Jiakun Fang

List of Publications by Year
in descending order

104 papers	3,385 citations	201674 27 h-index	149698 56 g-index
104 all docs	104 docs citations	104 times ranked	2272 citing authors

#	ARTICLE	IF	CITATIONS
1	Improved Communication-Free Coordinated Control of VSC-MTDC Integrated Offshore Wind Farms for Onshore System Frequency Support. IEEE Transactions on Power Delivery, 2024, , 1-13.	4.3	5
2	Adaptive Dual Droop Control of MTDC Integrated Offshore Wind Farms for Fast Frequency Support. IEEE Transactions on Power Systems, 2023, 38, 2525-2538.	6.5	8
3	Partial-Dimensional Correlation-Aided Convex-Hull Uncertainty Set for Robust Unit Commitment. IEEE Transactions on Power Systems, 2023, 38, 2434-2446.	6.5	4
4	Distributed Cooperative Control of Offshore Wind Farms Integrated via MTDC System for Fast Frequency Support. IEEE Transactions on Industrial Electronics, 2023, 70, 4693-4704.	7.9	13
5	Multi-scale regulation in S, N co-incorporated carbon encapsulated Fe-doped Co9S8 achieving efficient water oxidation with low overpotential. Nano Research, 2022, 15, 872-880.	10.4	31
6	Real-time schedule of integrated heat and power system: A multi-dimensional stochastic approximate dynamic programming approach. International Journal of Electrical Power and Energy Systems, 2022, 134, 107427.	5.5	18
7	Multi-Network Coordinated Hydrogen Supply Infrastructure Planning for the Integration of Hydrogen Vehicles and Renewable Energy. IEEE Transactions on Industry Applications, 2022, 58, 2875-2886.	4.9	19
8	Holomorphic Embedding Power Flow Algorithm for Isolated AC Microgrids With Hierarchical Control. IEEE Transactions on Smart Grid, 2022, 13, 1679-1690.	9.0	5
9	Modeling and Energy Generation Evaluations of Large-Scale Photovoltaic Plants Equipped With Panel-Level DC Optimizers. Frontiers in Energy Research, 2022, 10, .	2.3	0
10	Projection method for blockchain-enabled non-iterative decentralized management in integrated natural gas-electric systems and its application in digital twin modelling. Applied Energy, 2022, 311, 118645.	10.1	17
11	Real-Time Schedule of Microgrid for Maximizing Battery Energy Storage Utilization. IEEE Transactions on Sustainable Energy, 2022, 13, 1356-1369.	8.8	16
12	A low-carbon planning method for joint regional-district multi-energy systems: From the perspective of privacy protection. Applied Energy, 2022, 311, 118595.	10.1	9
13	Real-time joint regulating reserve deployment of electric vehicles and coal-fired generators considering EV battery degradation using scalable approximate dynamic programming. International Journal of Electrical Power and Energy Systems, 2022, 140, 108017.	5.5	4
14	Decomposed Unit Commitment of Integrated Electricity and Natural Gas System with Dynamic Gas Flow Considered. , 2022, , .		0
15	DC optimizer-based decentralized frequency support scheme of large-scale PV plants considering partial shading conditions. International Journal of Electrical Power and Energy Systems, 2022, 142, 108309.	5.5	3
16	Dynamic Characteristics Analysis of Distributed PV Plants with Panel-level DC Optimizers Under Severe Partial Shading Conditions. , 2022, , .		1
17	Optimal Real-time Operation Strategy of Microgrid with Power-to-Hydrogen Device: An ADP Approach. , 2022, , .		1
18	Resilient Adaptive Wide-Area Damping Control to Mitigate False Data Injection Attacks. IEEE Systems Journal, 2021, 15, 4831-4842.	4.6	19

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19	Two-Level Combined Control Scheme of VSC-MTDC Integrated Offshore Wind Farms for Onshore System Frequency Support. IEEE Transactions on Power Systems, 2021, 36, 781-792.	6.5	67
20	Dynamic Var Reserve-Constrained Coordinated Scheduling of LCC-HVDC Receiving-End System Considering Contingencies and Wind Uncertainties. IEEE Transactions on Sustainable Energy, 2021, 12, 469-481.	8.8	35
21	Wide-area power oscillation damper for DFIG-based wind farm with communication delay and packet dropout compensation. International Journal of Electrical Power and Energy Systems, 2021, 124, 106306.	5.5	21
22	Energy Flow Optimization of Integrated Gas and Power Systems in Continuous Time and Space. IEEE Transactions on Smart Grid, 2021, 12, 2611-2624.	9.0	20
23	Optimal coordination of flexible resources in the gas-heat-electricity integrated energy system. Energy, 2021, 223, 119729.	8.8	30
24	Optimal Operation of Integrated Power and Oil Transmission Systems. , 2021, , .		1
25	Data-driven stochastic unit commitment considering commercial air conditioning aggregators to provide multi-function demand response. International Journal of Electrical Power and Energy Systems, 2021, 129, 106790.	5.5	11
26	Coordination of Macro Base Stations for 5G Network with User Clustering. Sensors, 2021, 21, 5501.	3.8	0
27	Decentralized computation method for robust operation of multi-area joint regional-district integrated energy systems with uncertain wind power. Applied Energy, 2021, 298, 117280.	10.1	30
28	Resilient Wide-Area Damping Control for Inter-Area Oscillations to Tolerate Deception Attacks. IEEE Transactions on Smart Grid, 2021, 12, 4238-4249.	9.0	27
29	Flexibility-Enhanced Continuous-Time Scheduling of Power System Under Wind Uncerties. IEEE Transactions on Sustainable Energy, 2021, 12, 2306-2320.	8.8	13
30	Schottky Heterojunction Nanosheet Array Achieving High-Current-Density Oxygen Evolution for Industrial Water Splitting Electrolyzers. Advanced Energy Materials, 2021, 11, 2102353.	19.5	177
31	Sequential Decision-Making Methods on Real-time Optimization of Pump Scheduling of Refined Oil Pipelines. , 2021, , .		0
32	Impact of Power Grid Strength and PLL Parameters on Stability of Grid-Connected DFIG Wind Farm. IEEE Transactions on Sustainable Energy, 2020, 11, 545-557.	8.8	188
33	Impedance Modeling and Stability Analysis of Grid-Connected DFIG-Based Wind Farm With a VSC-HVDC. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1375-1390.	5.4	142
34	Feasibility Identification and Computational Efficiency Improvement for Two-Stage RUC With Multiple Wind Farms. IEEE Transactions on Sustainable Energy, 2020, 11, 1669-1678.	8.8	25
35	A data-driven approach for fault time determination and fault area location using random matrix theory. International Journal of Electrical Power and Energy Systems, 2020, 116, 105566.	5.5	23
36	Probabilistic Analysis of Commutation Failure in LCC-HVDC System Considering the CFPREV and the Initial Fault Voltage Angle. IEEE Transactions on Power Delivery, 2020, 35, 715-724.	4.3	53

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37	Coordinated Sequential Control of Individual Generators for Large-Scale DFIG-Based Wind Farms. IEEE Transactions on Sustainable Energy, 2020, 11, 1679-1692.	8.8	9
38	Real-time optimization of the integrated gas and power systems using hybrid approximate dynamic programming. International Journal of Electrical Power and Energy Systems, 2020, 118, 105776.	5.5	17
39	Dynamic modeling and small signal stability analysis of distributed photovoltaic grid-connected system with large scale of panel level DC optimizers. Applied Energy, 2020, 259, 114132.	10.1	71
40	Pyramidal approximation for power flow and optimal power flow. IET Generation, Transmission and Distribution, 2020, 14, 3774-3782.	2.5	7
41	Conformal Shell Amorphization of Nanoporous Ag-Bi for Efficient Formate Generation. ACS Applied Materials & Interfaces, 2020, 12, 31319-31326.	8.0	15
42	Optimal design of probabilistic robust damping controllers to suppress multiband oscillations of power systems integrated with wind farm. Renewable Energy, 2020, 158, 75-90.	8.9	12
43	2D CoOOH Sheet-Encapsulated Ni2P into Tubular Arrays Realizing 1000ÂmAÂcmâˆ'2-Level-Current-Density Hydrogen Evolution Over 100Âh in Neutral Water. Nano-Micro Letters, 2020, 12, 140.	27.0	83
44	Convolutional neural network-based power system transient stability assessment and instability mode prediction. Applied Energy, 2020, 263, 114586.	10.1	106
45	Partition-Combine Uncertainty Set for Robust Unit Commitment. IEEE Transactions on Power Systems, 2020, 35, 3266-3269.	6.5	20
46	Modelling and comparison analysis of gridâ€connected DFIGâ€based wind farm in weak grid. IET Renewable Power Generation, 2020, 14, 2406-2415.	3.1	8
47	Linear network model for integrated power and gas distribution systems with bidirectional energy conversion. IET Renewable Power Generation, 2020, 14, 3284-3291.	3.1	7
48	Unit Commitment of Integrated Electricity and Heat System with Bi-directional Variable Mass Flow. , 2020, , .		0
49	Continuous-Time optimization of Inverter Air Conditioning Demand Response for Ramping Flexibility Improvement. , 2020, , .		0
50	On-Line Energy Management of Microgrid via Parametric Cost Function Approximation. , 2020, , .		0
51	Optimal real-time operation strategy for microgrid: ADP based stochastic nonlinear optimization. , 2020, , .		1
52	Continuous-Trajectory Robust Unit Commitment Considering Beyond-the-Resolution Uncertainty. , 2020, , .		0
53	Coordinated demand response of powerâ€toâ€gas and FlexGas technologies in integrated power and gas system to accommodate wind energy. IET Renewable Power Generation, 2020, 14, 3300-3308.	3.1	5
54	Holomorphic embedding approach for VSCâ€based AC/DC power flow. IET Generation, Transmission and Distribution, 2020, 14, 6239-6249.	2.5	6

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55	Multi-time Scale Optimal Bidding Strategy for an EV Aggregator in Energy and Regulation Markets. , 2020, , .		1
56	Real-time Energy Management of Large-scale Data Centers: A Model Predictive Control Approach. , 2020, , .		3
57	Real-time Optimal Operation of Microgrid with Power-to-hydrogen. , 2020, , .		6
58	Optimal Real-Time Operation Strategy for Microgrid: An ADP-Based Stochastic Nonlinear Optimization Approach. IEEE Transactions on Sustainable Energy, 2019, 10, 931-942.	8.8	104
59	Data-Adaptive Robust Optimization Method for the Economic Dispatch of Active Distribution Networks. IEEE Transactions on Smart Grid, 2019, 10, 3791-3800.	9.0	74
60	Data-Adaptive Robust Transmission Network Planning Incorporating Post-Contingency Demand Response. IEEE Access, 2019, 7, 100296-100304.	4.2	4
61	Monthly Electricity Consumption Forecasting Method Based on X12 and STL Decomposition Model in an Integrated Energy System. Mathematical Problems in Engineering, 2019, 2019, 1-16.	1.1	20
62	Data-adaptive robust unit commitment in the hybrid AC/DC power system. Applied Energy, 2019, 254, 113784.	10.1	50
63	Twoâ€stage stochastic programming for the joint dispatch of energy and reserve considering demand response. Journal of Engineering, 2019, 2019, 5172-5177.	1.1	4
64	Security constrained co-planning of transmission expansion and energy storage. Applied Energy, 2019, 239, 383-394.	10.1	96
65	On-Line Energy Management of Microgrid via Parametric Cost Function Approximation. IEEE Transactions on Power Systems, 2019, 34, 3300-3302.	6.5	16
66	An improved two-stage optimization for network and load recovery during power system restoration. Applied Energy, 2019, 249, 265-275.	10.1	18
67	Design and real-time implementation of data-driven adaptive wide-area damping controller for back-to-back VSC-HVDC. International Journal of Electrical Power and Energy Systems, 2019, 109, 558-574.	5.5	22
68	Integrated Flexible Resources and Energy Markets in the Danish Multi-energy System. , 2019, , .		2
69	Stochastic unit commitment with air conditioning loads participating in reserve service. IET Renewable Power Generation, 2019, 13, 2977-2985.	3.1	11
70	Real-time subsidy based robust scheduling of the integrated power and gas system. Applied Energy, 2019, 236, 1158-1167.	10.1	30
71	Stochastic Optimization of Economic Dispatch for Microgrid Based on Approximate Dynamic Programming. IEEE Transactions on Smart Grid, 2019, 10, 2440-2452.	9.0	194
72	Power System Structural Vulnerability Assessment Based on an Improved Maximum Flow Approach. IEEE Transactions on Smart Grid, 2018, 9, 777-785.	9.0	91

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73	Dynamic Optimal Energy Flow in the Integrated Natural Gas and Electrical Power Systems. IEEE Transactions on Sustainable Energy, 2018, 9, 188-198.	8.8	250
74	Optimal Energy Management for the Integrated Power and Gas Systems via Real-time Pricing. , 2018, , .		1
75	Dynamic Optimal Energy Flow in the Integrated Natural Gas and Electrical Power Systems. , 2018, , .		5
76	The coordinated operation of electricity, gas and district heating systems. Energy Procedia, 2018, 145, 307-312.	1.8	7
77	A systematic approach for the joint dispatch of energy and reserve incorporating demand response. Applied Energy, 2018, 230, 1279-1291.	10.1	60
78	Multi‐time‐scale coordinated ramp‐rate control for photovoltaic plants and battery energy storage. IET Renewable Power Generation, 2018, 12, 1390-1397.	3.1	24
79	A coordinated dispatch method with pumped-storage and battery-storage for compensating the variation of wind power. Protection and Control of Modern Power Systems, 2018, 3, .	7.5	78
80	Improvement of wide‐area damping controller subject to actuator saturation: a dynamic anti‐windup approach. IET Generation, Transmission and Distribution, 2018, 12, 2115-2123.	2.5	8
81	A bi-level programming for multistage co-expansion planning of the integrated gas and electricity system. Applied Energy, 2017, 200, 192-203.	10.1	133
82	Coordinated Operation of the Electricity and Natural Gas Systems with Bi-directional Energy Conversion. Energy Procedia, 2017, 105, 492-497.	1.8	14
83	Overivew of grid codes for photovoltaic integration. , 2017, , .		11
84	A two-stage stochastic programming approach for operating multi-energy systems. , 2017, , .		1
85	Harmonic stability analysis of offshore wind farm with component connection method. , 2017, , .		6
86	Hybrid approximate dynamic programming approach for dynamic optimal energy flow in the integrated gas and power systems. , 2017, , .		2
87	Mixed‐integer second‐order cone programming taking appropriate approximation for the unit commitment in hybrid AC‐DC grid. Journal of Engineering, 2017, 2017, 1462-1467.	1.1	1
88	Generation method for the PV power time series combining the decomposition technique and Markov chain theory. Journal of Engineering, 2017, 2017, 2026-2031.	1.1	2
89	Improved extreme‐scenario extraction method for the economic dispatch of active distribution networks. Journal of Engineering, 2017, 2017, 1560-1564.	1.1	1
90	Steady-state analysis of the integrated natural gas and electric power system with bi-directional energy conversion. Applied Energy, 2016, 184, 1483-1492.	10.1	220

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91	Coordinated optimization of wind generation and pumped-storage plant by robust unit commitment. , 2016, , .		1
92	Adaptive power oscillation damping controller of superconducting magnetic energy storage device for interarea oscillations in power system. International Journal of Electrical Power and Energy Systems, 2016, 78, 555-562.	5.5	25
93	Optimal operation of the integrated electrical and heating systems to accommodate the intermittent renewable sources. Applied Energy, 2016, 167, 244-254.	10.1	211
94	A strategy of minimising wind power curtailment by considering operation capacity credit. , 2015, , .		2
95	A hidden Markov model representing the spatial and temporal correlation of multiple wind farms. , 2015, , .		0
96	Decentralized nonlinear optimal predictive excitation control for multi-machine power systems. International Journal of Electrical Power and Energy Systems, 2014, 55, 620-627.	5.5	43
97	Design of Anti-Windup Compensator for Energy Storage-Based Damping Controller to Enhance Power System Stability. IEEE Transactions on Power Systems, 2014, 29, 1175-1185.	6.5	69
98	Laboratory and Field Tests of Movable Conduction-Cooled High-Temperature SMES for Power System Stability Enhancement. IEEE Transactions on Applied Superconductivity, 2013, 23, 5701607-5701607.	1.7	15
99	Transient stability risk assessment of power systems incorporating wind farms. Journal of Modern Power Systems and Clean Energy, 2013, 1, 134-141.	5.4	17
100	Ancillary frequency control of direct drive full-scale converter based wind power plants. , 2013, , .		1
101	Probabilistic assessment of power system transient stability incorporating SMES. Physica C: Superconductivity and Its Applications, 2013, 484, 276-281.	1.2	16
102	Comparison study of power system small signal stability improvement using SSSC and STATCOM. , 2013, , .		4
103	Design of anti-windup compensator for superconducting magnetic energy storage. , 2013, , .		0
104	TCSC Nonlinear Adaptive Damping Controller Design Based on RBF Neural Network to Enhance Power System Stability. Journal of Electrical Engineering and Technology, 2013, 8, 252-261.	2.0	8