Zhenpo Wang

List of Publications by Citations

94 papers	2,702 citations	27 h-index	51 g-index
104 ext. papers	4,087 ext. citations	6.4 avg, IF	6.4 L-index

#	Paper	IF	Citations
94	Sustainable Recycling Technology for Li-Ion Batteries and Beyond: Challenges and Future Prospects. *Chemical Reviews*, **2020**, 120, 7020-7063	68.1	358
93	A review of fractional-order techniques applied to lithium-ion batteries, lead-acid batteries, and supercapacitors. *Journal of Power Sources*, **2018**, 390, 286-296	8.9	233
92	Grid Power Peak Shaving and Valley Filling Using Vehicle-to-Grid Systems. *IEEE Transactions on Power Delivery*, **2013**, 28, 1822-1829	4.3	193
91	State-of-health estimation for Li-ion batteries by combing the incremental capacity analysis method with grey relational analysis. *Journal of Power Sources*, **2019**, 410-411, 106-114	8.9	141
90	State of health estimation for Li-Ion battery using incremental capacity analysis and Gaussian process regression. *Energy*, **2020**, 190, 116467	7.9	111
89	Prognostic health condition for lithium battery using the partial incremental capacity and Gaussian process regression. *Journal of Power Sources*, **2019**, 421, 56-67	8.9	108
88	Co-estimation of capacity and state-of-charge for lithium-ion batteries in electric vehicles. *Energy*, **2019**, 174, 33-44	7.9	101
87	State-of-Health Estimation for Lithium-Ion Batteries Based on the Multi-Island Genetic Algorithm and the Gaussian Process Regression. *IEEE Access*, **2017**, 5, 21286-21295	3.5	95
86	Voltage fault diagnosis and prognosis of battery systems based on entropy and Z-score for electric vehicles. *Applied Energy*, **2017**, 196, 289-302	10.7	94
85	Battery Aging Assessment for Real-World Electric Buses Based on Incremental Capacity Analysis and Radial Basis Function Neural Network. *IEEE Transactions on Industrial Informatics*, **2020**, 16, 3345-3354	11.9	91
84	An Overview on Thermal Safety Issues of Lithium-ion Batteries for Electric Vehicle Application. *IEEE Access*, **2018**, 6, 23848-23863	3.5	84
83	Fault prognosis of battery system based on accurate voltage abnormity prognosis using long short-term memory neural networks. *Applied Energy*, **2019**, 251, 113381	10.7	77
82	A novel fault diagnosis method for lithium-Ion battery packs of electric vehicles. *Measurement: Journal of the International Measurement Confederation*, **2018**, 116, 402-411	4.6	70
81	Online Parameter Identification of Ultracapacitor Models Using the Extended Kalman Filter. *Energies*, **2014**, 7, 3204-3217	3.1	65
80	Battery Fault Diagnosis for Electric Vehicles Based on Voltage Abnormality by Combining the Long Short-Term Memory Neural Network and the Equivalent Circuit Model. *IEEE Transactions on Power Electronics*, **2021**, 36, 1303-1315	7.2	56
79	Longitudinal Vehicle Speed Estimation for Four-Wheel-Independently-Actuated Electric Vehicles Based on Multi-Sensor Fusion. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 12797-12806	6.8	55
78	A Novel Consistency Evaluation Method for Series-Connected Battery Systems Based on Real-World Operation Data. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 437-451	7.6	52

77	A novel data-model fusion state-of-health estimation approach for lithium-ion batteries. *Applied Energy*, **2019**, 237, 836-847	10.7	44
76	Vehicle Stability Enhancement through Hierarchical Control for a Four-Wheel-Independently-Actuated Electric Vehicle. *Energies*, **2017**, 10, 947	3.1	43
75	Robust Lateral Motion Control for In-Wheel-Motor-Drive Electric Vehicles With Network Induced Delays. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 10585-10593	6.8	38
74	A Vehicle Rollover Evaluation System Based on Enabling State and Parameter Estimation. *IEEE Transactions on Industrial Informatics*, **2021**, 17, 4003-4013	11.9	34
73	Entropy-Based Voltage Fault Diagnosis of Battery Systems for Electric Vehicles. *Energies*, **2018**, 11, 136	3.1	30
72	Big-Data-Based Thermal Runaway Prognosis of Battery Systems for Electric Vehicles. *Energies*, **2017**, 10, 919	3.1	29
71	A Data-Driven Method for Battery Charging Capacity Abnormality Diagnosis in Electric Vehicle Applications. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	29
70	Internal short circuit and failure mechanisms of lithium-ion pouch cells under mechanical indentation abuse conditions:An experimental study. *Journal of Power Sources*, **2020**, 455, 227939	8.9	28
69	Synchronous multi-parameter prediction of battery systems on electric vehicles using long short-term memory networks. *Applied Energy*, **2019**, 254, 113648	10.7	28
68	Overcharge-to-thermal-runaway behavior and safety assessment of commercial lithium-ion cells with different cathode materials: A comparison study. *Journal of Energy Chemistry*, **2021**, 55, 484-498	12	28
67	Hybrid Control-Based Acceleration Slip Regulation for Four-Wheel-Independent-Actuated Electric Vehicles. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 1976-1989	7.6	26
66	State and parameter estimation based on a modified particle filter for an in-wheel-motor-drive electric vehicle. *Mechanism and Machine Theory*, **2019**, 133, 606-624	4	21
65	Lithium Battery State-of-Health Estimation via Differential Thermal Voltammetry With Gaussian Process Regression. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 16-25	7.6	21
64	Fault-Tolerant Control for Intelligent Electrified Vehicles Against Front Wheel Steering Angle Sensor Faults During Trajectory Tracking. *IEEE Access*, **2021**, 9, 65174-65186	3.5	19
63	Chassis Coordinated Control for Full X-by-Wire Vehicles-A Review. *Chinese Journal of Mechanical Engineering (English Edition)*, **2021**, 34,	2.5	18
62	Automotive ABS/DYC Coordinated Control Under Complex Driving Conditions. *IEEE Access*, **2018**, 6, 32769-32779	3.5	18
61	Evaluating Model Predictive Path Following and Yaw Stability Controllers for Over-Actuated Autonomous Electric Vehicles. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 12807-12821	6.8	16
60	Lateral stability enhancement based on a novel sliding mode prediction control for a four-wheel-independently actuated electric vehicle. *IET Intelligent Transport Systems*, **2019**, 13, 124-133	2.4	16

59	Thermal Runaway Prognosis of Battery Systems Using the Modified Multiscale Entropy in Real-World Electric Vehicles. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 2269-2278	7.6	16
58	Advanced Vehicle State Monitoring: Evaluating Moving Horizon Estimators and Unscented Kalman Filter. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 5430-5442	6.8	15
57	DBSCAN-Based Thermal Runaway Diagnosis of Battery Systems for Electric Vehicles. *Energies*, **2019**, 12, 2977	3.1	13
56	Sideslip angle estimation of ground vehicles: a comparative study. *IET Control Theory and Applications*, **2020**, 14, 3490-3505	2.5	13
55	Data-Driven Ohmic Resistance Estimation of Battery Packs for Electric Vehicles. *Energies*, **2019**, 12, 4772	3.1	11
54	Multi-fault synergistic diagnosis of battery systems based on the modified multi-scale entropy. *International Journal of Energy Research*, **2019**, 43, 8350-8369	4.5	10
53	Thermal Runaway Characteristics of a Large Format Lithium-Ion Battery Module. *Energies*, **2019**, 12, 3099	3.1	10
52	Frequency and Parameter Combined Tuning Method of LCC-LCC Compensated Resonant Converter with Wide Coupling Variation for EV Wireless Charger. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	9
51	Electric Vehicle Battery Fault Diagnosis Based on Statistical Method. *Energy Procedia*, **2017**, 105, 2366-2371	2.3	8
50	Optimization of an Energy Storage System for Electric Bus Fast-Charging Station. *Energies*, **2021**, 14, 4143	3.1	8
49	Data-driven framework for large-scale prediction of charging energy in electric vehicles. *Applied Energy*, **2021**, 282, 116175	10.7	8
48	Battery Thermal Runaway Fault Prognosis in Electric Vehicles Based on Abnormal Heat Generation and Deep Learning Algorithms. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	7
47	Active camber for enhancing path following and yaw stability of over-actuated autonomous electric vehicles. *Vehicle System Dynamics*, **2021**, 59, 800-821	2.8	5
46	The Design and Coupler Optimization of a Single-Transmitter Coupled Multireceiver Inductive Power Transfer System for Maglev Trains. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 3173-3184	7.6	5
45	A Hybrid Mode Control Strategy for LCC□LCC- Compensated WPT System With Wide ZVS Operation. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	5
44	Novel Polarization Voltage Model: Accurate Voltage and State of Power Prediction. *IEEE Access*, **2020**, 1-1	3.5	4
43	Vehicle sideslip angle estimation for a four-wheel-independent-drive electric vehicle based on a hybrid estimator and a moving polynomial Kalman smoother. *Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics*, **2019**, 233, 125-140	0.9	4
42	Event-Triggered Vehicle Sideslip Angle Estimation Based on Low-Cost Sensors. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	4

41	An Enabling Trajectory Planning Scheme for Lane Change Collision Avoidance on Highways. *IEEE Transactions on Intelligent Vehicles*, **2021**, 1-1	5	4
40	Assessment of battery utilization and energy consumption in the large-scale development of urban electric vehicles. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
39	Integrated Sizing and Energy Management for Four-Wheel-Independently-Actuated Electric Vehicles Considering Realistic Constructed Driving Cycles. *Energies*, **2018**, 11, 1768	3.1	4
38	Thermal Property Measurements of a Large Prismatic Lithium-ion Battery for Electric Vehicles. *Journal of Thermal Science*, **2021**, 30, 477-492	1.9	4
37	Speed Planning for Autonomous Driving in Dynamic Urban Driving Scenarios **2020**,		3
36	Offline and Online Blended Machine Learning for Lithium-Ion Battery Health State Estimation. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	3
35	Modified Relative Entropy based Lithium-ion Battery Pack Online Short Circuit Detection for Electric Vehicle. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	3
34	Integrated Vehicle-Following Control for Four-Wheel-Independent-Drive Electric Vehicles Against Non-ideal V2X Communication. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	3
33	Analysis and Design of Double-sided LCLC Compensation Parameters with Coupling-insensitive ZVS Operation for Capacitive Power Transfer **2019**,		3
32	. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-10	6.1	3
31	Data-driven energy management and velocity prediction for four-wheel-independent-driving electric vehicles. *ETransportation*, **2021**, 9, 100119	12.7	3
30	A Comparison Study of Compensation Topologies for Capacitive Power Transfer **2019**,		2
29	Analyzing Charging Behavior of Electric City Buses in Typical Chinese Cities. *IEEE Access*, **2020**, 8, 4466-4474	3.9	2
28	A Vehicle Rollover Prediction System Based on Lateral Load Transfer Ratio **2020**,		2
27	Influence of Tire Inflation Pressure on Vehicle Dynamics and Compensation Control on FWID Electric Vehicles. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2020**, 142,	1.6	2
26	State of health estimation for LiFePO4 battery system on real-world electric vehicles considering aging stage. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	2
25	Optimal Sizing of On-Board Energy Storage Systems and Stationary Charging Infrastructures for a Catenary-Free Tram. *Energies*, **2020**, 13, 6227	3.1	2
24	Analysis of Multi-Pickup Inductive Power Transfer System with LCC Compensation for Maglev Train **2019**,		2

23	A Novel Design Method of LCC-S Compensated Inductive Power Transfer System Combining Constant Current and Constant Voltage Mode via Frequency Switching. *IEEE Access*, **2021**, 9, 117244-117256	3.5	2
22	Voltage Fault Diagnosis of Power Batteries based on Boxplots and Gini Impurity for Electric Vehicles **2019**,		1
21	Technical and economic analysis of pure-electric vehicles based on the life-cycle cost theory **2011**,		1
20	A Detuned LCC-LCC Compensation Topology with Coupling Variation Resisting for EV Wireless Charger **2020**,		1
19	Magnetic Coupler Robust Optimization Design for Electric Vehicle Wireless Charger Based on Improved Simulated Annealing Algorithm. *Automotive Innovation*, **2022**, 5, 29	1.7	1
18	Event-Triggered Vehicle-Following Control for Connected and Automated Vehicles under Nonideal Vehicle-to-Vehicle Communications **2021**,		1
17	Cloud Platform-Oriented Electrical Vehicle Abnormal Battery Cell Detection and Pack Consistency Evaluation With Big Data: Devising an Early-Warning System for Latent Risks. *IEEE Industry Applications Magazine*, **2021**, 2-13	0.6	1
16	A Novel Control Method for A Primary Triple Bridges Dual Active Bridge DC-DC Converter with Minimum RMS Current Optimization **2020**,		1
15	Relative Entropy based Lithium-ion Battery Pack Short Circuit Detection for Electric Vehicle **2020**,		1
14	Multi-Objective Optimization of Single-Transmitter Coupled Multi-Receiver IPT System for Maglev Trains **2020**,		1
13	Electric Vehicle Charging Facility Planning Based on Flow Demand: A Case Study. *Sustainability*, **2021**, 13, 4952	3.6	1
12	High-dimensional data abnormity detection based on improved Variance-of-Angle (VOA) algorithm for electric vehicles battery **2019**,		1
11	An Enhanced Dual Active Bridge Converter with Full Domain ZVS by Utilizing a Simple Segment Control for Wide Voltage Range Applications. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	1
10	Research on a novel data-driven aging estimation method for battery systems in real-world electric vehicles. *Advances in Mechanical Engineering*, **2021**, 13, 168781402110277	1.2	1
9	A Novel Voltage-Fed Hybrid Bridge Combining Semiactive Rectifier Converter for Wide Voltage Gain. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	1
8	A Dual-Transformer-Based Hybrid Dual Active Bridge Converter for Plug-in Electric Vehicle Charging to Cope with Wide Load Voltages. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	1
7	Timely Thermal Runaway Prognosis for Battery Systems in Real-world Electric Vehicles Based on Temperature Abnormality. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2022**, 1-1	5.6	1
6	An online data driven fault diagnosis and thermal runaway early warning for electric vehicle batteries. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	1

List of Publications

5	Multi-Objective Thermal Optimization Based on Improved Analytical Thermal Models of a 30 kW IPT System for EVs. *IEEE Transactions on Transportation Electrification*, **2022**, 1-1	7.6	1
4	The Technological Development of Domestic Li-ion Power Battery and Its Application on the Electric Vehicle. *Journal of Asian Electric Vehicles*, **2005**, 3, 743-746	0.3	0
3	Real-time identification of partnership for a new generation of vehicles battery model parameters based on the model reference adaptive system. *International Journal of Energy Research*, **2021**, 45, 9351-9368	4.5	0
2	Simplified Closed-Form Optimized Trajectories Control for a Dual Active Bridge Converter with ZVS Implementation Over Whole Domain. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	0
1	Comparative study of incremental capacity curve determination methods for lithium-ion batteries considering the real-world situation. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	0