustainable Energy Reviews, 2022, 159, 112204.	8.2	64
7	A Novel Algorithm for MPPT of an Isolated PV System Using Push Pull Converter with Fuzzy Logic Controller. Energies, 2020, 13, 4007.	1.6	59
8	A Holistic Review of the Present and Future Drivers of the Renewable Energy Mix in Maharashtra, State of India. Sustainability, 2020, 12, 6596.	1.6	55
9	A review on recent developments in control and optimization of micro grids. Energy Reports, 2022, 8, 4085-4103.	2.5	55
10	Distributed control algorithm for optimal reactive power control in power grids. International Journal of Electrical Power and Energy Systems, 2016, 83, 505-513.	3.3	52
11	A non-linear convex cost model for economic dispatch in microgrids. Applied Energy, 2018, 222, 637-648.	5.1	48
12	Integration and Decentralized Control of Standalone Solar Home Systems for Off-Grid Community Applications. IEEE Transactions on Industry Applications, 2019, 55, 7240-7250.	3.3	45
13	A holistic review on energy forecasting using big data and deep learning models. International Journal of Energy Research, 2021, 45, 13489-13530.	2.2	45
14	A stateâ€ofâ€theâ€art review on topologies and control techniques of solidâ€state transformers for electric vehicle extreme fast charging. IET Power Electronics, 2021, 14, 1560-1576.	1.5	45
15	Probabilistic generation model for optimal allocation of wind DG in distribution systems with time varying load models. Sustainable Energy, Grids and Networks, 2020, 22, 100358.	2.3	45
16	An Optimal Scheduling and Distributed Pricing Mechanism for Multi-Region Electric Vehicle Charging in Smart Grid. IEEE Access, 2020, 8, 40298-40312.	2.6	44
17	Distributed Optimal Reactive Power Control of Power Systems. IEEE Access, 2018, 6, 7100-7111.	2.6	42
18	Recent Approaches of Forecasting and Optimal Economic Dispatch to Overcome Intermittency of Wind and Photovoltaic (PV) Systems: A Review. Energies, 2019, 12, 4392.	1.6	39

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19	State-of-the-art vehicle-to-everything mode of operation of electric vehicles and its future perspectives. Renewable and Sustainable Energy Reviews, 2022, 166, 112574.	8.2	36
20	Optimization configuration of energy storage capacity based on the microgrid reliable output power. Journal of Energy Storage, 2020, 32, 101866.	3.9	35
21	Optimal PV Parameter Estimation via Double Exponential Function-Based Dynamic Inertia Weight Particle Swarm Optimization. Energies, 2020, 13, 4037.	1.6	33
22	A New Efficient Step-Up Boost Converter with CLD Cell for Electric Vehicle and New Energy Systems. Energies, 2020, 13, 1791.	1.6	33
23	A distributed robust optimization approach for the economic dispatch of flexible resources. International Journal of Electrical Power and Energy Systems, 2021, 124, 106360.	3.3	32
24	PV Model Parameter Estimation Using Modified FPA With Dynamic Switch Probability and Step Size Function. IEEE Access, 2021, 9, 42027-42044.	2.6	31
25	Improved Dual Switch Non-Isolated High Gain Boost Converter for DC microgrid Application. , 2021, , .		27
26	Performance Evaluation of Two Similar 100MW Solar PV Plants Located in Environmentally Homogeneous Conditions. IEEE Access, 2019, 7, 161697-161707.	2.6	25
27	A Comparison Review on Transmission Mode for Onshore Integration of Offshore Wind Farms: HVDC or HVAC. Electronics (Switzerland), 2021, 10, 1489.	1.8	21
28	Grid Load Reduction through Optimized PV Power Utilization in Intermittent Grids Using a Low-Cost Hardware Platform. Energies, 2019, 12, 1764.	1.6	20
29	A Combinational Level-Shifted and Phase-Shifted PWM Technique for Symmetrical Power Distribution in CHB Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2023, 11, 932-941.	3.7	20
30	A Single Source Switched-Capacitor 13-Level Inverter with Triple Voltage Boosting and Reduced Component Count. Electronics (Switzerland), 2021, 10, 2321.	1.8	20
31	Optimization of the electricity generation of a wave energy converter using deep reinforcement learning. Ocean Engineering, 2022, 244, 110363.	1.9	20
32	Placement of electric vehicle fast charging stations in distribution network considering power loss, land cost, and electric vehicle population. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 1693-1709.	1.2	20
33	A Novel Framework to Determine the Impact of Time Varying Load Models on Wind DG Planning. IEEE Access, 2021, 9, 11342-11357.	2.6	19
34	A Review on Impact Analysis of Electric Vehicle Charging on Power Distribution Systems. , 2020, , .		19
35	Compressive Sensing-Based Optimal Reactive Power Control of a Multi-Area Power System. IEEE Access, 2017, 5, 23576-23588.	2.6	17
36	Compressive Sensing and Morphology Singular Entropy-Based Real-Time Secondary Voltage Control of Multiarea Power Systems. IEEE Transactions on Industrial Informatics, 2019, 15, 3796-3807.	7.2	16

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37	Design Modification in Single-Tooth Winding Double-Stator Switched Reluctance Motor for Torque Ripple Mitigation. IEEE Access, 2021, 9, 19078-19096.	2.6	16
38	An Improved Particle Swarm Optimization with Chaotic Inertia Weight and Acceleration Coefficients for Optimal Extraction of PV Models Parameters. Energies, 2021, 14, 2980.	1.6	16
39	A Novel Analytical Approach for Optimal Integration of Renewable Energy Sources in Distribution Systems. Energies, 2022, 15, 1341.	1.6	16
40	Aquila Optimization Based Harmonic Elimination in a Modified H-Bridge Inverter. Sustainability, 2022, 14, 929.	1.6	14
41	Placement of Electric Vehicle Fast Charging Stations using Grey Wolf Optimization in Electrical Distribution Network. , 2022, , .		14
42	Economic and Environmental Impact of Vehicle-to-Grid (V2G) Integration in an Intermittent Utility Grid. , 2020, , .		13
43	Impact of EV charging Station Penetration on Harmonic Distortion Level in Utility Distribution Network: A Case Study of Qatar. , 2021, , .		13
44	An Eleven-Level Switched-Capacitor Inverter with Boosting Capability. Electronics (Switzerland), 2021, 10, 2262.	1.8	13
45	Chaotic Inertia Weight Particle Swarm Optimization (CIWPSO): An Efficient Technique for Solar Cell Parameter Estimation. , 2020, , .		12
46	Novel Approach to Investigate the Influence of Optimum Tilt Angle on Minimum Cost of Energy-Based Maximum Power Generation and Sizing of PV Systems: A Case Study of Diverse Climatic Zones in India. IEEE Access, 2021, 9, 110103-110115.	2.6	12
47	Modeling and evaluation of nickel manganese cobalt based Li-ion storage for stationary applications. Journal of Energy Storage, 2021, 36, 102346.	3.9	12
48	Impacts of Renewable Sources of Energy on Bid Modeling Strategy in an Emerging Electricity Market Using Oppositional Gravitational Search Algorithm. Energies, 2021, 14, 5726.	1.6	11
49	Novel Level-Shifted PWM Technique for Cascaded Multilevel Quasi-Impedance Source Inverter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 5918-5928.	3.7	11
50	Real-Time Processor-in-Loop Investigation of a Modified Non-Linear State Observer Using Sliding Modes for Speed Sensorless Induction Motor Drive in Electric Vehicles. Energies, 2020, 13, 4212.	1.6	10
51	Optimal Allocation of Wind DG with Time Varying Voltage Dependent Loads Using Bio-Inspired: Salp Swarm Algorithm. , 2020, , .		10
52	FedResilience: A Federated Learning Application to Improve Resilience of Resource-Constrained Critical Infrastructures. Electronics (Switzerland), 2021, 10, 1917.	1.8	10
53	Sliding Window Regression based Short-Term Load Forecasting of a Multi-Area Power System. , 2019, , .		9
54	A Review on Hybrid Energy Storage Systems in Microgrids. , 2020, , .		9

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55	An Impedance Network-Based Three Level Quasi Neutral Point Clamped Inverter with High Voltage Gain. Energies, 2020, 13, 1261.	1.6	8
56	NyströÃ¶m Minimum Kernel Risk-Sensitive Loss Based Seamless Control of Grid-Tied PV-Hybrid Energy Storage System. Energies, 2021, 14, 1365.	1.6	8
57	An Overview on Optimal Planning of Distributed Generation in Distribution System and Key Issues. , 2021, , .		6
58	System Modeling and Reliability Assessment of Microgrids: A Review. Sustainability, 2022, 14, 126.	1.6	6
59	Accurate Modeling of Li-ion Cells Applied to LiFePO$_4$ and NMC Chemistries. , 2020, , .		5
60	PEMFC application through coal gasification along with cost-benefit analysis: A case study for South Africa. Energy Exploration and Exploitation, 2021, 39, 1551-1587.	1.1	5
61	Modeling of a high-speed and cost-effective FPV quadcopter for surveillance. , 2020, , .		5
62	Reliability Analysis and Fault-Tolerant Operation in a Multilevel Inverter for Industrial Application. Electronics (Switzerland), 2022, 11, 98.	1.8	5
63	A Novel Hybrid Approach for Optimal Placement of Non-Dispatchable Distributed Generations in Radial Distribution System. Mathematics, 2021, 9, 3171.	1.1	5
64	Distributed control for energy management in a microgrid. , 2016, , .		4
65	A Novel Architecture for Condition Based Machinery Health Monitoring on Marine Vessels Using Deep Learning and Edge Computing. , 2019, , .		4
66	Effect of the approximation of voltage angle difference on the OPF algorithms in the power network. Energy Systems, 2020, 11, 471-490.	1.8	4
67	A Novel Pulse Width Amplitude Modulation for Elimination of Multiple Harmonics In Asymmetrical Multilevel Inverter. , 2021, , .		4
68	A Transformer-Less Multiconverter Having Output Voltage and Frequency Regulation Characteristics, Employed with Simple Switching Algorithms. Applied Sciences (Switzerland), 2021, 11, 3075.	1.3	4
69	Supporting distributed energy resources with optimal placement and sizing of voltage regulators on the distribution system by an improved <scp>teaching–learning–based</scp> optimization algorithm. International Transactions on Electrical Energy Systems, 2021, 31, e12974.	1.2	4
70	Scalable Multiport Converter Structure for Easy Grid Integration of Alternate Energy Sources for Generation of Isolated Voltage Sources for MMC. Electronics (Switzerland), 2021, 10, 1779.	1.8	4
71	Cascaded Solid State Transformer Structure to Power Fast EV Charging Stations from Medium Voltage Transmission Lines. , 2020, , .		4
72	Design and manufacturing of digital MOSFET based-AVR for synchronous generator. , 2015, , .		3

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73	Effect of ambient conditions on water management and faults in PEMFC systems: A Review. , 2019, , .		3
74	A High Gain 9L Switched-Capacitor Boost Inverter (9L-SCMI) With Reduced Component Count. , 2021, , .		3
75	A novel methodology to validate cyberattacks and evaluate their impact on power systems using real time digital simulation. , 2021, , .		3
76	Design and Implementation of Frequency Controller for Wind Energy-Based Hybrid Power System Using Quasi-Oppositional Harmonic Search Algorithm. Energies, 2021, 14, 6459.	1.6	3
77	Novel Three and Four Switch Inverters With Wide Input and Output Voltage Range for Renewable Energy Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 7385-7396.	3.7	3
78	A Survey of Recent Developments and Requirements for Modern Power System Control. , 2019, , 289-316.		2
79	A Tutorial on Current Controlled DC-DC Converter used in Microgrid System. , 2019, , .		2
80	A Novel Hybrid GWO-LS Estimator for Harmonic Estimation Problem in Time Varying Noisy Environment. Energies, 2021, 14, 2587.	1.6	2
81	Investigation of Power Quality Issues in Cold Ironed (Shore Connected) Grid Connected Electric Ships. , 2020, , .		2
82	Performance Evaluation of Multilevel DC-AC Converter To Interface EV Battery For V2H Application. , 2021, , .		2
83	Guest Editorial: Fast, Superfast, and Ultra-Superfast Intelligent and Smart Charging Solutions for Electric Vehicles. IEEE Transactions on Industry Applications, 2022, 58, 5518-5519.	3.3	2
84	Fault Detection and Harmonics Mitigation in Diesel Electric Ships Using IIOT Edge Devices. , 2019, , .		1
85	Prediction of Starting Voltage of PEMFC Systems under Various Ambient Conditions. , 2019, , .		1
86	Simple temperature modeling of proton exchange membrane fuel cell using load current and ambient temperature variations. International Journal of Green Energy, 2021, 18, 1352-1368.	2.1	1
87	Voltage Stabilization of DC-Link in EVs using DAB Converter based on Higher-Order SMC approach. , 2021, , .		1
88	Parameter Estimation of Photovoltaic Systems Based on Artificial Intelligence Algorithm. , 2022, , 1-28.		1
89	Intelligent Filtering Solutions for Improving Power Quality in Marine Shipboard Systems. , 2022, , .		1
90	Experimental validation of <scp>off‐board EV</scp> charging station with reduced active switch count. International Journal of Energy Research, 2022, 46, 16929-16948.	2.2	1

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91	Real-time Singular Value Decomposition based Load Frequency Control of Multi-area Power System. , 2018, , .		0
92	A Distributed Coordination Framework for Smart Microgrids. , 2019, , 119-136.		0
93	Consensus Based Distributed Optimal Reactive Power Control in Power Distribution Systems. Energy Systems, 2020, , 57-68.	0.5	0
94	Active Power Filtering Solution for Improving Power Quality in Cold Ironed Electric Ships. , 2021, , .		0