

# Xin Lai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8229823/publications.pdf>

Version: 2024-02-01

47  
papers

2,549  
citations

218592

26  
h-index

254106

43  
g-index

50  
all docs

50  
docs citations

50  
times ranked

1136  
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparative study of different equivalent circuit models for estimating state-of-charge of lithium-ion batteries. <i>Electrochimica Acta</i> , 2018, 259, 566-577.	2.6	282
2	Mechanism, modeling, detection, and prevention of the internal short circuit in lithium-ion batteries: Recent advances and perspectives. <i>Energy Storage Materials</i> , 2021, 35, 470-499.	9.5	169
3	A comparative study of global optimization methods for parameter identification of different equivalent circuit models for Li-ion batteries. <i>Electrochimica Acta</i> , 2019, 295, 1057-1066.	2.6	168
4	Micro-Short-Circuit Diagnosis for Series-Connected Lithium-Ion Battery Packs Using Mean-Difference Model. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 2132-2142.	5.2	167
5	Critical review of life cycle assessment of lithium-ion batteries for electric vehicles: A lifespan perspective. <i>ETransportation</i> , 2022, 12, 100169.	6.8	151
6	Parameter sensitivity analysis and simplification of equivalent circuit model for the state of charge of lithium-ion batteries. <i>Electrochimica Acta</i> , 2020, 330, 135239.	2.6	107
7	Sorting, regrouping, and echelon utilization of the large-scale retired lithium batteries: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 146, 111162.	8.2	106
8	Turning waste into wealth: A systematic review on echelon utilization and material recycling of retired lithium-ion batteries. <i>Energy Storage Materials</i> , 2021, 40, 96-123.	9.5	97
9	A rapid screening and regrouping approach based on neural networks for large-scale retired lithium-ion cells in second-use applications. <i>Journal of Cleaner Production</i> , 2019, 213, 776-791.	4.6	94
10	Co-estimation of state of charge and state of power for lithium-ion batteries based on fractional variable-order model. <i>Journal of Cleaner Production</i> , 2020, 255, 120203.	4.6	89
11	Capacity estimation of lithium-ion cells by combining model-based and data-driven methods based on a sequential extended Kalman filter. <i>Energy</i> , 2021, 216, 119233.	4.5	89
12	Model and experiments to investigate thermal runaway characterization of lithium-ion batteries induced by external heating method. <i>Journal of Power Sources</i> , 2021, 504, 230065.	4.0	82
13	Electrical behavior of overdischarge-induced internal short circuit in lithium-ion cells. <i>Electrochimica Acta</i> , 2018, 278, 245-254.	2.6	80
14	A novel capacity estimation method for lithium-ion batteries using fusion estimation of charging curve sections and discrete Arrhenius aging model. <i>Applied Energy</i> , 2019, 251, 113327.	5.1	74
15	A hybrid state-of-charge estimation method based on credible increment for electric vehicle applications with large sensor and model errors. <i>Journal of Energy Storage</i> , 2020, 27, 101106.	3.9	54
16	Real-time diagnosis of micro-short circuit for Li-ion batteries utilizing low-pass filters. <i>Energy</i> , 2019, 166, 1013-1024.	4.5	53
17	Online detection of early stage internal short circuits in series-connected lithium-ion battery packs based on state-of-charge correlation. <i>Journal of Energy Storage</i> , 2020, 30, 101514.	3.9	53
18	Remaining discharge energy estimation for lithium-ion batteries based on future load prediction considering temperature and ageing effects. <i>Energy</i> , 2022, 238, 121754.	4.5	52

#	ARTICLE	IF	CITATIONS
19	Investigation of thermal runaway propagation characteristics of lithium-ion battery modules under different trigger modes. International Journal of Heat and Mass Transfer, 2021, 171, 121080.	2.5	50
20	Online quantitative diagnosis of internal short circuit for lithium-ion batteries using incremental capacity method. Energy, 2022, 243, 123082.	4.5	45
21	Rapid Sorting and Regrouping of Retired Lithium-Ion Battery Modules for Echelon Utilization Based on Partial Charging Curves. IEEE Transactions on Vehicular Technology, 2021, 70, 1246-1254.	3.9	44
22	Massive battery pack data compression and reconstruction using a frequency division model in battery management systems. Journal of Energy Storage, 2020, 28, 101252.	3.9	42
23	A novel method for state of energy estimation of lithium-ion batteries using particle filter and extended Kalman filter. Journal of Energy Storage, 2021, 43, 103269.	3.9	40
24	Toward safe carbon-neutral transportation: Battery internal short circuit diagnosis based on cloud data for electric vehicles. Applied Energy, 2022, 317, 119168.	5.1	37
25	Soft clustering of retired lithium-ion batteries for the secondary utilization using Gaussian mixture model based on electrochemical impedance spectroscopy. Journal of Cleaner Production, 2022, 339, 130786.	4.6	31
26	A study of external surface pressure effects on the properties for lithium-ion pouch cells. International Journal of Energy Research, 2020, 44, 6778-6791.	2.2	30
27	A novel classification method of commercial lithium-ion battery cells based on fast and economic detection of self-discharge rate. Journal of Power Sources, 2020, 478, 229039.	4.0	29
28	A Fuzzy State-of-Charge Estimation Algorithm Combining Ampere-Hour and an Extended Kalman Filter for Li-Ion Batteries Based on Multi-Model Global Identification. Applied Sciences (Switzerland), 2018, 8, 2028.	1.3	27
29	Global parametric sensitivity analysis of equivalent circuit model based on Sobol' method for lithium-ion batteries in electric vehicles. Journal of Cleaner Production, 2021, 294, 126246.	4.6	26
30	A State of Charge Estimator Based Extended Kalman Filter Using an Electrochemistry-Based Equivalent Circuit Model for Lithium-Ion Batteries. Applied Sciences (Switzerland), 2018, 8, 1592.	1.3	25
31	A Novel Screening Method Based on a Partially Discharging Curve Using a Genetic Algorithm and Back-Propagation Model for the Cascade Utilization of Retired Lithium-Ion Batteries. Electronics (Switzerland), 2018, 7, 321.	1.8	23
32	A rapid classification method of the retired $\text{LiCoO}_2$ and $\text{NiMH}$ batteries based on the partial discharge curve. Applied Energy, 2022, 317, 119168.	2.5	22
33	An All-Region State-of-Charge Estimator Based on Global Particle Swarm Optimization and Improved Extended Kalman Filter for Lithium-Ion Batteries. Electronics (Switzerland), 2018, 7, 321.	1.8	19
34	A cloud-edge collaborative strategy for capacity prognostic of lithium-ion batteries based on dynamic weight allocation and machine learning. Energy, 2022, 239, 122185.	4.5	19
35	Online internal short circuit detection method considering equalization electric quantity for lithium-ion battery pack in electric vehicles. International Journal of Energy Research, 2021, 45, 7326-7340.	2.2	17
36	Compressing and reconstructing the voltage data for lithium-ion batteries using model migration and un-equidistant sampling techniques. ETransportation, 2022, 13, 100186.	6.8	15

#	ARTICLE	IF	CITATIONS
37	A Novel Composite Equalizer Based on an Additional Cell for Series-Connected Lithium-Ion Cells. Electronics (Switzerland), 2018, 7, 366.	1.8	11
38	A Novel Capacity Estimation Approach for Lithium-Ion Batteries Combining Three-Parameter Capacity Fade Model With Constant Current Charging Curves. IEEE Transactions on Energy Conversion, 2021, 36, 2574-2584.	3.7	9
39	Experimental investigation of the influence of electrolyte loss and replenishment on the critical performances of cylindrical lithium-ion cells. Journal of Energy Storage, 2022, 52, 104951.	3.9	7
40	Theoretical and Experimental Study on Electromechanical Coupling Properties of Multihammer Synchronous Vibration System. Shock and Vibration, 2016, 2016, 1-11.	0.3	4
41	A novel fast estimation and regroup method of retired lithium-ion battery cells. International Journal of Energy Research, 2020, 44, 11985-11997.	2.2	4
42	Experimental investigation of state-of-charge power measurement for lithium-ion batteries. International Journal of Energy Research, 2021, 45, 7549-7560.	2.2	3
43	Life Prediction under Charging Process of Lithium-Ion Batteries Based on AutoML. Energies, 2022, 15, 4594.	1.6	3
44	A comparative study of integral order and fractional order models for estimating state-of-charge of lithium-ion battery. International Journal of Powertrains, 2020, 9, 38.	0.1	0
45	Theoretical and Experimental Study on Electromechanical Coupling of Joint Pile-hammer System. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2012, 48, 108.	0.7	0
46	Electromechanical coupling characteristics and synchronization control of two-hammer synchronous vibration system. Journal of Vibroengineering, 2016, 18, 4523-4538.	0.5	0
47	Analysis of coupling vibration characteristics of electrically driven pile hammer linkage system. Journal of Vibroengineering, 2018, 20, 2212-2224.	0.5	0