

# Om Prakash Mahela

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

133  
papers

1,623  
citations

21  
h-index

37  
g-index

173  
ext. papers

2,379  
ext. citations

4.2  
avg, IF

5.89  
L-index

#	Paper	IF	Citations
133	Comprehensive Overview of Power System Flexibility during the Scenario of High Penetration of Renewable Energy in Utility Grid. <i>Energies</i> , <b>2022</b> , 15, 516	3.1	7
132	Performance Evaluation of a MW-Size Grid-Connected Solar Photovoltaic Plant Considering the Impact of Tilt Angle. <i>Sustainability</i> , <b>2022</b> , 14, 1444	3.6	0
131	Analyzing the Association between Pattern and Returns Using Goodman&ruskal Prediction Error Reduction Index (I) <i>Complexity</i> , <b>2022</b> , 2022, 1-8	1.6	
130	Design and Performance Analysis of Hybrid Battery and Ultracapacitor Energy Storage System for Electrical Vehicle Active Power Management. <i>Sustainability</i> , <b>2022</b> , 14, 776	3.6	4
129	Identification and classification of faults using Stockwell transform and decision rule <b>2022</b> , 439-455		
128	Reactive power compensation for voltage variation mitigation in grid with renewable energy <b>2022</b> , 415-426		
127	DC smart micro grid protection system <b>2022</b> , 427-437		
126	Feasibility Analysis and Development of Stand-Alone Hybrid Power Generation System for Remote Areas: A Case Study of Ethiopian Rural Area. <i>Wind</i> , <b>2022</b> , 2, 68-86		2
125	Islanding detection in utility grid with renewable energy using rate of change of frequency and signal processing technique. <i>AIMS Electronics and Electrical Engineering</i> , <b>2022</b> , 6, 144-160	1	1
124	Integration of Renewable Based Distributed Generation for Distribution Network Expansion Planning. <i>Energies</i> , <b>2022</b> , 15, 1378	3.1	2
123	Mitigating Generation Schedule Deviation of Wind Farm Using Battery Energy Storage System. <i>Energies</i> , <b>2022</b> , 15, 1768	3.1	1
122	Optimal Placement of Renewable Energy Generators Using Grid-Oriented Genetic Algorithm for Loss Reduction and Flexibility Improvement. <i>Energies</i> , <b>2022</b> , 15, 1863	3.1	3
121	A Hybrid Signal Processing Technique for Recognition of Complex Power Quality Disturbances. <i>Electric Power Systems Research</i> , <b>2022</b> , 207, 107865	3.5	0
120	Human resource training to implement transmission schemes for renewable power evacuation in India. <i>Utilities Policy</i> , <b>2022</b> , 76, 101376	3.3	0
119	Restructuring of Transmission Network to Cater Load Demand in Northern Parts of Rajasthan Using Renewable Energy. <i>Algorithms for Intelligent Systems</i> , <b>2022</b> , 193-212	0.5	0
118	Multivariable passive method for detection of islanding events in renewable energy based power grids. <i>IET Renewable Power Generation</i> , <b>2022</b> , 16, 497-516	2.9	
117	Design and Implementation of Hybrid Transmission Line Protection Scheme Using Signal Processing Techniques. <i>International Transactions on Electrical Energy Systems</i> , <b>2022</b> , 2022, 1-20	2.2	1

116	Experimental Investigations on Particle Swarm Optimization Based Control Algorithm for Shunt Active Power Filter to Enhance Electric Power Quality. <i>IEEE Access</i> , <b>2022</b> , 10, 54878-54890	3.5	2
115	Mitigation of Low-Frequency Oscillation in Power Systems through Optimal Design of Power System Stabilizer Employing ALO. <i>Energies</i> , <b>2022</b> , 15, 3809	3.1	2
114	Automatic analysis of the heart sound signal to build smart healthcare system <b>2022</b> , 151-188		
113	Hybrid signal processing technique to design smart meter for detection of voltage amplitude disturbances <b>2022</b> , 361-377		0
112	Optimal integration of DSTATCOM using improved bacterial search algorithm for distribution network optimization. <i>AEJ - Alexandria Engineering Journal</i> , <b>2021</b> , 61, 5539-5539	6.1	2
111	Distribution network reliability enhancement and power loss reduction by optimal network reconfiguration. <i>Computers and Electrical Engineering</i> , <b>2021</b> , 96, 107518	4.3	5
110	Hybrid Algorithm for Detection of Events and Power Quality Disturbances Associated with Distribution Network in the Presence of Wind Energy <b>2021</b> ,		1
109	Voltage-Based Hybrid Algorithm Using Parameter Variations and Stockwell Transform for Islanding Detection in Utility Grids. <i>Informatics</i> , <b>2021</b> , 8, 21	2.2	4
108	Recognition of complex and multiple power quality disturbances using wavelet packet-based fast kurtogram and ruled decision tree algorithm. <i>International Journal of Modeling, Simulation, and Scientific Computing</i> , <b>2021</b> , 12, 2150032	0.8	0
107	Shade dispersion methodologies for performance improvement of classical total cross-tied photovoltaic array configuration under partial shading conditions. <i>IET Renewable Power Generation</i> , <b>2021</b> , 15, 1796-1811	2.9	5
106	Events Recognition and Power Quality Estimation in Distribution Network in the Presence of Solar PV Generation <b>2021</b> ,		1
105	A multivariable transmission line protection scheme using signal processing techniques. <i>IET Generation, Transmission and Distribution</i> , <b>2021</b> , 15, 3115	2.5	2
104	Development of arduino assisted data acquisition system for solar photovoltaic array characterization under partial shading conditions. <i>Computers and Electrical Engineering</i> , <b>2021</b> , 92, 107175	4.3	6
103	Reliability enhancement and voltage profile improvement of distribution network using optimal capacity allocation and placement of distributed energy resources. <i>Computers and Electrical Engineering</i> , <b>2021</b> , 93, 107295	4.3	7
102	Wavelet-Alienation-Neural-Based Protection Scheme for STATCOM Compensated Transmission Line. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 17, 2557-2565	11.9	16
101	Recognition of Power Quality Issues Associated With Grid Integrated Solar Photovoltaic Plant in Experimental Framework. <i>IEEE Systems Journal</i> , <b>2021</b> , 15, 3740-3748	4.3	14
100	. <i>IEEE Access</i> , <b>2021</b> , 9, 93781-93794	3.5	2
99	Analysing integration issues of the microgrid system with utility grid network. <i>International Journal of Emerging Electric Power Systems</i> , <b>2021</b> , 22, 113-127	1.4	3

98	. <i>IEEE Access</i> , <b>2021</b> , 9, 69798-69813	3.5	1
97	Protection Scheme using Wavelet-Alienation-Neural Technique for UPFC Compensated Transmission Line. <i>IEEE Access</i> , <b>2021</b> , 9, 13737-13753	3.5	5
96	A Novel $\$k\$$ -Means Clustering and Weighted $\$k\$$ -NN-Regression-Based Fast Transmission Line Protection. <i>IEEE Transactions on Industrial Informatics</i> , <b>2021</b> , 17, 6034-6043	11.9	4
95	A protection scheme for distribution utility grid with wind energy penetration. <i>Computers and Electrical Engineering</i> , <b>2021</b> , 94, 107324	4.3	2
94	A Fusion-Based Hybrid-Feature Approach for Recognition of Unconstrained Offline Handwritten Hindi Characters. <i>Future Internet</i> , <b>2021</b> , 13, 239	3.3	1
93	Effect of Various Incremental Conductance MPPT Methods on the Charging of Battery Load Feed by Solar Panel. <i>IEEE Access</i> , <b>2021</b> , 1-1	3.5	9
92	Harmonic mitigation and power quality improvement in utility grid with solar energy penetration using distribution static compensator. <i>IET Power Electronics</i> , <b>2021</b> , 14, 912-922	2.2	3
91	Internet of Things and Machine Learning for Improving Solar-PV Plant Efficiency <b>2021</b> , 279-296		
90	Higher Levels of Wind Energy Penetration into the Remote Grid <b>2021</b> , 261-277		
89	A Sustainable Building Lightning Solution for Energy Conservation in Different Geographical Conditions <b>2021</b> , 539-571		
88	Power Quality Mitigation in a Distribution Network Using a Battery Energy Storage System <b>2021</b> , 51-68		
87	Optimal expansion planning of distribution system using grid-based multi-objective harmony search algorithm. <i>Computers and Electrical Engineering</i> , <b>2020</b> , 87, 106823	4.3	20
86	Transmission Line Protection Scheme Based on Combined Features of Stockwell Transform and Hilbert Transform <b>2020</b> ,		1
85	Algorithm Based on Combined Features of Stockwell Transform and Hilbert Transform for Detection of Transmission Line Faults with Dynamic Load <b>2020</b> ,		1
84	Voltage Based Transmission Line Protection Algorithm Using Signal Processing Techniques <b>2020</b> ,		1
83	Wigner distribution function and alienation coefficient-based transmission line protection scheme. <i>IET Generation, Transmission and Distribution</i> , <b>2020</b> , 14, 1842-1853	2.5	29
82	Protection of Distribution Feeder Using Stockwell Transform Supported Voltage Features <b>2020</b> ,		1
81	Recognition of Power Quality Disturbances Using Hybrid Algorithm Based on Combined Features of Stockwell Transform and Hilbert Transform <b>2020</b> ,		2

80	Comprehensive Review of Distributed FACTS Control Algorithms for Power Quality Enhancement in Utility Grid With Renewable Energy Penetration. <i>IEEE Access</i> , <b>2020</b> , 8, 107614-107634	3.5	44
79	An Algorithm for Recognition of Fault Conditions in the Utility Grid with Renewable Energy Penetration. <i>Energies</i> , <b>2020</b> , 13, 2383	3.1	25
78	Development of Stand-Alone Green Hybrid System for Rural Areas. <i>Sustainability</i> , <b>2020</b> , 12, 3808	3.6	6
77	K-means Clustering and Linear Regression Based Protection Scheme for Transmission Line <b>2020</b> ,		1
76	A Protection Scheme for a Power System with Solar Energy Penetration. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 1516	2.6	21
75	Power Quality Assessment and Event Detection in Distribution Network With Wind Energy Penetration Using Stockwell Transform and Fuzzy Clustering. <i>IEEE Transactions on Industrial Informatics</i> , <b>2020</b> , 16, 6922-6932	11.9	60
74	Managing Energy Plus Performance in Data Centers and Battery-Based Devices Using an Online Non-Clairvoyant Speed-Bounded Multiprocessor Scheduling. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 2459	2.6	1
73	. <i>IEEE Access</i> , <b>2020</b> , 8, 229184-229200	3.5	9
72	Identification and Classification of Faults in Utility Grid with Solar Energy Using Discrete Wavelet Transform and Decision Rules <b>2020</b> ,		1
71	Recognition and Mitigation of Power Quality Disturbances in Renewable Energy Interfaced Hybrid Power Grid <b>2020</b> ,		1
70	Convolutional Neural Networks with Transfer Learning for Recognition of COVID-19: A Comparative Study of Different Approaches. <i>AI</i> , <b>2020</b> , 1, 586-606	3.6	8
69	Mitigation of power evacuation constraints associated with transmission system of Kawai-Kalisindh-Chhabra thermal power complex in Rajasthan, India. <i>AIMS Energy</i> , <b>2020</b> , 8, 394-420	1.8	1
68	Impressions of remote area electrification on social and economic indicators. <i>AIMS Energy</i> , <b>2020</b> , 8, 1045-1068	1.8	0
67	Detection and Analysis of Power System Faults in the Presence of Wind Power Generation Using Stockwell Transform Based Median. <i>Lecture Notes in Electrical Engineering</i> , <b>2020</b> , 319-329	0.2	2
66	Plant Biology-Inspired Genetic Algorithm: Superior Efficiency to Firefly Optimizer. <i>Springer Tracts in Nature-inspired Computing</i> , <b>2020</b> , 193-219	1.8	22
65	Plant Genetics-Inspired Evolutionary Optimization: A Descriptive Tutorial. <i>Springer Tracts in Nature-inspired Computing</i> , <b>2020</b> , 53-77	1.8	3
64	Tracing the Points in Search Space in Plant Biology Genetics Algorithm Optimization. <i>Springer Tracts in Nature-inspired Computing</i> , <b>2020</b> , 180-195	1.8	5
63	. <i>IEEE Access</i> , <b>2020</b> , 8, 181375-181403	3.5	24

62	Recognition of Complex Power Quality Disturbances Using S-Transform Based Ruled Decision Tree. <i>IEEE Access</i> , <b>2020</b> , 8, 173530-173547	3.5	15
61	Detection and Classification of Complex Power Quality Disturbances Using Hybrid Algorithm Based on Combined Features of Stockwell Transform and Hilbert Transform <b>2020</b> ,		2
60	Hybridization of the Stockwell Transform and Wigner Distribution Function to Design a Transmission Line Protection Scheme. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 7985	2.6	3
59	Transmission Line Protection Schemes Based on Wigner Distribution Function and Discrete Wavelet Transform <b>2020</b> ,		1
58	A Hybrid Fault Recognition Algorithm Using Stockwell Transform and Wigner Distribution Function for Power System Network with Solar Energy Penetration. <i>Energies</i> , <b>2020</b> , 13, 3519	3.1	18
57	Incremental Conductance Based Particle Swarm Optimization Algorithm for Global Maximum Power Tracking of Solar-PV under Nonuniform Operating Conditions. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 4575	2.6	15
56	A Current Based Hybrid Algorithm using Discrete Wavelet Transform and Hilbert Transform for Detection and Classification of Power System Faults in the Presence of Solar Energy <b>2020</b> ,		1
55	Harmonics Mitigation in Industrial Sector by using Space Vector PWM and Shunt Active Power Filter <b>2020</b> ,		3
54	Assessment of power quality in the utility grid integrated with wind energy generation. <i>IET Power Electronics</i> , <b>2020</b> , 13, 2917-2925	2.2	38
53	A Voltage Based Technique Using Combined Features of Stockwell Transform and Hilbert Transform for Detection of Islanding Events <b>2020</b> ,		1
52	Mendelian evolutionary theory optimization algorithm. <i>Soft Computing</i> , <b>2020</b> , 24, 14345-14390	3.5	13
51	Recognition of Islanding and Operational Events in Power System With Renewable Energy Penetration Using a Stockwell Transform-Based Method. <i>IEEE Systems Journal</i> , <b>2020</b> , 1-10	4.3	11
50	Comprehensive Review on Detection and Classification of Power Quality Disturbances in Utility Grid With Renewable Energy Penetration. <i>IEEE Access</i> , <b>2020</b> , 8, 146807-146830	3.5	49
49	Combined Stockwell and Hilbert Transforms Based Technique for the Detection of Islanding Events in Hybrid Power System <b>2020</b> ,		3
48	Alienation Coefficient and Wigner Distribution Function Based Protection Scheme for Hybrid Power System Network with Renewable Energy Penetration. <i>Energies</i> , <b>2020</b> , 13, 1120	3.1	23
47	A Current Based Algorithm Using Harmonic Wavelet Transform and Rule Based Decision Tree for Transmission Line Protection <b>2019</b> ,		1
46	Comprehensive Overview of Low Voltage Ride Through Methods of Grid Integrated Wind Generator. <i>IEEE Access</i> , <b>2019</b> , 7, 99299-99326	3.5	64
45	Power Quality Improvement in Renewable Energy Sources Based Power System Using DSTATCOM Supported by Battery Energy Storage System <b>2019</b> ,		2

44	<b>2019,</b>		1
43	Power quality assessment and event detection in hybrid power system. <i>Electric Power Systems Research</i> , <b>2018</b> , 161, 26-44	3.5	59
42	Recognition of Power Quality Disturbances Using Discrete Wavelet Transform and Fuzzy C-means Clustering <b>2018</b> ,		3
41	Detection and Classification of Complex Power Quality Disturbances Using Hilbert Transform and Rule Based Decision Tree <b>2018</b> ,		3
40	A Technique Using Stockwell Transform Based Median for Detection of Power System Faults <b>2018</b> ,		1
39	An Algorithm Based on Hilbert Transform and Rule Based Decision Tree Classification of Power Quality Disturbances <b>2018</b> ,		3
38	Detection and Classification of Transmission Line Faults Using Empirical Mode Decomposition and Rule Based Decision Tree Based Algorithm <b>2018</b> ,		3
37	Detection of Saturation of Core of Current Transformer Using Combined Feature of Hilbert Transform and Stockwell Transform <b>2018</b> ,		1
36	Detection and Classification of Power System Faults using Discrete Wavelet Transform and Rule Based Decision Tree <b>2018</b> ,		2
35	Detection of Power Quality Disturbances in Utility Grid with Solar Photovoltaic Energy Penetration <b>2018</b> ,		3
34	Detection and Classification of Complex Power Quality Disturbances Using Stockwell Transform and Rule Based Decision Tree <b>2018</b> ,		10
33	Detection and Classification of Transmission Line Faults Using Stockwell Transform and Rule Based Decision Tree <b>2018</b> ,		2
32	Detection of Power System Faults in Distribution System Using Stockwell Transform <b>2018</b> ,		5
31	A Stockwell Transform Based Approach for Detection of Transmission Line Faults in the Presence of Thyristor Controlled Reactor <b>2018</b> ,		5
30	Recognition of power quality disturbances using S-transform based ruled decision tree and fuzzy C-means clustering classifiers. <i>Applied Soft Computing Journal</i> , <b>2017</b> , 59, 243-257	7.5	68
29	Power quality recognition in distribution system with solar energy penetration using S-transform and Fuzzy C-means clustering. <i>Renewable Energy</i> , <b>2017</b> , 106, 37-51	8.1	56
28	Experimental investigation of power quality disturbances associated with grid integrated wind energy system <b>2017</b> ,		2
27	Comprehensive overview of grid interfaced solar photovoltaic systems. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 68, 316-332	16.2	84

26	Implementation of Thyristor controlled series capacitor in transmission system to improve the performance of power system network <b>2017</b> ,		5
25	Impact of grid disturbances on the output of grid connected solar photovoltaic system <b>2016</b> ,		5
24	Detection of transmission line faults using discrete wavelet transform <b>2016</b> ,		14
23	Recognition of power quality disturbances using S-transform and Fuzzy C-means clustering <b>2016</b> ,		10
22	Detection of transmission line faults in the presence of solar PV generation using discrete wavelet <b>2016</b> ,		4
21	Detection of transmission line faults in the presence of thyristor controlled reactor using discrete wavelet transform <b>2016</b> ,		2
20	Optimal capacitor placement in distribution system using genetic algorithm <b>2016</b> ,		5
19	Detection of transmission line faults in the presence of solar PV system using stockwell's transform <b>2016</b> ,		3
18	Reactive power flow control using Static VAR Compensator to improve voltage stability in transmission system <b>2016</b> ,		8
17	Detection of transmission line faults in the presence of wind power generation using discrete wavelet transform <b>2016</b> ,		2
16	Topological aspects of power quality improvement techniques: A comprehensive overview. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 58, 1129-1142	16.2	78
15	Comprehensive overview of grid interfaced wind energy generation systems. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 57, 260-281	16.2	86
14	Detection of Power quality disturbances using discrete wavelet transform <b>2016</b> ,		3
13	Recognition of power quality disturbances using S-transform and rule-based decision tree <b>2016</b> ,		8
12	Power quality improvement in distribution network using DSTATCOM with battery energy storage system. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2016</b> , 83, 229-240	5.1	72
11	A review of distribution static compensator. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 50, 531-546	16.2	45
10	Detection of power quality events associated with grid integration of 100kW solar PV plant <b>2015</b> ,		21
9	A critical review of detection and classification of power quality events. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 41, 495-505	16.2	211

8	Power Quality Detection in Distribution System with Wind Energy Penetration Using Discrete Wavelet Transform <b>2015,</b>	25
7	Analysis of capacitor cells failure due to circuit breaker pole discrepancy in RRVPNL power grid <b>2014,</b>	1
6	A double input SMV controlled DC/DC buck-boost converter for solar PV/wind energy sources <b>2014</b>	4
5	Analysis of high voltage shunt capacitor bank on reduced capacity: The case of RRVPNL power grid <b>2013,</b>	1
4	Optimal Capacitor Placement Techniques in Transmission and Distribution Networks to Reduce Line Losses and Voltage Stability Enhancement: A Review. <i>IOSR Journal of Electrical and Electronics Engineering</i> , <b>2012</b> , 3, 01-08	5
3	Mendelian Evolutionary Theory Optimization Algorithm	2
2	Mendelian Evolutionary Theory Optimization Algorithm	4
1	Capacity-based optimization using whale optimization technique of a power distribution network. <i>Engineering Reports</i> ,e12455	1.2