Jiangfeng Zhang

List of Publications by Year
in descending order

155 papers	4,568 citations	94433 37 h-index	118850 62 g-index
157 all docs	157 docs citations	157 times ranked	4041 citing authors

#	Article	IF	Citations
1	Optimal scheduling of household appliances for demand response. Electric Power Systems Research, 2014, 116, 24-28.	3.6	264
2	Minimum cost solution of photovoltaic–diesel–battery hybrid power systems for remote consumers. Solar Energy, 2013, 96, 292-299.	6.1	175
3	Dynamics of Discrete-Time Sliding-Mode-Control Uncertain Systems With a Disturbance Compensator. IEEE Transactions on Industrial Electronics, 2014, 61, 3502-3510.	7.9	162
4	Low-carbon economic dispatch for electricity and natural gas systems considering carbon capture systems and power-to-gas. Applied Energy, 2018, 224, 357-370.	10.1	154
5	A multi-objective optimization model for the life-cycle cost analysis and retrofitting planning of buildings. Energy and Buildings, 2014, 77, 227-235.	6.7	153
6	An optimal control model for load shifting – With application in the energy management of a colliery. Applied Energy, 2009, 86, 1266-1273.	10.1	129
7	A multiple objective optimisation model for building energy efficiency investment decision. Energy and Buildings, 2013, 61, 81-87.	6.7	117
8	Energy Management Strategy in Dynamic Distribution Network Reconfiguration Considering Renewable Energy Resources and Storage. IEEE Transactions on Sustainable Energy, 2020, 11, 662-673.	8.8	116
9	Coordinated operation of electric vehicle charging and wind power generation as a virtual power plant: A multi-stage risk constrained approach. Applied Energy, 2019, 239, 1294-1307.	10.1	104
10	A review on resilience studies in active distribution systems. Renewable and Sustainable Energy Reviews, 2021, 135, 110201.	16.4	102
11	Environmental economic dispatch of integrated regional energy system considering integrated demand response. International Journal of Electrical Power and Energy Systems, 2020, 116, 105525.	5.5	98
12	Online Two-Section PV Array Fault Diagnosis With Optimized Voltage Sensor Locations. IEEE Transactions on Industrial Electronics, 2015, 62, 7237-7246.	7.9	97
13	A model predictive control strategy for load shifting in a water pumping scheme with maximum demand charges. Applied Energy, 2011, 88, 4785-4794.	10.1	95
14	A new method based on Type-2 fuzzy neural network for accurate wind power forecasting under uncertain data. Renewable Energy, 2018, 120, 220-230.	8.9	94
15	An application of model predictive control to the dynamic economic dispatch of power generation. Control Engineering Practice, 2011, 19, 638-648.	5.5	92
16	A comparative study of clustering techniques for electrical load pattern segmentation. Renewable and Sustainable Energy Reviews, 2020, 120, 109628.	16.4	89
17	Demand Side Load Management for Big Industrial Energy Users Under Blockchain-Based Peer-to-Peer Electricity Market. IEEE Transactions on Smart Grid, 2019, 10, 6426-6435.	9.0	85
18	Flexible Fault-Tolerant Topology for Switched Reluctance Motor Drives. IEEE Transactions on Power Electronics, 2016, 31, 4654-4668.	7.9	75

#	ARTICLE	IF	CITATIONS
19	Determinants of household electricity consumption in South Africa. Energy Economics, 2018, 75, 120-133.	12.1	69
20	Mathematical description for the measurement and verification of energy efficiency improvement. Applied Energy, 2013, 111, 247-256.	10.1	67
21	Smart charging management system for electric vehicles in coupled transportation and power distribution systems. Energy, 2019, 189, 116275.	8.8	66
22	Energy consumption of air conditioners at different temperature set points. Energy and Buildings, 2013, 65, 412-418.	6.7	65
23	An improved robust model for generator maintenance scheduling. Electric Power Systems Research, 2012, 92, 29-36.	3.6	64
24	Design of a Modular, High Step-Up Ratio DC–DC Converter for HVDC Applications Integrating Offshore Wind Power. IEEE Transactions on Industrial Electronics, 2016, 63, 2190-2202.	7.9	64
25	Minimization of Residential Energy Cost Considering Energy Storage System and EV With Driving Usage Probabilities. IEEE Transactions on Sustainable Energy, 2019, 10, 1752-1763.	8.8	62
26	Residential load management in an energy hub with heat pump water heater. Applied Energy, 2017, 208, 551-560.	10.1	59
27	Optimal sizing and operation of pumping systems to achieve energy efficiency and load shifting. Electric Power Systems Research, 2012, 86, 41-50.	3.6	54
28	A model predictive control approach to the periodic implementation of the solutions of the optimal dynamic resource allocation problem. Automatica, 2011, 47, 358-362.	5.0	53
29	Energy Efficiency and Control Systems–from a POET Perspective. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 255-260.	0.4	51
30	Programmable Topology Derivation and Analysis of Integrated Three-Port DC-DC Converters with Reduced Switches for Low-Cost Applications. IEEE Transactions on Industrial Electronics, 2019, , 1-1.	7.9	51
31	From active distribution systems to decentralized microgrids: A review on regulations and planning approaches based on operational factors. Applied Energy, 2019, 253, 113543.	10.1	50
32	A review on economic and technical operation of active distribution systems. Renewable and Sustainable Energy Reviews, 2019, 104, 38-53.	16.4	50
33	Optimal energy management for a jaw crushing process in deep mines. Energy, 2014, 68, 337-348.	8.8	43
34	Energy cycle and bound of Qi chaotic system. Chaos, Solitons and Fractals, 2017, 99, 7-15.	5.1	43
35	Risk-Constrained Bidding Strategy for a Joint Operation of Wind Power and CAES Aggregators. IEEE Transactions on Sustainable Energy, 2020, 11, 457-466.	8.8	42
36	Modeling and Control of Heavy-Haul Trains [Applications of Control]. IEEE Control Systems, 2011, 31, 18-31.	0.8	40

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37	Multi-objective economic dispatch with residential demand response programme under renewable obligation. Energy, 2021, 218, 119473.	8.8	38
38	Adaptive Synchronization for Generalized Lorenz Systems. IEEE Transactions on Automatic Control, 2008, 53, 1740-1746.	5.7	37
39	Optimal location and capacity planning for distributed generation with independent power production and self-generation. Applied Energy, 2017, 188, 140-150.	10.1	37
40	Desiccant wheel thermal performance modeling for indoor humidity optimal control. Applied Energy, 2013, 112, 999-1005.	10.1	36
41	Efficiency Improvement of Nonuniformly Aged PV Arrays. IEEE Transactions on Power Electronics, 2017, 32, 1124-1137.	7.9	36
42	Analysing the economic benefit of electricity price forecast in industrial load scheduling. Electric Power Systems Research, 2014, 116, 158-165.	3.6	35
43	A hybrid prediction-based microgrid energy management strategy considering demand-side response and data interruption. International Journal of Electrical Power and Energy Systems, 2019, 113, 139-153.	5.5	35
44	A pattern recognition methodology for analyzing residential customers load data and targeting demand response applications. Energy and Buildings, 2019, 203, 109455.	6.7	34
45	Energy management of commercial buildings â€" A case study from a POET perspective of energy efficiency. Journal of Energy in Southern Africa, 2012, 23, 23-31.	0.8	34
46	Improving energy efficiency of cyclone circuits in coal beneficiation plants by pump-storage systems. Applied Energy, 2014, 119, 306-313.	10.1	33
47	Parameter Identifiability of Nonlinear Systems With Time-Delay. IEEE Transactions on Automatic Control, 2006, 51, 371-375.	5.7	32
48	Non-Uniform Aged Modules Reconfiguration for Large-Scale PV Array. IEEE Transactions on Device and Materials Reliability, 2017, 17, 560-569.	2.0	31
49	A Model Predictive Control approach to dynamic economic dispatch problem. , 2009, , .		30
50	Optimal hoist scheduling of a deep level mine twin rock winder system for demand side management. Electric Power Systems Research, 2011, 81, 1088-1095.	3.6	30
51	A new state-of-charge estimation method for electric vehicle lithium-ion batteries based on multiple input parameter fitting model. International Journal of Energy Research, 2017, 41, 1265-1276.	4.5	30
52	Low-carbon optimal planning of an integrated energy station considering combined power-to-gas and gas-fired units equipped with carbon capture systems. International Journal of Electrical Power and Energy Systems, 2022, 138, 107966.	5.5	30
53	Dynamic Economic Dispatch With Maximal Renewable Penetration Under Renewable Obligation. IEEE Access, 2020, 8, 38794-38808.	4.2	29
54	Modelling dynamic demand response for plugâ€in hybrid electric vehicles based on realâ€time charging pricing. IET Generation, Transmission and Distribution, 2017, 11, 228-235.	2.5	28

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55	Optimal sampling plan for clean development mechanism energy efficiency lighting projects. Applied Energy, 2013, 112, 1006-1015.	10.1	27
56	Active power residential non-intrusive appliance load monitoring system. , 2009, , .		25
57	A fault locating method for PV arrays based on improved voltage sensor placement. Solar Energy, 2020, 201, 279-297.	6.1	23
58	Modelling the impact of social network on energy savings. Applied Energy, 2016, 178, 56-65.	10.1	22
59	Zero‐voltage‐switching buck converter with low‐voltage stress using coupled inductor. IET Power Electronics, 2016, 9, 719-727.	2.1	22
60	Energy storage management strategy in distribution networks utilised by photovoltaic resources. IET Generation, Transmission and Distribution, 2018, 12, 5627-5638.	2.5	22
61	Optimal Scheduling Strategy for a Grid-connected Photovoltaic System for Heat Pump Water Heaters. Energy Procedia, 2014, 61, 1511-1514.	1.8	21
62	Aggregation of small loads for demand response programs â€" Implementation and challenges: A review. , 2017, , .		20
63	Dynamical Behaviors of an Euler Discretized Sliding Mode Control Systems. IEEE Transactions on Automatic Control, 2014, 59, 2525-2529.	5.7	19
64	Operation efficiency optimisation modelling and application of model predictive control. IEEE/CAA Journal of Automatica Sinica, 2015, 2, 166-172.	13.1	19
65	Optimal sampling plan for clean development mechanism lighting projects with lamp population decay. Applied Energy, 2014, 136, 1184-1192.	10.1	18
66	A Line Flow Granular Computing Approach for Economic Dispatch With Line Constraints. IEEE Transactions on Power Systems, 2017, 32, 4832-4842.	6.5	18
67	Risk-Oriented Multi-Area Economic Dispatch Solution With High Penetration of Wind Power Generation and Compressed Air Energy Storage System. IEEE Transactions on Sustainable Energy, 2020, 11, 1569-1578.	8.8	18
68	Coordinated two-stage volt/var management in distribution networks. Electric Power Systems Research, 2016, 141, 157-164.	3.6	17
69	Single coupled‐inductor dual output soft‐switching DC–DC converters with improvedcross‐regulation and reduced components. IET Power Electronics, 2017, 10, 1665-1678.	2.1	17
70	Battery Equalization by Fly-Back Transformers with Inductance, Capacitance and Diode Absorbing Circuits. Energies, 2017, 10, 1482.	3.1	17
71	A review on clustering of residential electricity customers and its applications. , 2017, , .		16
72	A Unified Control Strategy for Inductor-Based Active Battery Equalisation Schemes. Energies, 2018, 11, 405.	3.1	16

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73	Multi-objective stochastic economic dispatch with maximal renewable penetration under renewable obligation. Applied Energy, 2020, 270, 115120.	10.1	16
74	Effects of trends and seasonalities on robustness of the Hurst parameter estimators. IET Signal Processing, 2012, 6, 849-856.	1.5	15
75	Optimal Economic and Emission Dispatch of a Microgrid with a Combined Heat and Power System. Energies, 2019, 12, 604.	3.1	15
76	Medium Density Control for Coal Washing Dense Medium Cyclone Circuits. IEEE Transactions on Control Systems Technology, 2015, 23, 1117-1122.	5.2	14
77	Dynamic performance improvement of an ultra-lift Luo DC–DC converter by using a type-2 fuzzy neural controller. Computers and Electrical Engineering, 2018, 69, 171-182.	4.8	14
78	Robust DED based on bad scenario set considering wind, EV and battery switching station. IET Generation, Transmission and Distribution, 2017, 11, 354-362.	2.5	13
79	State-of-Power Estimation of Li-ion Batteries Considering the Battery Surface Temperature. Energy Technology, 2018, 6, 1352-1360.	3.8	13
80	Bilateral negotiations for electricity market by adaptive agent-tracking strategy. Electric Power Systems Research, 2020, 186, 106390.	3.6	13
81	Improving the Security of Chaotic Synchronization With a $Delta$-Modulated Cryptographic Technique. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 680-684.	3.0	12
82	Optimal scheduling of conveyor belt systems under Critical Peak Pricing. , 2012, , .		12
83	How information propagation in social networks can improve energy savings based on time of use tariff. Sustainable Cities and Society, 2015, 19, 26-33.	10.4	12
84	Optimal scheduling of a hybrid AC/DC multi-energy microgrid considering uncertainties and Stackelberg game-based integrated demand response. International Journal of Electrical Power and Energy Systems, 2022, 142, 108341.	5.5	12
85	Optimal State-of-Charge Value for Charge-Sustaining Mode of Plug-In Hybrid Electric Vehicles. IEEE Access, 2020, 8, 187959-187964.	4.2	11
86	Non-cooperative game pricing strategy for maximizing social welfare in electrified transportation networks. International Journal of Electrical Power and Energy Systems, 2021, 130, 106980.	5.5	10
87	Application of small-scale compressed air energy storage in the daily operation of an active distribution system. Energy, 2021, 231, 120961.	8.8	10
88	Economic dispatch of multi-area integrated electricity and natural gas systems considering emission and hourly spinning reserve constraints. International Journal of Electrical Power and Energy Systems, 2021, 132, 107177.	5.5	10
89	Characterising Compact Fluorescent Lamp population decay. , 2013, , .		9
90	Mathematical modelling for the social impact to energy efficiency savings. Energy and Buildings, 2014, 84, 344-351.	6.7	9

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91	A new dynamic SOH estimation of lead-acid battery for substation application. International Journal of Energy Research, 2017, 41, 579-592.	4.5	9
92	A Security Level Classification Method for Power Systems under N-1 Contingency. Energies, 2017, 10, 2055.	3.1	9
93	Module block fault locating strategy for large-scale photovoltaic arrays. Energy Conversion and Management, 2020, 214, 112898.	9.2	9
94	New energy management approach in distribution systems considering energy storages. , 2017, , .		8
95	Risk–constrained demand response and wind energy systems integration to handle stochastic nature and wind power outage. IET Energy Systems Integration, 2019, 1, 114-120.	1.8	8
96	Best switching time of hot water cylinder-switched optimal control approach. , 2007, , .		7
97	A model predictive control strategy for load shifting in a water pumping scheme with maximum demand charges. , 2009, , .		7
98	Method to decide a multi-fault rush repair robust strategy in power distribution networks. Engineering Applications of Artificial Intelligence, 2016, 56, 91-101.	8.1	7
99	Day-Ahead Market Participation of an Active Distribution Network Equipped With Small-Scale CAES Systems. IEEE Transactions on Smart Grid, 2020, 11, 2966-2979.	9.0	7
100	Risk–constrained offering strategies for a large–scale price–maker electric vehicle demand aggregator. IET Smart Grid, 2020, 3, 860-869.	2.2	7
101	Integrative Design of an Emergency Resource Predicting-Scheduling-Repairing Method for Rail Track Faults. IEEE Access, 2019, 7, 155686-155700.	4.2	6
102	A novel hybrid multi-objective bacterial colony chemotaxis algorithm. Soft Computing, 2020, 24, 2013-2032.	3.6	6
103	Cost Effective Offline Reconfiguration for Large-Scale Non-Uniformly Aging Photovoltaic Arrays Efficiency Enhancement. IEEE Access, 2020, 8, 80572-80581.	4.2	6
104	Coordinated operation of coupled transportation and power distribution systems considering stochastic routing behaviour of electric vehicles and prediction error of travel demand. IET Generation, Transmission and Distribution, 2021, 15, 2112-2126.	2.5	6
105	Multi-Area Dynamic Economic Dispatch Considering Water Consumption Minimization, Wind Generation, and Energy Storage System. , 2020, , .		6
106	Some Applications of a Polynomial Inequality to Global Optimization. Journal of Optimization Theory and Applications, 2005, 127, 193-205.	1.5	5
107	Energy consumption of air conditioners at different temperature set points. , 2011, , .		5
108	Residential demand response strategies for South Africa. , 2012, , .		5

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109	Short-term wind power prediction using Least-Square Support Vector Machines. , 2012, , .		5
110	Risk-constrained offering strategies for a price-maker demand response aggregator. , 2017, , .		5
111	Security-level classification based on power system partitioning. IET Generation, Transmission and Distribution, 2019, 13, 703-709.	2.5	5
112	Matchmaking model for bilateral trading decisions of load serving entity. Electric Power Systems Research, 2020, 183, 106281.	3.6	5
113	Hybrid power plant bidding strategy for voltage stability improvement, electricity market profit maximization, and congestion management. IET Energy Systems Integration, 2021, 3, 130-141.	1.8	5
114	Optimal Energy Control Modelling of a Vertical Shaft Impact Crushing Process. Energy Procedia, 2014, 61, 560-563.	1.8	4
115	Static Var Compensator allocation considering transient stability, voltage profile and losses. , 2017, , .		4
116	Improved Probabilistic Multi-Stage PMU Placement with an Increased Search Space to Enhance Power System Monitoring. IFAC-PapersOnLine, 2018, 51, 262-267.	0.9	4
117	Bi-level optimal bidding strategy of an aggregator in competition with rival aggregators. IET Smart Grid, 2020, 3, 898-905.	2.2	4
118	Geometric Steady States of Nonlinear Systems. IEEE Transactions on Automatic Control, 2010, 55, 1448-1454.	5.7	3
119	Hybrid power plant bidding strategy including a commercial compressed air energy storage aggregator and a wind power producer. , 2017, , .		3
120	Geometric characterization on the solvability of regulator equations. Automatica, 2008, 44, 445-450.	5.0	2
121	On the application of parameter identifiability to the security of chaotic synchronization. , 2008, , .		2
122	Characterizing long memories in electric water heater power consumption time series. , 2011, , .		2
123	Optimal metering plan of measurement and verification for energy efficiency lighting projects. , 2012, , .		2
124	Hybrid power plant offering strategy to deal with the stochastic nature and outage of wind generators. , 2017, , .		2
125	Optimal Control of CHP Plant Integrated with Load Management on HVAC System in Microgrid. , 2019, , .		2
126	Minimization of Residential Energy Costs for PV-SWH and PV-T Systems. IFAC-PapersOnLine, 2019, 52, 940-945.	0.9	2

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127	Proposing a Framework for Resilient Active Distribution Systems using Withstand, Respond, Adapt, and Prevent Element. , 2019, , .		2
128	Optimal Investment Decision for Cotton Farm Microgrid Design. , 2021, , .		2
129	A distributed and integrated control strategy for an islanded microgrid considering line loss and communication interruption. ISA Transactions, 2022, 129, 345-360.	5.7	2
130	Simultaneous upper triangularization and the stability of linear discrete multidimensional systems. , 2008, , .		1
131	A residential energy and power conservation System Utilizing an Optimization Model. , 2009, , .		1
132	A near optimal hoist scheduling for deep level mine rock winders. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 209-214.	0.4	1
133	An MPC approach to deep level mine rock winder hoist control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 249-254.	0.4	1
134	Optimal Operation of Distribution Network with Distributed Generations to Maximize Social Welfare. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12195-12200.	0.4	1
135	Maximization of social welfare in distribution network with distributed generations using genetic algorithm. , 2011, , .		1
136	Decomposed Model Predictive Control for Economic Dispatch problems. , 2013, , .		1
137	A novel reliability oriented bi-objective unit commitment problem. , 2017, , .		1
138	Multi-Objective Energy Management Approach Considering Energy Storages in Distribution Networks with Respect to Voltage Security. , 2019, , .		1
139	Total load energy supply capability and security level classification of integrated power and natural gas systems considering N – 1 contingency of power system. International Transactions on Electrical Energy Systems, 2021, 31, e12842.	1.9	1
140	An improved multi-objective bacterial colony chemotaxis algorithm based on Pareto dominance. Soft Computing, 2022, 26, 69-87.	3.6	1
141	$\mathbb{Z} \times \mathbb{Z}$ Graded Lie Algebras Generated by the Virasoro Algebra and sl2. Mathematische Nachrichten, 2002, 246-247, 188-201.	0.8	0
142	On an open problem in bistable stabilization. Systems and Control Letters, 2005, 54, 399-403.	2.3	0
143	Steady States of Nonlinear Systems. , 2007, , .		0
144	Adaptive synchronization for a class of chaotic system. , 2007, , .		0

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145	GENERALIZED NONLINEAR MANEUVER REGULATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 510-514.	0.4	0
146	Correction to â€œAdaptive Synchronization for Generalized Lorenz Systemsâ€. IEEE Transactions on Automatic Control, 2008, 53, 2216-2216.	5.7	0
147	A chaos-based CDMA scheme with a chaos-based encryption algorithm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 110-115.	0.4	0
148	Mathematical description of the performance measurement and verification. , 2011, , .		0
149	A new approach to optimal energy management with discrete control. , 2012, , .		0
150	A Multiple Objective Decision Model for Energy Efficiency Upgrade Investment in Buildings. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 681-686.	0.4	0
151	Optimal meter commitment solutions to CDM energy effciency lighting projects. , 2013, , .		0
152	Social influence and energy efficiency savings. , 2013, , .		0
153	Managing the cumulative distribution function of the profit: A producer risk management case. , 2017, , .		0
154	Multi-area economic emission dispatch considering load uncertainty. , 2017, , .		0
155	On the representation of derivative algebras in characteristic $p gt 0$. Illinois Journal of Mathematics, 2002, 46, .	0.1	0