Maitane Berecibar

List of Publications by Year
in descending order

49 papers	3,886 citations	249298 26 h-index	242451 47 g-index
49 all docs	49 docs citations	49 times ranked	2457 citing authors

#	Article	IF	Citations
1	Voltage Vector Redundancy Exploitation for Battery Balancing in Three-Phase CHB-Based Modular Energy Storage Systems. IEEE Transactions on Industrial Electronics, 2022, 69, 9364-9375.	5.2	4
2	Implications of the BATTERY 2030+ AI‑Assisted Toolkit on Future Low‑TRL Battery Discoveries and Chemistries. Advanced Energy Materials, 2022, 12, 2102698.	10.2	20
3	Developing an online data-driven approach for prognostics and health management of lithium-ion batteries. Applied Energy, 2022, 308, 118348.	5.1	70
4	A Roadmap for Transforming Research to Invent the Batteries of the Future Designed within the European Large Scale Research Initiative BATTERY 2030+. Advanced Energy Materials, 2022, 12, .	10.2	70
5	Improved Performance of Solid Polymer Electrolyte for Lithium-Metal Batteries via Hot Press Rolling. Polymers, 2022, 14, 363.	2.0	6
6	Thermal Performance Improvement for Different Strategies of Battery Thermal Management Systems Combined with Jute—A Comparison Study. Energies, 2022, 15, 873.	1.6	6
7	Development, retainment, and assessment of the graphite-electrolyte interphase in Li-ion batteries regarding the functionality of SEI-forming additives. IScience, 2022, 25, 103862.	1.9	31
8	Rechargeable Batteries of the Future—The State of the Art from a BATTERY 2030+ Perspective. Advanced Energy Materials, 2022, 12, .	10.2	124
9	An Experimental Study on Thermal Performance of Graphite-Based Phase-Change Materials for High-Power Batteries. Energies, 2022, 15, 2515.	1.6	12
10	Advanced hybrid thermal management system for LTO battery module under fast charging. Case Studies in Thermal Engineering, 2022, 33, 101938.	2.8	27
11	Development of a lifetime model for large format nickel-manganese-cobalt oxide-based lithium-ion cell validated using a real-life profile. Journal of Energy Storage, 2022, 50, 104289.	3.9	5
12	Novel Hybrid Thermal Management System for High-Power Lithium-Ion Module for Electric Vehicles: Fast Charging Applications. World Electric Vehicle Journal, 2022, 13, 86.	1.6	8
13	A Comprehensive Review of Lithium-Ion Capacitor Technology: Theory, Development, Modeling, Thermal Management Systems, and Applications. Molecules, 2022, 27, 3119.	1.7	17
14	Experimental and numerical analysis of holistic active and passive thermal management systems for electric vehicles: Fast charge and discharge applications. Results in Engineering, 2022, 15, 100486.	2.2	11
15	Advanced Thermal Management Systems for High-Power Lithium-Ion Capacitors: A Comprehensive Review. Designs, 2022, 6, 53.	1.3	5
16	Online health diagnosis of lithium-ion batteries based on nonlinear autoregressive neural network. Applied Energy, 2021, 282, 116159.	5.1	94
17	A compact and optimized liquid-cooled thermal management system for high power lithium-ion capacitors. Applied Thermal Engineering, 2021, 185, 116449.	3.0	50
18	Beyond the State of the Art of Electric Vehicles: A Fact-Based Paper of the Current and Prospective Electric Vehicle Technologies. World Electric Vehicle Journal, 2021, 12, 20.	1.6	52

#	ARTICLE	IF	CITATIONS
19	Battery lifetime prediction and performance assessment of different modeling approaches. IScience, 2021, 24, 102060.	1.9	52
20	Lithium-Ion Capacitor Lifetime Extension through an Optimal Thermal Management System for Smart Grid Applications. Energies, 2021, 14, 2907.	1.6	29
21	Comprehensive Passive Thermal Management Systems for Electric Vehicles. Energies, 2021, 14, 3881.	1.6	45
22	Novel thermal management methods to improve the performance of the Li-ion batteries in high discharge current applications. Energy, 2021, 224, 120165.	4.5	57
23	PCM assisted heat pipe cooling system for the thermal management of an LTO cell for high-current profiles. Case Studies in Thermal Engineering, 2021, 25, 100920.	2.8	68
24	Battery cycle life study through relaxation and forecasting the lifetime via machine learning. Journal of Energy Storage, 2021, 40, 102726.	3.9	33
25	Techno-economic analysis of lithium-ion and lead-acid batteries in stationary energy storage application. Journal of Energy Storage, 2021, 40, 102748.	3.9	125
26	A hybrid thermal management system for high power lithium-ion capacitors combining heat pipe with phase change materials. Heliyon, 2021, 7, e07773.	1.4	34
27	Holistic 1D Electro-Thermal Model Coupled to 3D Thermal Model for Hybrid Passive Cooling System Analysis in Electric Vehicles. Energies, 2021, 14, 5924.	1.6	20
28	Twin‐model framework development for a comprehensive battery lifetime prediction validated with a realistic driving profile. Energy Science and Engineering, 2021, 9, 2191-2201.	1.9	21
29	A New Concept of Air Cooling and Heat Pipe for Electric Vehicles in Fast Discharging. Energies, 2021, 14, 6477.	1.6	16
30	High-Performance Amorphous Carbon Coated $LiNi_{0.6}Mn_{0.2}Co_{0.2}O_2$ Cathode Material with Improved Capacity Retention for Lithium-Ion Batteries. Batteries, 2021, 7, 69.	2.1	7
31	A Novel Air-Cooled Thermal Management Approach towards High-Power Lithium-Ion Capacitor Module for Electric Vehicles. Energies, 2021, 14, 7150.	1.6	11
32	Optimization of 1D/3D Electro-Thermal Model for Liquid-Cooled Lithium-Ion Capacitor Module in High Power Applications. Electricity, 2021, 2, 503-523.	1.4	11
33	Thermal management analysis using heat pipe in the high current discharging of lithium-ion battery in electric vehicles. Journal of Energy Storage, 2020, 32, 101893.	3.9	109
34	Thermal performance enhancement of phase change material using aluminum-mesh grid foil for lithium-capacitor modules. Journal of Energy Storage, 2020, 30, 101508.	3.9	48
35	Ensemble Gradient Boosted Tree for SoH Estimation Based on Diagnostic Features. Energies, 2020, 13, 1262.	1.6	21
36	Mechanical behavior of Silicon-Graphite pouch cells under external compressive load: Implications and opportunities for battery pack design. Journal of Power Sources, 2020, 451, 227774.	4.0	31

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37	A new concept of thermal management system in Li-ion battery using air cooling and heat pipe for electric vehicles. Applied Thermal Engineering, 2020, 174, 115280.	3.0	182
38	Battery voltage equalisation using single‐phase cascaded H‐bridge converters. IET Power Electronics, 2020, 13, 4158-4167.	1.5	2
39	A data-driven method based on recurrent neural network method for online capacity estimation of lithium-ion batteries. , 2020, , .		2
40	Data-driven health estimation and lifetime prediction of lithium-ion batteries: A review. Renewable and Sustainable Energy Reviews, 2019, 113, 109254.	8.2	599
41	Machine-learning techniques used to accurately predict battery life. Nature, 2019, 568, 325-326.	13.7	56
42	Electric Vehicle Battery Lifetime Extension through an Intelligent Double-Layer Control Scheme. Energies, 2019, 12, 1525.	1.6	3
43	Comparative Study on Parameter Identification Methods for Dual-Polarization Lithium-Ion Equivalent Circuit Model. Energies, 2019, 12, 4031.	1.6	38
44	A quick on-line state of health estimation method for Li-ion battery with incremental capacity curves processed by Gaussian filter. Journal of Power Sources, 2018, 373, 40-53.	4.0	353
45	Random forest regression for online capacity estimation of lithium-ion batteries. Applied Energy, 2018, 232, 197-210.	5.1	358
46	Online state of health estimation on NMC cells based on predictive analytics. Journal of Power Sources, 2016, 320, 239-250.	4.0	152
47	State of health estimation algorithm of LiFePO4 battery packs based on differential voltage curves for battery management system application. Energy, 2016, 103, 784-796.	4.5	150
48	Critical review of state of health estimation methods of Li-ion batteries for real applications. Renewable and Sustainable Energy Reviews, 2016, 56, 572-587.	8.2	640
49	Estimating storage requirements for wind power plants. , 2013, , .		1