Zhongbao Wei

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7205621/publications.pdf

Version: 2024-02-01

96 papers	6,294 citations	61977 43 h-index	76898 74 g-index
98 all docs	98 docs citations	98 times ranked	3749 citing authors

#	Article	IF	Citations
1	Thermal issues about Li-ion batteries and recent progress in battery thermal management systems: A review. Energy Conversion and Management, 2017, 150, 304-330.	9.2	786
2	Thermal investigation of lithium-ion battery module with different cell arrangement structures and forced air-cooling strategies. Applied Energy, 2014, 134, 229-238.	10.1	484
3	A multi-timescale estimator for battery state of charge and capacity dual estimation based on an online identified model. Applied Energy, 2017, 204, 1264-1274.	10.1	255
4	Modified Gaussian Process Regression Models for Cyclic Capacity Prediction of Lithium-Ion Batteries. IEEE Transactions on Transportation Electrification, 2019, 5, 1225-1236.	7.8	232
5	Online Model Identification and State-of-Charge Estimate for Lithium-Ion Battery With a Recursive Total Least Squares-Based Observer. IEEE Transactions on Industrial Electronics, 2018, 65, 1336-1346.	7.9	183
6	Future smart battery and management: Advanced sensing from external to embedded multi-dimensional measurement. Journal of Power Sources, 2021, 489, 229462.	7.8	178
7	Battery Thermal- and Health-Constrained Energy Management for Hybrid Electric Bus Based on Soft Actor-Critic DRL Algorithm. IEEE Transactions on Industrial Informatics, 2021, 17, 3751-3761.	11.3	169
8	Adaptive estimation of state of charge and capacity with online identified battery model for vanadium redox flow battery. Journal of Power Sources, 2016, 332, 389-398.	7.8	163
9	Electrochemical Estimation and Control for Lithium-Ion Battery Health-Aware Fast Charging. IEEE Transactions on Industrial Electronics, 2018, 65, 6635-6645.	7.9	155
10	Enhanced online model identification and state of charge estimation for lithium-ion battery with a FBCRLS based observer. Applied Energy, 2016, 181, 332-341.	10.1	151
11	Online state of charge and model parameter co-estimation based on a novel multi-timescale estimator for vanadium redox flow battery. Applied Energy, 2016, 172, 169-179.	10.1	146
12	Electrothermal dynamics-conscious lithium-ion battery cell-level charging management via state-monitored predictive control. Energy, 2017, 141, 250-259.	8.8	142
13	Noise-Immune Model Identification and State-of-Charge Estimation for Lithium-Ion Battery Using Bilinear Parameterization. IEEE Transactions on Industrial Electronics, 2021, 68, 312-323.	7.9	140
14	Battery-Involved Energy Management for Hybrid Electric Bus Based on Expert-Assistance Deep Deterministic Policy Gradient Algorithm. IEEE Transactions on Vehicular Technology, 2020, 69, 12786-12796.	6.3	132
15	Towards Long Lifetime Battery: AI-Based Manufacturing and Management. IEEE/CAA Journal of Automatica Sinica, 2022, 9, 1139-1165.	13.1	111
16	Deep Deterministic Policy Gradient-DRL Enabled Multiphysics-Constrained Fast Charging of Lithium-Ion Battery. IEEE Transactions on Industrial Electronics, 2022, 69, 2588-2598.	7.9	110
17	Online Estimation of Power Capacity With Noise Effect Attenuation for Lithium-Ion Battery. IEEE Transactions on Industrial Electronics, 2019, 66, 5724-5735.	7.9	109
18	State-of-Health Estimation of Lithium-Ion Batteries Using Incremental Capacity Analysis Based on Voltageâ€“Capacity Model. IEEE Transactions on Transportation Electrification, 2020, 6, 417-426.	7.8	104

#	Article	IF	Citations
19	Extended Kalman filter method for state of charge estimation ofÂvanadium redox flow battery using thermal-dependent electrical model. Journal of Power Sources, 2014, 262, 50-61.	7.8	100
20	A noise-tolerant model parameterization method for lithium-ion battery management system. Applied Energy, 2020, 268, 114932.	10.1	98
21	State of Charge Estimation of Vanadium Redox Flow Battery Based on Sliding Mode Observer and Dynamic Model Including Capacity Fading Factor. IEEE Transactions on Sustainable Energy, 2017, 8, 1658-1667.	8.8	95
22	Real-time monitoring of capacity loss for vanadium redox flow battery. Journal of Power Sources, 2018, 390, 261-269.	7.8	89
23	A Two-Step Parameter Optimization Method for Low-Order Model-Based State-of-Charge Estimation. IEEE Transactions on Transportation Electrification, 2021, 7, 399-409.	7.8	79
24	Constrained Ensemble Kalman Filter for Distributed Electrochemical State Estimation of Lithium-Ion Batteries. IEEE Transactions on Industrial Informatics, 2021, 17, 240-250.	11.3	76
25	Power capability prediction for lithium-ion batteries using economic nonlinear model predictive control. Journal of Power Sources, 2018, 396, 580-589.	7.8	75
26	Mass load prediction for lithium-ion battery electrode clean production: A machine learning approach. Journal of Cleaner Production, 2021, 289, 125159.	9.3	73
27	A Novel Model-Based Voltage Construction Method for Robust State-of-Health Estimation of Lithium-Ion Batteries. IEEE Transactions on Industrial Electronics, 2021, 68, 12173-12184.	7.9	73
28	Disturbance-Immune and Aging-Robust Internal Short Circuit Diagnostic for Lithium-Ion Battery. IEEE Transactions on Industrial Electronics, 2022, 69, 1988-1999.	7.9	71
29	Dynamic electro-thermal modeling of all-vanadium redox flow battery with forced cooling strategies. Applied Energy, 2014, 135, 1-10.	10.1	69
30	Load Current and State-of-Charge Coestimation for Current Sensor-Free Lithium-Ion Battery. IEEE Transactions on Power Electronics, 2021, 36, 10970-10975.	7.9	69
31	Data-Driven Battery Health Prognosis Using Adaptive Brownian Motion Model. IEEE Transactions on Industrial Informatics, 2020, 16, 4736-4746.	11.3	68
32	An adaptive model for vanadium redox flow battery and its application for online peak power estimation. Journal of Power Sources, 2017, 344, 195-207.	7.8	67
33	Deep reinforcement learning-based energy management of hybrid battery systems in electric vehicles. Journal of Energy Storage, 2021, 36, 102355.	8.1	67
34	Multistage State of Health Estimation of Lithium-Ion Battery With High Tolerance to Heavily Partial Charging. IEEE Transactions on Power Electronics, 2022, 37, 7432-7442.	7.9	65
35	Geometry optimization of thermoelectric modules: Simulation and experimental study. Energy Conversion and Management, 2019, 195, 236-243.	9.2	64
36	Dynamic thermal-hydraulic modeling and stack flow pattern analysis for all-vanadium redox flow battery. Journal of Power Sources, 2014, 260, 89-99.	7.8	63

#	Article	IF	Citations
37	Adaptive Ensemble-Based Electrochemicalâ€“Thermal Degradation State Estimation of Lithium-Ion Batteries. IEEE Transactions on Industrial Electronics, 2022, 69, 6984-6996.	7.9	59
38	Comparative study of computational intelligence approaches for NOx reduction of coal-fired boiler. Energy, 2013, 55, 683-692.	8.8	58
39	Comparative study of methods for integrated model identification and state of charge estimation of lithium-ion battery. Journal of Power Sources, 2018, 402, 189-197.	7.8	57
40	Embedded Distributed Temperature Sensing Enabled Multistate Joint Observation of Smart Lithium-Ion Battery. IEEE Transactions on Industrial Electronics, 2023, 70, 555-565.	7.9	50
41	State of Health Estimation of Lithium-Ion Battery Based on Constant-Voltage Charging Reconstruction. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2023, 11, 4393-4402.	5.4	49
42	Physics-informed neural networks for electrode-level state estimation in lithium-ion batteries. Journal of Power Sources, 2021, 506, 230034.	7.8	49
43	Thermoelectric generation for waste heat recovery: Application of a system level design optimization approach via Taguchi method. Energy Conversion and Management, 2018, 172, 507-516.	9.2	47
44	Cloud-based health-conscious energy management of hybrid battery systems in electric vehicles with deep reinforcement learning. Applied Energy, 2021, 293, 116977.	10.1	47
45	Online monitoring of state of charge and capacity loss for vanadium redox flow battery based on autoregressive exogenous modeling. Journal of Power Sources, 2018, 402, 252-262.	7.8	44
46	An Enhanced Equivalent Circuit Model of Vanadium Redox Flow Battery Energy Storage Systems Considering Thermal Effects. IEEE Access, 2019, 7, 162297-162308.	4.2	44
47	Battery Optimal Sizing Under a Synergistic Framework With DQN-Based Power Managements for the Fuel Cell Hybrid Powertrain. IEEE Transactions on Transportation Electrification, 2022, 8, 36-47.	7.8	44
48	Signal-Disturbance Interfacing Elimination for Unbiased Model Parameter Identification of Lithium-Ion Battery. IEEE Transactions on Industrial Informatics, 2021, 17, 5887-5897.	11.3	43
49	Comparative study of curve determination methods for incremental capacity analysis and state of health estimation of lithium-ion battery. Journal of Energy Storage, 2020, 29, 101400.	8.1	41
50	Hierarchical degradation processes in lithium-ion batteries during ageing. Electrochimica Acta, 2017, 256, 52-62.	5.2	34
51	Electrochemical Model-Based Fast Charging: Physical Constraint-Triggered PI Control. IEEE Transactions on Energy Conversion, 2021, 36, 3208-3220.	5.2	34
52	Modelling and control of vanadium redox flow battery for profile based charging applications. Energy, 2017, 141, 1479-1488.	8.8	33
53	State-of-Health Estimation of Lithium-ion Batteries by Fusing an Open-Circuit-Voltage Model and Incremental Capacity Analysis. IEEE Transactions on Power Electronics, 2021, , 1-1.	7.9	32
54	Hierarchical soft measurement of load current and state of charge for future smart lithium-ion batteries. Applied Energy, 2022, 307, 118246.	10.1	31

#	Article	IF	Citations
55	Charging Optimization for Li-Ion Battery in Electric Vehicles: A Review. IEEE Transactions on Transportation Electrification, 2022, 8, 3068-3089.	7.8	29
56	Online State of Charge and State of Health Estimation for a Lithium-Ion Battery Based on a Dataâ€“Model Fusion Method. Energies, 2018, 11, 1810.	3.1	28
57	A Survey of Powertrain Technologies for Energy-Efficient Heavy-Duty Machinery. Proceedings of the IEEE, 2021, 109, 279-308.	21.3	26
58	Optimization of Operating Parameters for Low NO_x Emission in High-Temperature Air Combustion. Energy & Fuels, 2012, 26, 2821-2829.	5.1	22
59	Hierarchical Sizing and Power Distribution Strategy for Hybrid Energy Storage System. Automotive Innovation, 2021, 4, 440-447.	5.1	22
60	A Simulation Study on a Thermoelectric Generator for Waste Heat Recovery from a Marine Engine. Journal of Electronic Materials, 2017, 46, 2908-2914.	2.2	20
61	Metabonomics study of the effects of traditional Chinese medicine formula Ermiaowan on hyperuricemic rats. Journal of Separation Science, 2018, 41, 560-570.	2.5	20
62	An Online Adaptive Internal Short Circuit Detection Method of Lithium-Ion Battery. Automotive Innovation, 2021, 4, 93-102.	5.1	19
63	Accurate calculation of winding resistance and influence of interleaving to mitigate ac effect in a medium-frequency high-power transformer. , 2017, , .		18
64	Twoâ€layer online stateâ€ofâ€charge estimation of lithiumâ€ion battery with current sensor bias correction. International Journal of Energy Research, 2019, 43, 3837-3852.	4.5	18
65	Residual Statistics-Based Current Sensor Fault Diagnosis for Smart Battery Management. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 2435-2444.	5.4	18
66	The optimization of state of charge and state of health estimation for lithiumâ€ions battery using combined deep learning and Kalman filter methods. International Journal of Energy Research, 2021, 45, 11206-11230.	4.5	17
67	Accurate calculation of leakage inductance for balanced and fractional-interleaved winding in medium-frequency high-power transformer. , 2017, , .		15
68	Multi-variable optimization methodology for medium-frequency high-power transformer design employing steepest descent method. , 2018, , .		14
69	Thermal modeling and transient behavior analysis of a medium-frequency high-power transformer. , 2017, , .		12
70	A Hierarchical Approach for Finite-Time H-$infty$ State-of-Charge Observer and Probabilistic Lifetime Prediction of Lithium-Ion Batteries. IEEE Transactions on Energy Conversion, 2022, 37, 718-728.	5.2	12
71	State of charge estimation of an all-vanadium redox flow battery based on a thermal-dependent model. , 2013, , .		10
72	Dynamic modeling of long-term operations of vanadium/air redox flow battery with different membranes. Journal of Energy Storage, 2022, 50, 104171.	8.1	10

#	Article	IF	Citations
73	Size optimization and power allocation of a hybrid energy storage system for frequency service. International Journal of Electrical Power and Energy Systems, 2022, 141, 108165.	5.5	9
74	Online State of Charge and Capacity Dual Estimation with a Multi-timescale Estimator for Lithium-ion Battery. Energy Procedia, 2017, 105, 2953-2958.	1.8	6
75	Calculation and Experimental Validation on Leakage Inductance of a Medium Frequency Transformer. , 2018, , .		6
76	A Coupled, Semi-Numerical Model for Thermal Analysis of Medium Frequency Transformer. Energies, 2019, 12, 328.	3.1	6
77	Variable Voltage Control of a Hybrid Energy Storage System for Firm Frequency Response in the U.K.. IEEE Transactions on Industrial Electronics, 2022, 69, 13394-13404.	7.9	5
78	Experimental Verification on Thermal Modeling of Medium Frequency Transformers. , 2018, , .		4
79	An Economic Driving Energy Management Strategy for the Fuel Cell Bus. IEEE Transactions on Transportation Electrification, 2023, 9, 5074-5084.	7.8	3
80	A Novel Adaptive Model Predictive Control Strategy of Solid Oxide Fuel Cell in DC Microgrids. IEEE Transactions on Industry Applications, 2022, 58, 6639-6654.	4.9	3
81	A Dynamic Heat/Power Decoupling Strategy for the Fuel Cell CHP in the Community Energy System: A Real Case Study in South of China. IEEE Transactions on Smart Grid, 2023, 14, 378-387.	9.0	3
82	State of Health Estimation of Li-ion Battery Based on Regional Constant Voltage Charging. , 2021, , .		2
83	Battery Thermal-conscious Energy Management for Hybrid Electric Bus Based on Fully-continuous Control with Deep Reinforcement Learning. , 2021, , .		2
84	Multi-States Fusion based Internal Short Circuit Fault Diagnostic for Lithium-Ion Battery. , 2021, , .		2
85	Robust Energy Management for Uncertain Microgrid Using Modified Grey Wolf Optimizer. , 2020, , .		2
86	Effect of inclined angle of fuel jet on NO<inf>x</inf> emission in high temperature air combustion. , 2012, , .		1
87	Lithium-Ion Battery Parameter Identification and State of Charge Estimation based on Equivalent Circuit Model. , 2020, , .		1
88	Stress-Constrained Fast Charging of Lithium-ion Battery with Predictive Control. , 2021, , .		1
89	CFD modelling of velocity distribution in tangential coal-fired flame. , 2011, , .		0
90	Improved internal short circuit detection method for Lithium-Ion battery with self-diagnosis characteristic. , 2020, , .		0

#	Article	IF	Citations
91	Moving Horizon Estimation based Unknown Input Observer for Lithium-Ion Batteries. , 2021, , .		0
92	Practical State of Health Estimation of Lithium-ion Battery with High Robustness to Charging Partialness. , 2021, , .		0
93	Predictive Fast Charging of Lithium-ion Battery with Electro-thermal Constraints. , 2020, , .		0
94	Unbiased Model Identification and State of Energy Estimation of Lithium-Ion Battery. , 2020, , .		0
95	Synergized Heating and Fast Charging for Lithium-Ion Batteries at Low Temperatures. , 2022, , .		0
96	Constant Overpotential Fast Charging for Lithium-Ion Battery with Twin Delayed DDPG Algorithm. , 2022, , .		0