Xuezhe Wei

List of Publications by Year
in descending order

63	3,411	236612 25	182168 51
papers	citations	h-index	g-index

64	64	64	2183
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Building Safe Lithium-Ion Batteries for Electric Vehicles: A Review. Electrochemical Energy Reviews, 2020, 3, 1-42.	13.1	448
2	Online cell SOC estimation of Li-ion battery packs using a dual time-scale Kalman filtering for EV applications. Applied Energy, 2012, 95, 227-237.	5.1	295
3	A review of modeling, acquisition, and application of lithium-ion battery impedance for onboard battery management. ETransportation, 2021, 7, 100093.	6.8	206
4	A Critical Review of Wireless Power Transfer via Strongly Coupled Magnetic Resonances. Energies, 2014, 7, 4316-4341.	1.6	179
5	Advanced battery management strategies for a sustainable energy future: Multilayer design concepts and research trends. Renewable and Sustainable Energy Reviews, 2021, 138, 110480.	8.2	170
6	Investigation of lithium-ion battery degradation mechanisms by combining differential voltage analysis and alternating current impedance. Journal of Power Sources, 2020, 448, 227575.	4.0	155
7	Estimation of state of health of lithium-ion batteries based on charge transfer resistance considering different temperature and state of charge. Journal of Energy Storage, 2019, 21, 618-631.	3.9	145
8	Data-driven capacity estimation of commercial lithium-ion batteries from voltage relaxation. Nature Communications, 2022, 13, 2261.	5.8	133
9	Incremental capacity analysis based adaptive capacity estimation for lithium-ion battery considering charging condition. Applied Energy, 2020, 269, 115074.	5.1	108
10	Adaptive model parameter identification for large capacity Li-ion batteries on separated time scales. Applied Energy, 2016, 184, 119-131.	5.1	103
11	Experimental investigations of an AC pulse heating method for vehicular high power lithium-ion batteries at subzero temperatures. Journal of Power Sources, 2017, 367, 145-157.	4.0	98
12	A comparative study of different features extracted from electrochemical impedance spectroscopy in state of health estimation for lithium-ion batteries. Applied Energy, 2022, 322, 119502.	5.1	98
13	Joint estimation of lithium-ion battery state of charge and capacity within an adaptive variable multi-timescale framework considering current measurement offset. Applied Energy, 2019, 253, 113619.	5.1	89
14	Adaptive Kalman filtering based internal temperature estimation with an equivalent electrical network thermal model for hard-cased batteries. Journal of Power Sources, 2015, 293, 351-365.	4.0	85
15	An alternating current heating method for lithium-ion batteries from subzero temperatures. International Journal of Energy Research, 2016, 40, 1869-1883.	2.2	80
16	Lithium plating on the anode for lithium-ion batteries during long-term low temperature cycling. Journal of Power Sources, 2021, 484, 229312.	4.0	79
17	Deep reinforcement learning-based energy management of hybrid battery systems in electric vehicles. Journal of Energy Storage, 2021, 36, 102355.	3.9	67
18	An improved electro-thermal battery model complemented by current dependent parameters for vehicular low temperature application. Applied Energy, 2019, 248, 149-161.	5.1	60

#	Article	IF	Citations
19	Studies on the medium-frequency impedance arc for Lithium-ion batteries considering various alternating current amplitudes. Journal of Applied Electrochemistry, 2016, 46, 157-167.	1.5	59
20	Internal Resistance Identification in Vehicle Power Lithium-Ion Battery and Application in Lifetime Evaluation. , 2009, , .		51
21	Comprehensive Investigation of a Slight Overcharge on Degradation and Thermal Runaway Behavior of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 35054-35068.	4.0	50
22	Investigation of capacity fade for 18650-type lithium-ion batteries cycled in different state of charge (SoC) ranges. Journal of Power Sources, 2021, 489, 229422.	4.0	48
23	Online SOC Estimation of High-power Lithium-ion Batteries Used on HEVs. , 2006, , .		46
24	Battery Internal Temperature Estimation for LiFePO4 Battery Based on Impedance Phase Shift under Operating Conditions. Energies, 2017, 10, 60.	1.6	39
25	Lithium-ion battery temperature on-line estimation based on fast impedance calculation. Journal of Energy Storage, 2019, 26, 100952.	3.9	39
26	A Novel System for Measuring Alternating Current Impedance Spectra of Series-Connected Lithium-Ion Batteries With a High-Power Dual Active Bridge Converter and Distributed Sampling Units. IEEE Transactions on Industrial Electronics, 2021, 68, 7380-7390.	5.2	38
27	Low-Temperature Separating Lithium-Ion Battery Interfacial Polarization Based on Distribution of Relaxation Times (DRT) of Impedance. IEEE Transactions on Transportation Electrification, 2021, 7, 410-421.	5.3	29
28	The research of vehicle power Li-ion battery pack balancing method. , 2009, , .		27
29	Practical On-Board Measurement of Lithium Ion Battery Impedance Based on Distributed Voltage and Current Sampling. Energies, 2018, 11, 64.	1.6	26
30	An experimental investigation for a hybrid <scp>phase change material</scp> â€liquid cooling strategy to achieve highâ€temperature uniformity of Liâ€ion battery module under fast charging. International Journal of Energy Research, 2021, 45, 6198-6212.	2.2	24
31	Multi-Kernel Relevance Vector Machine With Parameter Optimization for Cycling Aging Prediction of Lithium-Ion Batteries. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2023, 11, 175-186.	3.7	24
32	Preparation of a Graphitized-Carbon-Supported PtNi Octahedral Catalyst and Application in a Proton-Exchange Membrane Fuel Cell. ACS Applied Materials & Interfaces, 2020, 12, 7047-7056.	4.0	23
33	Online Reliable Peak Charge/Discharge Power Estimation of Series-Connected Lithium-Ion Battery Packs. Energies, 2017, 10, 390.	1.6	20
34	Revealing the Impact of Slight Electrical Abuse on the Thermal Safety Characteristics for Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 12858-12870.	2.5	20
35	Investigation the Degradation Mechanisms of Lithium-Ion Batteries under Low-Temperature High-Rate Cycling. ACS Applied Energy Materials, 2022, 5, 6462-6471.	2.5	20
36	A State of Health Estimation Method for Lithium-Ion Batteries Based on Voltage Relaxation Model. Energies, 2019, 12, 1349.	1.6	17

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37	A Cell-to-Pack State Estimation Extension Method Based on a Multilayer Difference Model for Series-Connected Battery Packs. IEEE Transactions on Transportation Electrification, 2022, 8, 2037-2049.	5.3	17
38	A Comprehensive Flowrate Optimization Design for a Novel Airâ€“Liquid Cooling Coupled Battery Thermal Management System. Journal of Electrochemical Energy Conversion and Storage, 2021, 18, .	1.1	17
39	Fast Calculation of Broadband Battery Impedance Spectra Based on S Transform of Step Disturbance and Response. IEEE Transactions on Transportation Electrification, 2022, 8, 3659-3672.	5.3	17
40	Multiscale investigation of discharge rate dependence of capacity fade for lithium-ion battery. Journal of Power Sources, 2022, 536, 231516.	4.0	16
41	Charging Strategy Optimization at Low Temperatures for Li-Ion Batteries Based on Multi-Factor Coupling Aging Model. IEEE Transactions on Vehicular Technology, 2021, 70, 11433-11445.	3.9	15
42	A Semi-Empirical Capacity Degradation Model of EV Li-Ion Batteries Based on Eyring Equation. , 2013, , .		14
43	Determination of Optimal Indicators Based on Statistical Analysis for the State of Health Estimation of a Lithium-Ion Battery. Frontiers in Energy Research, 2021, 9, .	1.2	12
44	Revealing the Impact of Fast Charge Cycling on the Thermal Safety of Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 7056-7068.	2.5	12
45	Investigating the critical characteristics of thermal runaway process for LiFePO4/graphite batteries by a ceased segmented method. IScience, 2021, 24, 103088.	1.9	11
46	A Remaining Discharge Energy Prediction Method for Lithium-Ion Battery Pack Considering SOC and Parameter Inconsistency. Energies, 2019, 12, 987.	1.6	10
47	Quantitative Analysis of Degradation Modes of Lithium-Ion Battery under Different Operating Conditions. Energies, 2021, 14, 350.	1.6	10
48	Principle Elaboration and System Structure Validation of Wireless Power Transfer via Strongly Coupled Magnetic Resonances. , 2013, , .		8
49	A novel dual <scp>time scale</scp> life prediction method for lithiumâ€ion batteries considering effects of temperature and state of charge. International Journal of Energy Research, 2021, 45, 14692-14709.	2.2	8
50	Experimental and modeling analysis of thermal runaway for <scp> LiNi ₀ </scp> _. <scp> ₅ Mn ₀ </scp> _. <scp> ₃ Co ₀ </scp> _. <scp> ₂ O <sub>. International Journal of Energy Research, 2021, 45, 10667-10681.	2.2	6
51	Investigation on Cell Performance and Inconsistency Evolution of Series and Parallel Lithiumâ€Ion Battery Modules. Energy Technology, 2021, 9, 2100072.	1.8	6
52	Theoretical Analysis of Planar Spiral Coils between Two Multilayer Media for Electric Vehicle Wireless Charging. Energies, 2018, 11, 693.	1.6	4
53	Advanced Online Broadband Impedance Spectrum Acquisition of Fuel Cells by S-Transform. IEEE Transactions on Industrial Electronics, 2023, 70, 3740-3750.	5.2	4
54	Alternating Current Impedance Probing Capacity of Lithiumâ€Ion Battery by Gaussian Process Regression. Energy Technology, 2022, 10, .	1.8	4

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55	Assessment of power consumption control strategy for battery management system using hardware-in-the-loop simulation. , 2008, , .		2
56	Design and implementation of RLS identification algorithm based on FPGA. , 2009, , .		2
57	Lithium-Ion Battery Internal Resistance Model Based on the Porous Electrode Theory. , 2014, , .		2
58	An Improved Discrete Preisach Model of Open Circuit Voltage Hysteresis for LiFePO4 Batteries. , 2015, , .		2
59	A Self-Tuning LCC/SP System for Electric Vehicle Wireless Charging against Large Self- and Mutual Inductance Variations. Energies, 2022, 15, 3980.	1.6	2
60	A Simulation of Lithium-Ion Battery Ohmic Resistance Identification. , 2013, , .		1
61	Preliminary Study on the Influence of Internal Temperature Gradient on EIS Measurement and Characterization for Li-Ion Batteries. , 2015, , .		1
62	A Discussion on a Feedback Mechanism of Estimated OCV in RLS Algorithm Based on Battery Equivalent Circuit Model. , 2017, , .		1
63	Preliminary Study of a Distributed Thermal Model for a LFP Battery in COMSOL Inc. Multiphysics(MP) Software. , 2013, , .		0