Masood Parvania

List of Publications by Year
in descending order

117 papers	3,159 citations	201385 27 h-index	182168 51 g-index
117 all docs	117 docs citations	117 times ranked	2497 citing authors

#	Article	IF	Citations
1	Demand Response Scheduling by Stochastic SCUC. IEEE Transactions on Smart Grid, 2010, 1, 89-98.	6.2	373
2	Optimal Demand Response Aggregation in Wholesale Electricity Markets. IEEE Transactions on Smart Grid, 2013, 4, 1957-1965.	6.2	330
3	Optimized Sectionalizing Switch Placement Strategy in Distribution Systems. IEEE Transactions on Power Delivery, 2012, 27, 362-370.	2.9	164
4	A Systematic Review of Quantitative Resilience Measures for Water Infrastructure Systems. Water (Switzerland), 2018, 10, 164.	1.2	126
5	Optimal Coordination of Water Distribution Energy Flexibility With Power Systems Operation. IEEE Transactions on Smart Grid, 2019, 10, 1101-1110.	6.2	104
6	Integrating Load Reduction Into Wholesale Energy Market With Application to Wind Power Integration. IEEE Systems Journal, 2012, 6, 35-45.	2.9	99
7	ISO's Optimal Strategies for Scheduling the Hourly Demand Response in Day-Ahead Markets. IEEE Transactions on Power Systems, 2014, 29, 2636-2645.	4.6	98
8	Comparative Hourly Scheduling of Centralized and Distributed Storage in Day-Ahead Markets. IEEE Transactions on Sustainable Energy, 2014, 5, 729-737.	5.9	82
9	Optimal Demand Response Scheduling for Water Distribution Systems. IEEE Transactions on Industrial Informatics, 2018, 14, 5112-5122.	7.2	67
10	Deliverable Energy Flexibility Scheduling for Active Distribution Networks. IEEE Transactions on Smart Grid, 2020, 11, 655-664.	6.2	65
11	Unit Commitment With Continuous-Time Generation and Ramping Trajectory Models. IEEE Transactions on Power Systems, 2016, 31, 3169-3178.	4.6	57
12	Intelligent Damage Classification and Estimation in Power Distribution Poles Using Unmanned Aerial Vehicles and Convolutional Neural Networks. IEEE Transactions on Smart Grid, 2020, 11, 3325-3333.	6.2	53
13	A Two-Stage Framework for Power Transformer Asset Maintenance Management—Part I: Models and Formulations. IEEE Transactions on Power Systems, 2013, 28, 1395-1403.	4.6	51
14	The plug-in electric vehicles for power system applications: The vehicle to grid (V2G) concept. , 2012, , .		47
15	Adversarial Semi-Supervised Learning for Diagnosing Faults and Attacks in Power Grids. IEEE Transactions on Smart Grid, 2021, 12, 3468-3478.	6.2	47
16	Optimized Midterm Preventive Maintenance Outage Scheduling of Thermal Generating Units. IEEE Transactions on Power Systems, 2012, 27, 1354-1365.	4.6	41
17	A survey on mobile energy storage systems (MESS): Applications, challenges and solutions. Renewable and Sustainable Energy Reviews, 2014, 40, 161-170.	8.2	40
18	Stochastic flexible transmission operation for coordinated integration of plug-in electric vehicles and renewable energy sources. Applied Energy, 2019, 238, 225-238.	5.1	40

#	ARTICLE	IF	CITATIONS
19	Look-Ahead Optimal Participation of Compressed Air Energy Storage in Day-Ahead and Real-Time Markets. IEEE Transactions on Sustainable Energy, 2020, 11, 682-692.	5.9	37
20	Continuous-Time Marginal Pricing of Electricity. IEEE Transactions on Power Systems, 2017, 32, 1960-1969.	4.6	35
21	Optimal Coordinated Operation of Interdependent Power and Water Distribution Systems. IEEE Transactions on Smart Grid, 2020, 11, 4784-4794.	6.2	35
22	Stochastic Transmission Impedance Control for Enhanced Wind Energy Integration. IEEE Transactions on Sustainable Energy, 2018, 9, 1108-1117.	5.9	34
23	Optimal Participation of Water Desalination Plants in Electricity Demand Response and Regulation Markets. IEEE Systems Journal, 2020, 14, 3729-3739.	2.9	34
24	Spatio-Temporal Electric Bus Charging Optimization With Transit Network Constraints. IEEE Transactions on Industry Applications, 2020, 56, 5741-5749.	3.3	34
25	Hybrid Control Network Intrusion Detection Systems for Automated Power Distribution Systems. , 2014, , .		33
26	Flexibility Scheduling for Large Customers. IEEE Transactions on Smart Grid, 2019, 10, 371-379.	6.2	31
27	Advanced charging infrastructure for enabling electrified transportation. Electricity Journal, 2019, 32, 21-26.	1.3	29
28	Flexibility Reserve in Power Systems: Definition and Stochastic Multi-Fidelity Optimization. IEEE Transactions on Smart Grid, 2020, 11, 644-654.	6.2	29
29	Wildfire Risk Mitigation: A Paradigm Shift in Power Systems Planning and Operation. IEEE Open Access Journal of Power and Energy, 2020, 7, 366-375.	2.5	29
30	Stochastic Charging Optimization of V2G-Capable PEVs: A Comprehensive Model for Battery Aging and Customer Service Quality. IEEE Transactions on Transportation Electrification, 2020, 6, 1026-1034.	5.3	29
31	Scheduling and Pricing of Load Flexibility in Power Systems. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 645-656.	7.3	28
32	Quantifying impacts of automation on resilience of distribution systems. IET Smart Grid, 2020, 3, 144-152.	1.5	27
33	Scheduling and Pricing of Energy Generation and Storage in Power Systems. IEEE Transactions on Power Systems, 2018, 33, 4308-4322.	4.6	26
34	Assessing impacts of energy storage on resilience of distribution systems against hurricanes. Journal of Modern Power Systems and Clean Energy, 2019, 7, 731-740.	3.3	26
35	Probabilistic Optimal Dynamic Planning of Onsite Solar Generation for Residential Energy Hubs. IEEE Systems Journal, 2020, 14, 832-841.	2.9	26
36	Resilient Operation of Distribution Grids Using Deep Reinforcement Learning. IEEE Transactions on Industrial Informatics, 2022, 18, 2100-2109.	7.2	26

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37	Integrated Cyber and Physical Anomaly Location and Classification in Power Distribution Systems. IEEE Transactions on Industrial Informatics, 2021, 17, 7040-7049.	7.2	26
38	Continuous-time Model Predictive Control for Real-time Flexibility Scheduling of Plugin Electric Vehicles. IFAC-PapersOnLine, 2018, 51, 498-503.	0.5	25
39	Preparatory Operation of Automated Distribution Systems for Resilience Enhancement of Critical Loads. IEEE Transactions on Power Delivery, 2021, 36, 2354-2362.	2.9	25
40	Data-Driven Risk Analysis of Joint Electric Vehicle and Solar Operation in Distribution Networks. IEEE Open Access Journal of Power and Energy, 2020, 7, 141-150.	2.5	24
41	Artificial intelligence for resilience enhancement of power distribution systems. Electricity Journal, 2021, 34, 106880.	1.3	24
42	A hybrid network IDS for protective digital relays in the power transmission grid. , 2014, , .		22
43	Generation Ramping Valuation in Day-Ahead Electricity Markets. , 2016, , .		22
44	Integrating water distribution energy flexibility in power systems operation. , 2017, , .		22
45	Contribution of FACTS devices in power systems security using MILPâ€based OPF. IET Generation, Transmission and Distribution, 2018, 12, 3744-3755.	1.4	22
46	A Two-Stage Framework for Power Transformer Asset Maintenance Managementâ€"Part II: Validation Results. IEEE Transactions on Power Systems, 2013, 28, 1404-1414.	4.6	21
47	Stochastic riskâ€based flexibility scheduling for large customers with onsite solar generation. IET Renewable Power Generation, 2019, 13, 2705-2714.	1.7	19
48	Comprehensive control framework for ensuring loading margin of power systems considering demand-side participation. IET Generation, Transmission and Distribution, 2012, 6, 1189-1201.	1.4	18
49	Demand response participation in wholesale energy markets. , 2012, , .		18
50	Stochastic Spatio-Temporal Hurricane Impact Analysis for Power Grid Resilience Studies. , 2019, , .		18
51	Coordinated deliverable energy flexibility and regulation capacity of distribution networks. International Journal of Electrical Power and Energy Systems, 2020, 123, 106219.	3.3	18
52	The Cyberphysical Power System Resilience Testbed: Architecture and Applications. Computer, 2020, 53, 44-54.	1.2	17
53	Attack Detection in Power Distribution Systems Using a Cyber-Physical Real-Time Reference Model. IEEE Transactions on Smart Grid, 2022, 13, 1490-1499.	6.2	17
54	Assessing impact of demand response in emission-constrained environments. , 2011, , .		16

#	ARTICLE	IF	CITATIONS
55	Reliability Modeling Considerations for Emerging Cyber-Physical Power Systems. , 2018, , .		14
56	Stochastic Multi-Fidelity Scheduling of Flexibility Reserve for Energy Storage. IEEE Transactions on Sustainable Energy, 2020, 11, 1438-1450.	5.9	14
57	Clustered multi-node learning of electric vehicle charging flexibility. Applied Energy, 2021, 282, 116125.	5.1	14
58	Stochastic Scheduling of Onsite Solar Power Generation for Large Customers. , 2018, , .		13
59	Continuous-time optimal charging control of plug-in Electric Vehicles. , 2018, , .		13
60	Continuous-time look-ahead flexible ramp scheduling in real-time operation. International Journal of Electrical Power and Energy Systems, 2020, 119, 105895.	3.3	13
61	Optimal production scheduling for smart manufacturers with application to food production planning. Computers and Electrical Engineering, 2020, 84, 106609.	3.0	13
62	Reliability-constrained unit commitment using stochastic mixed-integer programming. , 2010, , .		11
63	Cloud Based Intrusion Detection and Prevention System for Industrial Control Systems Using Software Defined Networking. , 2019, , .		11
64	Optimal Planning of Distributed Battery Energy Storage Systems in Unbalanced Distribution Networks. IEEE Systems Journal, 2022, 16, 1194-1205.	2.9	11
65	Decentralized Moving Target Defense for Microgrid Protection Against False-Data Injection Attacks. IEEE Transactions on Smart Grid, 2022, 13, 3700-3710.	6.2	11
66	Continuous-Time Locational Marginal Price of Electricity. IEEE Access, 2019, 7, 129480-129493.	2.6	10
67	Automated Switching Operation for Resilience Enhancement of Distribution Systems. , 2019, , .		10
68	Hydrothermal scheduling in the continuous-time framework. Electric Power Systems Research, 2020, 189, 106787.	2.1	10
69	Energy storage in the western interconnection: Current adoption, trends and modeling challenges. , 2017, , .		9
70	Probabilistic Impact Analysis of Residential Electric Vehicle Charging on Distribution Transformers. , 2018, , .		9
71	Supercapacitor for High-Dynamic Load Management in MVDC Shipboard Power Systems. , 2019, , .		9
72	Wireless-Sensor Network Topology Optimization in Complex Terrain: A Bayesian Approach. IEEE Internet of Things Journal, 2021, 8, 17429-17435.	5.5	9

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73	Continuous-time Look-Ahead Scheduling of Energy Storage in Regulation Markets. , 2019, , .		9
74	Characterizing Probability of Wildfire Ignition Caused by Power Distribution Lines. IEEE Transactions on Power Delivery, 2021, 36, 3681-3688.	2.9	9
75	Data‑driven spatio‑temporal analysis of wildfire risk to power systems operation. IET Generation, Transmission and Distribution, 2022, 16, 2531-2546.	1.4	9
76	Integrated water-power system resiliency quantification, challenge and opportunity. Energy Strategy Reviews, 2022, 39, 100796.	3.3	8
77	Continuous-Time Stochastic Modeling and Estimation of Electricity Load. , 2018, , .		7
78	Continuous-Time Look-Ahead Optimization of Energy Storage in Real-Time Balancing and Regulation Markets. IEEE Systems Journal, 2021, 15, 3230-3237.	2.9	7
79	Risk-Based Operation Coordination of Water Desalination and Renewable-Rich Power Systems. IEEE Transactions on Power Systems, 2023, 38, 1162-1175.	4.6	7
80	From loss allocation to loss cost allocation: a comparative study of different loss cost allocation methods. International Transactions on Electrical Energy Systems, 2013, 23, 586-600.	1.2	6
81	Optimal Participation of Compressed Air Energy Storage in Energy and Ancillary Service Markets. , 2018, , .		6
82	Interactive Visualization of Interdependent Power and Water Infrastructure Operation. , 2020, , .		6
83	Smart parking lot to minimize residential grid losses based on customer priorities. , 2013, , .		5
84	The pulse coupled phasor measurement units. , 2014, , .		5
85	Dynamics-aware Continuous-time Economic Dispatch and Optimal Automatic Generation Control. , 2020, , .		5
86	Moving Target Defense for Cyber‑Physical Systems Using IoT-Enabled Data Replication. IEEE Internet of Things Journal, 2022, 9, 13223-13232.	5.5	5
87	Guest Editorial Power Grid Resilience. IEEE Transactions on Smart Grid, 2016, 7, 2805-2806.	6.2	4
88	Continuous-Time Day-Ahead Operation of Multienergy Systems. IEEE Systems Journal, 2021, 15, 5595-5605.	2.9	4
89	Deploying Water Treatment Energy Flexibility in Power Distribution Systems Operation. , 2020, , .		4
90	Impact of COVID-19 on Mobility and Electric Vehicle Charging Load. , 2021, , .		4

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91	Resilience Analytics for Interdependent Power and Water Distribution Systems. IEEE Transactions on Power Systems, 2022, 37, 4244-4257.	4.6	4
92	Coordinated operation of pumped-storage hydropower with power and water distribution systems. International Journal of Electrical Power and Energy Systems, 2022, 142, 108297.	3.3	4
93	ISO's optimal strategies for scheduling the hourly demand response in day-ahead markets. , 2015, , .		3
94	Flexibility Scheduling for Large Customers. , 2018, , .		3
95	Continuous-time Flexible Ramp Scheduling in Forward Power Systems Operation. , 2019, , .		3
96	Multi-Task Gaussian Process Learning for Energy Forecasting in IoT-Enabled Electric Vehicle Charging Infrastructure. , 2020, , .		3
97	Asynchronous Distributed IoT-Enabled Customer Characterization in Distribution Networks: Theory and Hardware Implementation. IEEE Transactions on Smart Grid, 2022, 13, 4392-4404.	6.2	3
98	A Method to Calculate the Linear Load Pay Back Factors for Air Conditioners. , 2012, , .		2
99	Spatio-Temporal Value of Energy Storage in Transmission Networks. IEEE Systems Journal, 2020, 14, 3855-3864.	2.9	2
100	Online Algorithms for Dynamic Matching Markets in Power Distribution Systems. , 2021, 5, 995-1000.		2
101	Continuous Hydrothermal Flexibility Coordination Under Wind Power Uncertainty. IEEE Transactions on Sustainable Energy, 2022, , 1-1.	5.9	2
102	Incorporating Two-Part Real-Time Pricing Scheme into Distribution System Operation. , 2014, , .		1
103	Incorporating time-varying electricity rates into day-ahead distribution system operation. , 2014, , .		1
104	Unit commitment with continuous-time generation and ramping trajectory models. , 2016, , .		1
105	Optimal Coordination of Energy Storage and Generation Flexibility in Transmission Networks. , 2019, , .		1
106	Worst-Case Probabilistic Network Outage Identification Under Physical Disturbances. , 2020, 4, 115-120.		1
107	Dynamic Matching in Power Systems using Model Predictive Control. , 2021, , .		1
108	IoT-Enabled Decentralized Moving Target Defense for Enhancing Privacy in Microgrid Control. , 2022, , .		1

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109	Risk-based Operation of Power Networks with Hybrid Energy Systems. , 2022, , .		1
110	Continuous-time marginal pricing of electricity. , 2017, , .		0
111	Optimal Production Scheduling for Smart Manufacturers. , 2018, , .		0
112	Toward a 21st Century Power Education: A Bright Future Awaits Students in Utah. IEEE Power and Energy Magazine, 2018, 16, 87-95.	1.6	0
113	Guest Editorial: Demand Side Management and Market Design for Renewable Energy Support and Integration. IET Renewable Power Generation, 2019, 13, 801-801.	1.7	0
114	Scheduling and Pricing of Energy Generation and Storage in Power Systems. , 2019, , .		0
115	Spatio-Temporal Visualization of Interdependent Battery Bus Transit and Power Distribution Systems. , 2021, , .		0
116	Flexibility Reserve in Power Systems: Definition and Stochastic Multi-Fidelity Optimization. , 2020, , .		0
117	Implementation of IEEE Standard 1547-2018 for DER Communication Interface using Data Distribution Service. , 2020, , .		0