

Automotive Li-Ion Batteries: Current Status and Future

Electrochemical Energy Reviews

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Controllable Cathode-Electrolyte Interface of $\text{Li}[\text{Ni}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}]\text{O}_2$ for Lithium Ion Batteries: A Review. <i>Advanced Energy Materials</i> , 2019, 9, 1901597.	10.2	273
2	Proton conducting composite membranes based on sulfonated polysulfone and polysulfone-g-(phosphonated polystyrene) via controlled atom-transfer radical polymerization for fuel cell applications. <i>Solid State Ionics</i> , 2019, 338, 103-112.	1.3	22
3	Manipulation of an ionic and electronic conductive interface for highly-stable high-voltage cathodes. <i>Nano Energy</i> , 2019, 65, 103988.	8.2	45
4	Recent advances and challenges in divalent and multivalent metal electrodes for metal-air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18183-18208.	5.2	139
5	The Effects of Lithium Sulfur Battery Ageing on Second-Life Possibilities and Environmental Life Cycle Assessment Studies. <i>Energies</i> , 2019, 12, 2440.	1.6	13
6	Sandwich-like $\text{SnS}_2/\text{Graphene}/\text{SnS}_2$ with Expanded Interlayer Distance as High-Rate Lithium/Sodium-Ion Battery Anode Materials. <i>ACS Nano</i> , 2019, 13, 9100-9111.	7.3	276
7	$\text{Li}[\text{Ni}_{0.9}\text{Co}_{0.09}\text{W}_{0.01}]\text{O}_2$: A New Type of Layered Oxide Cathode with High Cycling Stability. <i>Advanced Energy Materials</i> , 2019, 9, 1902698.	10.2	121
8	Water-Mediated Synthesis of a Superionic Halide Solid Electrolyte. <i>Angewandte Chemie</i> , 2019, 131, 16579-16584.	1.6	92
9	Water-Mediated Synthesis of a Superionic Halide Solid Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16427-16432.	7.2	232
10	Anisotropically Electrochemical-Mechanical Evolution in Solid-State Batteries and Interfacial Tailored Strategy. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18647-18653.	7.2	43
11	In situ thermally reduced graphene oxide enhancing lithium storage of $0.3\text{Li}_2\text{MnO}_3\text{-}0.7\text{LiNi}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3}\text{O}_2$ cathode material. <i>Journal of Energy Storage</i> , 2019, 26, 100953.	3.9	2
12	Improved Capacity Retention of SiO_2 -Coated $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ Cathode Material for Lithium-Ion Batteries. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3671.	1.3	21
13	A fast measurement of Warburg-like impedance spectra with Morlet wavelet transform for electrochemical energy devices. <i>Electrochimica Acta</i> , 2019, 322, 134760.	2.6	23
14	Anisotropically Electrochemical-Mechanical Evolution in Solid-State Batteries and Interfacial Tailored Strategy. <i>Angewandte Chemie</i> , 2019, 131, 18820-18826.	1.6	12
15	Ultrathin, Flexible Polymer Electrolyte for Cost-Effective Fabrication of All-Solid-State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902767.	10.2	239
16	Modelling of the Calendering Process of NMC622 Cathodes in Battery Production Analyzing Machine/Material-Process-Structure Correlations. <i>Energy Technology</i> , 2019, 7, 1900840.	1.8	29
17	Examining the Cycling Behaviour of Li-Ion Batteries Using Ultrasonic Time-of-Flight Measurements. <i>Journal of Power Sources</i> , 2019, 444, 227318.	4.0	37
18	ALD derived Fe^{3+} -doping toward high performance $\text{P}_2\text{-Na}_{0.75}\text{Ni}_{0.2}\text{Co}_{0.2}\text{Mn}_{0.6}\text{O}_2$ cathode material for sodium ion batteries. <i>Materials Today Energy</i> , 2019, 14, 100353.	2.5	16

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19	Preparation and electrochemical properties of core-shelled silicon@carbon composites as anode materials for lithium-ion batteries. <i>Journal of Applied Electrochemistry</i> , 2019, 49, 1123-1132.	1.5	7
20	Utilizing an autogenously protective atmosphere to synthesize a Prussian white cathode with ultrahigh capacity-retention for potassium-ion batteries. <i>Chemical Communications</i> , 2019, 55, 12555-12558.	2.2	24
21	Rambutan peel based hard carbons as anode materials for sodium ion battery. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 953-960.	1.0	18
22	A versatile nitrogen-doped carbon coating strategy to improve the electrochemical performance of LiFePO ₄ cathodes for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019, 810, 151889.	2.8	20
23	The glucose-based treatment: A green and cost-efficient lithium-rich layered oxide modification strategy. <i>Ceramics International</i> , 2019, 45, 19268-19274.	2.3	1
24	Commercialization of Lithium Battery Technologies for Electric Vehicles. <i>Advanced Energy Materials</i> , 2019, 9, 1900161.	10.2	865
25	Green principles for responsible battery management in mobile applications. <i>Journal of Energy Storage</i> , 2019, 24, 100779.	3.9	15
26	On the Functionality of Coatings for Cathode Active Materials in Thiophosphate-Based All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900626.	10.2	221
27	A Comprehensive Review of Materials with Catalytic Effects in Li-S Batteries: Enhanced Redox Kinetics. <i>Angewandte Chemie</i> , 2019, 131, 18920-18931.	1.6	90
28	A Comprehensive Review of Materials with Catalytic Effects in Li-S Batteries: Enhanced Redox Kinetics. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18746-18757.	7.2	379
29	Optimized ALD-derived MgO coating layers enhancing silicon anode performance for lithium ion batteries. <i>Journal of Materials Research</i> , 2019, 34, 2425-2434.	1.2	13
30	A nanoarchitected Na ₆ Fe ₅ (SO ₄) ₈ /CNTs cathode for building a low-cost 3.6V sodium-ion full battery with superior sodium storage. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14656-14669.	5.2	51
31	Quest for Sustainability: Life-Cycle Emissions Assessment of Electric Vehicles Considering Newer Li-Ion Batteries. <i>Sustainability</i> , 2019, 11, 2366.	1.6	18
32	Semiactive Hybrid Energy Management System: A Solution for Electric Wheelchairs. <i>Electronics (Switzerland)</i> , 2019, 8, 345.	1.8	11
33	Electrolytes for Dual-Carbon Batteries. <i>ChemElectroChem</i> , 2019, 6, 2615-2629.	1.7	59
34	Tunable Electronic Properties of Graphene/g-AlN Heterostructure: The Effect of Vacancy and Strain Engineering. <i>Nanomaterials</i> , 2019, 9, 1674.	1.9	32
35	Influence of Laser-Generated Cutting Edges on the Electrical Performance of Large Lithium-Ion Pouch Cells. <i>Batteries</i> , 2019, 5, 73.	2.1	10
36	In Situ Probing Multiple-Scale Structures of Energy Materials for Li-Ion Batteries. <i>Small Methods</i> , 2020, 4, 1900223.	4.6	39

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38	Highly stable Ni-rich layered oxide cathode enabled by a thick protective layer with bio-tissue structure. <i>Energy Storage Materials</i> , 2020, 24, 291-296.	9.5	51
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40	Vehicle-to-Everything (V2X) energy services, value streams, and regulatory policy implications. <i>Energy Policy</i> , 2020, 137, 111136.	4.2	59
41	Building Safe Lithium-Ion Batteries for Electric Vehicles: A Review. <i>Electrochemical Energy Reviews</i> , 2020, 3, 1-42.	13.1	448
42	Novel dry deposition of LiNbO ₃ or Li ₂ ZrO ₃ on LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ for high performance all-solid-state lithium batteries. <i>Chemical Engineering Journal</i> , 2020, 386, 123975.	6.6	61
43	Construction of uniform SnS ₂ /ZnS heterostructure nanosheets embedded in graphene for advanced lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 820, 153147.	2.8	21
44	Self-supported GaN nanowires with cation-defects, lattice distortion, and abundant active sites for high-rate lithium-ion storage. <i>Nano Energy</i> , 2020, 68, 104376.	8.2	33
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52	Energy-dense Li metal anodes enabled by thin film electrolytes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	0.9	6
53	Surface Modification of Li-Rich Mn-Based Layered Oxide Cathodes: Challenges, Materials, Methods, and Characterization. <i>Advanced Energy Materials</i> , 2020, 10, 2002506.	10.2	108
54	Mechanical methods for state determination of Lithium-Ion secondary batteries: A review. <i>Journal of Energy Storage</i> , 2020, 32, 101859.	3.9	54

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57	Assessing the impact of cornering losses on the energy consumption of electric city buses. <i>Transportation Research, Part D: Transport and Environment</i> , 2020, 86, 102360.	3.2	21
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60	Ions Transfer Behavior during water washing for LiNi _{0.815} Co _{0.15} Al _{0.035} O ₂ : Role of Excess Lithium. <i>Materials Today Energy</i> , 2020, 17, 100440.	2.5	14
61	Tuning bifunctional interface for advanced sulfide-based all-solid-state batteries. <i>Energy Storage Materials</i> , 2020, 33, 139-146.	9.5	44
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64	A review of lithium ion batteries electrochemical models for electric vehicles. <i>E3S Web of Conferences</i> , 2020, 185, 04001.	0.2	10
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68	Industrial Validation of Lead-plated Aluminum Negative Grid for Lead-acid Batteries. <i>IOP Conference Series: Earth and Environmental Science</i> , 2020, 545, 012003.	0.2	0
69	Synthesis and electrochemical properties of Pb/Sb@C composite for lithium-ion battery application. <i>Ionics</i> , 2020, 26, 5343-5348.	1.2	3
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71	Electron density modulation of GaN nanowires by manganese incorporation for highly high-rate Lithium-ion storage. <i>Electrochimica Acta</i> , 2020, 350, 136380.	2.6	28
72	Effect of Microcracks on Graphite Anode Materials for Lithium-Ion Batteries. <i>ChemistrySelect</i> , 2020, 5, 5742-5747.	0.7	2

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74	Macroporous Mn ₃ O ₄ microspheres as a conversion-type anode material morphology for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 1283-1290.	1.2	7
75	New Class of Ni-Rich Cathode Materials Li[Ni _x Co _y B _{1-x-y}]O ₂ for Next Lithium Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000495.	1.0	10
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77	The Known and Unknown about the Environmental Safety of Nanomaterials in Commerce. <i>Small</i> , 2020, 16, e2000690.	5.2	22
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81	Size-Mediated Recurring Spinel Subnanodomains in Li- and Mn-Rich Layered Cathode Materials. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14313-14320.	7.2	46
82	Combining physicochemical model with the equivalent circuit model for performance prediction and optimization of lead-acid batteries. <i>Electrochimica Acta</i> , 2020, 353, 136567.	2.6	13
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84	Lithium-Ion Batteries State of Charge Prediction of Electric Vehicles Using RNNs-CNNs Neural Networks. <i>IEEE Access</i> , 2020, 8, 98168-98180.	2.6	45
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93	A Review on Temperature-Dependent Electrochemical Properties, Aging, and Performance of Lithium-Ion Cells. <i>Batteries</i> , 2020, 6, 35.	2.1	80
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104	Technology Development of Electric Vehicles: A Review. <i>Energies</i> , 2020, 13, 90.	1.6	220
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112	Preparation of porous Li _{1.2} Mn _{0.54} Ni _{0.13} Co _{0.13} O ₂ micro-cubes for high-capacity lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155152.	2.8	15
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115	Toward Green Battery Cells: Perspective on Materials and Technologies. <i>Small Methods</i> , 2020, 4, 2000039.	4.6	177
116	Bringing forward the development of battery cells for automotive applications: Perspective of R&D activities in China, Japan, the EU and the USA. <i>Journal of Power Sources</i> , 2020, 459, 228073.	4.0	109
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118	ZnO Interface Modified LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ Toward Boosting Lithium Storage. <i>Energy and Environmental Materials</i> , 2020, 3, 522-528.	7.3	24
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121	Towards High-Performance Li-rich NCM Graphite Cells by Germanium-Polymer Coating of the Positive Electrode Material. <i>Journal of the Electrochemical Society</i> , 2020, 167, 060524.	1.3	14
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123	Challenges of today for Na-based batteries of the future: From materials to cell metrics. <i>Journal of Power Sources</i> , 2021, 482, 228872.	4.0	169
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131	Rational design on materials for developing next generation lithium-ion secondary battery. <i>Progress in Solid State Chemistry</i> , 2021, 62, 100298.	3.9	80
132	Environmentally friendly 5V cathode based on Fe-doped $\text{LiMn}_{1.5}\text{Ni}_{0.5}\text{O}_4$ spinel for Li-ion batteries. <i>Materials Today: Proceedings</i> , 2021, 37, 3951-3957.	0.9	0
133	Additive Manufacturing of 3D Microlattice Lithium-Ion Battery Electrodes: A Review. <i>Minerals, Metals and Materials Series</i> , 2021, , 111-120.	0.3	1
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135	Novel high-performance Ga_2Te_3 anodes for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20553-20564.	5.2	9
136	Polymer-Ceramic Composite Electrolyte for Li-Ion Batteries. , 2022, , 1031-1039.		2
137	Influences and Mechanisms of Water on a Solid Electrolyte Interphase Film for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 1199-1207.	2.5	7
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