

# Mohit Bajaj

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2915335/publications.pdf>

Version: 2024-02-01

95  
papers

1,495  
citations

394286

19  
h-index

434063

31  
g-index

98  
all docs

98  
docs citations

98  
times ranked

494  
citing authors

#	ARTICLE	IF	CITATIONS
1	Grid integrated renewable DG systems: A review of power quality challenges and state-of-the-art mitigation techniques. International Journal of Energy Research, 2020, 44, 26-69.	2.2	186
2	Residential Demand Side Management model, optimization and future perspective: A review. Energy Reports, 2022, 8, 3727-3766.	2.5	68
3	Power Quality Assessment of Distorted Distribution Networks Incorporating Renewable Distributed Generation Systems Based on the Analytic Hierarchy Process. IEEE Access, 2020, 8, 145713-145737.	2.6	49
4	An analytic hierarchy process-based novel approach for benchmarking the power quality performance of grid-integrated renewable energy systems. Electrical Engineering, 2020, 102, 1153-1173.	1.2	49
5	Multilevel Inverter: A Survey on Classical and Advanced Topologies, Control Schemes, Applications to Power System and Future Prospects. Energies, 2021, 14, 5773.	1.6	49
6	Overview of ESP8266 Wi-Fi module based Smart Irrigation System using IOT. , 2018, , .		48
7	IOT based controlling of hybrid energy system using ESP8266. , 2018, , .		43
8	Hosting capacity enhancement of renewable-based distributed generation in harmonically polluted distribution systems using passive harmonic filtering. Sustainable Energy Technologies and Assessments, 2021, 44, 101030.	1.7	38
9	Modeling and sensitivity analysis of grid-connected hybrid green microgrid system. Ain Shams Engineering Journal, 2022, 13, 101679.	3.5	38
10	Optimal Design of Passive Power Filter Using Multi-Objective Pareto-Based Firefly Algorithm and Analysis Under Background and Load-Side's Nonlinearity. IEEE Access, 2021, 9, 22724-22744.	2.6	37
11	Design of Optimal Energy Management System in a Residential Microgrid Based on Smart Control. Smart Science, 2022, 10, 25-39.	1.9	36
12	Comparative Performance Assessment of Different Energy Storage Devices in Combined LFC and AVR Analysis of Multi-Area Power System. Energies, 2022, 15, 629.	1.6	34
13	Increasing Electric Vehicle Autonomy Using a Photovoltaic System Controlled by Particle Swarm Optimization. IEEE Access, 2021, 9, 72040-72054.	2.6	33
14	New intelligent direct power control of DFIG-based wind conversion system by using machine learning under variations of all operating and compensation modes. Energy Reports, 2021, 7, 6394-6412.	2.5	29
15	Robust interconnection and damping assignment energy-based control for a permanent magnet synchronous motor using high order sliding mode approach and nonlinear observer. Energy Reports, 2022, 8, 1731-1740.	2.5	29
16	Design and Simulation of Hybrid DG System Fed Single-Phase Dynamic Voltage Restorer for Smart Grid Application. Smart Science, 2020, 8, 24-38.	1.9	28
17	A Lyapunov-Function Based Controller for 3-Phase Shunt Active Power Filter and Performance Assessment Considering Different System Scenarios. IEEE Access, 2021, 9, 66079-66102.	2.6	28
18	Optimized Economic Operation of Microgrid: Combined Cooling and Heating Power and Hybrid Energy Storage Systems. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	1.4	27

#	ARTICLE	IF	CITATIONS
19	Water Cycle Algorithm Optimized Type II Fuzzy Controller for Load Frequency Control of a Multi-Area, Multi-Fuel System with Communication Time Delays. <i>Energies</i> , 2021, 14, 5387.	1.6	27
20	Power Quality Concerns with Integration of RESs into the Smart Power Grid and Associated Mitigation Techniques. , 2020, , .		25
21	Optimal sizing of hybrid Systems for Power loss Reduction and Voltage improvement using PSO algorithm: Case study of Guissia Rural Grid. <i>Energy Reports</i> , 2022, 8, 86-95.	2.5	25
22	Harmonics and Reactive Power Compensation of Three Phase Induction Motor Drive by Photovoltaic-based DSTATCOM. <i>Smart Science</i> , 2018, 6, 319-329.	1.9	22
23	Power Quality Challenges Associated with Distributed Generation Planning: A Simulation-based Demonstration. , 2019, , .		21
24	Designing of a Solar Energy based Single Phase Dynamic Voltage Restorer using Fuzzy Logic Controlled Novel Boost Inverter. , 2020, , .		21
25	Enhanced Direct Reactive Power Control-Based Multi-Level Inverter for DFIC Wind System under Variable Speeds. <i>Sustainability</i> , 2021, 13, 9060.	1.6	21
26	Automatic Speech Recognition (ASR) Systems for Children: A Systematic Literature Review. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4419.	1.3	20
27	Power Quality Improvement Using Distributed Power Flow Controller with BWO-Based FOPID Controller. <i>Sustainability</i> , 2021, 13, 11194.	1.6	19
28	Optimal design of passive power filter for enhancing the harmonic-constrained hosting capacity of renewable DG systems. <i>Computers and Electrical Engineering</i> , 2022, 97, 107646.	3.0	19
29	A Grid-connected Solar PV Module with Autonomous Power Management. , 2020, , .		17
30	Electric Vehicle Model Based on Multiple Recharge System and a Particular Traction Motor Conception. <i>IEEE Access</i> , 2021, 9, 49308-49324.	2.6	17
31	Water-Cycle-Algorithm-Tuned Intelligent Fuzzy Controller for Stability of Multi-Area Multi-Fuel Power System with Time Delays. <i>Mathematics</i> , 2022, 10, 508.	1.1	17
32	Improving voltage profile and reducing power losses based on reconfiguration and optimal placement of <sc>UPQC</sc> in the network by considering system reliability indices. <i>International Transactions on Electrical Energy Systems</i> , 2021, 31, e13120.	1.2	15
33	Improving the Sharing of Active and Reactive Power of the Islanded Microgrid Based on Load Voltage Control. <i>Smart Science</i> , 2022, 10, 142-157.	1.9	15
34	Feasibility of Solar Grid-Based Industrial Virtual Power Plant for Optimal Energy Scheduling: A Case of Indian Power Sector. <i>Energies</i> , 2022, 15, 752.	1.6	14
35	Calculation of Capacitive-Based Sensors of Rotating Shaft Vibration for Fault Diagnostic Systems of Powerful Generators. <i>Sensors</i> , 2022, 22, 1634.	2.1	14
36	Analysis of Power Quality issues of different types of household applications. <i>Energy Reports</i> , 2022, 8, 5370-5386.	2.5	14

#	ARTICLE	IF	CITATIONS
37	Influence of Artificial and Natural Cooling on Performance Parameters of a Solar PV System: A Case Study. <i>IEEE Access</i> , 2021, 9, 29449-29457.	2.6	13
38	Optimal Power Flow Solution in Smart Grid Environment Using SVC and TCSC. , 0, , .		12
39	Prospects of biogas and evaluation of unseen livestock based resource potential as distributed generation in India. <i>Ain Shams Engineering Journal</i> , 2022, 13, 101657.	3.5	12
40	A comparative analysis of control techniques of SAPF under source side disturbance. , 2016, , .		11
41	A global power quality index for assessment in distributed energy systems connected to a harmonically polluted network. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 0, , 1-27.	1.2	10
42	The Impact of Coil Position and Number on Wireless System Performance for Electric Vehicle Recharging. <i>Sensors</i> , 2021, 21, 4343.	2.1	10
43	An improved SRF based control algorithm for D-STATCOM under abnormal source voltage. , 2015, , .		9
44	Hybrid ROCOF Relay for Islanding Detection. <i>Journal of Electrical Engineering and Technology</i> , 2022, 17, 51-60.	1.2	9
45	Hardware-in-the-Loop Implementation and Performance Evaluation of Three-Phase Hybrid Shunt Active Power Filter for Power Quality Improvement. <i>Mathematical Problems in Engineering</i> , 2021, 2021, 1-23.	0.6	9
46	Design and analysis of optimal passive filters for increasing the harmonic-constrained hosting capacity of inverter-based DG systems in non-sinusoidal grids. <i>Electrical Engineering</i> , 2022, 104, 1883-1907.	1.2	9
47	Seagull Optimization Algorithm-Based Fractional-Order Fuzzy Controller for LFC of Multi-Area Diverse Source System With Realistic Constraints. <i>Frontiers in Energy Research</i> , 0, 10, , .	1.2	9
48	Performance assessment of hybrid active filtering technique to enhance the hosting capacity of distorted grids for renewable energy systems. <i>International Journal of Energy Research</i> , 2022, 46, 2783-2809.	2.2	8
49	Interconnection and damping assignment passivity-based non-linear observer control for efficiency maximization of permanent magnet synchronous motor. <i>Energy Reports</i> , 2022, 8, 1350-1361.	2.5	8
50	SMES and TCSC Coordinated Strategy for Multi-area Multi-source System with Water Cycle Algorithm Based 3DOF-PID Controller. <i>Smart Science</i> , 2023, 11, 1-15.	1.9	8
51	Reliability Analysis of Bifacial PV Panel-Based Inverters Considering the Effect of Geographical Location. <i>Energies</i> , 2022, 15, 170.	1.6	8
52	A hybrid machine learning technique for feature optimization in object-based classification of debris-covered glaciers. <i>Ain Shams Engineering Journal</i> , 2022, 13, 101809.	3.5	8
53	An IRP based control algorithm for load compensation by DSTATCOM under polluted supply system. , 2015, , .		7
54	A Streamlined Approach for Assessing the Power Quality in Renewable Energy Systems. , 2020, , .		7

#	ARTICLE	IF	CITATIONS
55	Faulted Section Identification and Fault Location in Power Network Based on Histogram Analysis of Three-phase Current and Voltage Modulated. <i>Journal of Electrical Engineering and Technology</i> , 2022, 17, 2631-2647.	1.2	7
56	A modified algorithm for time varying reactive power control and harmonics compensation by D-STATCOM. , 2015, , .		6
57	A single index for voltage quality ranking in the distribution power networks using multiple criteria decisionâ€™making. <i>International Transactions on Electrical Energy Systems</i> , 2021, 31, e12965.	1.2	6
58	Increasing renewable energy penetration in harmonically polluted distribution grids using passive filtering: a comparative assessment of common filter types. <i>Electrical Engineering</i> , 2022, 104, 2979-3005.	1.2	6
59	A Topological Advancement Review of Magnetically Coupled Impedance Source Network Configurations. <i>Sustainability</i> , 2022, 14, 3123.	1.6	6
60	Placement and optimal size of DG in the distribution network based on nodal pricing reduction with nonlinear load model using the IABC algorithm. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2022, 47, 1.	0.8	6
61	New direct reactive power control based fuzzy and modulated hysteresis method for micro-grid applications under real wind speed. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2022, 44, 4862-4887.	1.2	6
62	Optimal sizing and cost assessment of off grid connected hybrid microgrid system. , 2022, , .		6
63	A comparative study of control techniques of distribution-STATCOM under abnormal source voltage. , 2016, , .		5
64	An MCDM-based approach for ranking the voltage quality in the distribution power networks. , 2020, , .		5
65	Implementation of Islanding Recognizing Technique for Wind Distributed Generations Considering Insignificant NDZ. <i>Frontiers in Energy Research</i> , 2022, 10, .	1.2	5
66	Match-Level Fusion of Finger-Knuckle Print and Iris for Human Identity Validation Using Neuro-Fuzzy Classifier. <i>Sensors</i> , 2022, 22, 3620.	2.1	5
67	A Hybrid Approach for an Efficient Estimation and Control of Permanent Magnet Synchronous Motor with Fast Dynamics and Practically Unavailable Measurements. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4958.	1.3	5
68	Biogeography-Based Optimization for Power Quality Improvement in HRES System. <i>Lecture Notes in Electrical Engineering</i> , 2022, , 309-316.	0.3	4
69	Investigation and Field Measurements for Demand Side Management Control Technique of Smart Air Conditioners located at Residential, Commercial, and Industrial Sites. <i>Energies</i> , 2022, 15, 2482.	1.6	4
70	Mitigation of Circulating Bearing Current in Induction Motor Drive Using Modified ANN Based MRAS for Traction Application. <i>Mathematics</i> , 2022, 10, 1220.	1.1	4
71	Generalized regression neural network and fitness dependent optimization: Application to energy harvesting of centralized TEC systems. <i>Energy Reports</i> , 2022, 8, 6332-6346.	2.5	4
72	Analysis of Electric Vehicle Charging Station Allocation in Deregulated Electric Power System. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
73	Hybrid Local-Global Optimum Search Using Particle Swarm Gravitation Search Algorithm (HLGOS-PSGSA) for Waveguide Selection. IEEE Access, 2021, 9, 127866-127882.	2.6	3
74	Performance Comparison of Control Algorithms for Load Compensation Using D-STATCOM under Abnormal Source Voltage. Journal of Automation and Control Engineering, 2014, 2, 54-58.	0.3	3
75	Method for Calculation Controlled Compensating Devices Parameters Extra High Voltage Power Lines. , 2021, , .		3
76	Novel Energy-Based Speed Control of Grid-Connecting PMSG Wind System. , 2021, , .		3
77	Falcon Optimizer based PID Controller for AGC of Dual Area Realistic System with AC-DC Links. , 2021, , .		3
78	Effect of cryogenic treatment on drill tool for enhancing metal cutting operation of aluminium alloy IS737.Gr19000. Journal of Materials Research and Technology, 2022, 18, 1488-1501.	2.6	3
79	Passivity-Based Control of Tidal Turbine Based PMSG Using Interconnection and Damping Assignment Approach. Lecture Notes in Electrical Engineering, 2022, , 505-514.	0.3	3
80	Financial Hazard Assessment for Electricity Suppliers Due to Power Outages: The Revenue Loss Perspective. Energies, 2022, 15, 4327.	1.6	3
81	Capacitor voltage control of PV based quasi-z-source inverter. , 2022, , .		3
82	Performance Assessment of Lyapunov-Function based 3-Phase SAPF in Compensating Harmonics of Industrial Motor Drive. , 2021, , .		2
83	Simultaneous Competition Modeling of Generations and Consumers in the New Market Structure based on the Supply Function Equilibrium Model Systems. , 2021, , .		2
84	AGC of Multi Area Multi Fuel System with Water Cycle Algorithm based 3DOF-PID Controller and Integration of PEVs. , 2021, , .		2
85	Improved Deep Neural Network (IDNN) with SMO Algorithm for Enhancement of Third Zone Distance Relay under Power Swing Condition. Mathematics, 2022, 10, 1944.	1.1	2
86	Load Frequency Control of Multi-Area Power System with Integration of SMES and Plug-In Electric Vehicles. , 2022, , .		2
87	Decaying DC Offset Removal in Fault Current Signals of Digital Relays Based on LMSR Method. , 2021, , .		1
88	Optimal BLDC Motor Control Using a WOA-based LQR Strategy. , 2022, , .		1
89	Propitious Step for CO <sub>2</sub> Mitigation in University Campus boosting Clean Development Mechanism. , 2022, , .		1
90	Brushless Wound Rotor Synchronous Machine Based on a Consequent-Pole Rotor Structure with Better Torque Attributes. International Transactions on Electrical Energy Systems, 2022, 2022, 1-12.	1.2	1

#	ARTICLE	IF	CITATIONS
91	Predictive TCAD of Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) Solar Cells. , 2018, , .		0
92	Correction to "Optimal Design of Passive Power Filter Using Multi-Objective Pareto-Based Firefly Algorithm and Analysis Under Background and Load-Side's Nonlinearity" IEEE Access, 2021, 9, 45399-45399.	2.6	0
93	Determination of Technical Condition of the Power Transformer by Frequency Response Analysis Method. , 2021, , .		0
94	A Comparative Study of Short Channel Effects in 3-D FinFET with High-K Gate Di-electric. , 2021, , .		0
95	Performance Investigation of Innovative Induction Motor Strategy Using Magnet for Traction Application. International Transactions on Electrical Energy Systems, 2022, 2022, 1-15.	1.2	0