

# Xianke Lin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/332612/publications.pdf>

Version: 2024-02-01

84  
papers

4,848  
citations

87888

38  
h-index

98798

67  
g-index

84  
all docs

84  
docs citations

84  
times ranked

2662  
citing authors

#	ARTICLE	IF	CITATIONS
1	Battery Lifetime Prognostics. <i>Joule</i> , 2020, 4, 310-346.	24.0	570
2	Advanced Fault Diagnosis for Lithium-Ion Battery Systems: A Review of Fault Mechanisms, Fault Features, and Diagnosis Procedures. <i>IEEE Industrial Electronics Magazine</i> , 2020, 14, 65-91.	2.6	260
3	Data-driven state of charge estimation for lithium-ion battery packs based on Gaussian process regression. <i>Energy</i> , 2020, 205, 118000.	8.8	217
4	A Comprehensive Capacity Fade Model and Analysis for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1701-A1710.	2.9	194
5	Advanced battery management strategies for a sustainable energy future: Multilayer design concepts and research trends. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 138, 110480.	16.4	170
6	Battery Health Prediction Using Fusion-Based Feature Selection and Machine Learning. <i>IEEE Transactions on Transportation Electrification</i> , 2021, 7, 382-398.	7.8	156
7	Remaining Useful Life Prediction Using a Novel Feature-Attention-Based End-to-End Approach. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 1197-1207.	11.3	133
8	Simulation and Experiment on Solid Electrolyte Interphase (SEI) Morphology Evolution and Lithium-Ion Diffusion. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1798-A1808.	2.9	130
9	Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries. <i>Progress in Energy and Combustion Science</i> , 2021, 87, 100953.	31.2	117
10	A thermal-electrochemical model that gives spatial-dependent growth of solid electrolyte interphase in a Li-ion battery. <i>Journal of Power Sources</i> , 2014, 268, 482-490.	7.8	115
11	A review of equalization strategies for series battery packs: variables, objectives, and algorithms. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 116, 109464.	16.4	115
12	Predictive Battery Health Management With Transfer Learning and Online Model Correction. <i>IEEE Transactions on Vehicular Technology</i> , 2021, 70, 1269-1277.	6.3	110
13	Battery health estimation with degradation pattern recognition and transfer learning. <i>Journal of Power Sources</i> , 2022, 525, 231027.	7.8	110
14	Health Prognosis for Electric Vehicle Battery Packs: A Data-Driven Approach. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, 25, 2622-2632.	5.8	109
15	General Discharge Voltage Information Enabled Health Evaluation for Lithium-Ion Batteries. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 1295-1306.	5.8	108
16	Data-Driven Battery State of Health Estimation Based on Random Partial Charging Data. <i>IEEE Transactions on Power Electronics</i> , 2022, 37, 5021-5031.	7.9	106
17	Reliable state of charge estimation of battery packs using fuzzy adaptive federated filtering. <i>Applied Energy</i> , 2020, 262, 114569.	10.1	96
18	Health conscious fast charging of Li-ion batteries via a single particle model with aging mechanisms. <i>Journal of Power Sources</i> , 2018, 400, 305-316.	7.8	86

#	ARTICLE	IF	CITATIONS
19	A Comparative Study of Control-Oriented Thermal Models for Cylindrical Li-Ion Batteries. IEEE Transactions on Transportation Electrification, 2019, 5, 1237-1253.	7.8	84
20	Model predictive control of hybrid electric vehicles for fuel economy, emission reductions, and inter-vehicle safety in car-following scenarios. Energy, 2020, 196, 117101.	8.8	77
21	Data-driven fault diagnosis and thermal runaway warning for battery packs using real-world vehicle data. Energy, 2021, 234, 121266.	8.8	73
22	Oxygen Vacancies Lead to Loss of Domain Order, Particle Fracture, and Rapid Capacity Fade in Lithium Manganospinel (LiMn <sub>2</sub> O <sub>4</sub> ) Batteries. ACS Applied Materials & Interfaces, 2014, 6, 10849-10857.	8.0	70
23	Battery aging- and temperature-aware predictive energy management for hybrid electric vehicles. Journal of Power Sources, 2020, 473, 228568.	7.8	68
24	Aging-aware co-optimization of battery size, depth of discharge, and energy management for plug-in hybrid electric vehicles. Journal of Power Sources, 2020, 450, 227638.	7.8	63
25	Large displacement vertical translational actuator based on piezoelectric thin films. Journal of Micromechanics and Microengineering, 2010, 20, 075016.	2.6	61
26	Multi-fault Detection and Isolation for Lithium-Ion Battery Systems. IEEE Transactions on Power Electronics, 2022, 37, 971-989.	7.9	59
27	State of health prognostics for series battery packs: A universal deep learning method. Energy, 2022, 238, 121857.	8.8	58
28	Enabling high-fidelity electrochemical P2D modeling of lithium-ion batteries via fast and non-destructive parameter identification. Energy Storage Materials, 2022, 45, 952-968.	18.0	58
29	Optimal Multistage Charging of NCA/Graphite Lithium-Ion Batteries Based on Electrothermal-Aging Dynamics. IEEE Transactions on Transportation Electrification, 2020, 6, 427-438.	7.8	56
30	Eco-driving control of connected and automated hybrid vehicles in mixed driving scenarios. Applied Energy, 2020, 271, 115233.	10.1	55
31	A Reduced-Order Electrochemical Model for All-Solid-State Batteries. IEEE Transactions on Transportation Electrification, 2021, 7, 464-473.	7.8	55
32	Powertrain Design and Control in Electrified Vehicles: A Critical Review. IEEE Transactions on Transportation Electrification, 2021, 7, 1990-2009.	7.8	54
33	Ensemble Reinforcement Learning-Based Supervisory Control of Hybrid Electric Vehicle for Fuel Economy Improvement. IEEE Transactions on Transportation Electrification, 2020, 6, 717-727.	7.8	52
34	A Neural Network Based Method for Thermal Fault Detection in Lithium-Ion Batteries. IEEE Transactions on Industrial Electronics, 2021, 68, 4068-4078.	7.9	52
35	Improving Ride Comfort and Fuel Economy of Connected Hybrid Electric Vehicles Based on Traffic Signals and Real Road Information. IEEE Transactions on Vehicular Technology, 2021, 70, 3101-3112.	6.3	51
36	Sensitivity Analysis and Joint Estimation of Parameters and States for All-Solid-State Batteries. IEEE Transactions on Transportation Electrification, 2021, 7, 1314-1323.	7.8	49

#	ARTICLE	IF	CITATIONS
37	A Review of Second-Life Lithium-Ion Batteries for Stationary Energy Storage Applications. Proceedings of the IEEE, 2022, 110, 735-753.	21.3	47
38	An Enhanced Online Temperature Estimation for Lithium-Ion Batteries. IEEE Transactions on Transportation Electrification, 2020, 6, 375-390.	7.8	42
39	An MPC-Based Control Strategy for Electric Vehicle Battery Cooling Considering Energy Saving and Battery Lifespan. IEEE Transactions on Vehicular Technology, 2020, 69, 14657-14673.	6.3	41
40	Predictive energy management for plug-in hybrid electric vehicles considering electric motor thermal dynamics. Energy Conversion and Management, 2022, 251, 115022.	9.2	35
41	Dimensioning and Power Management of Hybrid Energy Storage Systems for Electric Vehicles With Multiple Optimization Criteria. IEEE Transactions on Power Electronics, 2021, 36, 5545-5556.	7.9	34
42	Coordinated management of connected plug-in hybrid electric buses for energy saving, inter-vehicle safety, and battery health. Applied Energy, 2020, 268, 115028.	10.1	33
43	Joint Estimation of Inconsistency and State of Health for Series Battery Packs. Automotive Innovation, 2021, 4, 103-116.	5.1	32
44	Battery Health-Aware and Deep Reinforcement Learning-Based Energy Management for Naturalistic Data-Driven Driving Scenarios. IEEE Transactions on Transportation Electrification, 2022, 8, 948-964.	7.8	30
45	Lifetime and Aging Degradation Prognostics for Lithium-ion Battery Packs Based on a Cell to Pack Method. Chinese Journal of Mechanical Engineering (English Edition), 2022, 35, .	3.7	30
46	Highway Decision-Making and Motion Planning for Autonomous Driving via Soft Actor-Critic. IEEE Transactions on Vehicular Technology, 2022, 71, 4706-4717.	6.3	29
47	A Practical and Comprehensive Evaluation Method for Series-Connected Battery Pack Models. IEEE Transactions on Transportation Electrification, 2020, 6, 391-416.	7.8	27
48	A Control-Oriented Electrothermal Model for Pouch-Type Electric Vehicle Batteries. IEEE Transactions on Power Electronics, 2021, 36, 5530-5544.	7.9	26
49	An adversarial bidirectional serial-parallel LSTM-based QTD framework for product quality prediction. Journal of Intelligent Manufacturing, 2020, 31, 1511-1529.	7.3	25
50	An improved resistance-based thermal model for prismatic lithium-ion battery charging. Applied Thermal Engineering, 2020, 180, 115794.	6.0	24
51	Research directions for next-generation battery management solutions in automotive applications. Renewable and Sustainable Energy Reviews, 2021, 152, 111695.	16.4	24
52	A Novel Deep Learning-Based Encoder-Decoder Model for Remaining Useful Life Prediction. , 2019, , .		23
53	Battery health evaluation using a short random segment of constant current charging. IScience, 2022, 25, 104260.	4.1	23
54	A Particle Filter and Long Short-Term Memory Fusion Technique for Lithium-Ion Battery Remaining Useful Life Prediction. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	1.6	22

#	ARTICLE	IF	CITATIONS
55	Optimization of Rule-Based Control Strategy for a Hydraulic-Electric Hybrid Light Urban Vehicle Based on Dynamic Programming. SAE International Journal of Alternative Powertrains, 0, 1, 249-259.	0.8	20
56	Q-Learning-Based Supervisory Control Adaptability Investigation for Hybrid Electric Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 6797-6806.	8.0	20
57	A framework for charging strategy optimization using a physics-based battery model. Journal of Applied Electrochemistry, 2019, 49, 779-793.	2.9	18
58	Real-Time Prediction of Anode Potential in Li-Ion Batteries Using Long Short-Term Neural Networks for Lithium Plating Prevention. Journal of the Electrochemical Society, 2019, 166, A1893-A1904.	2.9	17
59	Optimal Discretization Approach to the Enhanced Single-Particle Model for Li-Ion Batteries. IEEE Transactions on Transportation Electrification, 2021, 7, 369-381.	7.8	17
60	An Enhanced Electro-Thermal Model for EV Battery Packs Considering Current Distribution in Parallel Branches. IEEE Transactions on Power Electronics, 2022, 37, 1027-1043.	7.9	16
61	The role and application of convex modeling and optimization in electrified vehicles. Renewable and Sustainable Energy Reviews, 2022, 153, 111796.	16.4	16
62	A battery model that enables consideration of realistic anisotropic environment surrounding an active material particle and its application. Journal of Power Sources, 2017, 357, 220-229.	7.8	15
63	On state estimation of all solid-state batteries. Electrochimica Acta, 2019, 317, 663-672.	5.2	15
64	Designing Multi-Mode Power Split Hybrid Electric Vehicles Using the Hierarchical Topological Graph Theory. IEEE Transactions on Vehicular Technology, 2020, 69, 7159-7171.	6.3	15
65	An Online SOC-SOTD Joint Estimation Algorithm for Pouch Li-Ion Batteries Based on Spatio-Temporal Coupling Correction Method. IEEE Transactions on Power Electronics, 2022, 37, 7370-7386.	7.9	14
66	Multi-Objective Design Optimization of a Novel Dual-Mode Power-Split Hybrid Powertrain. IEEE Transactions on Vehicular Technology, 2022, 71, 282-296.	6.3	14
67	Convex optimization-based predictive and bi-level energy management for plug-in hybrid electric vehicles. Energy, 2022, 257, 124672.	8.8	12
68	A Framework for Optimization on Battery Cycle Life. Journal of the Electrochemical Society, 2018, 165, A3380-A3388.	2.9	11
69	Physics-Based and Control-Oriented Modeling of Diffusion-Induced Stress in Li-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A2255-A2266.	2.9	11
70	Energy Management Options for an Electric Vehicle with Hydraulic Regeneration System. , 2011, , .		10
71	Improving the Air-Cooling Performance for Battery Packs via Electrothermal Modeling and Particle Swarm Optimization. IEEE Transactions on Transportation Electrification, 2021, 7, 1285-1302.	7.8	10
72	A control strategy for cabin temperature of electric vehicle considering health ventilation for lowering virus infection. International Journal of Thermal Sciences, 2022, 172, 107371.	4.9	9

#	ARTICLE	IF	CITATIONS
73	Novel Image-Based Rapid RUL Prediction for Li-Ion Batteries Using a Capsule Network and Transfer Learning. IEEE Transactions on Transportation Electrification, 2023, 9, 958-967.	7.8	9
74	Real-Time Multiobjective Energy Management for Electrified Powertrains: A Convex Optimization-Driven Predictive Approach. IEEE Transactions on Transportation Electrification, 2022, 8, 3139-3150.	7.8	8
75	Increasing energy utilization of battery energy storage via active multivariable fusion-driven balancing. Energy, 2022, 243, 122772.	8.8	6
76	Design of Cylindrical Thermal Dummy Cell for Development of Lithium-Ion Battery Thermal Management System. Energies, 2021, 14, 1357.	3.1	5
77	Economic Control for a Residential Photovoltaic-Battery System by Combining Stochastic Model Predictive Control and Improved Correction Strategy. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	2.3	5
78	Online Estimation of Diffusion-Induced Stress in Cathode Particles of Li-Ion Batteries. , 2019, , .		3
79	A Data-Driven Power Consumption Model for Electric UAVs. , 2020, , .		2
80	Eco-Driving Control of Connected and Automated Hybrid Electric Vehicles on Multi-lane Roads Using Model Predictive Control. SAE International Journal of Advances and Current Practices in Mobility, 0, 3, 1748-1756.	2.0	2
81	Dynamics, Sensing, and Control of a Thin-Film Piezoelectric Vertical Micro-Stage. , 2010, , .		1
82	A Voltage Fault Detection Method Enabled by A Recurrent Neural Network and Residual Threshold Monitor for Lithium-ion Batteries. , 2021, , .		1
83	Optimal Charging Of Li-Ion Batteries Based On An Electrolyte Enhanced Single Particle Model. , 2018, , .		1
84	An online health-conscious enhanced charging and active balancing strategy for lithium-ion battery packs. Journal of Energy Storage, 2021, 44, 103368.	8.1	1