Zheng Yan

List of Publications by Year
in descending order

136 papers	2,818 citations	172457 29 h-index	197818 49 g-index
137 all docs	137 docs citations	137 times ranked	2727 citing authors

#	ARTICLE	IF	CITATIONS
1	Gesture recognition using a bioinspired learning architecture that integrates visual data with somatosensory data from stretchable sensors. Nature Electronics, 2020, 3, 563-570.	26.0	298
2	Production and characteristics of a bioflocculant produced by Bacillus sp. F19. Bioresource Technology, 2008, 99, 7686-7691.	9.6	163
3	Smart contract architecture for decentralized energy trading and management based on blockchains. Energy, 2020, 199, 117417.	8.8	132
4	Adjusting Learning Rate of Memristor-Based Multilayer Neural Networks via Fuzzy Method. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 1084-1094.	2.7	102
5	Estimating wind speed probability distribution by diffusion-based kernel density method. Electric Power Systems Research, 2015, 121, 28-37.	3.6	95
6	Power System Voltage Stability Evaluation Considering Renewable Energy With Correlated Variabilities. IEEE Transactions on Power Systems, 2018, 33, 3236-3245.	6.5	86
7	General memristor with applications in multilayer neural networks. Neural Networks, 2018, 103, 142-149.	5.9	83
8	A one-layer recurrent neural network for constrained nonconvex optimization. Neural Networks, 2015, 61, 10-21.	5.9	80
9	Data-Driven Risk-Averse Two-Stage Optimal Stochastic Scheduling of Energy and Reserve With Correlated Wind Power. IEEE Transactions on Sustainable Energy, 2020, 11, 436-447.	8.8	80
10	A Neurodynamic Approach to Distributed Optimization With Globally Coupled Constraints. IEEE Transactions on Cybernetics, 2018, 48, 3149-3158.	9.5	67
11	An Iterative LMP Calculation Method Considering Loss Distributions. IEEE Transactions on Power Systems, 2010, 25, 1469-1477.	6.5	57
12	Probabilistic optimal power flow considering dependences of wind speed among wind farms by pair-copula method. International Journal of Electrical Power and Energy Systems, 2017, 84, 296-307.	5.5	57
13	Optimal coordinated operation of a multi-energy community considering interactions between energy storage and conversion devices. Applied Energy, 2019, 248, 256-273.	10.1	57
14	Tube-Based Robust Model Predictive Control of Nonlinear Systems via Collective Neurodynamic Optimization. IEEE Transactions on Industrial Electronics, 2016, 63, 4377-4386.	7.9	53
15	A Distributed and Robust Security-Constrained Economic Dispatch Algorithm Based on Blockchain. IEEE Transactions on Power Systems, 2022, 37, 691-700.	6.5	53
16	A trusted energy trading framework by marrying blockchain and optimization. Advances in Applied Energy, 2021, 2, 100029.	13.2	53
17	Direct Load Control in Microgrids to Enhance the Performance of Integrated Resources Planning. IEEE Transactions on Industry Applications, 2015, 51, 3553-3560.	4.9	52
18	Multilabel Image Classification via Feature/Label Co-Projection. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 7250-7259.	9.3	52

#	Article	IF	Citations
19	CKFO: Convolution Kernel First Operated Algorithm With Applications in Memristor-Based Convolutional Neural Network. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 1640-1647.	2.7	52
20	A Novel State of Charge Feedback Strategy in Wind Power Smoothing Based on Short-Term Forecast and Scenario Analysis. IEEE Transactions on Sustainable Energy, 2017, 8, 870-879.	8.8	49
21	A blockchain consensus mechanism that uses Proof of Solution to optimize energy dispatch and trading. Nature Energy, 2022, 7, 495-502.	39.5	39
22	Three-Stage Distributed State Estimation for AC-DC Hybrid Distribution Network Under Mixed Measurement Environment. IEEE Access, 2018, 6, 39027-39036.	4.2	38
23	A Two-stage Autonomous EV Charging Coordination Method Enabled by Blockchain. Journal of Modern Power Systems and Clean Energy, 2021, 9, 104-113.	5.4	38
24	Distributed Neurodynamic Optimization for Energy Internet Management. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1624-1633.	9.3	37
25	Probabilistic power flow analysis of microgrid with renewable energy. International Journal of Electrical Power and Energy Systems, 2020, 114, 105393.	5.5	35
26	Maximum Loadability of Islanded Microgrids With Renewable Energy Generation. IEEE Transactions on Smart Grid, 2019, 10, 4696-4705.	9.0	34
27	Coordinating EV Charging via Blockchain. Journal of Modern Power Systems and Clean Energy, 2020, 8, 573-581.	5.4	32
28	Biosorption of Cu(II) on extracellular polymers from Bacillus sp. F19. Journal of Environmental Sciences, 2008, 20, 1288-1293.	6.1	31
29	Integrated resources planning in microgrids considering interruptible loads and shiftable loads. Journal of Modern Power Systems and Clean Energy, 2018, 6, 802-815.	5.4	31
30	Optimal Energy Storage Allocation for Mitigating the Unbalance in Active Distribution Network via Uncertainty Quantification. IEEE Transactions on Sustainable Energy, 2021, 12, 303-313.	8.8	30
31	Probabilistic load flow evaluation considering correlated input random variables. International Transactions on Electrical Energy Systems, 2016, 26, 555-572.	1.9	29
32	Quantitative Evaluations of Uncertainties in Multivariate Operations of Microgrids. IEEE Transactions on Smart Grid, 2020, 11, 2892-2903.	9.0	25
33	An online optimization method for extracting parameters of multi-parameter PV module model based on adaptive Levenberg-Marquardt algorithm. Energy Conversion and Management, 2021, 245, 114611.	9.2	25
34	Optimal power flow calculation in AC/DC hybrid power system based on adaptive simplified human learning optimization algorithm. Journal of Modern Power Systems and Clean Energy, 2016, 4, 690-701.	5.4	23
35	A Collective Neurodynamic System for Distributed Optimization with Applications in Model Predictive Control. IEEE Transactions on Emerging Topics in Computational Intelligence, 2017, 1, 305-314.	4.9	23
36	Enabling a Transactive Distribution System via Real-Time Distributed Optimization. IEEE Transactions on Smart Grid, 2019, 10, 4907-4917.	9.0	23

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37	Forming Bidding Curves for a Distribution System Operator. IEEE Transactions on Power Systems, 2018, 33, 5389-5400.	6.5	22
38	Evaluating Influence of Variable Renewable Energy Generation on Islanded Microgrid Power Flow. IEEE Access, 2018, 6, 71339-71349.	4.2	22
39	A Multi-Domain Co-Simulation Method for Comprehensive Shifted-Frequency Phasor DC-Grid Models and EMT AC-Grid Models. IEEE Transactions on Power Electronics, 2019, 34, 10557-10574.	7.9	21
40	Lactic acid production from dining‐hall food waste by <i>Lactobacillus plantarum</i> using response surface methodology. Journal of Chemical Technology and Biotechnology, 2008, 83, 1541-1550.	3.2	20
41	A novel reactive power planning method based on improved particle swarm optimization with static voltage stability. European Transactions on Electrical Power, 2010, 20, 1129-1137.	1.0	20
42	Short Term Residential Load Forecasting: An Improved Optimal Nonlinear Auto Regressive (NARX) Method with Exponential Weight Decay Function. Electronics (Switzerland), 2018, 7, 432.	3.1	20
43	A Shifted Frequency Impedance Model of Doubly Fed Induction Generator (DFIG)-Based Wind Farms and Its Applications on S^{2}SI Analysis. IEEE Transactions on Power Electronics, 2021, 36, 215-227.	7.9	19
44	Data-driven stochastic programming for energy storage system planning in high PV-penetrated distribution network. International Journal of Electrical Power and Energy Systems, 2020, 123, 106326.	5.5	18
45	Cosimulation of Shifted-Frequency/Dynamic Phasor and Electromagnetic Transient Models of Hybrid LCC-MMC DC Grids on Integrated CPU–GPUs. IEEE Transactions on Industrial Electronics, 2020, 67, 6517-6530.	7.9	18
46	Density-based Global Sensitivity Analysis of Islanded Microgrid Loadability Considering Distributed Energy Resource Integration. Journal of Modern Power Systems and Clean Energy, 2020, 8, 94-101.	5.4	18
47	Distributionally Robust Co-Optimization of Power Dispatch and Do-Not-Exceed Limits. IEEE Transactions on Power Systems, 2020, 35, 887-897.	6.5	17
48	Portfolio management of battery storages in multiple electricity markets. IET Generation, Transmission and Distribution, 2018, 12, 6004-6010.	2.5	15
49	Application of Multi-Objective Human Learning Optimization Method to Solve AC/DC Multi-Objective Optimal Power Flow Problem. International Journal of Emerging Electric Power Systems, 2016, 17, 327-337.	0.8	14
50	Electricity trading in global energy internet. , 2017, , .		14
51	Optimizing Generation Capacities Incorporating Renewable Energy with Storage Systems Using Genetic Algorithms. Electronics (Switzerland), 2018, 7, 100.	3.1	14
52	A Multi-Rate Co-Simulation of Combined Phasor-Domain and Time-Domain Models for Large-Scale Wind Farms. IEEE Transactions on Energy Conversion, 2020, 35, 324-335.	5.2	14
53	Accommodating Strategic Players in Distributed Algorithms for Power Dispatch Problems. IEEE Transactions on Cybernetics, 2022, 52, 12594-12603.	9.5	14
54	Optimal Incentive Strategy in Cloud-Edge Integrated Demand Response Framework for Residential Air Conditioning Loads. IEEE Transactions on Cloud Computing, 2022, 10, 31-42.	4.4	13

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55	Two‐stage market clearing approach to mitigate generator collusion in Eastern China electricity market via system dynamics method. IET Generation, Transmission and Distribution, 2019, 13, 3346-3353.	2.5	12
56	Operation Strategy of Smart Thermostats That Self-Learn User Preferences. IEEE Transactions on Smart Grid, 2019, 10, 5770-5780.	9.0	11
57	Evaluating peak-regulation capability for power grid with various energy resources in Chinese urban regions via a pragmatic visualization method. Sustainable Cities and Society, 2022, 80, 103749.	10.4	11
58	Impact of HVDC line on the convergence property of AC/DC power flow calculation. International Journal of Electrical Power and Energy Systems, 2016, 83, 140-148.	5.5	10
59	Designing pulse-coupled neural networks with spike-synchronization-dependent plasticity rule: image segmentation and memristor circuit application. Neural Computing and Applications, 2020, 32, 13441-13452.	5.6	10
60	Multistage Robust Optimization of Routing and Scheduling of Mobile Energy Storage in Coupled Transportation and Power Distribution Networks. IEEE Transactions on Transportation Electrification, 2022, 8, 2583-2594.	7.8	9
61	Spatio-Temporal Probabilistic Forecasting of Photovoltaic Power Based on Monotone Broad Learning System and Copula Theory. IEEE Transactions on Sustainable Energy, 2022, 13, 1874-1885.	8.8	9
62	Use of starter culture of Lactobacillus plantarum BP04 in the preservation of dining-hall food waste. World Journal of Microbiology and Biotechnology, 2008, 24, 2249-2256.	3.6	8
63	Multiple scale identification of power system oscillations using an improved Hilbert-Huang transform. , 2009, , .		8
64	Congestion Surplus Minimization Pricing Solutions When Lagrange Multipliers are not Unique. IEEE Transactions on Power Systems, 2014, 29, 2023-2032.	6.5	8
65	Energy internet in the Yangtze River Delta: opportunities, challenges, and suggestions. Frontiers in Energy, 2018, 12, 484-492.	2.3	8
66	Dynamic battery loss evaluation and its application for optimal online wind‐storage integrated scheduling. IET Renewable Power Generation, 2020, 14, 3079-3087.	3.1	8
67	AC/DC Power Flow Computation Based on Improved Levenberg–Marquardt Method. International Journal of Emerging Electric Power Systems, 2015, 16, 1-13.	0.8	7
68	Probabilistic static voltage stability analysis considering the correlation of wind power. , 2016, , .		7
69	Gaussian Mixture Model for Multivariate Wind Power Based on Kernel Density Estimation and Component Number Reduction. IEEE Transactions on Sustainable Energy, 2022, 13, 1853-1856.	8.8	7
70	Explore Uncertainty in Residual Networks for Crowds Flow Prediction. , 2018, , .		6
71	Blockchain in energy systems: values, opportunities, and limitations. Frontiers in Energy, 2022, 16, 9-18.	2.3	6
72	A Risk-Controllable Day-Ahead Transmission Schedule of Surplus Wind Power with Uncertainty in Sending Grids. International Journal of Electrical Power and Energy Systems, 2022, 139, 107649.	5.5	6

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73	Distributionally Robust Co-optimization of Transmission Network Expansion Planning and Penetration Level of Renewable Generation. Journal of Modern Power Systems and Clean Energy, 2022, 10, 577-587.	5.4	6
74	Optimal power grid black start using fuzzy logic and expert system. European Transactions on Electrical Power, 2009, 19, 969-977.	1.0	5
75	Decentralized Charging of Plug-In Electric Vehicles Using Lagrange Relaxation Method at the Residential Transformer Level. International Journal of Emerging Electric Power Systems, 2016, 17, 267-276.	0.8	5
76	Optimal operation of wind-solar-hydrogen storage system based on energy hub. , 2017, , .		5
77	Reconstruction of sparse signals via neurodynamic optimization. International Journal of Machine Learning and Cybernetics, 2019, 10, 15-26.	3.6	5
78	Multirateâ€‰andâ€‰Mixedâ€‰Solverâ€‰Basedâ€‰Cosimulationâ€‰of Combined Transient Stability, Shifted-Frequency Phasor, and Electromagnetic Models: A Practical LCC HVDC Simulation Study. IEEE Transactions on Industrial Electronics, 2021, 68, 4954-4965.	7.9	5
79	Data-driven distribution network topology identification considering correlated generation power of distributed energy resource. Frontiers in Energy, 2022, 16, 121-129.	2.3	5
80	Portfolio management for a windâ€storage system based on distributionally robust optimisation considering a flexible ramping product. IET Renewable Power Generation, 2020, 14, 3192-3199.	3.1	5
81	Distributionally Robust Optimization for Generation Expansion Planning Considering Virtual Inertia from Wind Farms. Electric Power Systems Research, 2022, 210, 108060.	3.6	5
82	Distributionally Robust Capacity Configuration for Energy Storage in Microgrid Considering Renewable Utilization. Frontiers in Energy Research, 0, 10, .	2.3	5
83	A two-phase market clearing framework for inter-provincial electricity trading in Chinese power grids. Sustainable Cities and Society, 2022, 85, 104057.	10.4	5
84	AC/DC optimal power flow problem considering wind farm integration. , 2016, , .		4
85	Modeling on Electrical Power Market Clearing with Consideration of the Participation of VPP and MG in View of Energy Internet. , 2017, , .		4
86	Impact of China Transmission Pricing Reform on Power Grid Investment. , 2018, , .		4
87	Bidding strategy of energy storage in imperfectly competitive flexible ramping market via system dynamics method. International Journal of Electrical Power and Energy Systems, 2022, 136, 107722.	5.5	4
88	Cost and risk management for a local distribution company in purchasing electricity. European Transactions on Electrical Power, 2010, 20, 1101-1113.	1.0	3
89	Multi-elements and multi-dimensions risk evaluation of smart grid. , 2012, , .		3
90	A Two-stage Robust Stochastic Programming Approach for Generation Expansion Planning of Smart Grids under Uncertainties. , 2018, , .		3

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91	Consensus-Based Source-Load-Storage Optimal Dispatch for Active Distributed Network in Dynamic Multi-Agent System. , 2018, , .		3
92	A Two-Layer Network Equivalent With Local Passivity Compensation With Applications to Hybrid Simulations of MMC-Based ACâ€"DC Grids. IEEE Transactions on Power Systems, 2019, 34, 4514-4524.	6.5	3
93	Enhanced Real-time Electricity Price Prediction with a Novel Feature Selection Technique. , 2019, , .		3
94	Real-Time Simulation of Hybrid Modular Multilevel Converters Using Shifted Phasor Models. IEEE Access, 2019, 7, 2376-2386.	4.2	3
95	A Nested MCMC Method Incorporated With Atmospheric Process Decomposition for Photovoltaic Power Simulation. IEEE Transactions on Sustainable Energy, 2020, 11, 2972-2984.	8.8	3
96	DOB-Net: Actively Rejecting Unknown Excessive Time-Varying Disturbances. , 2020, , .		3
97	Optimal portfolio design of energy storage devices with financial and physical right market. Frontiers in Energy, 2022, 16, 95-104.	2.3	3
98	Reactive Power Market Design for Distribution Networks With High Photovoltaic Penetration. IEEE Transactions on Smart Grid, 2023, 14, 1642-1651.	9.0	3
99	A Novel CVaR Based Portfolio Optimization Model for LDC Electricity Procurement. , 2008, , .		2
100	A kernelâ€based clustering approach to finding communities in multiâ€machine power systems. European Transactions on Electrical Power, 2009, 19, 1131-1139.	1.0	2
101	An improved state selection technique for power system reliability evaluation. , 2011, , .		2
102	A robust optimization approach to evaluate the impact of smart grid technologies on generation plans. , 2014, , .		2
103	Game-based strategy for load service entity to level Duck Chart as well as gain EV consumers. International Transactions on Electrical Energy Systems, 2016, 26, 2204-2215.	1.9	2
104	Determine the reliable generating capacity of power systems with high HVDC penetration considering both stability and ancillary service requirements. IET Generation, Transmission and Distribution, 2018, 12, 540-547.	2.5	2
105	Data-driven Power System Collapse Predicting Using Critical Slowing Down Indicators. , 2018, , .		2
106	Probabilistic Static Voltage Stability Assessment for Distribution Network Considering Correlated Renewable Energy. , 2020, , .		2
107	Study of Toroidal Core Multilimb Transformer (TCMLT) for High-Power DC Application. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2951-2964.	5.4	2
108	Hybrid clusteringâ€based bad data detection of PMU measurements. Energy Conversion and Economics, 2021, 2, 235-247.	3.2	2

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109	Coordinated Operation Strategy for PV-battery-load in LV Distribution Networks Considering Low-carbon Economy. , 2022, , .		2
110	&#x03B1;-stable statistical modeling and application of marginal price in electricity market. , 2008, , .		1
111	Fault diagnosis of power grid with information fusion of multi-level. , 2011, , .		1
112	Study on Thevenin equivalent model and algorithm of AC/DC power systems for voltage instability identification. , 2014, , .		1
113	Risk assessment model for wind power integrated power systems using conditional value-at-risk. , 2014, , .		1
114	Probabilistic load flow evaluation with hybrid Latin Hypercube Sampling and multiple linear regression. , 2015, , .		1
115	Global Sensitivity Analysis of Islanded Microgrid Power Flow. , 2018, , .		1
116	A Continuous-Time Recurrent Neural Network for Sparse Signal Reconstruction Via â„"<inf>1</inf> Minimization. , 2018, , .		1
117	Methods of Preventing Collusion of Generation Enterprises in East China Electricity Market. , 2019, , .		1
118	Source-Grid-Load Combined Security Assessment of PV-Penetrated Distribution Network. , 2020, , .		1
119	Distributed Model Predictive Control of Linear Systems with Coupled Constraints Based on Collective Neurodynamic Optimization. Lecture Notes in Computer Science, 2018, , 318-328.	1.3	1
120	Short-Term Load Forecasting Using Broad Learning System. , 2019, , .		1
121	Demonstration Project and State Estimation Application in PMU-Based Distribution Network. , 2020, , .		1
122	A Reinforcement Learning Method for Power Suppliers' Strategic Bidding with Insufficient Information. , 2021, , .		1
123	Analysis of effects of contracts on the stability of dynamic power markets. European Transactions on Electrical Power, 2009, 19, 56-71.	1.0	0
124	An oligopolistic model considering the locational SR requirement for joint energyâ€reserve market. European Transactions on Electrical Power, 2010, 20, 491-504.	1.0	0
125	A Study on Determining the Maximum Loading Index of a Power Grid. , 2010, , .		0
126	A modified Levenberg-Marquardt approach to explore the limit operation state of AC/DC hybrid system. , 2015, , .		0

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127	Suggestions on Electric Power Industry Reform under Regional Integration of Yangtze River Delta. , 2019, , .		0
128	Multi-time Load Restoration Model in Unbalanced Electrical Distribution System Based on Rolling Optimization. , 2020, , .		0
129	Power Grid Parameters Determining Based on Extended Sensitivity Matrix in Electricity Market. , 2021, , .		0
130	Optimal Scheduling of Electric Vehicles Charging in low-Voltage Distribution Systems. Journal of Electrical Engineering and Technology, 2016, 11, 810-819.	2.0	0
131	Road traffic flow prediction using deep transfer learning. , 2018, , .		0
132	A Multi-rate Co-simulation of Combined Phasor-Domain and Time-Domain Models for Large-scale Wind Farms. , 2020, , .		0
133	Dynamic scheduling of rail replacement bus timetables. , 2020, , .		0
134	An Improved Control Strategy for Renewable energy sources (RES) based DC microgrid with enhanced System Stability and Control Performance. , 2020, , .		0
135	Dynamic evaluation of large-scale rooftop photovoltaic penetration into the power distribution system. IET Renewable Power Generation, 2020, 14, 2976-2982.	3.1	0
136	Probabilistic Transient Analysis of Power System based on Nonlinear Auto-regressive Model. , 2021, , .		0