The significance of Li-ion batteries in electric vehicle lif
recycling's role in its reduction

Energy and Environmental Science

8, 158-168

DOI: 10.1039/c4ee03029j

#	Article	IF	Citations
1	The representation of trace functions of linear recurrences over rings and modules. Russian Mathematical Surveys, 2001, 56, 1170-1172.	0.6	0
2	Estimation of the effect of thermal convection and casing on the temperature regime of boreholes: a review. Journal of Geophysics and Engineering, 2011, 8, R1-R10.	1.4	18
3	Heat transport in helical RFX-mod plasmas by electron temperature dynamics from soft-x-ray diagnostics. Plasma Physics and Controlled Fusion, 2013, 55, 105010.	2.1	10
4	Interference of biphotons upon parametric down-conversion in the field of biharmonic pumping. Quantum Electronics, 2014, 44, 341-344.	1.0	0
5	Comment on â€œThe significance of Liâ€ion batteries in electric vehicle lifeâ€cycle energy and emissions and recycling's role in its reductionâ€in <i>Energy & Environmental Science</i>. Journal of Industrial Ecology, 2015, 19, 518-519.	5.5	10
6	Life-cycle implications and supply chain logistics of electric vehicle battery recycling in California. Environmental Research Letters, 2015, 10, 014011.	5.2	120
7	Review of Recent Lifecycle Assessments of Energy and Greenhouse Gas Emissions for Electric Vehicles. Current Sustainable/Renewable Energy Reports, 2015, 2, 66-73.	2.6	56
8	3D Nanostructured Molybdenum Diselenide/Graphene Foam as Anodes for Long-Cycle Life Lithium-ion Batteries. Electrochimica Acta, 2015, 176, 103-111.	5.2	107
9	Life cycle assessment of PEM FC applications: electric mobility and Î¼-CHP. Energy and Environmental Science, 2015, 8, 1969-1985.	30.8	71
10	Carbonate-assisted hydrothermal synthesis of porous, hierarchical CuO microspheres and CuO/GO for high-performance lithium-ion battery anodes. RSC Advances, 2015, 5, 85179-85186.	3.6	19
11	Atomically precise growth of sodium titanates as anode materials for high-rate and ultralong cycle-life sodium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 24281-24288.	10.3	32
12	Synergy of Nyquist and Bode electrochemical impedance spectroscopy studies to particle size effect on the electrochemical properties of LiNi0.5Co0.2Mn0.3O2. Electrochimica Acta, 2015, 186, 413-419.	5.2	30
13	Environmental Risk Trade-off for New Generation Vehicle Production: Malaysia Case. Journal of Sustainable Development, 2016, 9, 132.	0.3	1
14	Nanotechnology for environmentally sustainable electromobility. Nature Nanotechnology, 2016, 11, 1039-1051.	31.5	117
15	Mesoporous flower-like Co 3 O 4 /C nanosheet composites and their performance evaluation as anodes for lithium ion batteries. Electrochimica Acta, 2016, 207, 293-300.	5.2	41
16	Governing the electric vehicle transition â€“ Near term interventions to support a green energy economy. Applied Energy, 2016, 179, 1360-1371.	10.1	102
18	Rational design of hierarchical Ni embedded NiO hybrid nanospheres for high-performance lithium-ion batteries. RSC Advances, 2016, 6, 72008-72014.	3.6	6
19	Well-to-wheel costs, primary energy demand, and greenhouse gas emissions for the production and operation of conventional and alternative vehicles. Transportation Research, Part D: Transport and Environment, 2016, 48, 63-84.	6.8	42

#	Article	IF	Citations
20	Effect of Side-Plane Width on Lithium-Ion Transportation in Additive-Free LiCoO₂ Crystal Layer-Based Cathodes for Rechargeable Lithium-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 18496-18502.	3.1	5
21	Resilient Yolkâ€“Shell Siliconâ€“Reduced Graphene Oxide/Amorphous Carbon Anode Material from a Synergistic Dualâ€Coating Process for Lithiumâ€Ion Batteries. ChemElectroChem, 2016, 3, 1446-1454.	3.4	25
22	FeOx@carbon yolk/shell nanowires with tailored void spaces as stable and high-capacity anodes for lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 12487-12496.	10.3	44
23	Sustainable Recycling and Regeneration of Cathode Scraps from Industrial Production of Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2016, 4, 7041-7049.	6.7	148
24	High Volumetric Capacity Three-Dimensionally Sphere-Caged Secondary Battery Anodes. Nano Letters, 2016, 16, 4501-4507.	9.1	62
25	A simple route toward next-gen green energy storage concept by nanofibres-based self-supporting electrodes and a solid polymeric design. Carbon, 2016, 107, 811-822.	10.3	80
26	Investigation of the primary production routes of nickel and cobalt products used for Li-ion batteries. Resources, Conservation and Recycling, 2016, 112, 107-122.	10.8	69
27	The size and range effect: lifecycle greenhouse gas emissions of electric vehicles. Environmental Research Letters, 2016, 11, 054010.	5.2	213
28	Cradle-to-Gate Emissions from a Commercial Electric Vehicle Li-Ion Battery: A Comparative Analysis. Environmental Science & Technology, 2016, 50, 7715-7722.	10.0	210
29	Impact of Nanoscale Lithium Nickel Manganese Cobalt Oxide (NMC) on the Bacterium <i>Shewanella oneidensis</i> MR-1. Chemistry of Materials, 2016, 28, 1092-1100.	6.7	70
30	Computer simulations of the influence of geometry in the performance of conventional and unconventional lithium-ion batteries. Applied Energy, 2016, 165, 318-328.	10.1	36
31	Multiscale modeling of lithium-ion battery electrodes based on nano-scale X-ray computed tomography. Journal of Power Sources, 2016, 307, 496-509.	7.8	92
32	Correlation between the model accuracy and model-based SOC estimation. Electrochimica Acta, 2017, 228, 146-159.	5.2	119
33	<i>Ab Initio</i> Atomistic Thermodynamics Study of the (001) Surface of LiCoO₂ in a Water Environment and Implications for Reactivity under Ambient Conditions. Journal of Physical Chemistry C, 2017, 121, 5069-5080.	3.1	37
34	Core chemistry influences the toxicity of multicomponent metal oxide nanomaterials, lithium nickel manganese cobalt oxide, and lithium cobalt oxide to <i>Daphnia magna</i>. Environmental Toxicology and Chemistry, 2017, 36, 2493-2502.	4.3	49
35	Manufacturing energy analysis of lithium ion battery pack for electric vehicles. CIRP Annals - Manufacturing Technology, 2017, 66, 53-56.	3.6	127
36	Parameters driving environmental performance of energy storage systems across grid applications. Journal of Energy Storage, 2017, 12, 11-28.	8.1	27
37	Improved Li⁺ Storage through Homogeneous Nâ€Doping within Highly Branched Tubular Graphitic Foam. Advanced Materials, 2017, 29, 1603692.	21.0	113

#	Article	IF	Citations
38	Ecoâ€Efficiency Analysis of a Lithiumâ€Ion Battery Waste Hierarchy Inspired by Circular Economy. Journal of Industrial Ecology, 2017, 21, 715-730.	5.5	154
39	A review of stochastic battery models and health management. Renewable and Sustainable Energy Reviews, 2017, 80, 716-732.	16.4	79
40	Improved Na-storage cycling of amorphous-carbon-sheathed Ni3S2 arrays and investigation by in situ TEM characterization. Materials Today Energy, 2017, 5, 99-106.	4.7	22
41	Low temperature hydrothermal synthesis of battery grade lithium iron phosphate. RSC Advances, 2017, 7, 17763-17767.	3.6	21
42	Nanomaterials and Global Sustainability. Accounts of Chemical Research, 2017, 50, 633-637.	15.6	60
43	Electrochemical performance and reaction mechanism of the Li2MoO3 anode synthesized by ball milling and thermal reduction for lithium-ion batteries. Electrochimica Acta, 2017, 224, 1-8.	5.2	9
44	Lithium-Ion Battery Supply Chain Considerations: Analysis of Potential Bottlenecks in Critical Metals. Joule, 2017, 1, 229-243.	24.0	937
45	Confronting Issues of the Practical Implementation of Si Anode in High-Energy Lithium-Ion Batteries. Joule, 2017, 1, 47-60.	24.0	329
46	Identifying key assumptions and differences in life cycle assessment studies of lithium-ion traction batteries with focus on greenhouse gas emissions. Transportation Research, Part D: Transport and Environment, 2017, 55, 82-90.	6.8	136
47	Promising electrochemical performance of Cu3Mo2O9 nanorods for lithium-ion batteries. Journal of Materials Science, 2017, 52, 12380-12389.	3.7	17
48	In-situ polymerized lithium polyacrylate (PAALi) as dual-functional lithium source for high-performance layered oxide cathodes. Electrochimica Acta, 2017, 249, 43-51.	5.2	14
49	Facile synthesis, structure and first investigation of promising lithium storage ability for Fe₂SiS₄/porous carbon composite. Functional Materials Letters, 2017, 10, 1750054.	1.2	6
50	Nanostructured materials: A progressive assessment and future direction for energy device applications. Coordination Chemistry Reviews, 2017, 353, 113-141.	18.8	37
51	Highly-efficient MnO2/carbon array-type catalytic cathode enabling confined Li2O2 growth for long-life Liâ€“O2 batteries. Energy Storage Materials, 2017, 6, 164-170.	18.0	27
52	Quantifying the environmental impact of a Li-rich high-capacity cathode material in electric vehicles via life cycle assessment. Environmental Science and Pollution Research, 2017, 24, 1251-1260.	5.3	26
53	The environmental impact of Li-Ion batteries and the role of key parameters â€“ A review. Renewable and Sustainable Energy Reviews, 2017, 67, 491-506.	16.4	522
54	Ni₃S₂ nanosheet-anchored carbon submicron tube arrays as high-performance binder-free anodes for Na-ion batteries. Inorganic Chemistry Frontiers, 2017, 4, 131-138.	6.0	22
55	Random Forest Based Li-Ion Battery Capacity Prediction Subject to Capacity Recovery Effect. , 2017, , .		1

#	Article	IF	Citations
56	Energy use and climate change improvements of Li/S batteries based on life cycle assessment. Journal of Power Sources, 2018, 383, 87-92.	7.8	33
57	Life Cycle Assessment of LFP Cathode Material Production for Power Lithium-Ion Batteries. Springer Proceedings in Energy, 2018, , 513-522.	0.3	8
58	Effect of nanopatterning on mechanical properties of Lithium anode. Scientific Reports, 2018, 8, 2514.	3.3	33
59	A cross-disciplinary overview of naturally derived materials for electrochemical energy storage. Materials Today Energy, 2018, 7, 58-79.	4.7	58
60	Disassembly Planning and Assessment of Automation Potentials for Lithium-Ion Batteries. Sustainable Production, Life Cycle Engineering and Management, 2018, , 83-97.	0.3	15
61	Influence of Nanoparticle Morphology on Ion Release and Biological Impact of Nickel Manganese Cobalt Oxide (NMC) Complex Oxide Nanomaterials. ACS Applied Nano Materials, 2018, 1, 1721-1730.	5.0	25
62	Uncertain Environmental Footprint of Current and Future Battery Electric Vehicles. Environmental Science & Technology, 2018, 52, 4989-4995.	10.0	117
63	Thermal runaway mechanism of lithium ion battery for electric vehicles: A review. Energy Storage Materials, 2018, 10, 246-267.	18.0	1,939
64	Should BEVs be subsidized or taxed? A European perspective based on the economic value of CO2 emissions. Transportation Research, Part D: Transport and Environment, 2018, 64, 70-89.	6.8	42
65	Empirical Fuel Consumption and CO₂ Emissions of Plugâ€•In Hybrid Electric Vehicles. Journal of Industrial Ecology, 2018, 22, 773-784.	5.5	50
66	A novel NiCo2O4@GO hybrid composite with core-shell structure as high-performance anodes for lithium-ion batteries. Journal of Alloys and Compounds, 2018, 731, 1095-1102.	5.5	45
67	LCA of Electromobility. , 2018, , 669-693.		18
68	Providing a common base for life cycle assessments of Li-Ion batteries. Journal of Cleaner Production, 2018, 171, 704-713.	9.3	132
69	Local degradation pathways in lithium-rich manganeseâ€“nickelâ€“cobalt oxide epitaxial thin films. Journal of Materials Science, 2018, 53, 1365-1379.	3.7	6
70	Scrutinising the electric vehicle material backpack. Journal of Cleaner Production, 2018, 172, 1699-1710.	9.3	15
71	A review on the growing concern and potential management strategies of waste lithium-ion batteries. Resources, Conservation and Recycling, 2018, 129, 263-277.	10.8	323
72	Impact of lithiated cobalt oxide and phosphate nanoparticles on rainbow trout gill epithelial cells. Nanotoxicology, 2018, 12, 1166-1181.	3.0	20
73	A Comprehensive Review of Nanomaterials Developed Using Electrophoresis Process for High-Efficiency Energy Conversion and Storage Systems. Energies, 2018, 11, 3122.	3.1	18

#	Article	IF	Citations
74	The Recycling of Spent Lithium-Ion Batteries: a Review of Current Processes and Technologies. Electrochemical Energy Reviews, 2018, 1, 461-482.	25.5	215
75	Evolution of spent LiFePO4 powders into LiFePO4/C/FeS composites: A facile and smart approach to make sustainable anodes for alkaline Ni-Fe secondary batteries. Journal of Power Sources, 2018, 403, 38-48.	7.8	30
76	Novel Application of Repaired LiFePO₄ as a Candidate Anode Material for Advanced Alkaline Rechargeable Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 13312-13323.	6.7	24
77	Comparative life cycle assessment of lithium-ion batteries with lithium metal, silicon nanowire, and graphite anodes. Clean Technologies and Environmental Policy, 2018, 20, 1233-1244.	4.1	43
78	An Equivalent Circuit Model for Lithium Battery of Electric Vehicle considering Self-Healing Characteristic. Journal of Control Science and Engineering, 2018, 2018, 1-11.	1.0	26
79	Hydrothermal preparation and performance of LiFePO4 by using Li3PO4 recovered from spent cathode scraps as Li source. Waste Management, 2018, 78, 208-216.	7.4	58
80	Global Artificial Photosynthesis and Renewable Energy Storage and Policy for the Sustainocene. Advanced Sustainable Systems, 2018, 2, 1800035.	5.3	3
81	A review of power management strategies and component sizing methods for hybrid vehicles. Renewable and Sustainable Energy Reviews, 2018, 96, 132-144.	16.4	175
82	Impact of Phosphate Adsorption on Complex Cobalt Oxide Nanoparticle Dispersibility in Aqueous Media. Environmental Science & Technology, 2018, 52, 10186-10195.	10.0	27
83	Exploring the Effect of Increased Energy Density on the Environmental Impacts of Traction Batteries: A Comparison of Energy Optimized Lithium-Ion and Lithium-Sulfur Batteries for Mobility Applications. Energies, 2018, 11, 150.	3.1	53
84	Lithium-ion battery recycling processes: Research towards a sustainable course. Sustainable Materials and Technologies, 2018, 17, e00068.	3.3	117
85	Earlyâ€Stage Sustainability Evaluation of Nanoscale Cathode Materials for Lithium Ion Batteries. ChemSusChem, 2018, 11, 2068-2076.	6.8	10
86	Use-Phase Drives Lithium-Ion Battery Life Cycle Environmental Impacts When Used for Frequency Regulation. Environmental Science & Technology, 2018, 52, 10163-10174.	10.0	26
87	Toward sustainable and systematic recycling of spent rechargeable batteries. Chemical Society Reviews, 2018, 47, 7239-7302.	38.1	624
88	Cradle-to-gate environmental impacts of sulfur-based solid-state lithium batteries for electric vehicle applications. Journal of Cleaner Production, 2018, 202, 770-778.	9.3	18
89	Silicon Oxycarbide Beads from Continuously Produced Polysilsesquioxane as Stable Anode Material for Lithium-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 2961-2970.	5.1	31
90	Recovery of active cathode materials from lithium-ion batteries using froth flotation. Sustainable Materials and Technologies, 2018, 17, e00062.	3.3	52
91	Evaluation of the Recyclability of Traction Batteries Using the Concept of Information Theory Entropy. , 2019, , 93-103.		2

#	Article	IF	Citations
92	Methodological Approaches to End-Of-Life Modelling in Life Cycle Assessments of Lithium-Ion Batteries. Batteries, 2019, 5, 51.	4.5	67
93	Nitrogenâ€Doped Carbonâ€Coated Bimetal Selenides for Highâ€Performance Lithiumâ€Ion Storage through the Selfâ€Accommodation of Volume Change. ChemElectroChem, 2019, 6, 3736-3741.	3.4	12
94	Flexible Garnet Solid-State Electrolyte Membranes Enabled by Tile-and-Grout Design. ACS Energy Letters, 2019, 4, 2668-2674.	17.4	50
95	A Critical Review of Lithium-Ion Battery Recycling Processes from a Circular Economy Perspective. Batteries, 2019, 5, 68.	4.5	288
96	Utilization effects on battery electric vehicle life-cycle assessment: A case-driven analysis of two commercial mobility applications. Transportation Research, Part D: Transport and Environment, 2019, 75, 87-105.	6.8	29
97	Impact of natural and synthetic graphite milling energy on lithium-ion electrode capacity and cycle life. Carbon, 2019, 145, 82-89.	10.3	27
98	An international dialogue about electric vehicle deployment to bring energy and greenhouse gas benefits through 2030 on a well-to-wheels basis. Transportation Research, Part D: Transport and Environment, 2019, 74, 245-254.	6.8	32
99	The Life Cycle of Energy Consumption and Greenhouse Gas Emissions from Critical Minerals Recycling: Case of Lithium-ion Batteries. Procedia CIRP, 2019, 80, 316-321.	1.9	35
100	Ultrafast Li-ion migration in holey-graphene-based composites constructed by a generalized <i>ex situ</i> method towards high capacity energy storage. Journal of Materials Chemistry A, 2019, 7, 4788-4796.	10.3	34
101	Multifunctional energy storage composite structures with embedded lithium-ion batteries. Journal of Power Sources, 2019, 414, 517-529.	7.8	94
102	Electrification of urban mobility: The case of catenary-free buses. Transport Policy, 2019, 80, 39-48.	6.6	9
103	High capacity vanadium oxide electrodes: effective recycling through thermal treatment. Sustainable Energy and Fuels, 2019, 3, 2615-2626.	4.9	4
104	Life Cycle Analysis of Lithium-Ion Batteries for Automotive Applications. Batteries, 2019, 5, 48.	4.5	241
105	Commercialization of Lithium Battery Technologies for Electric Vehicles. Advanced Energy Materials, 2019, 9, 1900161.	19.5	865
106	Economy analysis of second-life battery in wind power systems considering battery degradation in dynamic processes: Real case scenarios. Applied Energy, 2019, 251, 113411.	10.1	81
107	Life cycle assessment of electric vehicles and buses in Brazil: effects of local manufacturing, mass reduction, and energy consumption evolution. International Journal of Life Cycle Assessment, 2019, 24, 1878-1897.	4.7	28
108	Efficient recycling of valuable resources from discarded lithium-ion batteries. Journal of Power Sources, 2019, 426, 259-265.	7.8	67
109	The energetic implications of introducing lithium-ion batteries into distributed photovoltaic systems. Sustainable Energy and Fuels, 2019, 3, 1182-1190.	4.9	7

#	Article	IF	Citations
110	Material efficiency strategies to reducing greenhouse gas emissions associated with buildings, vehicles, and electronicsâ€"a review. Environmental Research Letters, 2019, 14, 043004.	5.2	225
111	Additional Emissions and Cost from Storing Electricity in Stationary Battery Systems. Environmental Science & Technology, 2019, 53, 3379-3390.	10.0	58
112	Quantitative Mapping of Oxidative Stress Response to Lithium Cobalt Oxide Nanoparticles in Single Cells Using Multiplexed <i>in Situ</i> Gene Expression Analysis. Nano Letters, 2019, 19, 1990-1997.	9.1	25
113	Inhibition effect of different interstitial materials on thermal runaway propagation in the cylindrical lithium-ion battery module. Applied Thermal Engineering, 2019, 153, 39-50.	6.0	97
114	Proposal for Disassembly of Electric Vehicle Batteries used in the Volkswagen Jetta Hybrid System. , 2019, , .		4
115	Interaction of Phosphate with Lithium Cobalt Oxide Nanoparticles: A Combined Spectroscopic and Calorimetric Study. Langmuir, 2019, 35, 16640-16649.	3.5	16
116	From the Perspective of Battery Production: Energyâ€"Environmentâ€"Economy (3E) Analysis of Lithium-Ion Batteries in China. Sustainability, 2019, 11, 6941.	3.2	15
117	Prospective Life Cycle Assessment of a Structural Battery. Sustainability, 2019, 11, 5679.	3.2	12
118	Electric vehicle recycling in China: Economic and environmental benefits. Resources, Conservation and Recycling, 2019, 140, 45-53.	10.8	131
119	Transitioning to low-carbon suburbs in hot-arid regions: A case-study of Emirati villas in Abu Dhabi. Building and Environment, 2019, 147, 77-96.	6.9	17
120	Operando X-ray diffraction analysis of the degradation mechanisms of a spinel LiMn2O4 cathode in different voltage windows. Journal of Energy Chemistry, 2020, 44, 138-146.	12.9	53
121	Research gaps in environmental life cycle assessments of lithium ion batteries for grid-scale stationary energy storage systems: End-of-life options and other issues. Sustainable Materials and Technologies, 2020, 23, e00120.	3.3	49
122	Globally regional life cycle analysis of automotive lithium-ion nickel manganese cobalt batteries. Mitigation and Adaptation Strategies for Global Change, 2020, 25, 371-396.	2.1	53
123	Few-layered MoSe2 ultrathin nanosheets as anode materials for lithium ion batteries. Journal of Alloys and Compounds, 2020, 813, 152074.	5.5	39
124	Understanding the future of lithium: Part 2, temporally and spatially resolved lifeâ€cycle assessment modeling. Journal of Industrial Ecology, 2020, 24, 90-100.	5.5	45
125	A high-performance energy storage system from sphagnum uptake waste LIBs with negative greenhouse-gas emission. Nano Energy, 2020, 67, 104216.	16.0	10
126	Environmental life cycle assessment of the production in China of lithium-ion batteries with nickel-cobalt-manganese cathodes utilising novel electrode chemistries. Journal of Cleaner Production, 2020, 254, 120067.	9.3	76
127	Nickel enrichment of next-generation NMC nanomaterials alters material stability, causing unexpected dissolution behavior and observed toxicity to <i>S. oneidensis</i> MR-1 and <i>D. magna</i>. Environmental Science: Nano, 2020, 7, 571-587.	4.3	18

#	Article	IF	Citations
128	Emissions performance of electric vehicles: A case study from the United Kingdom. Applied Energy, 2020, 260, 114241.	10.1	37
129	Selectively peeling of spent LiFePO4 cathode by destruction of crystal structure and binder matrix for efficient recycling of spent battery materials. Journal of Hazardous Materials, 2020, 386, 121633.	12.4	29
130	Environmental and economic evaluation of remanufacturing lithium-ion batteries from electric vehicles. Waste Management, 2020, 102, 579-586.	7.4	109
131	Lithium recovery from artificial brine using energy-efficient membrane distillation and nanofiltration. Journal of Membrane Science, 2020, 598, 117683.	8.2	83
132	Swelling mechanism of 0%SOC lithium iron phosphate battery at high temperature storage. Journal of Energy Storage, 2020, 32, 101791.	8.1	8
133	Qualitative framework based on intelligent robotics for safe and efficient disassembly of battery modules for recycling purposes. IOP Conference Series: Earth and Environmental Science, 2020, 463, 012159.	0.3	4
134	Subtoxic dose of lithium cobalt oxide nanosheets impacts critical molecular pathways in trout gill epithelial cells. Environmental Science: Nano, 2020, 7, 3419-3430.	4.3	4
135	Internal temperature detection of thermal runaway in lithium-ion cells tested by extended-volume accelerating rate calorimetry. Journal of Energy Storage, 2020, 31, 101670.	8.1	45
136	Key Challenges and Opportunities for Recycling Electric Vehicle Battery Materials. Sustainability, 2020, 12, 5837.	3.2	99
137	Sustainable Direct Recycling of Lithiumâ€Ion Batteries via Solvent Recovery of Electrode Materials. ChemSusChem, 2020, 13, 5664-5670.	6.8	80
138	Energy and environmental aspects in recycling lithium-ion batteries: Concept of Battery Identity Global Passport. Materials Today, 2020, 41, 304-315.	14.2	181
139	Experimental Determination of the Mansonâ˘Coffin Curves for an Original Unconventional Vehicle Frame. Materials, 2020, 13, 4675.	2.9	23
140	Energy use for GWh-scale lithium-ion battery production. Environmental Research Communications, 2020, 2, 012001.	2.3	52
141	Flow battery production: Materials selection and environmental impact. Journal of Cleaner Production, 2020, 269, 121740.	9.3	48
142	Systematic Study of Al Impurity for NCM622 Cathode Materials. ACS Sustainable Chemistry and Engineering, 2020, 8, 9875-9884.	6.7	53
143	Environment-friendly technology for recovering cathode materials from spent lithium iron phosphate batteries. Waste Management and Research, 2020, 38, 911-920.	3.9	25
144	Toward a cellâ€chemistry specific life cycle assessment of lithiumâ€ion battery recycling processes. Journal of Industrial Ecology, 2020, 24, 1310-1322.	5.5	138
145	DFT and thermodynamics calculations of surface cation release in LiCoO2. Applied Surface Science, 2020, 515, 145865.	6.1	34

#	Article	IF	Citations
146	Recycled Red Mudâ€"Decorated Porous 3D Graphene for Highâ€Energy Flexible Microâ€Supercapacitor. Advanced Sustainable Systems, 2020, 4, 1900133.	5.3	25
147	Electrochemical Performance of Recycled Cathode Active Materials Using Froth Flotation-based Separation Process. Journal of the Electrochemical Society, 2020, 167, 020504.	2.9	34
148	Regeneration of degraded LiNi0.5Co0.2Mn0.3O2 from spent lithium ion batteries. Ionics, 2020, 26, 2757-2761.	2.4	18
149	Application of Life Cycle Assessment to Lithium Ion Batteries in the Automotive Sector. Sustainability, 2020, 12, 4628.	3.2	28
150	Progress and Status of Hydrometallurgical and Direct Recycling of Li-Ion Batteries and Beyond. Materials, 2020, 13, 801.	2.9	205
151	Spatially confined synthesis of a flexible and hierarchically porous three-dimensional graphene/FeP hollow nanosphere composite anode for highly efficient and ultrastable potassium ion storage. Journal of Materials Chemistry A, 2020, 8, 3369-3378.	10.3	58
152	Recycling of mixed cathode lithiumâ€ion batteries for electric vehicles: Current status and future outlook. , 2020, 2, 6-43.		300
153	Sustainable Recycling Technology for Li-Ion Batteries and Beyond: Challenges and Future Prospects. Chemical Reviews, 2020, 120, 7020-7063.	47.7	957
154	The Role of Divalent (Zn²⁺/Mg²⁺/Cu²⁺) Substituents in Achieving Full Capacity of Sodium Layered Oxides for Na-Ion Battery Applications. Chemistry of Materials, 2020, 32, 1657-1666.	6.7	74
155	Long-term analysis of critical materials in future vehicles electrification in China and their national and global implications. Energy, 2020, 202, 117697.	8.8	24
156	Life cycle environmental and cost comparison of current and future passenger cars under different energy scenarios. Applied Energy, 2020, 269, 115021.	10.1	114
157	An Organic Solvent-free Approach towards PDI/Carbon Cloth Composites as Flexible Lithium Ion Battery Cathodes. Chinese Journal of Polymer Science (English Edition), 2020, 38, 540-549.	3.8	1
158	A green process for phosphorus recovery from spent LiFePO4 batteries by transformation of delithiated LiFePO4 crystal into NaFeS2. Journal of Hazardous Materials, 2020, 395, 122614.	12.4	29
159	Comparison of fresh and aged lithium iron phosphate cathodes using a tailored electrochemical strain microscopy technique. Beilstein Journal of Nanotechnology, 2020, 11, 583-596.	2.8	6
160	Lithium iron phosphate batteries recycling: An assessment of current status. Critical Reviews in Environmental Science and Technology, 2021, 51, 2232-2259.	12.8	52
161	Battery pack recycling challenges for the year 2030: Recommended solutions based on intelligent robotics for safe and efficient disassembly, residual energy detection, and secondary utilization. Energy Storage, 2021, 3, e190.	4.3	28
162	Recent developments and future perspectives of anionic batteries. Journal of Power Sources, 2021, 481, 228877.	7.8	68
163	Uniformly dispersed nano-crystallite graphite in a silicon-oxygen-carbon matrix for high rate performance lithium-ion batteries. Journal of Alloys and Compounds, 2021, 857, 157476.	5.5	5

#	Article	IF	Citations
164	Natural resource use of a traction lithium-ion battery production based on land disturbances through mining activities. Journal of Cleaner Production, 2021, 280, 124871.	9.3	27
165	Wastewater Technologies and Environmental Treatment. Springer Proceedings in Earth and Environmental Sciences, 2021, , .	0.4	0
166	The Role of Cycle Life on the Environmental Impact of Li_{6.4}La₃Zr_{1.4}Ta_{0.6}O₁₂ based Solidâ€State Batteries. Advanced Sustainable Systems, 2021, 5, 2000241.	5.3	17
167	Phosphorusâ€Containing C₁₂H₂₇O₄P as Functional Electrolyte Additives for Highâ€Voltage LiNi_{0.5}Mn_{1.5}O₄/Graphite Liâ€Ion Batteries with Excellent Electrochemical Performance. Advanced Materials Interfaces, 2021, 8, 2001588.	3.7	7
168	On the sustainability of lithium ion battery industry â€" A review and perspective. Energy Storage Materials, 2021, 36, 186-212.	18.0	425
169	Review of Lithium Production and Recovery from Minerals, Brines, and Lithium-Ion Batteries. Mineral Processing and Extractive Metallurgy Review, 2021, 42, 123-141.	5.0	163
170	Valorization of resources from end-of-life lithium-ion batteries: A review. Critical Reviews in Environmental Science and Technology, 2022, 52, 2060-2103.	12.8	20
171	Surface Oxidation Layer-Mediated Conformal Carbon Coating on Si Nanoparticles for Enhanced Lithium Storage. ACS Applied Materials & Interfaces, 2021, 13, 3991-3998.	8.0	51
172	Battery recycling opportunity and challenges in India. Materials Today: Proceedings, 2021, 46, 1543-1556.	1.8	12
173	Sodium ion intercalation and multi redox behavior of a Keggin type polyoxometalate during [PMo₁₀V₂O₄₀]^{5âˆ’}to [PMo₁₀V₂O₄₀]^{27âˆ’}as a cathode material for Na-ion rechargeable batteries. RSC Advances, 2021, 11, 19378-19386.	3.6	8
174	A closed-loop regeneration of LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂ and graphite from spent batteries <i>via</i> efficient lithium supplementation and structural remodelling. Sustainable Energy and Fuels, 2021, 5, 4981-4991.	4.9	21
175	Lithium-Ion Batteries for Automotive Applications: Life Cycle Analysis. , 2021, , 395-405.		2
176	Revealing the degradation mechanism of Ni-rich cathode materials after ambient storage and related regeneration method. Journal of Materials Chemistry A, 2021, 9, 3995-4006.	10.3	51
177	Life Cycle Assessment of an NMC Battery for Application to Electric Light-Duty Commercial Vehicles and Comparison with a Sodium-Nickel-Chloride Battery. Applied Sciences (Switzerland), 2021, 11, 1160.	2.5	48
178	The Carbon Footprint of Electrified City Buses: A Case Study in Trondheim, Norway. Energies, 2021, 14, 770.	3.1	12
179	Roomâ€Temperature Sodiumâ€"Sulfur Batteries and Beyond: Realizing Practical High Energy Systems through Anode, Cathode, and Electrolyte Engineering. Advanced Energy Materials, 2021, 11, 2003493.	19.5	114
180	Electrode and Electrolyte Materials From Atomistic Simulations: Properties of LixFEPO4 Electrode and Zircon-Based Ionic Conductors. Frontiers in Energy Research, 2021, 9, .	2.3	5
181	The influence of the development of new energy vehicles on the environment from the game perspective. IOP Conference Series: Earth and Environmental Science, 2021, 692, 022061.	0.3	1

#	Article	IF	Citations
182	Separator Aging and Performance Degradation Caused by Battery Expansion: Cyclic Compression Test Simulation of Polypropylene Separator. Journal of the Electrochemical Society, 2021, 168, 030506.	2.9	9
183	Circularity of Lithium-Ion Battery Materials in Electric Vehicles. Environmental Science & Technology, 2021, 55, 5189-5198.	10.0	89
184	Opportunities for the State-of-the-Art Production of LIB Electrodesâ€"A Review. Energies, 2021, 14, 1406.	3.1	55
185	Synthesis of graphene and recovery of lithium from lithiated graphite of spent Li-ion battery. Waste Management, 2021, 124, 283-292.	7.4	38
186	Cradle-to-gate life cycle assessment of cobalt sulfate production derived from a nickelâ€"copperâ€"cobalt mine in China. International Journal of Life Cycle Assessment, 2021, 26, 1198-1210.	4.7	24
187	Global perspective on CO₂ emissions of electric vehicles. Environmental Research Letters, 2021, 16, 054043.	5.2	22
188	Machine learning of materials design and state prediction for lithium ion batteries. Chinese Journal of Chemical Engineering, 2021, 37, 1-11.	3.5	29
189	Energy flow analysis of laboratory scale lithium-ion battery cell production. IScience, 2021, 24, 102437.	4.1	15
190	Reductive Thermal Treatment of LiCoO₂ from End-of-Life Lithium-Ion Batteries with Hydrogen. ACS Sustainable Chemistry and Engineering, 2021, 9, 7447-7453.	6.7	28
191	Life Cycle Assesment of Powertrains Based on a Battery, Hydrogen Fuel Cells, and Internal Combustion Engine for Urban Buses under the Conditions of Moscow Oblast. Russian Journal of Applied Chemistry, 2021, 94, 793-812.	0.5	3
192	Charge and discharge profiles of repurposed LiFePO4 batteries based on the UL 1974 standard. Scientific Data, 2021, 8, 165.	5.3	9
193	Lifeâ€Cycle Assessment Considerations for Batteries and Battery Materials. Advanced Energy Materials, 2021, 11, 2100771.	19.5	96
194	Emissions life cycle assessment of diesel, hybrid and electric buses. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2022, 236, 1233-1245.	1.9	7
195	State of Researchâ€"Review on LCE Modelling and Assessment Approaches for Electromobility. Sustainable Production, Life Cycle Engineering and Management, 2022, , 57-85.	0.3	0
196	Background and Context. Sustainable Production, Life Cycle Engineering and Management, 2022, , 1-10.	0.3	0
197	Life Cycle Modelling of Extraction and Processing of Battery Mineralsâ€"A Parametric Approach. Batteries, 2021, 7, 57.	4.5	21
198	Circular economy of Li Batteries: Technologies and trends. Journal of Energy Storage, 2021, 40, 102690.	8.1	65
199	Environmental life cycle implications of upscaling lithium-ion battery production. International Journal of Life Cycle Assessment, 2021, 26, 2024-2039.	4.7	53

#	Article	IF	Citations
200	Turning waste into wealth: A systematic review on echelon utilization and material recycling of retired lithium-ion batteries. Energy Storage Materials, 2021, 40, 96-123.	18.0	97
201	Valence Effects of Fe Impurity for Recovered LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂ Cathode Materials. ACS Applied Energy Materials, 2021, 4, 10356-10367.	5.1	11
202	A comparative life cycle assessment of electric, compressed natural gas, and diesel buses in Thailand. Journal of Cleaner Production, 2021, 314, 128013.	9.3	17
203	Circular business models for electric vehicle lithium-ion batteries: An analysis of current practices of vehicle manufacturers and policies in the EU. Resources, Conservation and Recycling, 2021, 172, 105658.	10.8	58
204	In-situ generated Li2S-based composite cathodes with high mass and capacity loading for all-solid-state Li-S batteries. Journal of Alloys and Compounds, 2021, 874, 159763.	5.5	10
205	Fun to drive? The dynamics of car manufacturers' differentiation strategies. Strategic Change, 2021, 30, 489-500.	4.1	0
206	Environmental benefit-detriment thresholds for flow battery energy storage systems: A case study in California. Applied Energy, 2021, 300, 117354.	10.1	10
207	Evaluating environmental impacts and economic performance of remanufacturing electric vehicle lithium-ion batteries. Journal of Cleaner Production, 2021, 321, 128935.	9.3	49
208	An adaptable life cycle greenhouse gas emissions assessment framework for electric, hybrid, fuel cell and conventional vehicles: Effect of electricity mix, mileage, battery capacity and battery chemistry in the context of Canada. Journal of Cleaner Production, 2021, 317, 128394.	9.3	27
209	Comparative Life Cycle Assessment of Merging Recycling Methods for Spent Lithium Ion Batteries. Energies, 2021, 14, 6263.	3.1	17
210	Assessment of end-of-life electric vehicle batteries in China: Future scenarios and economic benefits. Waste Management, 2021, 135, 70-78.	7.4	52
211	A lattice defect-inspired leaching strategy toward simultaneous recovery and separation of value metals from spent cathode materials. Waste Management, 2021, 135, 40-46.	7.4	9
212	Assessing the life cycle cumulative energy demand and greenhouse gas emissions of lithium-ion batteries. Journal of Energy Storage, 2021, 43, 103193.	8.1	21
213	Transportation of electric vehicle lithium-ion batteries at end-of-life: A literature review. Resources, Conservation and Recycling, 2021, 174, 105755.	10.8	65
214	Electric cars â€“ Assessment of â€˜greenâ€™ nature vis-Ã-vis conventional fuel driven cars. Sustainable Materials and Technologies, 2021, 30, e00339.	3.3	1
215	Model-based energy analysis of a dry room HVAC system in battery cell production. Procedia CIRP, 2021, 98, 157-162.	1.9	16
216	Life Cycle Analysis Summary for Automotive Lithium-Ion Battery Production and Recycling. , 2016, , 73-79.		7
217	Battery Production and Simulation. Sustainable Production, Life Cycle Engineering and Management, 2017, , 11-37.	0.3	1

#	Article	IF	Citations
218	Environmental Aspects of the Recycling of Lithium-Ion Traction Batteries. Sustainable Production, Life Cycle Engineering and Management, 2018, , 267-288.	0.3	13
219	Methodology for the Simulation based Energy Efficiency Assessment of Battery Cell Manufacturing Systems. Procedia Manufacturing, 2020, 43, 32-39.	1.9	21
220	Significance of a Solid Electrolyte Interphase on Separation of Anode and Cathode Materials from Spent Li-Ion Batteries by Froth Flotation. ACS Sustainable Chemistry and Engineering, 2021, 9, 531-540.	6.7	38
221	Lithium ion car batteries: Present analysis and future predictions. Environmental Engineering Research, 2019, 24, 699-710.	2.5	27
222	Environmental impacts, pollution sources and pathways of spent lithium-ion batteries. Energy and Environmental Science, 2021, 14, 6099-6121.	30.8	240
224	Lithium-Ion Batteries for Automotive Applications: Life Cycle Analysis. , 2019, , 1-12.		0
225	Chinaâ€™s Development on New Energy Vehicle Battery Industry: Based on Market and Bibliometrics. IOP Conference Series: Earth and Environmental Science, 0, 581, 012003.	0.3	6
226	Evaluating Remanufacturing Lithium-Ion Batteries. Springer Proceedings in Earth and Environmental Sciences, 2021, , 77-85.	0.4	0
227	Second life and recycling: Energy and environmental sustainability perspectives for high-performance lithium-ion batteries. Science Advances, 2021, 7, eabi7633.	10.3	94
228	Life cycle assessment of the energy consumption and GHG emissions of state-of-the-art automotive battery cell production. Journal of Cleaner Production, 2022, 330, 129798.	9.3	53
229	Enabling Intelligent Recovery of Critical Materials from Li-Ion Battery through Direct Recycling Process with Internet-of-Things. Materials, 2021, 14, 7153.	2.9	6
230	Surface-Modified Lithium Cobalt Oxide (LiCoO₂) with Enhanced Performance at Higher Rates through Li-Vacancy Ordering in the Monoclinic Phase. ACS Applied Energy Materials, 2021, 4, 14260-14272.	5.1	14
231	Strategies for improving rechargeable lithium-ion batteries: From active materials to CO₂ emissions. Nanotechnology Reviews, 2021, 10, 1993-2026.	5.8	9
232	Comparative life cycle GHG emission analysis of conventional and electric vehicles in India. Environment, Development and Sustainability, 2022, 24, 13294-13333.	5.0	11
233	Evaluating multifunctional efficiency of a structural battery composite via thermo-electro-chemical modeling. Multifunctional Materials, 2022, 5, 015001.	3.7	2
235	Environmental impacts of hydrometallurgical recycling and reusing for manufacturing of lithium-ion traction batteries in China. Science of the Total Environment, 2022, 811, 152224.	8.0	50
236	A review of the life cycle assessment of electric vehicles: Considering the influence of batteries. Science of the Total Environment, 2022, 814, 152870.	8.0	82
237	Protective and ion conductive: High-Rate Ni-Rich cathode with enhanced cyclic stability via One-Step bifunctional dual-layer coating. Chemical Engineering Journal, 2022, 431, 134031.	12.7	13

#	Article	IF	Citations
238	A new approach to regenerate high-performance graphite from spent lithium-ion batteries. Carbon, 2022, 189, 293-304.	10.3	50
239	The Regulatory Environment for Lithium-Ion Battery Recycling. ACS Energy Letters, 2022, 7, 736-740.	17.4	46
240	Lithium-Ion Battery Recyclingâ”€Overview of Techniques and Trends. ACS Energy Letters, 2022, 7, 712-719.	17.4	164
242	Technological innovation <i>vs.</i> tightening raw material markets: falling battery costs put at risk. Energy Advances, 2022, 1, 136-145.	3.3	21
243	Life cycle assessment of recycled NiCoMn ternary cathode materials prepared by hydrometallurgical technology for power batteries in China. Journal of Cleaner Production, 2022, 340, 130798.	9.3	24
244	Environmental hotspots and greenhouse gas reduction potential for different lithium-ion battery recovery strategies. Journal of Cleaner Production, 2022, 339, 130697.	9.3	20
245	Worldwide ubiquitous utilization of lithium-ion batteries: What we have done, are doing, and could do safely once they are dead?. Journal of Power Sources, 2022, 523, 231015.	7.8	24
246	Prediction of battery thermal behaviour in the presence of a constructal theory-based heat pipe (CBHP): A multiphysics model and pattern-based machine learning approach. Journal of Energy Storage, 2022, 48, 103963.	8.1	28
247	Life Cycle Analysis of LiCoO2/ Graphite Batteries with Cooling using Combined Electrochemical-Thermal Modeling. Resources, Conservation and Recycling, 2022, 180, 106204.	10.8	2
248	Life Cycle Assessment of Lithium-ion Batteries: A Critical Review. Resources, Conservation and Recycling, 2022, 180, 106164.	10.8	86
249	Total CO2-equivalent life-cycle emissions from commercially available passenger cars. Renewable and Sustainable Energy Reviews, 2022, 159, 112158.	16.4	78
250	Carbothermic reduction of spent Lithium-Ion batteries using CO2 as reaction medium. Chemical Engineering Journal, 2022, 435, 135165.	12.7	21
252	Exploring recycling options in battery supply chains â€“ a life cycle sustainability assessment. Procedia CIRP, 2022, 105, 434-439.	1.9	8
253	Avoiding CO₂ Improves Thermal Stability at the Interface of Li₇La₃Zr₂O₁₂ Electrolyte with Layered Oxide Cathodes. Advanced Energy Materials, 2022, 12, .	19.5	17
254	Sustainable Recycling of Electrode Materials in Spent Li-Ion Batteries through Direct Regeneration Processes. ACS ES&T Engineering, 2022, 2, 586-605.	7.6	37
255	Basics, properties, and thermal issues of EV battery and battery thermal management systems: Comprehensive review. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2023, 237, 295-311.	1.9	9
256	Comprehensive Characterization of Shredded Lithiumâ€Ion Battery Recycling Material. Chemistry - A European Journal, 2022, 28, .	3.3	8
257	Expression Patterns of Energy-Related Genes in Single Cells Uncover Key Isoforms and Enzymes That Gain Priority Under Nanoparticle-Induced Stress. ACS Nano, 2022, 16, 7197-7209.	14.6	3

#	Article	IF	Citations
258	Fast Charging Anode Materials for Lithiumâ€Ion Batteries: Current Status and Perspectives. Advanced Functional Materials, 2022, 32, .	14.9	185
259	Battery technology and recycling alone will not save the electric mobility transition from future cobalt shortages. Nature Communications, 2022, 13, 1341.	12.8	107
260	Recycle cathode materials from spent lithium-ion batteries by an innovative method. Ionics, 2022, 28, 2135-2141.	2.4	3
261	The greenhouse gas emissions of automotive lithium-ion batteries: a statistical review of life cycle assessment studies. Journal of Cleaner Production, 2022, 344, 130994.	9.3	22
262	Recycling cathode materials of spent lithium-ion batteries for advanced catalysts production. Journal of Power Sources, 2022, 528, 231220.	7.8	41
263	A drive system global control strategy for electric vehicle based on optimized acceleration curve. Energy, 2022, 248, 123598.	8.8	4
264	Addressing the social life cycle inventory analysis data gap: Insights from a case study of cobalt mining in the Democratic Republic of the Congo. One Earth, 2021, 4, 1704-1714.	6.8	17
265	Critical review of life cycle assessment of lithium-ion batteries for electric vehicles: A lifespan perspective. ETransportation, 2022, 12, 100169.	14.8	151
266	Environmental impact assessment of second life and recycling for LiFePO4 power batteries in China. Journal of Environmental Management, 2022, 314, 115083.	7.8	31
267	Study on Performances of LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode Materials Prepared from Different Lithium Sources and Coated Modification of ZnO. Material Sciences, 2022, 12, 386-395.	0.0	0
268	Sustainable Electric Vehicle Batteries for a Sustainable World: Perspectives on Battery Cathodes, Environment, Supply Chain, Manufacturing, Life Cycle, and Policy. Advanced Energy Materials, 2022, 12, .	19.5	72
269	Preferential Extraction of Lithium from Spent Cathodes and the Regeneration of Layered Oxides for Li/Na-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24255-24264.	8.0	7
270	Modern practices in electrophoretic deposition to manufacture energy storage electrodes. International Journal of Energy Research, 2022, 46, 13205-13250.	4.5	17
271	Are Electric Vehicles Really the Optimal Option for Transportation Sector to Approach Carbon Neutrality Goal in China?. SSRN Electronic Journal, 0, , .	0.4	0
272	Environmental Impact Assessment of Na₃V₂(PO₄)₃ Cathode Production for Sodiumâ€Ion Batteries. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	14
273	Simulation of the Thermal Runaway Onset in Li-Ion Cellsâ€"Influence of Cathode Materials and Operating Conditions. Energies, 2022, 15, 4169.	3.1	1
274	On the energy use of battery Gigafactories. Journal of Cleaner Production, 2022, 364, 132573.	9.3	5
275	Hierarchical Diagnostics and Risk Assessment for Energy Supply in Military Vehicles. Energies, 2022, 15, 4791.	3.1	3

#	Article	IF	Citations
276	Conversion of LiFePO₄ to FePO₄ via Selective Lithium Bicarbonation: A Direct Pathway Towards Battery Recycling. Journal of the Electrochemical Society, 2022, 169, 073509.	2.9	7
277	Life cycle assessment of an innovative lithium-ion battery recycling route: A feasibility study. Journal of Cleaner Production, 2022, 368, 133130.	9.3	10
278	Environmental benefits of circular economy approach to use of cobalt. Global Environmental Change, 2022, 76, 102568.	7.8	5
279	Synthesis, structural and conductive properties of Nd doped garnet-type Li7La3Zr2O12 Li-ion conductor. Current Applied Physics, 2022, 41, 1-6.	2.4	4
280	Electric vehicle lithium-ion battery recycled content standards for the US â€“ targets, costs, and environmental impacts. Resources, Conservation and Recycling, 2022, 185, 106488.	10.8	30
281	Environmental Impact Assessment of LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂ Hydrometallurgical Cathode Recycling from Spent Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 9798-9810.	6.7	26
282	Testing and Modeling Procedure of the 18650 Lithium Battery at Different Temperatures. , 2022, , .		2
283	Advances in Intelligent Regeneration of Cathode Materials for Sustainable Lithiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	19.5	34
284	Sulfur: A potential resource crisis that could stifle green technology and threaten food security as the world decarbonises. Geographical Journal, 2022, 188, 498-505.	3.1	13
285	Comparative life cycle assessment of synthesis routes for cathode materials in sodium-ion batteries. Clean Technologies and Environmental Policy, 2022, 24, 3319-3330.	4.1	2
286	Hierarchic porous graphite/reduced graphene oxide composites generated from semi-coke as high-performance anodes for lithium-ion batteries. Sustainable Materials and Technologies, 2022, 33, e00476.	3.3	4
287	Life cycle assessment of recycling options for automotive Li-ion battery packs. Journal of Cleaner Production, 2022, 371, 133636.	9.3	28
288	Circularity and life cycle environmental impact assessment of batteries for electric vehicles: Industrial challenges, best practices and research guidelines. Renewable and Sustainable Energy Reviews, 2022, 169, 112941.	16.4	17
289	Life cycle carbon footprint of electric vehicles in different countries: A review. Separation and Purification Technology, 2022, 301, 122063.	7.9	23
290	Battery electric vehicles: Progress, power electronic converters, strength (S), weakness (W), opportunity (O), and threats (T). International Journal of Thermofluids, 2022, 16, 100212.	7.8	24
291	Decarbonization potential of on-road fuels and powertrains in the European Union and the United States: a well-to-wheels assessment. Sustainable Energy and Fuels, 2022, 6, 4398-4417.	4.9	8
292	Emerging green technologies for recovery and reuse of spent lithium-ion batteries â€“ a review. Journal of Materials Chemistry A, 2022, 10, 17053-17076.	10.3	28
293	Enabling Sustainable Lithium-Ion Battery Manufacturing via Recycling. ACS Symposium Series, 0, , 551-565.	0.5	0

#	Article	IF	Citations
294	The (un)shared responsibility in the reverse logistics of portable batteries: A Brazilian case. Waste Management, 2022, 154, 49-63.	7.4	3
295	Material and energy requirements of transport electrification. Energy and Environmental Science, 2022, 15, 4872-4910.	30.8	10
296	Literature Review, Recycling of Lithium-Ion Batteries from Electric Vehicles, Part II: Environmental and Economic Perspective. Energies, 2022, 15, 7356.	3.1	17
297	Comparative life cycle assessment of conventional combustion engine vehicle, battery electric vehicle and fuel cell electric vehicle in Nepal. Journal of Cleaner Production, 2022, 379, 134407.	9.3	25
298	Oxide ceramic electrolytes for all-solid-state lithium batteries â€“ cost-cutting cell design and environmental impact. Green Chemistry, 2023, 25, 399-414.	9.0	4
299	Direct recycling and remanufacturing of anode scraps. Sustainable Materials and Technologies, 2023, 35, e00542.	3.3	4
300	Methods and Technologies for Recycling Batteries. , 2022, , 1-34.		0
301	Review and selection of recycling technology for lithium-ion batteries made for EV application - A life cycle perspective. IOP Conference Series: Earth and Environmental Science, 2022, 1100, 012011.	0.3	3
302	Roadmap for a sustainable circular economy in lithium-ion and future battery technologies. JPhys Energy, 2023, 5, 021501.	5.3	16
303	Comparison of Electric Vehicle Lithium-Ion Battery Recycling Allocation Methods. Environmental Science & Technology, 2022, 56, 17977-17987.	10.0	10
304	A feasibility analysis on adopting electric vehicles in the short food supply chain based on GHG emissions and economic costs estimations. Sustainable Production and Consumption, 2023, 36, 49-61.	11.0	15
305	Preparing La-Doped LiAl₅O₈ from the Electrode Materials of Waste Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2023, 11, 1386-1393.	6.7	0
306	The growing metaverse sector can reduce greenhouse gas emissions by 10 Gt CO₂e in the united states by 2050. Energy and Environmental Science, 2023, 16, 2382-2397.	30.8	10
307	Carbon footprint of Li-Oxygen batteries and the impact of material and structure selection. Journal of Energy Storage, 2023, 60, 106684.	8.1	2
308	Emissions of electric vehicles in Californiaâ€™s transition to carbon neutrality. Applied Energy, 2023, 339, 120974.	10.1	9
309	Impact of automated battery sorting for mineral recovery from lithium-ion battery recycling in the United States. Resources, Conservation and Recycling, 2023, 192, 106936.	10.8	6
310	Cost-effective electric bus resource assignment based on optimized charging and decision robustness. Transportation Research, Part D: Transport and Environment, 2023, 118, 103724.	6.8	5
311	Experimental Study on Electrical Properties of Power Lithium-ion Battery. Journal of Physics: Conference Series, 2023, 2442, 012025.	0.4	0

#	Article	IF	Citations
312	An In-Situ Low Temperature-Mechanical Coupling Test System for Battery Materials. IEEE Transactions on Instrumentation and Measurement, 2023, 72, 1-9.	4.7	3
313	Comparative sustainability assessment of lithium-ion, lithium-sulfur, and all-solid-state traction batteries. International Journal of Life Cycle Assessment, 2023, 28, 462-477.	4.7	5
314	Assessing the feasibility of the Inflation Reduction Actâ€™s EV critical mineral targets. Nature Sustainability, 2023, 6, 639-643.	23.7	5
315	Highly selective and green recovery of lithium ions from lithium iron phosphate powders with ozone. Frontiers of Chemical Science and Engineering, 0, , .	4.4	0
316	Oneâ€Pot, Threeâ€Phase Recycling of Metals from Liâ€Ion Batteries in Rotating, Concentricâ€Liquid Reactors. Advanced Materials, 2023, 35, .	21.0	3
317	Greenhouse gas emissions embodied in electric vehicle charging infrastructure: a method and case study of Georgia, US 2021â€“2050. Environmental Research: Infrastructure and Sustainability, 2023, 3, 015013.	2.3	1
318	Analysis of nickel sulphate datasets used in lithium-ion batteries. Procedia CIRP, 2023, 116, 348-353.	1.9	2
319	Environmental assessment of secondary materials from battery recycling process chains: the influence of recycling processes and modelling choices. Procedia CIRP, 2023, 116, 29-34.	1.9	0
320	Divalent Ion Pillaring and Coating on Lithium Cobalt Oxide Cathode for Fast Intercalation of Li⁺ Ion with High Capacity. Energy Technology, 2023, 11, .	3.8	2
321	Silicon Anode: A Perspective on Fast Charging Lithium-Ion Battery. Inorganics, 2023, 11, 182.	2.7	2
322	Vehicle-cycle and life-cycle analysis of medium-duty and heavy-duty trucks in the United States. Science of the Total Environment, 2023, 891, 164093.	8.0	1
323	Towards Allâ€Solidâ€State Polymer Batteries: Going Beyond PEO with Hybrid Concepts. Advanced Functional Materials, 2023, 33, .	14.9	5
324	Effect of alkali types during iron precipitation on manganese sulfate crystallization from Indonesian manganese ore. AIP Conference Proceedings, 2023, , .	0.4	0
325	Ionic Conductivity of Lithium Phosphides. Crystals, 2023, 13, 756.	2.2	2
326	Mottâ€“Schottky Effect in Coreâ€“Shell W@W<i>_x</i>C Heterostructure: Boosting Both Electronic/Ionic Kinetics for Lithium Storage. Small, 2023, 19, .	10.0	2
327	Life-cycle analysis of battery metal recycling with lithium recovery from a spent lithium-ion battery. Resources, Conservation and Recycling, 2023, 196, 107040.	10.8	8
328	è»Šè¼‰ç”¨ãƒªãƒã‚¦ãƒ ã‚ªãƒ³é›»æ± ã«ãŠã‘ã‚‹è³‡æºå•é¡Œ. Material Cycles and Waste Management Research, 2022, 33, 175-180.	0.2	0
329	A review of research in the Li-ion battery production and reverse supply chains. Journal of Energy Storage, 2023, 68, 107622.	8.1	8

#	Article	IF	Citations
330	Technological penetration and carbon-neutral evaluation of rechargeable battery systems for large-scale energy storage. Journal of Energy Storage, 2023, 69, 107917.	8.1	3
331	Effect of Artificial Aging Treatment on the Mechanical Properties and Regulation of Precipitated Phase Particles of High-Pressure Die-Cast Thin-Wall AlSi10MnMg Longitudinal Carrier. Materials, 2023, 16, 4369.	2.9	1
332	Sustainable recovery of high-valued resources from spent lithium-ion batteries: A review of the membrane-integrated hybrid approach. Chemical Engineering Journal, 2023, 470, 144169.	12.7	9
333	Advancing recycling of spent lithium-ion batteries: From green chemistry to circular economy. Energy Storage Materials, 2023, 61, 102870.	18.0	5
334	Manufacturing processes and recycling technology of automotive lithium-ion battery: A review. Journal of Energy Storage, 2023, 67, 107533.	8.1	10
335	Greenhouse gas emissions from storing energy from wind turbines. , 2023, , 399-409.		0
336	Study on the impact of government policies on power battery recycling under different recycling models. Journal of Cleaner Production, 2023, 413, 137492.	9.3	10
337	Integrated process of CO2 sequestration and recycling spent LiFePO4 batteries. Energy Storage Materials, 2023, 60, 102819.	18.0	5
338	1Tâ€“2H MoSe₂/N-doped rGO composites as anodes for high performance lithium-ion batteries. New Journal of Chemistry, 2024, 48, 1372-1380.	2.8	1
339	Sustainable Development Goals and End-of-Life Electric Vehicle Battery: Literature Review. Batteries, 2023, 9, 353.	4.5	3
340	Circular economy conceptualization for lithium-ion batteries- material procurement and disposal process. Chemical Engineering Science, 2023, 281, 119080.	3.8	4
341	Cradle-to-Gate and Use-Phase Carbon Footprint of a Commercial Plug-in Hybrid Electric Vehicle Lithium-Ion Battery. Environmental Science & Technology, 2023, 57, 11834-11842.	10.0	1
342	Sustainability accounting for greenhouse gas emissions measurement using the GREET LCA model: practical review of automotive ESG reporting. Clean Technologies and Environmental Policy, 0, , .	4.1	0
343	Comprehensive evaluation on production and recycling of lithium-ion batteries: A critical review. Renewable and Sustainable Energy Reviews, 2023, 185, 113585.	16.4	2
344	Uncovering the CO2 emissions embodied in the anthropogenic global cobalt flows. Journal of Cleaner Production, 2023, 422, 138627.	9.3	0
345	An Emerging and Consummate Photocatalysis-Assisted Strategy for Efficient Recycling of Spent Lithium-Ion Batteries. ACS Energy Letters, 2023, 8, 4287-4295.	17.4	3
346	A comprehensive review of the reclamation of resources from spent lithium-ion batteries. Chemical Engineering Journal, 2023, 474, 145822.	12.7	4
347	On the damage and performance degradation of multifunctional sandwich structure embedded with lithium-ion batteries under impact loading. Journal of Power Sources, 2023, 581, 233509.	7.8	3

#	Article	IF	Citations
348	Thermal Safety of Lithium-ion Batteries: Mechanism, Modeling, and Characterizations. Annual Review of Heat Transfer, 2023, , .	1.0	0
349	Prospects of recycling from end-of-life of Li-ion batteries on alleviating materials demand-supply gap in new electric vehicles in Asia. Waste Management, 2023, 171, 207-217.	7.4	2
350	Life cycle assessment of electrochemical and mechanical energy storage systems. Energy Reports, 2023, 10, 2036-2046.	5.1	0
351	Regulating Lithium Transfer Pathway to Avoid Capacity Fading of Nano Si Through Subâ€Nano Scale Interfused SiO<i>_x</i>/C Coating. Advanced Materials, 2023, 35, .	21.0	7
352	Techno-economic analysis of lithium-ion battery price reduction considering carbon footprint based on life cycle assessment. Journal of Cleaner Production, 2023, 425, 139045.	9.3	6
353	AnÃ¡lise da demanda energÃ©tica para reciclagem de baterias de veÃculos elÃ©tricos atravÃ©s de um processo hidrometalÃºrgico flexÃvel. , 0, , .		0
354	Assessment and Mitigation of Environmental Footprints for Energy-Critical Metals Used in Permanent Magnets. , 2023, , 21-40.		1
355	Emerging Multiscale Porous Anodes toward Fast Charging Lithium-Ion Batteries. ACS Nano, 2023, 17, 20850-20874.	14.6	2
356	Emissions andÂ Mitigation. , 2023, , 233-284.		0
358	Sustainable recovery and resynthesis of electroactive materials from spent Li-ion batteries to ensure material sustainability. Resources, Conservation and Recycling, 2024, 200, 107292.	10.8	2
359	Impact of cobalt recycling on China's electrification process: Assessing the potential reduction in cobalt demand from battery recycling. Journal of Cleaner Production, 2024, 434, 139917.	9.3	0
360	Environmental impact assessment of lithium ion battery employing cradle to grave. Sustainable Energy Technologies and Assessments, 2023, 60, 103530.	2.7	1
361	Prospective life cycle assessment of sodiumâ€ion batteries made from abundant elements. Journal of Industrial Ecology, 2024, 28, 116-129.	5.5	0
363	AtÄ±k LFP BataryalarÄ±n Geri DÃ¶nÃ¼ÅŸÃ¼mÃ¼. Gazi Ãœniversitesi Fen Bilimleri Dergisi, 0, , .	0.6	0
364	Separation of Li and Co from LiCoO2 Cathode Material Through Aluminothermic Reduction: Thermodynamic Calculations and Experimental Results. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 0, , .	2.1	0
365	Charting the electric vehicle battery reuse and recycling network in North America. Waste Management, 2024, 174, 76-87.	7.4	0
366	Low-carbon technologies in automotive industry and decarbonizing transport. Journal of Power Sources, 2024, 591, 233888.	7.8	5
367	Green Path to Power: Spray-Printed LNMO Cathodes Using Cyrene for Sustainable Lithium-Ion Battery Production. , 2023, , .		0

#	Article	IF	Citations
368	Sustainability challenges throughout the electric vehicle battery value chain. Renewable and Sustainable Energy Reviews, 2024, 191, 114176.	16.4	0
369	Unlocking the value of recycling scrap from Li-ion battery manufacturing: Challenges and outlook. Journal of Power Sources, 2024, 593, 233955.	7.8	0
370	A bottom-up method to analyze the environmental and economic impacts of recycling lithium-ion batteries with different cathode chemistries. Environment, Development and Sustainability, 0, , .	5.0	1
372	Challenges, Solutions and Future Trends in EV-Technology: A Review. IEEE Access, 2024, 12, 17242-17260.	4.2	0
373	Composition Analysis of the Solid Electrolyte Interface of NaK Anodes in Na-Ion Batteries. ACS Applied Materials & Interfaces, 2024, 16, 4592-4599.	8.0	0
374	Scenario Analysis of the Prospects for the Use of Alternative Fuels for Road Transport in Russia. World of Transport and Transportation, 2024, 21, 88-98.	0.2	0
375	A lithium-ion battery with cycling stability promoted by the progressive activation of a silicon oxide anode in graphene-amorphous carbon matrix. Journal of Power Sources, 2024, 595, 234059.	7.8	0
376	In situ constructed MgO parclose-concerted fabrication of Silicon/carbon hybrids via a high-efficiency and expedited electrochemical process in molten salt. Chemical Engineering Journal, 2024, 484, 149428.	12.7	0
377	Progress of machine learning in materials design for Li-Ion battery. , 2024, 2, 100145.		0
378	Identification of principal factors for low-carbon electric vehicle batteries by using a life cycle assessment model-based sensitivity analysis. Sustainable Energy Technologies and Assessments, 2024, 64, 103683.	2.7	0
379	A green and simplified method for selective recovery of lithium from the cathode scraps of spent LiFexMn1â^'xPO4 batteries. Separation and Purification Technology, 2024, 341, 126848.	7.9	0
380	Achieving reusability of leachate for multi-element recovery of the discarded LiNixCoyMn1-x-yO2 cathode by regulating the co-precipitation coefficient. Chinese Chemical Letters, 2024, , 109726.	9.0	0
381	Recovering Critical Metal Ions from Battery Wastes: A Brief Review. Membrane Journal, 2024, 34, 1-9.	0.4	0
382	Effect of graphene nanoplatelets induced ethylene glycol/water mixture (50:50) fluid on lithium-battery cooling. Case Studies in Thermal Engineering, 2024, 56, 104267.	5.7	0
383	Preferentially selective recovery of lithium from spent LiCoO2 by sulfation roasting of MnSO4. Materials Chemistry and Physics, 2024, 318, 129236.	4.0	0
384	Regeneration of Hybrid and Electric Vehicle Batteries: State-of-the-Art Review, Current Challenges, and Future Perspectives. Batteries, 2024, 10, 101.	4.5	0
385	Are electric vehicles really the optimal option for the transportation sector in China to approach pollution reduction and carbon neutrality goals?. Journal of Environmental Management, 2024, 356, 120648.	7.8	0