

# Xiaosong Hu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3721596/publications.pdf>

Version: 2024-02-01

211  
papers

22,314  
citations

4641

85  
h-index

9073

144  
g-index

214  
all docs

214  
docs citations

214  
times ranked

10743  
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparative study of equivalent circuit models for Li-ion batteries. <i>Journal of Power Sources</i> , 2012, 198, 359-367.	4.0	1,500
2	A review of supercapacitor modeling, estimation, and applications: A control/management perspective. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 81, 1868-1878.	8.2	599
3	Battery Lifetime Prognostics. <i>Joule</i> , 2020, 4, 310-346.	11.7	570
4	Energy Management in Plug-in Hybrid Electric Vehicles: Recent Progress and a Connected Vehicles Perspective. <i>IEEE Transactions on Vehicular Technology</i> , 2017, 66, 4534-4549.	3.9	544
5	Combined State of Charge and State of Health estimation over lithium-ion battery cell cycle lifespan for electric vehicles. <i>Journal of Power Sources</i> , 2015, 273, 793-803.	4.0	528
6	Adaptive unscented Kalman filtering for state of charge estimation of a lithium-ion battery for electric vehicles. <i>Energy</i> , 2011, 36, 3531-3540.	4.5	487
7	State estimation for advanced battery management: Key challenges and future trends. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 114, 109334.	8.2	448
8	Technological Developments in Batteries: A Survey of Principal Roles, Types, and Management Needs. <i>IEEE Power and Energy Magazine</i> , 2017, 15, 20-31.	1.6	417
9	Co-Estimation of State of Charge and State of Health for Lithium-Ion Batteries Based on Fractional-Order Calculus. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 10319-10329.	3.9	394
10	Velocity Predictors for Predictive Energy Management in Hybrid Electric Vehicles. <i>IEEE Transactions on Control Systems Technology</i> , 2015, 23, 1197-1204.	3.2	378
11	A review of fractional-order techniques applied to lithium-ion batteries, lead-acid batteries, and supercapacitors. <i>Journal of Power Sources</i> , 2018, 390, 286-296.	4.0	367
12	Reinforcement Learning Optimized Look-Ahead Energy Management of a Parallel Hybrid Electric Vehicle. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 1497-1507.	3.7	300
13	Stochastic control of smart home energy management with plug-in electric vehicle battery energy storage and photovoltaic array. <i>Journal of Power Sources</i> , 2016, 333, 203-212.	4.0	299
14	Energy management strategies of connected HEVs and PHEVs: Recent progress and outlook. <i>Progress in Energy and Combustion Science</i> , 2019, 73, 235-256.	15.8	298
15	Energy efficiency analysis of a series plug-in hybrid electric bus with different energy management strategies and battery sizes. <i>Applied Energy</i> , 2013, 111, 1001-1009.	5.1	288
16	Pontryagin's Minimum Principle based model predictive control of energy management for a plug-in hybrid electric bus. <i>Applied Energy</i> , 2019, 236, 893-905.	5.1	269
17	Advanced Machine Learning Approach for Lithium-Ion Battery State Estimation in Electric Vehicles. <i>IEEE Transactions on Transportation Electrification</i> , 2016, 2, 140-149.	5.3	261
18	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.	2.3	260

#	ARTICLE	IF	CITATIONS
19	Longevity-conscious dimensioning and power management of the hybrid energy storage system in a fuel cell hybrid electric bus. Applied Energy, 2015, 137, 913-924.	5.1	256
20	Optimal Dimensioning and Power Management of a Fuel Cell/Battery Hybrid Bus via Convex Programming. IEEE/ASME Transactions on Mechatronics, 2015, 20, 457-468.	3.7	256
21	Cost-Optimal Energy Management of Hybrid Electric Vehicles Using Fuel Cell/Battery Health-Aware Predictive Control. IEEE Transactions on Power Electronics, 2020, 35, 382-392.	5.4	254
22	Dynamic Traffic Feedback Data Enabled Energy Management in Plug-in Hybrid Electric Vehicles. IEEE Transactions on Control Systems Technology, 2015, 23, 1075-1086.	3.2	239
23	Gaussian Process Regression With Automatic Relevance Determination Kernel for Calendar Aging Prediction of Lithium-Ion Batteries. IEEE Transactions on Industrial Informatics, 2020, 16, 3767-3777.	7.2	233
24	Modified Gaussian Process Regression Models for Cyclic Capacity Prediction of Lithium-Ion Batteries. IEEE Transactions on Transportation Electrification, 2019, 5, 1225-1236.	5.3	232
25	Multiobjective Optimal Sizing of Hybrid Energy Storage System for Electric Vehicles. IEEE Transactions on Vehicular Technology, 2018, 67, 1027-1035.	3.9	227
26	Optimal Charging of Li-Ion Batteries With Coupled Electro-Thermal-Aging Dynamics. IEEE Transactions on Vehicular Technology, 2017, 66, 7761-7770.	3.9	223
27	Estimation of State of Charge of a Lithium-Ion Battery Pack for Electric Vehicles Using an Adaptive Luenberger Observer. Energies, 2010, 3, 1586-1603.	1.6	221
28	Comparison of Three Electrochemical Energy Buffers Applied to a Hybrid Bus Powertrain With Simultaneous Optimal Sizing and Energy Management. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 1193-1205.	4.7	218
29	Battery warm-up methodologies at subzero temperatures for automotive applications: Recent advances and perspectives. Progress in Energy and Combustion Science, 2020, 77, 100806.	15.8	218
30	Stochastic Optimal Energy Management of Smart Home With PEV Energy Storage. IEEE Transactions on Smart Grid, 2018, 9, 2065-2075.	6.2	217
31	Data-driven state of charge estimation for lithium-ion battery packs based on Gaussian process regression. Energy, 2020, 205, 118000.	4.5	217
32	Battery Health Prognosis for Electric Vehicles Using Sample Entropy and Sparse Bayesian Predictive Modeling. IEEE Transactions on Industrial Electronics, 2015, , 1-1.	5.2	212
33	Driving-Style-Based Codesign Optimization of an Automated Electric Vehicle: A Cyber-Physical System Approach. IEEE Transactions on Industrial Electronics, 2019, 66, 2965-2975.	5.2	195
34	Integrated Optimization of Battery Sizing, Charging, and Power Management in Plug-In Hybrid Electric Vehicles. IEEE Transactions on Control Systems Technology, 2016, 24, 1036-1043.	3.2	193
35	Optimal integration of a hybrid solar-battery power source into smart home nanogrid with plug-in electric vehicle. Journal of Power Sources, 2017, 363, 277-283.	4.0	188
36	Charging optimization in lithium-ion batteries based on temperature rise and charge time. Applied Energy, 2017, 194, 569-577.	5.1	188

#	ARTICLE	IF	CITATIONS
37	Comparison of power-split and parallel hybrid powertrain architectures with a single electric machine: Dynamic programming approach. <i>Applied Energy</i> , 2016, 168, 683-690.	5.1	184
38	Propagation mechanisms and diagnosis of parameter inconsistency within Li-Ion battery packs. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 112, 102-113.	8.2	173
39	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.	8.2	170
40	Lithium-ion battery charging management considering economic costs of electrical energy loss and battery degradation. <i>Energy Conversion and Management</i> , 2019, 195, 167-179.	4.4	169
41	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
42	Robustness analysis of State-of-Charge estimation methods for two types of Li-ion batteries. <i>Journal of Power Sources</i> , 2012, 217, 209-219.	4.0	163
43	Reinforcement Learning for Hybrid and Plug-In Hybrid Electric Vehicle Energy Management: Recent Advances and Prospects. <i>IEEE Industrial Electronics Magazine</i> , 2019, 13, 16-25.	2.3	160
44	Charging, power management, and battery degradation mitigation in plug-in hybrid electric vehicles: A unified cost-optimal approach. <i>Mechanical Systems and Signal Processing</i> , 2017, 87, 4-16.	4.4	158
45	Battery Health Prediction Using Fusion-Based Feature Selection and Machine Learning. <i>IEEE Transactions on Transportation Electrification</i> , 2021, 7, 382-398.	5.3	156
46	Electrochemical Estimation and Control for Lithium-Ion Battery Health-Aware Fast Charging. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 6635-6645.	5.2	155
47	Condition Monitoring in Advanced Battery Management Systems: Moving Horizon Estimation Using a Reduced Electrochemical Model. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018, 23, 167-178.	3.7	154
48	Advanced Power-Source Integration in Hybrid Electric Vehicles: Multicriteria Optimization Approach. <i>IEEE Transactions on Industrial Electronics</i> , 2015, 62, 7847-7858.	5.2	152
49	Enhanced sample entropy-based health management of Li-ion battery for electrified vehicles. <i>Energy</i> , 2014, 64, 953-960.	4.5	151
50	Electrothermal dynamics-conscious lithium-ion battery cell-level charging management via state-monitored predictive control. <i>Energy</i> , 2017, 141, 250-259.	4.5	142
51	Greener plug-in hybrid electric vehicles incorporating renewable energy and rapid system optimization. <i>Energy</i> , 2016, 111, 971-980.	4.5	141
52	An electrochemistry-based impedance model for lithium-ion batteries. <i>Journal of Power Sources</i> , 2014, 258, 9-18.	4.0	140
53	A comparative study of equivalent circuit models of ultracapacitors for electric vehicles. <i>Journal of Power Sources</i> , 2015, 274, 899-906.	4.0	134
54	An artificial neural network-enhanced energy management strategy for plug-in hybrid electric vehicles. <i>Energy</i> , 2018, 163, 837-848.	4.5	132

#	ARTICLE	IF	CITATIONS
55	Model predictive energy management for plug-in hybrid electric vehicles considering optimal battery depth of discharge. <i>Energy</i> , 2019, 173, 667-678.	4.5	128
56	Charging time and loss optimization for LiNMC and LiFePO <sub>4</sub> batteries based on equivalent circuit models. <i>Journal of Power Sources</i> , 2013, 239, 449-457.	4.0	127
57	A novel simplified model for torsional vibration analysis of a series-parallel hybrid electric vehicle. <i>Mechanical Systems and Signal Processing</i> , 2017, 85, 329-338.	4.4	127
58	Distributed Adaptive Sliding Mode Control of Vehicular Platoon With Uncertain Interaction Topology. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 6352-6361.	5.2	127
59	A Heuristic Planning Reinforcement Learning-Based Energy Management for Power-Split Plug-in Hybrid Electric Vehicles. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 6436-6445.	7.2	122
60	Novel Torsional Vibration Modeling and Assessment of a Power-Split Hybrid Electric Vehicle Equipped With a Dual-Mass Flywheel. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 1990-2000.	3.9	120
61	Fractional-order modeling and State-of-Charge estimation for ultracapacitors. <i>Journal of Power Sources</i> , 2016, 314, 28-34.	4.0	119
62	Adaptive Hierarchical Energy Management Design for a Plug-In Hybrid Electric Vehicle. <i>IEEE Transactions on Vehicular Technology</i> , 2019, 68, 11513-11522.	3.9	119
63	Time-Efficient Stochastic Model Predictive Energy Management for a Plug-In Hybrid Electric Bus With an Adaptive Reference State-of-Charge Advisory. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 5671-5682.	3.9	118
64	Cyber-Physical Control for Energy-Saving Vehicle Following With Connectivity. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 8578-8587.	5.2	117
65	Lithium Plating Mechanism, Detection, and Mitigation in Lithium-Ion Batteries. <i>Progress in Energy and Combustion Science</i> , 2021, 87, 100953.	15.8	117
66	A review of equalization strategies for series battery packs: variables, objectives, and algorithms. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 116, 109464.	8.2	115
67	An enhanced multi-state estimation hierarchy for advanced lithium-ion battery management. <i>Applied Energy</i> , 2020, 257, 114019.	5.1	115
68	Predictive vehicle-following power management for plug-in hybrid electric vehicles. <i>Energy</i> , 2019, 166, 701-714.	4.5	113
69	Predictive Battery Health Management With Transfer Learning and Online Model Correction. <i>IEEE Transactions on Vehicular Technology</i> , 2021, 70, 1269-1277.	3.9	110
70	Battery health estimation with degradation pattern recognition and transfer learning. <i>Journal of Power Sources</i> , 2022, 525, 231027.	4.0	110
71	Health Prognosis for Electric Vehicle Battery Packs: A Data-Driven Approach. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, 25, 2622-2632.	3.7	109
72	Modeling and multi-objective optimization of a stand-alone PV-hydrogen-retired EV battery hybrid energy system. <i>Energy Conversion and Management</i> , 2019, 181, 80-92.	4.4	108

#	ARTICLE	IF	CITATIONS
73	General Discharge Voltage Information Enabled Health Evaluation for Lithium-Ion Batteries. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1295-1306.	3.7	108
74	Model-Based Dynamic Power Assessment of Lithium-Ion Batteries Considering Different Operating Conditions. IEEE Transactions on Industrial Informatics, 2014, 10, 1948-1959.	7.2	107
75	Data-Driven Battery State of Health Estimation Based on Random Partial Charging Data. IEEE Transactions on Power Electronics, 2022, 37, 5021-5031.	5.4	106
76	Comparison between two model-based algorithms for Li-ion battery SOC estimation in electric vehicles. Simulation Modelling Practice and Theory, 2013, 34, 1-11.	2.2	103
77	Feature Analyses and Modeling of Lithium-Ion Battery Manufacturing Based on Random Forest Classification. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2944-2955.	3.7	103
78	Hybrid electrochemical energy storage systems: An overview for smart grid and electrified vehicle applications. Renewable and Sustainable Energy Reviews, 2021, 139, 110581.	8.2	97
79	Reliable state of charge estimation of battery packs using fuzzy adaptive federated filtering. Applied Energy, 2020, 262, 114569.	5.1	96
80	Large-scale deployment of electric taxis in Beijing: A real-world analysis. Energy, 2016, 100, 25-39.	4.5	95
81	Naturalistic Data-Driven Predictive Energy Management for Plug-In Hybrid Electric Vehicles. IEEE Transactions on Transportation Electrification, 2021, 7, 497-508.	5.3	95
82	Optimal battery sizing of smart home via convex programming. Energy, 2017, 140, 444-453.	4.5	93
83	Simultaneous Observation of Hybrid States for Cyber-Physical Systems: A Case Study of Electric Vehicle Powertrain. IEEE Transactions on Cybernetics, 2018, 48, 2357-2367.	6.2	93
84	State of Charge-Dependent Polynomial Equivalent Circuit Modeling for Electrochemical Impedance Spectroscopy of Lithium-Ion Batteries. IEEE Transactions on Power Electronics, 2018, 33, 8449-8460.	5.4	92
85	Fuel economy optimization of power split hybrid vehicles: A rapid dynamic programming approach. Energy, 2019, 166, 929-938.	4.5	92
86	An improved resistance-based thermal model for a pouch lithium-ion battery considering heat generation of posts. Applied Thermal Engineering, 2020, 164, 114455.	3.0	90
87	Active Cell Equalization Topologies Analysis for Battery Packs: A Systematic Review. IEEE Transactions on Power Electronics, 2021, 36, 9119-9135.	5.4	89
88	Real time energy management strategy for a fast charging electric urban bus powered by hybrid energy storage system. Energy, 2016, 112, 322-331.	4.5	85
89	Optimal Charging of Li-Ion Batteries via a Single Particle Model with Electrolyte and Thermal Dynamics. Journal of the Electrochemical Society, 2017, 164, A1679-A1687.	1.3	85
90	Convex programming energy management and components sizing of a plug-in fuel cell urban logistics vehicle. Journal of Power Sources, 2019, 423, 358-366.	4.0	85

#	ARTICLE	IF	CITATIONS
91	A Comparative Study of Control-Oriented Thermal Models for Cylindrical Li-Ion Batteries. IEEE Transactions on Transportation Electrification, 2019, 5, 1237-1253.	5.3	84
92	Economy analysis of second-life battery in wind power systems considering battery degradation in dynamic processes: Real case scenarios. Applied Energy, 2019, 251, 113411.	5.1	81
93	Adaptively coordinated optimization of battery aging and energy management in plug-in hybrid electric buses. Applied Energy, 2019, 256, 113891.	5.1	80
94	An evaluation study of different modelling techniques for calendar ageing prediction of lithium-ion batteries. Renewable and Sustainable Energy Reviews, 2020, 131, 110017.	8.2	80
95	Comparison of multi-mode hybrid powertrains with multiple planetary gears. Applied Energy, 2016, 178, 624-632.	5.1	78
96	Model predictive control of hybrid electric vehicles for fuel economy, emission reductions, and inter-vehicle safety in car-following scenarios. Energy, 2020, 196, 117101.	4.5	77
97	Nonlinear Fractional-Order Estimator with Guaranteed Robustness and Stability for Lithium-Ion Batteries. IEEE Transactions on Industrial Electronics, 2017, , 1-1.	5.2	76
98	Optimal Energy Management and Sizing of a Dual Motor-Driven Electric Powertrain. IEEE Transactions on Power Electronics, 2019, 34, 7489-7501.	5.4	76
99	Effects of imbalanced currents on large-format LiFePO <sub>4</sub> /graphite batteries systems connected in parallel. Journal of Power Sources, 2016, 313, 198-204.	4.0	74
100	Data-driven fault diagnosis and thermal runaway warning for battery packs using real-world vehicle data. Energy, 2021, 234, 121266.	4.5	73
101	A Bi-Level Control for Energy Efficiency Improvement of a Hybrid Tracked Vehicle. IEEE Transactions on Industrial Informatics, 2018, 14, 1616-1625.	7.2	72
102	Configuration optimization for improving fuel efficiency of power split hybrid powertrains with a single planetary gear. Applied Energy, 2018, 214, 103-116.	5.1	68
103	Battery aging- and temperature-aware predictive energy management for hybrid electric vehicles. Journal of Power Sources, 2020, 473, 228568.	4.0	68
104	Experimental impedance investigation of an ultracapacitor at different conditions for electric vehicle applications. Journal of Power Sources, 2015, 287, 129-138.	4.0	64
105	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.	4.0	63
106	$H_{\infty}$ -Based Nonlinear Observer Design for State of Charge Estimation of Lithium-Ion Battery With Polynomial Parameters. IEEE Transactions on Vehicular Technology, 2017, 66, 10853-10865.	3.9	61
107	Multi-fault Detection and Isolation for Lithium-Ion Battery Systems. IEEE Transactions on Power Electronics, 2022, 37, 971-989.	5.4	59
108	Combined Optimal Sizing and Control for a Hybrid Tracked Vehicle. Energies, 2012, 5, 4697-4710.	1.6	58

#	ARTICLE	IF	CITATIONS
109	State of health prognostics for series battery packs: A universal deep learning method. <i>Energy</i> , 2022, 238, 121857.	4.5	58
110	Enabling high-fidelity electrochemical P2D modeling of lithium-ion batteries via fast and non-destructive parameter identification. <i>Energy Storage Materials</i> , 2022, 45, 952-968.	9.5	58
111	Optimal Multistage Charging of NCA/Graphite Lithium-Ion Batteries Based on Electrothermal-Aging Dynamics. <i>IEEE Transactions on Transportation Electrification</i> , 2020, 6, 427-438.	5.3	56
112	A Reduced-Order Electrochemical Model for All-Solid-State Batteries. <i>IEEE Transactions on Transportation Electrification</i> , 2021, 7, 464-473.	5.3	55
113	Powertrain Design and Control in Electrified Vehicles: A Critical Review. <i>IEEE Transactions on Transportation Electrification</i> , 2021, 7, 1990-2009.	5.3	54
114	Ensemble Reinforcement Learning-Based Supervisory Control of Hybrid Electric Vehicle for Fuel Economy Improvement. <i>IEEE Transactions on Transportation Electrification</i> , 2020, 6, 717-727.	5.3	52
115	A Neural Network Based Method for Thermal Fault Detection in Lithium-Ion Batteries. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 4068-4078.	5.2	52
116	Improving Ride Comfort and Fuel Economy of Connected Hybrid Electric Vehicles Based on Traffic Signals and Real Road Information. <i>IEEE Transactions on Vehicular Technology</i> , 2021, 70, 3101-3112.	3.9	51
117	Sensitivity Analysis and Joint Estimation of Parameters and States for All-Solid-State Batteries. <i>IEEE Transactions on Transportation Electrification</i> , 2021, 7, 1314-1323.	5.3	49
118	An adaptive central difference Kalman filter approach for state of charge estimation by fractional order model of lithium-ion battery. <i>Energy</i> , 2022, 244, 122627.	4.5	49
119	Adaptive energy management in automated hybrid electric vehicles with flexible torque request. <i>Energy</i> , 2021, 214, 118873.	4.5	48
120	A Review of Second-Life Lithium-Ion Batteries for Stationary Energy Storage Applications. <i>Proceedings of the IEEE</i> , 2022, 110, 735-753.	16.4	47
121	Novel Mesoscale Electrothermal Modeling for Lithium-Ion Batteries. <i>IEEE Transactions on Power Electronics</i> , 2020, 35, 2595-2614.	5.4	44
122	The sequential algorithm for combined state of charge and state of health estimation of lithium-ion battery based on active current injection. <i>Energy</i> , 2020, 193, 116732.	4.5	44
123	Power Allocation Strategy Based on Decentralized Convex Optimization in Modular Fuel Cell Systems for Vehicular Applications. <i>IEEE Transactions on Vehicular Technology</i> , 2020, 69, 14563-14574.	3.9	44
124	Data efficient health prognostic for batteries based on sequential information-driven probabilistic neural network. <i>Applied Energy</i> , 2022, 323, 119663.	5.1	43
125	Arrhenius Equation-Based Cell-Health Assessment: Application to Thermal Energy Management Design of a HEV NiMH Battery Pack. <i>Energies</i> , 2013, 6, 2709-2725.	1.6	42
126	An Enhanced Online Temperature Estimation for Lithium-Ion Batteries. <i>IEEE Transactions on Transportation Electrification</i> , 2020, 6, 375-390.	5.3	42



#	ARTICLE	IF	CITATIONS
127	Online model identification of lithium-ion battery for electric vehicles. Journal of Central South University, 2011, 18, 1525-1531.	1.2	41
128	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.	3.9	41
129	Convex relaxations in the optimal control of electrified vehicles. , 2015, , .		40
130	Online estimation of an electric vehicle Lithium-Ion battery using recursive least squares with forgetting. , 2011, , .		35
131	Predictive energy management for plug-in hybrid electric vehicles considering electric motor thermal dynamics. Energy Conversion and Management, 2022, 251, 115022.	4.4	35
132	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.	5.4	34
133	Computationally Efficient Energy Management for Hybrid Electric Vehicles Using Model Predictive Control and Vehicle-to-Vehicle Communication. IEEE Transactions on Vehicular Technology, 2021, 70, 237-250.	3.9	34
134	Visual Detection and Deep Reinforcement Learning-Based Car Following and Energy Management for Hybrid Electric Vehicles. IEEE Transactions on Transportation Electrification, 2022, 8, 2501-2515.	5.3	33
135	Joint Estimation of Inconsistency and State of Health for Series Battery Packs. Automotive Innovation, 2021, 4, 103-116.	3.1	32
136	A Review of Modeling, Management, and Applications of Grid-Connected Li-Ion Battery Storage Systems. IEEE Transactions on Smart Grid, 2022, 13, 4505-4524.	6.2	32
137	Recursive calibration for a lithium iron phosphate battery for electric vehicles using extended Kalman filtering. Journal of Zhejiang University: Science A, 2011, 12, 818-825.	1.3	31
138	Cybersecurity of Plug-In Electric Vehicles: Cyberattack Detection During Charging. IEEE Transactions on Industrial Electronics, 2021, 68, 478-487.	5.2	31
139	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.	5.3	30
140	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, .	1.9	30
141	Temporal-Difference Learning-Based Stochastic Energy Management for Plug-in Hybrid Electric Buses. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 2378-2388.	4.7	29
142	Data pieces-based parameter identification for lithium-ion battery. Journal of Power Sources, 2016, 328, 174-184.	4.0	28
143	Analysis of Thermal Aging Paths for Large-Format LiFePO <sub>4</sub> /Graphite Battery. Electrochimica Acta, 2016, 196, 13-23.	2.6	27
144	A Practical and Comprehensive Evaluation Method for Series-Connected Battery Pack Models. IEEE Transactions on Transportation Electrification, 2020, 6, 391-416.	5.3	27

#	ARTICLE	IF	CITATIONS
145	A Control-Oriented Electrothermal Model for Pouch-Type Electric Vehicle Batteries. IEEE Transactions on Power Electronics, 2021, 36, 5530-5544.	5.4	26
146	Review of Modeling Techniques for Lithium-ion Traction Batteries in Electric Vehicles. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2017, 53, 20.	0.7	25
147	Fuzzy Clustering Based Multi-model Support Vector Regression State of Charge Estimator for Lithium-ion Battery of Electric Vehicle. , 2009, , .		24
148	Convex programming improved online power management in a range extended fuel cell electric truck. Journal of Power Sources, 2020, 476, 228642.	4.0	24
149	An improved resistance-based thermal model for prismatic lithium-ion battery charging. Applied Thermal Engineering, 2020, 180, 115794.	3.0	24
150	Research directions for next-generation battery management solutions in automotive applications. Renewable and Sustainable Energy Reviews, 2021, 152, 111695.	8.2	24
151	Computed Tomography Analysis of Li-Ion Battery Case Ruptures. Fire Technology, 2020, 56, 2565-2578.	1.5	24
152	Hierarchical predictive control for electric vehicles with hybrid energy storage system under vehicle-following scenarios. Energy, 2022, 251, 123774.	4.5	24
153	Modeling and control strategy development of a parallel hybrid electric bus. International Journal of Automotive Technology, 2013, 14, 971-985.	0.7	23
154	Battery Charge Control With an Electro-Thermal-Aging Coupling. , 2015, , .		23
155	RUBoost-Based Ensemble Machine Learning for Electrode Quality Classification in Li-ion Battery Manufacturing. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2474-2483.	3.7	23
156	Battery health evaluation using a short random segment of constant current charging. IScience, 2022, 25, 104260.	1.9	23
157	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, .	0.9	22
158	Trajectory Optimization-Based Auxiliary Power Unit Control Strategy for an Extended Range Electric Vehicle. IEEE Transactions on Vehicular Technology, 2017, 66, 10866-10874.	3.9	20
159	Q-Learning-Based Supervisory Control Adaptability Investigation for Hybrid Electric Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 6797-6806.	4.7	20
160	Integrating traffic velocity data into predictive energy management of plug-in hybrid electric vehicles. , 2015, , .		19
161	Module-Based Active Equalization for Battery Packs: A Two-Layer Model Predictive Control Strategy. IEEE Transactions on Transportation Electrification, 2022, 8, 149-159.	5.3	19
162	Powering Mode-Integrated Energy Management Strategy for a Plug-In Hybrid Electric Truck with an Automatic Mechanical Transmission Based on Pontryagin's Minimum Principle. Sustainability, 2018, 10, 3758.	1.6	16

#	ARTICLE	IF	CITATIONS
163	Comparison of Decentralized ADMM Optimization Algorithms for Power Allocation in Modular Fuel Cell Vehicles. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3297-3308.	3.7	16
164	An Enhanced Electro-Thermal Model for EV Battery Packs Considering Current Distribution in Parallel Branches. IEEE Transactions on Power Electronics, 2022, 37, 1027-1043.	5.4	16
165	The role and application of convex modeling and optimization in electrified vehicles. Renewable and Sustainable Energy Reviews, 2022, 153, 111796.	8.2	16
166	Designing Multi-Mode Power Split Hybrid Electric Vehicles Using the Hierarchical Topological Graph Theory. IEEE Transactions on Vehicular Technology, 2020, 69, 7159-7171.	3.9	15
167	Optimal Sizing and Control Strategy Design for Heavy Hybrid Electric Truck. Mathematical Problems in Engineering, 2012, 2012, 1-15.	0.6	14
168	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.	5.4	14
169	Multi-Objective Design Optimization of a Novel Dual-Mode Power-Split Hybrid Powertrain. IEEE Transactions on Vehicular Technology, 2022, 71, 282-296.	3.9	14
170	Comparison of Velocity Forecasting Strategies for Predictive Control in HEVs. , 2014, , .		13
171	Correction to the "Integrated control of braking and steering subsystems for autonomous vehicle based on an efficient yaw moment distribution". IEEE Transactions on Industrial Electronics, 2024, , 1-1.	5.2	13
172	Optimisation of a Catenary-Free Tramline Equipped With Stationary Energy Storage Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 2449-2462.	3.9	13
173	Convex optimization-based predictive and bi-level energy management for plug-in hybrid electric vehicles. Energy, 2022, 257, 124672.	4.5	12
174	Design and implementation of a real-time power management strategy for a parallel hybrid electric bus. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2014, 228, 1581-1598.	1.1	11
175	A Platoon Control Method Based on DMPC for Connected Energy-Saving Electric Vehicles. IEEE Transactions on Transportation Electrification, 2022, 8, 3219-3235.	5.3	11
176	Improving the Air-Cooling Performance for Battery Packs via Electrothermal Modeling and Particle Swarm Optimization. IEEE Transactions on Transportation Electrification, 2021, 7, 1285-1302.	5.3	10
177	A control strategy for cabin temperature of electric vehicle considering health ventilation for lowering virus infection. International Journal of Thermal Sciences, 2022, 172, 107371.	2.6	9
178	State of charge estimation by square root cubature particle filter approach with fractional order model of lithium-ion battery. Science China Technological Sciences, 2022, 65, 1760-1771.	2.0	9
179	Real-Time Multiobjective Energy Management for Electrified Powertrains: A Convex Optimization-Driven Predictive Approach. IEEE Transactions on Transportation Electrification, 2022, 8, 3139-3150.	5.3	8
180	Experimental Investigation of Ultracapacitor Impedance Characteristics. Energy Procedia, 2015, 75, 1888-1894.	1.8	7

#	ARTICLE	IF	CITATIONS
181	Robust state-of-charge estimation of ultracapacitors for electric vehicles. , 2015, , .		7
182	Multi-objective optimal sizing and control of fuel cell systems for hybrid vehicle applications. , 2015, , .		7
183	Real-time energy optimization of HEVs under-connected environment: a benchmark problem and receding horizon-based solution. Control Theory and Technology, 2022, 20, 145-160.	1.0	7
184	Computationally efficient energy management of a planetary gear hybrid electric vehicle. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4831-4836.	0.4	6
185	Increasing energy utilization of battery energy storage via active multivariable fusion-driven balancing. Energy, 2022, 243, 122772.	4.5	6
186	Preface for Feature Topic on Advanced Battery Management for Electric Vehicles. Automotive Innovation, 2022, 5, 105-106.	3.1	6
187	Global Sensitivity Analysis of Battery Single Particle Model Parameters. , 2019, , .		5
188	Stochastic optimization of a stationary energy storage system for a catenary-free tramline. Applied Energy, 2020, 280, 115711.	5.1	5
189	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, .	1.4	5
190	Modeling and Control Problems in Sustainable Transportation and Power Systems. Mathematical Problems in Engineering, 2016, 2016, 1-3.	0.6	4
191	A Novel Sensitivity Analysis to Moment of Inertia and Load Variations for PMSM Drives. IEEE Transactions on Power Electronics, 2022, 37, 13299-13309.	5.4	4
192	Decentralized Implementation of an Optimal Energy Management Strategy in Interconnected Modular Fuel Cell Systems. , 2019, , .		3
193	Notice of Violation of IEEE Publication Principles: Integrated Control of Braking and Steering Subsystems for Autonomous Vehicle based on an Efficient Yaw Moment Distribution. IEEE Transactions on Industrial Electronics, 2024, , 1-1.	5.2	3
194	Maximizing economy of plug-in hybrid electric vehicles. , 2016, , .		2
195	Guest Editorial Special Section on Cyber-Physical Systems in Green Transportation. IEEE Transactions on Industrial Informatics, 2018, 14, 4124-4127.	7.2	2
196	Parameter identification of continuous - time Hammerstein system from step responses. , 2009, , .		1
197	Parameter Design and Implementation of Propulsion System of a Plug-In Hybrid Electric Transit Bus. , 2009, , .		1
198	Modeling, Control, Optimization, and Analysis of Electrified Vehicle Systems. Advances in Mechanical Engineering, 2014, 6, 541412.	0.8	1

#	ARTICLE	IF	CITATIONS
199	Integration of EVs With a Smart Grid * *Elsevier granted permission to use the full text of Hu et al. (2017) in this chapter.. , 2018, , 475-496.		1
200	Guest Editorial: Special Section on Advanced Informatics for Energy Storage Systems in Electrified Vehicles and Smart Grids. IEEE Transactions on Industrial Informatics, 2020, 16, 3330-3334.	7.2	1
201	IEEE Access Special Section Editorial: Battery Energy Storage and Management Systems. IEEE Access, 2020, 8, 123098-123103.	2.6	1
202	A Voltage Fault Detection Method Enabled by A Recurrent Neural Network and Residual Threshold Monitor for Lithium-ion Batteries. , 2021, , .		1
203	Distributed Collaborative Control of Multiple Smart Homes via Consensus ADMM. , 2021, , .		1
204	Optimal sizing and control strategy design for heavy hybrid electric truck. , 2012, , .		0
205	Integrated System Design and Energy Management of Plug-In Hybrid Electric Vehicles * *Elsevier granted permission to use the full text of Hu et al. (2016b) in this chapter.. , 2018, , 451-474.		0
206	The Modeling and Identification of Lithium-Ion Battery System. , 2018, , 99-140.		0
207	The Nonlinear Programming Optimal Control of a Hybrid Drive System. , 2018, , 205-245.		0
208	Optimal Control and System Optimization of Ground Vehicle Hybrid Drive System. , 2018, , 141-203.		0
209	Battery Health Estimation Using Electrochemical Aging Model and Ensemble Kalman Filtering. , 2021, , .		0
210	Predictive Energy Management for Dual Motor-Driven Electric Vehicles. , 0, , .		0
211	Battery Lifetime Prediction and Capacity Estimation Based on Entropy and Bayesian Neural Networks. , 2022, , .		0