

# Jiangong Zhu

## List of Publications by Year in descending order

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43  
papers

1,847  
citations

304743

22  
h-index

414414

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g-index

44  
all docs

44  
docs citations

44  
times ranked

968  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of modeling, acquisition, and application of lithium-ion battery impedance for onboard battery management. <i>ETransportation</i> , 2021, 7, 100093.	14.8	206
2	A new lithium-ion battery internal temperature on-line estimate method based on electrochemical impedance spectroscopy measurement. <i>Journal of Power Sources</i> , 2015, 274, 990-1004.	7.8	155
3	Investigation of lithium-ion battery degradation mechanisms by combining differential voltage analysis and alternating current impedance. <i>Journal of Power Sources</i> , 2020, 448, 227575.	7.8	155
4	Data-driven capacity estimation of commercial lithium-ion batteries from voltage relaxation. <i>Nature Communications</i> , 2022, 13, 2261.	12.8	133
5	Internal short circuit mechanisms, experimental approaches and detection methods of lithium-ion batteries for electric vehicles: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 141, 110790.	16.4	108
6	Experimental investigations of an AC pulse heating method for vehicular high power lithium-ion batteries at subzero temperatures. <i>Journal of Power Sources</i> , 2017, 367, 145-157.	7.8	98
7	A comparative study of different features extracted from electrochemical impedance spectroscopy in state of health estimation for lithium-ion batteries. <i>Applied Energy</i> , 2022, 322, 119502.	10.1	98
8	Adaptive Kalman filtering based internal temperature estimation with an equivalent electrical network thermal model for hard-cased batteries. <i>Journal of Power Sources</i> , 2015, 293, 351-365.	7.8	85
9	An alternating current heating method for lithium-ion batteries from subzero temperatures. <i>International Journal of Energy Research</i> , 2016, 40, 1869-1883.	4.5	80
10	Lithium plating on the anode for lithium-ion batteries during long-term low temperature cycling. <i>Journal of Power Sources</i> , 2021, 484, 229312.	7.8	79
11	Nonlinear health evaluation for lithium-ion battery within full-lifespan. <i>Journal of Energy Chemistry</i> , 2022, 72, 333-341.	12.9	69
12	An improved electro-thermal battery model complemented by current dependent parameters for vehicular low temperature application. <i>Applied Energy</i> , 2019, 248, 149-161.	10.1	60
13	Studies on the medium-frequency impedance arc for Lithium-ion batteries considering various alternating current amplitudes. <i>Journal of Applied Electrochemistry</i> , 2016, 46, 157-167.	2.9	59
14	Comprehensive Investigation of a Slight Overcharge on Degradation and Thermal Runaway Behavior of Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 35054-35068.	8.0	50
15	Investigation of capacity fade for 18650-type lithium-ion batteries cycled in different state of charge (SoC) ranges. <i>Journal of Power Sources</i> , 2021, 489, 229422.	7.8	48
16	Multi-objective optimization design and experimental investigation for a parallel liquid cooling-based Lithium-ion battery module under fast charging. <i>Applied Thermal Engineering</i> , 2022, 211, 118503.	6.0	41
17	Battery Internal Temperature Estimation for LiFePO <sub>4</sub> Battery Based on Impedance Phase Shift under Operating Conditions. <i>Energies</i> , 2017, 10, 60.	3.1	39
18	Lithium-ion battery temperature on-line estimation based on fast impedance calculation. <i>Journal of Energy Storage</i> , 2019, 26, 100952.	8.1	39

#	ARTICLE	IF	CITATIONS
19	A new electrochemical impedance spectroscopy model of a high-power lithium-ion battery. RSC Advances, 2014, 4, 29988-29998.	3.6	30
20	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.	7.8	29
21	Fatigue in High-Energy Commercial Li Batteries while Cycling at Standard Conditions: An In Situ Neutron Powder Diffraction Study. ACS Applied Energy Materials, 2020, 3, 6611-6622.	5.1	27
22	Unlocking the thermal safety evolution of lithium-ion batteries under shallow over-discharge. Journal of Power Sources, 2022, 521, 230990.	7.8	25
23	Revealing the Impact of Slight Electrical Abuse on the Thermal Safety Characteristics for Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 12858-12870.	5.1	20
24	Investigation the Degradation Mechanisms of Lithium-Ion Batteries under Low-Temperature High-Rate Cycling. ACS Applied Energy Materials, 2022, 5, 6462-6471.	5.1	20
25	A State of Health Estimation Method for Lithium-Ion Batteries Based on Voltage Relaxation Model. Energies, 2019, 12, 1349.	3.1	17
26	Multiscale investigation of discharge rate dependence of capacity fade for lithium-ion battery. Journal of Power Sources, 2022, 536, 231516.	7.8	16
27	Revealing the Impact of Fast Charge Cycling on the Thermal Safety of Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 7056-7068.	5.1	12
28	Investigating the critical characteristics of thermal runaway process for LiFePO <sub>4</sub> /graphite batteries by a ceased segmented method. IScience, 2021, 24, 103088.	4.1	11
29	<i>In Operando</i> analysis of the charge storage mechanism in a conversion ZnCo <sub>2</sub> O <sub>4</sub> anode and the application in flexible Li-ion batteries. Inorganic Chemistry Frontiers, 2019, 6, 1861-1872.	6.0	10
30	Managing Life Span of High-Energy LiNi <sub>0.88</sub> Co <sub>0.11</sub> Al <sub>0.01</sub> O <sub>2</sub>   C/Si Li-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 9982-10002.	5.1	8
31	Experimental and modeling analysis of thermal runaway for $\text{LiNi}_{0.5}\text{Mn}_{0.3}\text{Co}_{0.2}\text{O}_2$ . International Journal of Energy Research, 2021, 45, 10667-10681.	4.5	6
32	Alternating Current Impedance Probing Capacity of Lithium-Ion Battery by Gaussian Process Regression. Energy Technology, 2022, 10, .	3.8	4
33	Lithium-Ion Battery Internal Resistance Model Based on the Porous Electrode Theory. , 2014, , .		2
34	Research on Charging Strategy of Lithium-ion Battery. , 2015, , .		2
35	Preliminary Study on the Influence of Internal Temperature Gradient on EIS Measurement and Characterization for Li-Ion Batteries. , 2015, , .		1
36	A Lithium-Ion Battery Optimized Equivalent Circuit Model based on Electrochemical Impedance Spectroscopy. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
37	A Neural Network-Based Regression Study for a Hybrid Battery Thermal Management System under Fast Charging. SAE International Journal of Electrified Vehicles, 0, 11, .	0.0	1
38	Investigation on the Impact of High-Temperature Calendar and Cyclic Aging on Battery Overcharge Performance. SAE International Journal of Advances and Current Practices in Mobility, 0, 4, 1953-1960.	2.0	1
39	Preliminary Study of a Distributed Thermal Model for a LFP Battery in COMSOL Inc. Multiphysics(MP) Software. , 2013, , .		0
40	Effect of Electrode Tabs Configuration on the Electric-Thermal Behavior of a Li-Ion Battery. , 2014, , .		0
41	Experimental Investigation of AC Pulse Heating Method for NMC Lithium-Ion Battery at Subzero Temperatures. , 0, , .		0
42	A Novel Battery Impedance Model Considering Internal Temperature Gradient. , 0, , .		0
43	Comparative Thermal Runaway Behavior Analysis of High-Nickel Lithium-Ion Batteries with Different Specifications. , 0, , .		0