Zhiwu Huang

List of Publications by Year
in descending order

123 papers	962 citations	516215 16 h-index	610482 24 g-index
123 all docs	123 docs citations	123 times ranked	789 citing authors

#	Article	IF	Citations
1	An Active Mobile Charging and Data Collection Scheme for Clustered Sensor Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 5100-5113.	3.9	48
2	A Cooperative Charging Protocol for Onboard Supercapacitors of Catenary-Free Trams. IEEE Transactions on Control Systems Technology, 2018, 26, 1219-1232.	3.2	43
3	Adaptive power allocation using artificial potential field with compensator for hybrid energy storage systems in electric vehicles. Applied Energy, 2020, 257, 113983.	5.1	42
4	A rapid cell voltage balancing scheme for supercapacitor based energy storage systems for urban rail vehicles. Electric Power Systems Research, 2017, 142, 329-340.	2.1	37
5	Remaining Useful Life Estimation Using CNN-XGB With Extended Time Window. IEEE Access, 2019, 7, 154386-154397.	2.6	35
6	Stationary Charging Station Design for Sustainable Urban Rail Systems: A Case Study at Zhuzhou Electric Locomotive Co., China. Sustainability, 2015, 7, 465-481.	1.6	30
7	A Light Gradient Boosting Machine for Remainning Useful Life Estimation of Aircraft Engines. , 2018, , .		30
8	Data-Driven Distributed Coordinated Control for Cloud-Based Model-Free Multiagent Systems With Communication Constraints. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3187-3198.	3.5	27
9	Cooperative CCâ€“CV Charging of Supercapacitors Using Multicharger Systems. IEEE Transactions on Industrial Electronics, 2020, 67, 10497-10508.	5.2	25
10	Adaptive Split-Frequency Quantitative Power Allocation for Hybrid Energy Storage Systems. IEEE Transactions on Transportation Electrification, 2021, 7, 2306-2317.	5.3	25
11	A Learning-Based Data Placement Framework for Low Latency in Data Center Networks. IEEE Transactions on Cloud Computing, 2022, 10, 146-157.	3.1	23
12	A Data-driven Approach for Remaining Useful Life Prediction of Aircraft Engines. , 2018, , .		22
13	A Predictive Set-Point Modulation Energy Management Strategy for Hybrid Energy Storage Systems. IEEE Transactions on Industry Applications, 2019, 55, 6266-6277.	3.3	22
14	Adaptive Model Predictive Control for Cruise Control of High-Speed Trains with Time-Varying Parameters. Journal of Advanced Transportation, 2019, 2019, 1-11.	0.9	21
15	A Real-Time Layer-Adaptive Wavelet Transform Energy Distribution Strategy in a Hybrid Energy Storage System of EVs. Energies, 2019, 12, 440.	1.6	21
16	Scalable and Adaptive Data Replica Placement for Geo-Distributed Cloud Storages. IEEE Transactions on Parallel and Distributed Systems, 2020, 31, 1575-1587.	4.0	20
17	Distributed Group Coordination of Multiagent Systems in Cloud Computing Systems Using a Model-Free Adaptive Predictive Control Strategy. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 3461-3473.	7.2	19
18	Distributed Control for State-of-Energy Balancing of Supercapacitor Modules in Light Rail Vehicles. IEEE Transactions on Vehicular Technology, 2019, 68, 4447-4457.	3.9	18

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19	Sizing optimization research considering mass effect of hybrid energy storage system in electric vehicles. Journal of Energy Storage, 2022, 48, 103892.	3.9	18
20	Synchronized Cell-Balancing Charging of Supercapacitors: A Consensus-Based Approach. IEEE Transactions on Industrial Electronics, 2018, 65, 8030-8040.	5.2	16
21	A Data-Driven Method with Feature Enhancement and Adaptive Optimization for Lithium-Ion Battery Remaining Useful Life Prediction. Energies, 2020, 13, 752.	1.6	16
22	A combinatorial double auction based resource allocation mechanism with multiple rounds for geo-distributed data centers. , 2016, , .		15
23	SoH-Aware Charging of Supercapacitors With Energy Efficiency Maximization. IEEE Transactions on Energy Conversion, 2018, 33, 1766-1775.	3.7	14
24	Using blockchain to enhance the security of fog-assisted crowdsensing systems. , 2019, , .		14
25	RLCP: A Reinforcement Learning Method for Health Stage Division Using Change Points. , 2018, , .		13
26	Dataâ€based predictive control for networked nonâ€linear multiâ€agent systems consensus tracking via cloud computing. IET Control Theory and Applications, 2019, 13, 683-692.	1.2	13
27	A Generalized Extended State Observer for Supercapacitor State of Energy Estimation With Online Identified Model. IEEE Access, 2018, 6, 27706-27716.	2.6	12
28	An Optimal Stacking Ensemble for Remaining Useful Life Estimation of Systems Under Multi-Operating Conditions. IEEE Access, 2020, 8, 31854-31868.	2.6	12
29	A Newton-Based Extremum Seeking MPPT Method for Photovoltaic Systems with Stochastic Perturbations. International Journal of Photoenergy, 2014, 2014, 1-13.	1.4	11
30	Dynamic resource reservation via broker federation in cloud service: A fine-grained heuristic-based approach. , 2014, , .		11
31	Data-Driven Koopman Model Predictive Control for Optimal Operation of High-Speed Trains. IEEE Access, 2021, 9, 82233-82248.	2.6	11
32	A Temperature-Suppression Charging Strategy for Supercapacitor Stack With Lifetime Maximization. IEEE Transactions on Industry Applications, 2019, 55, 6173-6183.	3.3	10
33	A predictive control method to improve pressure tracking precision and reduce valve switching for pneumatic brake systems. IET Control Theory and Applications, 2021, 15, 1389-1403.	1.2	10
34	A Novel Energy-Efficient Routing Algorithm in Multi-sink Wireless Sensor Networks. , 2011, , .		9
35	Flocking of Mobile Agents Using a New Interaction Model: A Cyber-Physical Perspective. IEEE Access, 2017, 5, 2665-2675.	2.6	9
36	Sliding mode control for urban railway anti-slip system based on optimal slip ratio estimation with forgetting factor recursive least-squares. , 2017, , .		9

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37	Optimal Operation of High-Speed Trains Using Hybrid Model Predictive Control. Journal of Advanced Transportation, 2018, 2018, 1-16.	0.9	9
38	Distributed Voltage Equalization Design for Supercapacitors Using State Observer. IEEE Transactions on Industry Applications, 2019, 55, 620-630.	3.3	9
39	Enhanced Sliding Mode Control and Online Estimation of Optimal Slip Ratio for Railway Vehicle Braking Systems. International Journal of Precision Engineering and Manufacturing, 2018, 19, 655-664.	1.1	8
40	Distributed cooperative tracking control for heavy haul trains with event-triggered strategy. , 2016, , .		7
41	A Remaining Useful Life Prediction Model Based on Hybrid Long-Short Sequences for Engines. , 2018, , .		7
42	An Aging-Aware SOC Estimation Method for Lithium-Ion Batteries using XGBoost Algorithm. , 2019, , .		7
43	Object recognition and localization based on kinect camera in complex environment. , 2013, , .		6
44	Flocking control for multi-agent systems with communication optimization. , 2013, , .		6
45	A generalized extended state observer for supercapacitor state of charge estimation under disturbances. , 2017, , .		6
46	Regenerative Braking Control Strategy of Electric Vehicle Based on Composite Power Supply. , 2018, , .		6
47	Ensemble Strategy for Hard Classifying Samples in Class-Imbalanced Data Set. , 2018, , .		6
48	An Instance Reservation Framework for Cost Effective Services in Geo-Distributed Data Centers. IEEE Transactions on Services Computing, 2021, 14, 356-370.	3.2	6
49	A Combinatorial Optimization for Energy-Efficient Mobile Cloud Offloading over Cellular Networks. , 2016, , .		5
50	Sliding model control based on estimation of optimal slip ratio for railway wheel slide protection using extremum seeking. , 2016, , .		5
51	A distributed ESO based cooperative current-sharing strategy for parallel charging systems under disturbances. , 2016, , .		5
52	An Energy-Based Nonlinear Pressure Observer for Fast and Precise Braking Force Control of the ECP Brake. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1437-1445.	1.1	5
53	Energy Sharing of Zero-Energy Buildings: A Consensus-Based Approach. IEEE Access, 2019, 7, 62172-62183.	2.6	5
54	A Novel Method for Lithium-Ion Battery Remaining Useful Life Prediction Using Time Window and Gradient Boosting Decision Trees. , 2019, , .		5

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55	A LiFePO4 battery management system for heavy-haul train electrically controlled pneumatic brake system application. , 2015, , .		4
56	A Hybrid Particle Swarm Ant Colony Based Resource Reservation for Geo-Distributed Cloud Service. , 2016, , .		4
57	A cooperative charging strategy for onboard supercapacitors of catenary-free trams. , 2016, , .		4
58	A new state of charge estimation for lithium-ion battery based on sliding-mode observer and battery status. , 2016, , .		4
59	An adaptive energy allocation strategy for battery/supercapacitor hybrid energy storage system. , 2017, , .		4
60	A novel estimator for adhesion force of railway vehicles braking systems and reference speed calculation. , 2017, , .		4
61	A parameter adaptive data-driven approach for remaining useful life prediction of solenoid valves. , 2019, , .		4
62	Pinning-Based Switching Control of Cyber-Physical Supercapacitor Energy Storage Systems. IEEE Transactions on Control Systems Technology, 2020, 28, 1520-1533.	3.2	4
63	Observer-Driven Charging of Supercapacitors. IEEE Transactions on Industrial Informatics, 2020, 16, 3439-3450.	7.2	4
64	A Hybrid Degradation Modeling and Prognostic Method for the Multi-Modal System. Applied Sciences (Switzerland), 2020, 10, 1378.	1.3	4
65	A Novel Stator Resistance Identification for Speed Sensorless Induction Motor Drives Using Observer. , 2006, , .		3
66	Locomotive Brake Control Method Based on T-S Fuzzy Modeling Predictive Control. , 2008, , .		3
67	Actuator fault detection based on robust adaptive observer for CCBII Braking System. , 2014, , .		3
68	An on-line fast model predictive control of highpower ultracapacitors charging current for renewable energy urban rail vehicle. , 2014, , .		3
69	An adaptive parallel charging system for energy-storage urban rails. , 2015, , .		3
70	Low-power Wireless Sensor Network protocol of Mobile Health based on IPv6. , 2016, , .		3
71	An energy-based nonlinear pressure observer for electronically controlled pneumatic brake fault diagnosis. , 2017, , .		3
72	Development of A Customizable Real-time Monitoring System for Networked Control Systems. , 2018, , .		3

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73	An Efficient Reference Modulation Based Control Strategy for Active Hybrid Energy Management of EVs. , 2018, , .		3
74	Consensus-Based Cell Balancing of Reconfigurable Supercapacitors. IEEE Transactions on Industry Applications, 2020, , 1-1.	3.3	3
75	Cooperative Charging of Supercapacitor Trams with Current Overshoot Suppression. IEEE Transactions on Industry Applications, 2020, , 1-1.	3.3	3
76	An Online Super-Twisting Sliding Mode Anti-Slip Control Strategy. Energies, 2020, 13, 1823.	1.6	3
77	Optimal Filter-Based Energy Management for Hybrid Energy Storage Systems with Energy Consumption Minimization. , 2020, , .		3
78	A False Data Injection Attack Detection Method for Cooperative Charging Systems. IEEE Transactions on Industry Applications, 2022, 58, 3946-3956.	3.3	3
79	A Constant Gain Adaptive Observer for Speed and Resistances Identification. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	2
80	A Multi-task Real-Time Scheduling Algorithm Based on Dynamic Weight Compensation and Adaptive Task Jumping. , 2009, , .		2
81	An Online Distributed Game Optimal Control for Heavy Haul Trains with Limited Communication. Mathematical Problems in Engineering, 2015, 2015, 1-9.	0.6	2
82	An extremum seeking based control strategy for pantograph-catenary contact force of high-speed trains. , 2015, , .		2
83	Energy efficient video streaming over wireless networks with mobile-to-mobile cooperation. , 2015, , .		2
84	Coordinated control for multi-agent systems based on networked predictive control schemes. , 2016, , .		2
85	Optimal operation of high-speed train using hybrid model predictive control. , 2017, , .		2
86	Cooperative Neural Fitted Learning for Distributed Energy Management in Microgrids via Wireless Networks. , 2017, , .		2
87	A Current Controller based on SPAACE for Parallel Charging Systems of Energy-Storage Urban Rails. , 2018, , .		2
88	A Cooperative Cell Balancing Approach for Reconfigurable Supercapacitor Energy Storage Systems. , 2018, , .		2
89	Adaptive Precision Automatic Train Stop Control based on Pneumatic Brake Systems. , 2019, , .		2
90	Lithium-Ion Battery SoC Equilibrium: An Artificial Potential Field-Based Method. Energies, 2020, 13, 5691.	1.6	2

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91	Decentralized control of heavy haul trains with input constraints and communication delays. , 2012, , .		1
92	Multiple incipient faults prognosis for CCBII braking system. , 2014, , .		1
93	Periodic Event-Triggered Condition Design for the Consensus of Multiagent Systems with Communication Delays. Mathematical Problems in Engineering, 2016, 2016, 1-9.	0.6	1
94	A power bond graph based diagnostic algorithm for CCBII brake. , 2016, , .		1
95	A coalitional game based mechanism for resource sharing in geo-distributed mobile cloud computing. , 2017, , .		1
96	A Temperature-Suppression Charging Strategy for Supercapacitors of Portable Applications. , 2018, , .		1
97	Fault Diagnosis of Direct Electro-pneumatic Brake Based on Model and Data-driven. , 2018, , .		1
98	Railway Optimal Slip Ratio Control Using Extremum Seeking Algorithm With Adaptive Amplitude Tuning. , 2018, , .		1
99	An Online Parameter Identification for Ultracapacitor Model by Using Recursive Least Square with Multi-forgetting Factor. , 2018, , .		1
100	Cooperative Cell Balancing of Supercapacitors with Adaptive Observers. , 2020, , .		1
101	A Hierarchical State of Charge Estimation Method for Lithium-ion Batteries via XGBoost and Kalman Filter. , 2020, , .		1
102	Detection of False-Data Injection Attacks in Supercapacitor Charging Systems. , 2020, , .		1
103	PID control and optimum of the third-order monotone nondecreasing and nonovershooting. , 0, , .		0
104	On the Stability and Stabilization of Linear Neutral Time-delay Systems. , 0, , .		0
105	Robust H>inf<∞>/inf<Control of Linear Uncertain Neutral Type Systems with Time-Varying Delay. , 0, , .		0
106	Based on the betterment expert control of the brake cylinder pressure control method. , 2008, , .		0
107	Research of State Monitor System for CCBII Brake Based on Multi-hierarchy Fuzzy Evaluation. , 2009, , .		0
108	Modelling and model optimization of locomotive brake control system. , 2011, , .		0

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109	An adaptive charging control strategy for ultracapacitor light rail vehicles. , 2016, , .		0
110	A hybrid model predictive charging control strategy for ultracapacitors of urban rail vehicles. , 2016, , .		0
111	A high-efficiency synchronous rectifier for supercapacitor voltage equalizer in urban rail. , 2016, , .		0
112	An EMPC based active control for pneumatic pantograph system using ON/OFF valves. , 2017, , .		0
113	Mathematical modeling of electrical controlled pneumatic brake. , 2017, , .		0
114	Emergency data gathering mechanism for sustainable wireless sensor networks. , 2017, , .		0
115	A Fast servoing strategy for nonholonomic mobile robot with RGB-D sensing. , 2017, , .		0
116	A Practical and Efficient Nonlinear Observer for Supercapacitor Energy Identification. , 2018, , .		0
117	A Novel Charging Strategy to Reduce Voltage Variation for Reconfigurable Energy Storage System of Modern Tram. , 2018, , .		0
118	An Adaptive Current Sharing Strategy for Energy Storage Urban Rails Using Extremum Seeking. , 2018, , .		0
119	Optimal ultracapacitor permutation and combination for voltage equalization using Rejected Monte Carlo algorithm. , 2018, , .		0
120	Voltage Equalization Scheme for Onboard Supercapacitor Based on Sliding Mode Observer. , 2018, , .		0
121	Robust Fault Diagnosis for DK-2 Brake Based on Both Data-driven and Model. , 2018, , .		0
122	Optimal Charging of Supercapacitors with Limited Charging Time. , 2021, , .		0
123	A fast adaptive bus voltage regulation strategy for supercapacitor energy storage systems. IET Power Electronics, 0, , .	1.5	0