Masood Parvania

List of Publications by Year
in descending order

117 papers	3,159 citations	201575 27 h-index	182361 51 g-index
117 all docs	117 docs citations	117 times ranked	2497 citing authors

#	Article	IF	Citations
1	Risk-Based Operation Coordination of Water Desalination and Renewable-Rich Power Systems. IEEE Transactions on Power Systems, 2023, 38, 1162-1175.	4.6	7
2	Optimal Planning of Distributed Battery Energy Storage Systems in Unbalanced Distribution Networks. IEEE Systems Journal, 2022, 16, 1194-1205.	2.9	11
3	Resilient Operation of Distribution Grids Using Deep Reinforcement Learning. IEEE Transactions on Industrial Informatics, 2022, 18, 2100-2109.	7.2	26
4	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
5	Integrated water-power system resiliency quantification, challenge and opportunity. Energy Strategy Reviews, 2022, 39, 100796.	3.3	8
6	Moving Target Defense for Cyber–Physical Systems Using IoT-Enabled Data Replication. IEEE Internet of Things Journal, 2022, 9, 13223-13232.	5.5	5
7	Resilience Analytics for Interdependent Power and Water Distribution Systems. IEEE Transactions on Power Systems, 2022, 37, 4244-4257.	4.6	4
8	Data‐driven spatio‐temporal analysis of wildfire risk to power systems operation. IET Generation, Transmission and Distribution, 2022, 16, 2531-2546.	1.4	9
9	Continuous Hydrothermal Flexibility Coordination Under Wind Power Uncertainty. IEEE Transactions on Sustainable Energy, 2022, , 1-1.	5.9	2
10	Decentralized Moving Target Defense for Microgrid Protection Against False-Data Injection Attacks. IEEE Transactions on Smart Grid, 2022, 13, 3700-3710.	6.2	11
11	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
12	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
13	IoT-Enabled Decentralized Moving Target Defense for Enhancing Privacy in Microgrid Control. , 2022, , .		1
14	Risk-based Operation of Power Networks with Hybrid Energy Systems. , 2022, , .		1
15	Continuous-Time Day-Ahead Operation of Multienergy Systems. IEEE Systems Journal, 2021, 15, 5595-5605.	2.9	4
16	Online Algorithms for Dynamic Matching Markets in Power Distribution Systems. , 2021, 5, 995-1000.		2
17	Clustered multi-node learning of electric vehicle charging flexibility. Applied Energy, 2021, 282, 116125.	5.1	14
18	Artificial intelligence for resilience enhancement of power distribution systems. Electricity Journal, 2021, 34, 106880.	1.3	24

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19	Preparatory Operation of Automated Distribution Systems for Resilience Enhancement of Critical Loads. IEEE Transactions on Power Delivery, 2021, 36, 2354-2362.	2.9	25
20	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
21	Wireless-Sensor Network Topology Optimization in Complex Terrain: A Bayesian Approach. IEEE Internet of Things Journal, 2021, 8, 17429-17435.	5.5	9
22	Spatio-Temporal Visualization of Interdependent Battery Bus Transit and Power Distribution Systems. , 2021, , .		0
23	Adversarial Semi-Supervised Learning for Diagnosing Faults and Attacks in Power Grids. IEEE Transactions on Smart Grid, 2021, 12, 3468-3478.	6.2	47
24	Integrated Cyber and Physical Anomaly Location and Classification in Power Distribution Systems. IEEE Transactions on Industrial Informatics, 2021, 17, 7040-7049.	7.2	26
25	Characterizing Probability of Wildfire Ignition Caused by Power Distribution Lines. IEEE Transactions on Power Delivery, 2021, 36, 3681-3688.	2.9	9
26	Impact of COVID-19 on Mobility and Electric Vehicle Charging Load. , 2021, , .		4
27	Dynamic Matching in Power Systems using Model Predictive Control. , 2021, , .		1
28	Probabilistic Optimal Dynamic Planning of Onsite Solar Generation for Residential Energy Hubs. IEEE Systems Journal, 2020, 14, 832-841.	2.9	26
29	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
30	Stochastic Multi-Fidelity Scheduling of Flexibility Reserve for Energy Storage. IEEE Transactions on Sustainable Energy, 2020, 11, 1438-1450.	5.9	14
31	Worst-Case Probabilistic Network Outage Identification Under Physical Disturbances. , 2020, 4, 115-120.		1
32	Deliverable Energy Flexibility Scheduling for Active Distribution Networks. IEEE Transactions on Smart Grid, 2020, 11, 655-664.	6.2	65
33	Flexibility Reserve in Power Systems: Definition and Stochastic Multi-Fidelity Optimization. IEEE Transactions on Smart Grid, 2020, 11, 644-654.	6.2	29
34	Optimal Participation of Water Desalination Plants in Electricity Demand Response and Regulation Markets. IEEE Systems Journal, 2020, 14, 3729-3739.	2.9	34
35	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
36	Dynamics-aware Continuous-time Economic Dispatch and Optimal Automatic Generation Control. , 2020, , .		5

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37	Hydrothermal scheduling in the continuous-time framework. Electric Power Systems Research, 2020, 189, 106787.	2.1	10
38	Multi-Task Gaussian Process Learning for Energy Forecasting in IoT-Enabled Electric Vehicle Charging Infrastructure. , 2020, , .		3
39	The Cyberphysical Power System Resilience Testbed: Architecture and Applications. Computer, 2020, 53, 44-54.	1.2	17
40	Interactive Visualization of Interdependent Power and Water Infrastructure Operation. , 2020, , .		6
41	Quantifying impacts of automation on resilience of distribution systems. IET Smart Grid, 2020, 3, 144-152.	1.5	27
42	Optimal Coordinated Operation of Interdependent Power and Water Distribution Systems. IEEE Transactions on Smart Grid, 2020, 11, 4784-4794.	6.2	35
43	Spatio-Temporal Electric Bus Charging Optimization With Transit Network Constraints. IEEE Transactions on Industry Applications, 2020, 56, 5741-5749.	3.3	34
44	Coordinated deliverable energy flexibility and regulation capacity of distribution networks. International Journal of Electrical Power and Energy Systems, 2020, 123, 106219.	3.3	18
45	Deploying Water Treatment Energy Flexibility in Power Distribution Systems Operation. , 2020, , .		4
46	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
47	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
48	Spatio-Temporal Value of Energy Storage in Transmission Networks. IEEE Systems Journal, 2020, 14, 3855-3864.	2.9	2
49	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
50	Optimal production scheduling for smart manufacturers with application to food production planning. Computers and Electrical Engineering, 2020, 84, 106609.	3.0	13
51	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
52	Flexibility Reserve in Power Systems: Definition and Stochastic Multi-Fidelity Optimization. , 2020, , .		0
53	Implementation of IEEE Standard 1547-2018 for DER Communication Interface using Data Distribution Service. , 2020, , .		0
54	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

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55	Supercapacitor for High-Dynamic Load Management in MVDC Shipboard Power Systems. , 2019, , .		9
56	Stochastic Spatio-Temporal Hurricane Impact Analysis for Power Grid Resilience Studies. , 2019, , .		18
57	Continuous-Time Locational Marginal Price of Electricity. IEEE Access, 2019, 7, 129480-129493.	2.6	10
58	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
59	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
60	Advanced charging infrastructure for enabling electrified transportation. Electricity Journal, 2019, 32, 21-26.	1.3	29
61	Automated Switching Operation for Resilience Enhancement of Distribution Systems. , 2019, , .		10
62	Stochastic riskâ€based flexibility scheduling for large customers with onsite solar generation. IET Renewable Power Generation, 2019, 13, 2705-2714.	1.7	19
63	Continuous-time Flexible Ramp Scheduling in Forward Power Systems Operation. , 2019, , .		3
64	Cloud Based Intrusion Detection and Prevention System for Industrial Control Systems Using Software Defined Networking. , 2019, , .		11
65	Optimal Coordination of Energy Storage and Generation Flexibility in Transmission Networks. , 2019, , .		1
66	Scheduling and Pricing of Energy Generation and Storage in Power Systems. , 2019, , .		0
67	Flexibility Scheduling for Large Customers. IEEE Transactions on Smart Grid, 2019, 10, 371-379.	6.2	31
68	Optimal Coordination of Water Distribution Energy Flexibility With Power Systems Operation. IEEE Transactions on Smart Grid, 2019, 10, 1101-1110.	6.2	104
69	Continuous-time Look-Ahead Scheduling of Energy Storage in Regulation Markets. , 2019, , .		9
70	Stochastic Transmission Impedance Control for Enhanced Wind Energy Integration. IEEE Transactions on Sustainable Energy, 2018, 9, 1108-1117.	5.9	34
71	Scheduling and Pricing of Energy Generation and Storage in Power Systems. IEEE Transactions on Power Systems, 2018, 33, 4308-4322.	4.6	26
72	Optimal Demand Response Scheduling for Water Distribution Systems. IEEE Transactions on Industrial Informatics, 2018, 14, 5112-5122.	7.2	67

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73	Probabilistic Impact Analysis of Residential Electric Vehicle Charging on Distribution Transformers. , 2018, , .		9
74	Continuous-Time Stochastic Modeling and Estimation of Electricity Load. , 2018, , .		7
75	Optimal Production Scheduling for Smart Manufacturers. , 2018, , .		0
76	Continuous-time Model Predictive Control for Real-time Flexibility Scheduling of Plugin Electric Vehicles. IFAC-PapersOnLine, 2018, 51, 498-503.	0.5	25
77	Stochastic Scheduling of Onsite Solar Power Generation for Large Customers. , 2018, , .		13
78	Flexibility Scheduling for Large Customers. , 2018, , .		3
79	Reliability Modeling Considerations for Emerging Cyber-Physical Power Systems. , 2018, , .		14
80	Optimal Participation of Compressed Air Energy Storage in Energy and Ancillary Service Markets. , 2018, , .		6
81	Scheduling and Pricing of Load Flexibility in Power Systems. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 645-656.	7.3	28
82	Contribution of FACTS devices in power systems security using MILPâ€based OPF. IET Generation, Transmission and Distribution, 2018, 12, 3744-3755.	1.4	22
83	A Systematic Review of Quantitative Resilience Measures for Water Infrastructure Systems. Water (Switzerland), 2018, 10, 164.	1.2	126
84	Continuous-time optimal charging control of plug-in Electric Vehicles. , 2018, , .		13
85	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
86	Continuous-Time Marginal Pricing of Electricity. IEEE Transactions on Power Systems, 2017, 32, 1960-1969.	4.6	35
87	Energy storage in the western interconnection: Current adoption, trends and modeling challenges. , 2017, , .		9
88	Integrating water distribution energy flexibility in power systems operation. , 2017, , .		22
89	Continuous-time marginal pricing of electricity. , 2017, , .		0
90	Unit commitment with continuous-time generation and ramping trajectory models. , 2016, , .		1

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91	Guest Editorial Power Grid Resilience. IEEE Transactions on Smart Grid, 2016, 7, 2805-2806.	6.2	4
92	Generation Ramping Valuation in Day-Ahead Electricity Markets. , 2016, , .		22
93	Unit Commitment With Continuous-Time Generation and Ramping Trajectory Models. IEEE Transactions on Power Systems, 2016, 31, 3169-3178.	4.6	57
94	ISO's optimal strategies for scheduling the hourly demand response in day-ahead markets. , 2015, , .		3
95	Incorporating Two-Part Real-Time Pricing Scheme into Distribution System Operation. , 2014, , .		1
96	The pulse coupled phasor measurement units. , 2014, , .		5
97	A hybrid network IDS for protective digital relays in the power transmission grid. , 2014, , .		22
98	Hybrid Control Network Intrusion Detection Systems for Automated Power Distribution Systems. , 2014, , .		33
99	Comparative Hourly Scheduling of Centralized and Distributed Storage in Day-Ahead Markets. IEEE Transactions on Sustainable Energy, 2014, 5, 729-737.	5.9	82
100	A survey on mobile energy storage systems (MESS): Applications, challenges and solutions. Renewable and Sustainable Energy Reviews, 2014, 40, 161-170.	8.2	40
101	Incorporating time-varying electricity rates into day-ahead distribution system operation. , 2014, , .		1
102	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
103	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
104	Smart parking lot to minimize residential grid losses based on customer priorities. , 2013, , .		5
105	Optimal Demand Response Aggregation in Wholesale Electricity Markets. IEEE Transactions on Smart Grid, 2013, 4, 1957-1965.	6.2	330
106	A Two-Stage Framework for Power Transformer Asset Maintenance Management—Part II: Validation Results. IEEE Transactions on Power Systems, 2013, 28, 1404-1414.	4.6	21
107	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
108	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

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109	Demand response participation in wholesale energy markets. , 2012, , .		18
110	A Method to Calculate the Linear Load Pay Back Factors for Air Conditioners. , 2012, , .		2
111	Optimized Sectionalizing Switch Placement Strategy in Distribution Systems. IEEE Transactions on Power Delivery, 2012, 27, 362-370.	2.9	164
112	Optimized Midterm Preventive Maintenance Outage Scheduling of Thermal Generating Units. IEEE Transactions on Power Systems, 2012, 27, 1354-1365.	4.6	41
113	The plug-in electric vehicles for power system applications: The vehicle to grid (V2G) concept. , 2012, , .		47
114	Integrating Load Reduction Into Wholesale Energy Market With Application to Wind Power Integration. IEEE Systems Journal, 2012, 6, 35-45.	2.9	99
115	Assessing impact of demand response in emission-constrained environments. , 2011, , .		16
116	Demand Response Scheduling by Stochastic SCUC. IEEE Transactions on Smart Grid, 2010, 1, 89-98.	6.2	373
117	Reliability-constrained unit commitment using stochastic mixed-integer programming. , 2010, , .		11