Zhaoping Liu

List of Publications by Year
in descending order

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214 papers	10,986 citations	31976 53 h-index	37204 96 g-index
220 all docs	220 docs citations	220 times ranked	12472 citing authors

#	Article	IF	Citations
1	Towards Highâ€Voltage Aqueous Metalâ€Ion Batteries Beyond 1.5 V: The Zinc/Zinc Hexacyanoferrate System. Advanced Energy Materials, 2015, 5, 1400930.	19.5	932
2	Gasâ€“solid interfacial modification of oxygen activity in layered oxide cathodes for lithium-ion batteries. Nature Communications, 2016, 7, 12108.	12.8	531
3	Graphene modified LiFePO4 cathode materials for high power lithium ion batteries. Journal of Materials Chemistry, 2011, 21, 3353.	6.7	469
4	3D Porous MXene (Ti₃C₂)/Reduced Graphene Oxide Hybrid Films for Advanced Lithium Storage. ACS Applied Materials & Interfaces, 2018, 10, 3634-3643.	8.0	288
5	A Comprehensive Understanding of Lithiumâ€“Sulfur Battery Technology. Advanced Functional Materials, 2019, 29, 1901730.	14.9	267
6	A scalable, solution-phase processing route to graphene oxide and graphene ultralarge sheets. Chemical Communications, 2010, 46, 2611.	4.1	240
7	A Chronicle Review of Nonsilicon (Sn, Sb, Ge)â€Based Lithium/Sodiumâ€Ion Battery Alloying Anodes. Small Methods, 2020, 4, 2000218.	8.6	220
8	Morphological Evolution of High-Voltage Spinel LiNi_{0.5}Mn_{1.5}O₄ Cathode Materials for Lithium-Ion Batteries: The Critical Effects of Surface Orientations and Particle Size. ACS Applied Materials & Interfaces, 2016, 8, 4661-4675.	8.0	212
9	Morphology-Dependent Electrochemical Performance of Zinc Hexacyanoferrate Cathode for Zinc-Ion Battery. Scientific Reports, 2015, 5, 18263.	3.3	211
10	Largeâ€Sized Fewâ€Layer Graphene Enables an Ultrafast and Longâ€Life Aluminumâ€Ion Battery. Advanced Energy Materials, 2017, 7, 1700034.	19.5	197
11	A 3D porous architecture of Si/graphene nanocomposite as high-performance anode materials for Li-ion batteries. Journal of Materials Chemistry, 2012, 22, 7724.	6.7	193
12	Morphology-controlled solvothermal synthesis of LiFePO4 as a cathode material for lithium-ion batteries. Journal of Materials Chemistry, 2010, 20, 8086.	6.7	170
13	Transition metal oxide-based oxygen reduction reaction electrocatalysts for energy conversion systems with aqueous electrolytes. Journal of Materials Chemistry A, 2018, 6, 10595-10626.	10.3	162
14	Microscale Lithium Metal Stored inside Cellular Graphene Scaffold toward Advanced Metallic Lithium Anodes. Advanced Energy Materials, 2018, 8, 1703152.	19.5	144
15	Abundant nanoscale defects to eliminate voltage decay in Li-rich cathode materials. Energy Storage Materials, 2019, 16, 220-227.	18.0	144
16	Mechanical and Thermal Properties of Epoxy Resin Nanocomposites Reinforced with Graphene Oxide. Polymer-Plastics Technology and Engineering, 2012, 51, 251-256.	1.9	143
17	Hybrid Organicâ€“Inorganic Thermoelectric Materials and Devices. Angewandte Chemie - International Edition, 2019, 58, 15206-15226.	13.8	138
18	Sulfur/Carbon Nanotube Composite Film as a Flexible Cathode for Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry C, 2013, 117, 21112-21119.	3.1	135

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19	Enhancing the pyridinic N content of Nitrogen-doped graphene and improving its catalytic activity for oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 28298-28308.	7.1	132
20	A novel fluorocyclophosphazene as bifunctional additive for safer lithium-ion batteries. Journal of Power Sources, 2015, 278, 190-196.	7.8	117
21	Two-dimensional silicon suboxides nanostructures with Si nanodomains confined in amorphous SiO2 derived from siloxene as high performance anode for Li-ion batteries. Nano Energy, 2017, 39, 546-553.	16.0	113
22	Self-Templating Construction of 3D Hierarchical Macro-/Mesoporous Silicon from 0D Silica Nanoparticles. ACS Nano, 2017, 11, 889-899.	14.6	100
23	Enhanced Electrochemical Performance with Surface Coating by Reactive Magnetron Sputtering on Lithium-Rich Layered Oxide Electrodes. ACS Applied Materials & Interfaces, 2014, 6, 9185-9193.	8.0	98
24	Understanding and Controlling Anionic Electrochemical Activity in High-Capacity Oxides for Next Generation Li-Ion Batteries. Chemistry of Materials, 2017, 29, 908-915.	6.7	97
25	Electrochemical properties of 0.6Li[Li1/3Mn2/3]O2â€“0.4LiNixMnyCo1â^'xâ^'yO2 cathode materials for lithium-ion batteries. Journal of Power Sources, 2012, 218, 128-133.	7.8	93
26	Improving the cyclability performance of lithium-ion batteries by introducing lithium difluorophosphate (LiPO₂F₂) additive. RSC Advances, 2017, 7, 26052-26059.	3.6	93
27	New-concept Batteries Based on Aqueous Li+/Na+ Mixed-ion Electrolytes. Scientific Reports, 2013, 3, 1946.	3.3	91
28	Morphology controlled synthesis and modification of high-performance LiMnPO4 cathode materials for Li-ion batteries. Journal of Materials Chemistry, 2012, 22, 21144.	6.7	90
29	Water-mediated cation intercalation of open-framework indium hexacyanoferrate with high voltage and fast kinetics. Nature Communications, 2016, 7, 11982.	12.8	90
30	(La1â^'xSrx)0.98MnO3 perovskite with A-site deficiencies toward oxygen reduction reaction in aluminum-air batteries. Journal of Power Sources, 2017, 342, 192-201.	7.8	87
31	Methylsulfonylmethane-Based Deep Eutectic Solvent as a New Type of Green Electrolyte for a High-Energy-Density Aqueous Lithium-Ion Battery. ACS Energy Letters, 2019, 4, 1419-1426.	17.4	87
32	Polyimide matrix-enhanced cross-linked gel separator with three-dimensional heat-resistance skeleton for high-safety and high-power lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 9134.	10.3	86
33	Superior Thermally Stable and Nonflammable Porous Polybenzimidazole Membrane with High Wettability for High-Power Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 8742-8750.	8.0	83
34	Porous membrane with high curvature, three-dimensional heat-resistance skeleton: a new and practical separator candidate for high safety lithium ion battery. Scientific Reports, 2015, 5, 8255.	3.3	80
35	Graphene nested porous carbon current collector for lithium metal anode with ultrahigh areal capacity. Energy Storage Materials, 2018, 15, 266-273.	18.0	77
36	Silicon/carbon lithium-ion battery anode with 3D hierarchical macro-/mesoporous silicon network: Self-templating synthesis via magnesiothermic reduction of silica/carbon composite. Journal of Power Sources, 2019, 412, 93-104.	7.8	77

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37	Synthesis and electrochemical properties of layered lithium transition metal oxides. Journal of Materials Chemistry, 2011, 21, 2544-2549.	6.7	74
38	Surface structural conversion and electrochemical enhancement by heat treatment of chemical pre-delithiation processed lithium-rich layered cathode material. Journal of Power Sources, 2014, 268, 683-691.	7.8	74
39	Ion-selective copper hexacyanoferrate with an open-framework structure enables high-voltage aqueous mixed-ion batteries. Journal of Materials Chemistry A, 2017, 5, 16740-16747.	10.3	74
40	Freestanding bacterial cellulose-graphene oxide composite membranes with high mechanical strength for selective ion permeation. Scientific Reports, 2016, 6, 33185.	3.3	73
41	Orientation Control of Graphene Flakes by Magnetic Field: Broad Device Applications of Macroscopically Aligned Graphene. Advanced Materials, 2017, 29, 1604453.	21.0	72
42	Performances of an Alâ€“0.15 Biâ€“0.15 Pbâ€“0.035 Ga alloy as an anode for Alâ€“air batteries in neutral and alkaline electrolytes. RSC Advances, 2017, 7, 25838-25847.	3.6	71
43	La0.8Sr0.2Co1-xMnxO3 perovskites as efficient bi-functional cathode catalysts for rechargeable zinc-air batteries. Electrochimica Acta, 2017, 254, 14-24.	5.2	71
44	Solution-Processed Transparent Conducting Electrodes for Flexible Organic Solar Cells with 16.61% Efficiency. Nano-Micro Letters, 2021, 13, 44.	27.0	71
45	Si/Ag/C Nanohybrids with in Situ Incorporation of Super-Small Silver Nanoparticles: Tiny Amount, Huge Impact. ACS Nano, 2018, 12, 861-875.	14.6	67
46	Aqueous Batteries Based on Mixed Monovalence Metal Ions: A New Battery Family. ChemSusChem, 2014, 7, 2295-2302.	6.8	61
47	A comparative study on the oxidation state of lattice oxygen among Li_{1.14}Ni_{0.136}Co_{0.136}Mn_{0.544}O₂, Li₂MnO₃, LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ and LiCoO₂ for the initial charge–discharge. Journal of Materials Chemistry A, 2015, 3, 11929-11939.	10.3	61
48	Oxygen reduction reaction catalysts of manganese oxide decorated by silver nanoparticles for aluminum-air batteries. Electrochimica Acta, 2016, 214, 49-55.	5.2	61
49	Distinguishing thermal lens effect from electronic third-order nonlinear self-phase modulation in liquid suspensions of 2D nanomaterials. Nanoscale, 2017, 9, 3547-3554.	5.6	60
50	Enhanced Bifunctional Catalytic Activity of Manganese Oxide/Perovskite Hierarchical Coreâ€“Shell Materials by Adjusting the Interface for Metalâ€“Air Batteries. ACS Applied Materials & Interfaces, 2019, 11, 25870-25881.	8.0	59
51	Graphene wrapped silicon suboxides anodes with suppressed Li-uptake behavior enabled superior cycling stability. Energy Storage Materials, 2021, 35, 317-326.	18.0	58
52	Designed synthesis of LiMn₂O₄microspheres with adjustable hollow structures for lithium-ion battery applications. Journal of Materials Chemistry A, 2013, 1, 837-842.	10.3	56
53	Fluorinated Electrolytes for Li-Ion Batteries: The Lithium Difluoro(oxalato)borate Additive for Stabilizing the Solid Electrolyte Interphase. ACS Omega, 2017, 2, 8741-8750.	3.5	55
54	Two-Dimensional Porous Micro/Nano Metal Oxides Templated by Graphene Oxide. ACS Applied Materials & Interfaces, 2015, 7, 11984-11990.	8.0	54

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55	Competitive Solvation-Induced Concurrent Protection on the Anode and Cathode toward a 400 Wh kg^{â€“1} Lithium Metal Battery. ACS Energy Letters, 2021, 6, 115-123.	17.4	53
56	Bronzeâ€Phase TiO₂ as Anode Materials in Lithium and Sodiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	14.9	53
57	New perspective to understand the effect of electrochemical prelithiation behaviors on silicon monoxide. RSC Advances, 2018, 8, 14473-14478.	3.6	52
58	Cerium ion intercalated MnO2 nanospheres with high catalytic activity toward oxygen reduction reaction for aluminum-air batteries. Electrochimica Acta, 2018, 263, 544-554.	5.2	52
59	Synthetic Methodologies for Carbon Nanomaterials. Advanced Materials, 2010, 22, 1963-1966.	21.0	50
60	Synthesis of Three-Dimensional Nanoporous Li-Rich Layered Cathode Oxides for High Volumetric and Power Energy Density Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 3661-3666.	8.0	50
61	Localized concentration reversal of lithium during intercalation into nanoparticles. Science Advances, 2018, 4, eaao2608.	10.3	50
62	A new family of Mn-based perovskite (La1-xYxMnO3) with improved oxygen electrocatalytic activity for metal-air batteries. Energy, 2018, 154, 561-570.	8.8	50
63	Oneâ€Pot Synthesis of Co₃O₄/Ag Nanoparticles Supported on Nâ€Doped Graphene as Efficient Bifunctional Oxygen Catalysts for Flexible Rechargeable Zincâ€“Air Batteries. Chemistry - A European Journal, 2018, 24, 14816-14823.	3.3	49
64	Identifying the chemical and structural irreversibility in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ â€“ a model compound for classical layered intercalation. Journal of Materials Chemistry A, 2018, 6, 4189-4198.	10.3	48
65	Scalable in Situ Synthesis of Li₄Ti₅O₁₂/Carbon Nanohybrid with Supersmall Li₄Ti₅O₁₂Nanoparticles Homogeneously Embedded in Carbon Matrix. ACS Applied Materials & Interfaces, 2018, 10, 2591-2602.	8.0	47
66	Graphene network nested Cu foam for reducing size of lithium metal towards stable metallic lithium anode. Energy Storage Materials, 2019, 21, 107-114.	18.0	46
67	Enhanced high voltage cyclability of LiCoO2 cathode by adopting poly[bis-(ethoxyethoxyethoxy)phosphazene] with flame-retardant property as an electrolyte additive for lithium-ion batteries. Applied Surface Science, 2017, 403, 260-266.	6.1	44
68	Scalable synthesis of Si nanowires interconnected SiOx anode for high performance lithium-ion batteries. Journal of Alloys and Compounds, 2019, 783, 128-135.	5.5	43
69	Electrocatalytic activity of silver decorated ceria microspheres for the oxygen reduction reaction and their application in aluminiumâ€“air batteries. Chemical Communications, 2017, 53, 7921-7924.	4.1	42
70	Highly Reversible Li Plating Confined in Three-Dimensional Interconnected Microchannels toward High-Rate and Stable Metallic Lithium Anodes. ACS Applied Materials & Interfaces, 2018, 10, 20387-20395.	8.0	42
71	Facile synthesis of ternary spinel Coâ€“Mnâ€“Ni nanorods as efficient bi-functional oxygen catalysts for rechargeable zinc-air batteries. Journal of Power Sources, 2019, 435, 226761.	7.8	42
72	5â€…Vâ€Class Electrolytes Based on Fluorinated Solvents for Liâ€Ion Batteries with Excellent Cyclability. ChemElectroChem, 2015, 2, 1707-1712.	3.4	41

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73	Polyethylene Glycolâ€“Na⁺ Interface of Vanadium Hexacyanoferrate Cathode for Highly Stable Rechargeable Aqueous Sodium-Ion Battery. ACS Applied Materials & Interfaces, 2019, 11, 28762-28768.	8.0	41
74	Niobium carbide/reduced graphene oxide hybrid porous aerogel as high capacity and longâ€life anode material for Liâ€ion batteries. International Journal of Energy Research, 2019, 43, 4995-5003.	4.5	40
75	From â^'20 Â°C to 150 Â°C: a lithium secondary battery with a wide temperature window obtained via manipulated competitive decomposition in electrolyte solution. Journal of Materials Chemistry A, 2021, 9, 9307-9318.	10.3	40
76	Green Facile Scalable Synthesis of Titania/Carbon Nanocomposites: New Use of Old Dental Resins. ACS Applied Materials & Interfaces, 2014, 6, 18461-18468.	8.0	38
77	One-pot synthesis of La 0.7 Sr 0.3 MnO 3 supported on flower-like CeO 2 as electrocatalyst for oxygen reduction reaction in aluminum-air batteries. Journal of Power Sources, 2017, 358, 50-60.	7.8	38
78	Metastability and Reversibility of Anionic Redox-Based Cathode for High-Energy Rechargeable Batteries. Cell Reports Physical Science, 2020, 1, 100028.	5.6	37
79	Eliminating Voltage Decay of Lithiumâ€Rich Li_{1.14}Mn_{0.54}Ni_{0.14}Co_{0.14}O₂ Cathodes by Controlling the Electrochemical Process. Chemistry - A European Journal, 2015, 21, 7503-7510.	3.3	36
80	Facile Scalable Synthesis of TiO₂/Carbon Nanohybrids with Ultrasmall TiO₂ Nanoparticles Homogeneously Embedded in Carbon Matrix. ACS Applied Materials & Interfaces, 2015, 7, 24247-24255.	8.0	36
81	Silicon Oxycarbide/Carbon Nanohybrids with Tiny Silicon Oxycarbide Particles Embedded in Free Carbon Matrix Based on Photoactive Dental Methacrylates. ACS Applied Materials & Interfaces, 2016, 8, 13982-13992.	8.0	36
82	Nitrogenâ€Doped Graphene Nanoscroll Foam with High Diffusion Rate and Binding Affinity for Removal of Organic Pollutants. Small, 2017, 13, 1603779.	10.0	36
83	Oxidation Decomposition Mechanism of Fluoroethylene Carbonateâ€Based Electrolytes for Highâ€Voltage Lithium Ion Batteries: A DFT Calculation and Experimental Study. ChemistrySelect, 2017, 2, 7353-7361.	1.5	36
84	Promoting effects of Ce_{0.75}Zr_{0.25}O₂ on the La_{0.7}Sr_{0.3}MnO₃ electrocatalyst for the oxygen reduction reaction in metalâ€“air batteries. Journal of Materials Chemistry A, 2017, 5, 6411-6415.	10.3	35
85	Synthesis and electrochemical performance of micro-sized Li-rich layered cathode material for Lithium-ion batteries. Electrochimica Acta, 2016, 211, 507-514.	5.2	34
86	Silver nanoparticles supported on a nitrogen-doped graphene aerogel composite catalyst for an oxygen reduction reaction in aluminum air batteries. RSC Advances, 2016, 6, 99179-99183.	3.6	33
87	La_{1â^'x}Ag_xMnO₃ electrocatalyst with high catalytic activity for oxygen reduction reaction in aluminium air batteries. RSC Advances, 2017, 7, 5214-5221.	3.6	33
88	Revisiting the open-framework zinc hexacyanoferrate: The role of ternary electrolyte and sodium-ion intercalation mechanism. Journal of Power Sources, 2018, 380, 135-141.	7.8	33
89	Planar Alignment of Graphene Sheets by a Rotating Magnetic Field for Full Exploitation of Graphene as a 2D Material. Advanced Functional Materials, 2018, 28, 1805255.	14.9	33
90	A LiPO2F2/LiFSI dual-salt electrolyte enabled stable cycling of lithium metal batteries. Journal of Power Sources, 2018, 400, 449-456.	7.8	33

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91	Attapulgite nanofibers and graphene oxide composite membrane for high-performance molecular separation. Journal of Colloid and Interface Science, 2019, 545, 276-281.	9.4	33
92	Graphene Modified Polyanilineâ€Hydrogel Based Stretchable Supercapacitor with High Capacitance and Excellent Stretching Stability. ChemSusChem, 2021, 14, 938-945.	6.8	33
93	La0.7(Sr0.3-xPdx)MnO3 as a highly efficient electrocatalyst for oxygen reduction reaction in aluminum air battery. Electrochimica Acta, 2017, 230, 418-427.	5.2	32
94	Controlling siloxene oxidization to tailor SiOx anodes for high performance lithium ion batteries. Journal of Power Sources, 2019, 432, 65-72.	7.8	32
95	Double-helix-superstructure aqueous binder to boost excellent electrochemical performance in Li-rich layered oxide cathode. Journal of Power Sources, 2019, 420, 29-37.	7.8	32
96	Direct Regeneration of Spent Lithium Iron Phosphate via a Low-Temperature Molten Salt Process Coupled with a Reductive Environment. Industrial & Engineering Chemistry Research, 2022, 61, 3831-3839.	3.7	31
97	A bifunctional hierarchical porous carbon network integrated with an in situ formed ultrathin graphene shell for stable lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 13674-13682.	10.3	30
98	Understanding the Discrepancy of Defect Kinetics on Anionic Redox in Lithium-Rich Cathode Oxides. ACS Applied Materials & Interfaces, 2019, 11, 14023-14034.	8.0	30
99	All annealing-free solution-processed highly flexible organic solar cells. Journal of Materials Chemistry A, 2021, 9, 5425-5433.	10.3	30
100	Hydrothermal self-assembly of graphene foams with controllable pore size. RSC Advances, 2016, 6, 20843-20849.	3.6	29
101	Effect of alumina on the curvature, Young's modulus, thermal expansion coefficient and residual stress of planar solid oxide fuel cells. Journal of Power Sources, 2011, 196, 7639-7644.	7.8	28
102	Physicochemical and Electrochemical Properties of 1,1,2,2â€Tetrafluoroethylâ€2,2,3,3â€Tetrafluoropropyl Ether as a Coâ€Solvent for Highâ€Voltage Lithiumâ€Ion Electrolytes. ChemElectroChem, 2019, 6, 3747-3755.	3.4	28
103	Ordered self-assembly of amphipathic graphene nanosheets into three-dimensional layered architectures. Nanoscale, 2016, 8, 197-203.	5.6	26
104	Oriented Arrangement: The Origin of Versatility for Porous Graphene Materials. Small, 2017, 13, 1701231.	10.0	26
105	Dental Resin Monomer Enables Unique NbO₂/Carbon Lithiumâ€Ion Battery Negative Electrode with Exceptional Performance. Advanced Functional Materials, 2019, 29, 1904961.	14.9	26
106	Organosiliconâ€Based Functional Electrolytes for Highâ€Performance Lithium Batteries. Advanced Energy Materials, 2021, 11, 2101057.	19.5	26
107	Stabilization effects of Al doping for enhanced cycling performances of Li-rich layered oxides. Ceramics International, 2017, 43, 13845-13852.	4.8	25
108	Ultrasmall Co₃O₄ Nanoparticles Confined in P, N-Doped Carbon Matrices for High-Performance Supercapacitors. Journal of Physical Chemistry C, 2020, 124, 9225-9232.	3.1	25

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109	Synergistic Effect of Lewis Base Polymers and Graphene in Enhancing the Efficiency of Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 3928-3936.	5.1	25
110	Vapor-assisted synthesis of hierarchical porous graphitic carbon materials towards energy storage devices. Journal of Power Sources, 2019, 425, 10-16.	7.8	24
111	Rational Design and Mechanical Understanding of Three-Dimensional Macro-/Mesoporous Silicon Lithium-Ion Battery Anodes with a Tunable Pore Size and Wall Thickness. ACS Applied Materials & Interfaces, 2020, 12, 43785-43797.	8.0	24
112	Structure-preserved 3D porous silicon/reduced graphene oxide materials as anodes for Li-ion batteries. RSC Advances, 2017, 7, 24305-24311.	3.6	23
113	Slurry-like hybrid electrolyte with high lithium-ion transference number for dendrite-free lithium metal anode. Journal of Energy Chemistry, 2020, 48, 375-382.	12.9	23
114	Stable Electrode/Electrolyte Interface for High-Voltage NCM 523 Cathode Constructed by Synergistic Positive and Passive Approaches. ACS Applied Materials & Interfaces, 2021, 13, 57107-57117.	8.0	23
115	TiO₂(B)â€“CNTâ€“graphene ternary composite anode material for lithium ion batteries. RSC Advances, 2015, 5, 22449-22454.	3.6	22
116	Template-directed fabrication of porous gas diffusion layer for magnesium air batteries. Journal of Power Sources, 2015, 297, 202-207.	7.8	22
117	A compressible and hierarchical porous graphene/Co composite aerogel for lithium-ion batteries with high gravimetric/volumetric capacity. Journal of Materials Chemistry A, 2016, 4, 6021-6028.	10.3	22
118	Hierarchical porous MnO/graphene composite aerogel as high-performance anode material for lithium ion batteries. RSC Advances, 2017, 7, 15857-15863.	3.6	22
119	Microporous Binder for the Silicon-Based Lithium-Ion Battery Anode with Exceptional Rate Capability and Improved Cyclic Performance. Langmuir, 2020, 36, 2003-2011.	3.5	22
120	Lithium/Graphene Composite Anode with 3D Structural LiF Protection Layer for High-Performance Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2022, 14, 2871-2880.	8.0	22
121	CO₂ treatment enables non-hazardous, reliable, and efficacious recovery of spent Li(Ni_{0.5}Co_{0.2}Mn_{0.3})O₂ cathodes. Green Chemistry, 2022, 24, 779-789.	9.0	22
122	Lithium Bis(fluorosulfony)imideâ€Lithium Hexafluorophosphate Binaryâ€Salt Electrolytes for Lithiumâ€Ion Batteries: Aluminum Corrosion Behaviors and Electrochemical Properties. ChemistrySelect, 2018, 3, 1954-1960.	1.5	21
123	Surface oxo-functionalized hard carbon spheres enabled superior high-rate capability and long-cycle stability for Li-ion storage. Electrochimica Acta, 2018, 260, 430-438.	5.2	21
124	Surface reinforcement doping to suppress oxygen release of Li-rich layered oxides. Journal of Power Sources, 2021, 503, 230048.	7.8	20
125	A chemical lithiation induced Li_{4.4}Sn lithiophilic layer for anode-free lithium metal batteries. Journal of Materials Chemistry A, 2022, 10, 9670-9679.	10.3	20
126	Graphene/Sulfur Composites with a Foamâ€Like Porous Architecture and Controllable Pore Size for High Performance Lithiumâ€“Sulfur Batteries. ChemNanoMat, 2016, 2, 952-958.	2.8	19

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127	Regulating capillary pressure to achieve ultralow areal mass loading metallic lithium anodes. Energy Storage Materials, 2019, 23, 693-700.	18.0	19
128	All graphene electrode for highâ€performance asymmetric supercapacitor. International Journal of Energy Research, 2020, 44, 1244-1255.	4.5	19
129	Vacuumâ€Free, Allâ€Solution, and Allâ€Air Processed Organic Photovoltaics with over 11% Efficiency and Promoted Stability Using Layerâ€byâ€Layer Codoped Polymeric Electrodes. Solar Rrl, 2020, 4, 1900543.	5.8	19
130	Superior cycling performance of a sandwich structure Si/C anode for lithium ion batteries. RSC Advances, 2016, 6, 12107-12113.	3.6	18
131	Mg₂SiO₄/Si-Coated Disproportionated SiO Composite Anodes with High Initial Coulombic Efficiency for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 15337-15345.	8.0	18
132	Poly(siloxane imide) Binder for Siliconâ€Based Lithiumâ€Ion Battery Anodes via Rigidness/Softness Coupling. Chemistry - an Asian Journal, 2020, 15, 2674-2680.	3.3	17
133	Sulfur is a New High-Performance Additive toward High-Voltage LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode: Tiny Amount, Huge Impact. ACS Applied Materials & Interfaces, 2021, 13, 18648-18657.	8.0	17
134	Nano-channel-based physical and chemical synergic regulation for dendrite-free lithium plating. Nano Research, 2021, 14, 3585-3597.	10.4	17
135	A composite surface configuration towards improving cycling stability of Li-rich layered oxide materials. Journal of Materials Chemistry A, 2021, 9, 24426-24437.	10.3	17
136	Hybrid electrolytes incorporated with dandelion-like silaneâ€“Al2O3 nanoparticles for high-safety high-voltage lithium ion batteries. Journal of Power Sources, 2018, 391, 113-119.	7.8	16
137	Reactivating Li₂O with Nanoâ€Sn to Achieve Ultrahigh Initial Coulombic Efficiency SiO Anodes for Liâ€Ion Batteries. ChemSusChem, 2019, 12, 3377-3382.	6.8	16
138	Improving catalytic activity of layered lithium transition metal oxides for oxygen electrode in metal-air batteries. International Journal of Hydrogen Energy, 2020, 45, 1846-1856.	7.1	16
139	Fabrication of porous anode-support for planar solid oxide fuel cell using fish oil as a pore former. International Journal of Hydrogen Energy, 2016, 41, 8533-8541.	7.1	15
140	Graphene Flakes: Orientation Control of Graphene Flakes by Magnetic Field: Broad Device Applications of Macroscopically Aligned Graphene (Adv. Mater. 1/2017). Advanced Materials, 2017, 29, .	21.0	15
141	Ultrafast Heterogeneous Nucleation Enables a Hierarchical Surface Configuration of Lithiumâ€Rich Layered Oxide Cathode Material for Enhanced Electrochemical Performances. Advanced Materials Interfaces, 2018, 5, 1701465.	3.7	15
142	Flexible asymmetric microsupercapacitor with high energy density based on all-graphene electrode system. Journal of Materials Science, 2020, 55, 309-318.	3.7	15
143	High Pressure Effect on Structural and Electrochemical Properties of Anionic Redox-Based Lithium Transition Metal Oxides. Matter, 2021, 4, 164-181.	10.0	15
144	Si/C nanocomposite anode materials by freeze-drying with enhanced electrochemical performance in lithium-ion batteries. Journal of Solid State Electrochemistry, 2012, 16, 2733-2738.	2.5	14

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145	Graphene/Sulfur/Carbon Nanocomposite for High Performance Lithium-Sulfur Batteries. Nanomaterials, 2015, 5, 1481-1492.	4.1	14
146	Anode supported planar solid oxide fuel cells with the large size of 30ÂcmÂÃ—Â30Âcm via tape-casting and co-sintering technique. International Journal of Hydrogen Energy, 2016, 41, 1871-1876.	7.1	14
147	Facile fabrication of nanoporous graphene powder for high-rate lithiumâ€“sulfur batteries. RSC Advances, 2017, 7, 5177-5182.	3.6	14
148	A Nano-Architectured Metal-Oxide/Perovskite Hybrid Material as Electrocatalyst for the Oxygen Reduction Reaction in Aluminumâ€“Air Batteries. ACS Applied Nano Materials, 2018, 1, 6824-6833.	5.0	14
149	MnO/Metal/Carbon Nanohybrid Lithiumâ€Ion Battery Anode With Enhanced Electrochemical Performance: Universal Facile Scalable Synthesis and Fundamental Understanding. Advanced Materials Interfaces, 2019, 6, 1900335.	3.7	14
150	Morphology-controlled MoS₂ by low-temperature atomic layer deposition. Nanoscale, 2020, 12, 20404-20412.	5.6	14
151	Revealing Anion Adsorption Mechanism for Coating Layer on Separator toward Practical Li Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 23584-23591.	8.0	14
152	Scalable fabrication of a large-area lithium/graphene anode towards a long-life 350 W h kg^{â^'1} lithium metal pouch cell. Journal of Materials Chemistry A, 2021, 9, 25558-25566.	10.3	14
153	Controls of oxygen-partial pressure to accelerate the electrochemical activation in Co-free Li-rich layered oxide cathodes. Journal of Power Sources, 2022, 523, 231022.	7.8	14
154	Role of Nickel Nanoparticles in Highâ€Performance TiO₂/Ni/Carbon Nanohybrid Lithium/Sodiumâ€Ion Battery Anodes. Chemistry - an Asian Journal, 2019, 14, 1557-1569.	3.3	13
155	A_mV₂O₅ with Binary Phases as High-Performance Cathode Materials for Zinc-Ion Batteries: Effect of the Pre-Intercalated Cations A and Reversible Transformation of Coordination Polyhedra. ACS Applied Materials & Interfaces, 2022, 14, 24415-24424.	8.0	13
156	Highly Deformable Graphene/Poly(3,4-ethylenedioxythiophene):Poly(styrene Sulfonate) Hydrogel Composite Film for Stretchable Supercapacitors. ACS Applied Energy Materials, 2022, 5, 7277-7286.	5.1	13
157	Composite membrane with ultra-thin ion exchangeable functional layer: a new separator choice for manganese-based cathode material in lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 7006-7013.	10.3	12
158	Solvent evaporation induced self-assembly of graphene foam for thermally conductive polymers. RSC Advances, 2017, 7, 15469-15474.	3.6	12
159	Study on the fracture behavior of the planar-type solid oxide fuel cells. Journal of Alloys and Compounds, 2019, 782, 355-362.	5.5	12
160	Ultra-smooth and robust graphene-based hybrid anode for high-performance flexible organic light-emitting diodes. Journal of Materials Chemistry C, 2021, 9, 2106-2114.	5.5	12
161	Depressing the irreversible reactions on a three-dimensional interface towards a high-areal capacity lithium metal anode. Journal of Materials Chemistry A, 2019, 7, 6267-6274.	10.3	11
162	Photoacoustic identification of laser-induced microbubbles as light scattering centers for optical limiting in a liquid suspension of graphene nanosheets. Nanoscale, 2020, 12, 7109-7115.	5.6	11

#	Article	IF	Citations
163	Sufficient Oxygen Redox Activation against Voltage Decay in Li-Rich Layered Oxide Cathode Materials. , 2021, 3, 433-441.		11
164	Effect of phase transformation of zirconia on the fracture behavior of electrolyte-supported solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 12118-12126.	7.1	10
165	Unveiling the Effect of Surface and Bulk Structure on Electrochemical Properties of Disproportionated SiO_x Anodes. ChemNanoMat, 2020, 6, 1127-1135.	2.8	10
166	SnO₂/Sn/Carbon nanohybrid lithiumâ€ion battery anode with high reversible capacity and excellent cyclic stability. Nano Select, 2021, 2, 642-653.	3.7	10
167	One Stone for Multiple Birds: A Versatile Cross-Linked Poly(dimethyl siloxane) Binder Boosts Cycling Life and Rate Capability of an NCM 523 Cathode at 4.6 V. ACS Applied Materials & Interfaces, 2022, 14, 16245-16257.	8.0	10
168	Hybride organischâ€anorganische thermoelektrische Materialien und Baueinheiten. Angewandte Chemie, 2019, 131, 15348-15370.	2.0	9
169	Impact of CO₂ activation on the structure, composition, and performance of Sb/C nanohybrid lithium/sodium-ion battery anodes. Nanoscale Advances, 2021, 3, 1942-1953.	4.6	9
170	A facile method of selective dissolution for preparation of Co₃O₄/LaCoO₃ as a bifunctional catalyst for Al/Znâ€“air batteries. Sustainable Energy and Fuels, 2021, 5, 995-1002.	4.9	9
171	Direct Recycling of Spent LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathodes Based on Single Oxalic Acid Leaching and Regeneration under Mild Conditions Assisted by Lithium Acetate. Energy & Fuels, 2022, 36, 6552-6559.	5.1	9
172	Template-free synthesis of titania architectures with controlled morphology evolution. Journal of Materials Science, 2016, 51, 3941-3956.	3.7	8
173	Direct probing of density of states of reduced graphene oxides in a wide voltage range by tunneling junction. Applied Physics Letters, 2012, 101, .	3.3	7
174	Adopting combined strategies to make state of charge (SOC) estimation for practical use. Journal of Renewable and Sustainable Energy, 2018, 10, .	2.0	7
175	Na Superionic Conductor-Type TiNb(PO₄)₃ Anode with High Energy Density and Long Cycle Life Enables Aqueous Alkaline-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 39757-39764.	8.0	7
176	Conformal Coating of a Carbon Film on 3D Hosts toward Stable Lithium Anodes. ACS Applied Energy Materials, 2021, 4, 7288-7297.	5.1	7
177	Carbon-emcoating architecture boosts lithium storage of Nb2O5. Science China Materials, 2021, 64, 1071-1086.	6.3	7
178	Synergistic Effects of Ni²⁺ and Mn³⁺ on the Electrochemical Activation of Li₂MnO₃ in Co-Free and Ni-Poor Li-Rich Layered Cathodes. ACS Applied Energy Materials, 2022, 5, 9079-9089.	5.1	7
179	Porous Grapheneâ€Like Materials Prepared from Hollow Carbonaceous Microspheres for Supercapacitors. ChemNanoMat, 2015, 1, 422-429.	2.8	6
180	3D Graphene Oxide Micropatterns Achieved by Rollerâ€Assisted Microcontact Printing Induced Interface Integral Peel and Transfer. Advanced Materials Interfaces, 2017, 4, 1600867.	3.7	6

#	Article	IF	Citations
181	Electrostatic Selfâ€Assembly of the Composite La_{0.7}Sr_{0.3}MnO₃@Ce_{0.75}Zr_{0.25}O₂ as Electrocatalyst for the Oxygen Reduction Reaction in Aluminumâ€“Air Batteries. Energy Technology, 2017, 5, 2226-2233.	3.8	6
182	Confining Alâ€“Li alloys between pre-constructed conductive buffers for advanced aluminum anodes. Chemical Communications, 2019, 55, 2352-2355.	4.1	6
183	Porous titania/carbon hybrid microspheres templated by in situ formed polystyrene colloids. Journal of Colloid and Interface Science, 2016, 469, 242-256.	9.4	5
184	Composite cathodes for electrolyte-supported solid oxide fuel cells with thin YbSZ electrolyte. Journal of Alloys and Compounds, 2017, 695, 583-589.	5.5	5
185	Iron Hexcyanoferrate Nanocubes as Low-Strain Cathode Materials for Aqueous Li/Na Mixed-Ion Batteries. ACS Applied Nano Materials, 2020, 3, 1318-1323.	5.0	5
186	Mutual Performance Enhancement within Dual Nâ€doped TiO 2 /Si/C Nanohybrid Lithiumâ€Ion Battery Anode. ChemistrySelect, 2021, 6, 141-153.	1.5	5
187	Si/Cu/C Nanohybrid Lithium-Ion Battery Anode with in Situ Incorporation of Nonagglomerated Super-Small Copper Nanoparticles Based on Epoxy Resin. Energy & Fuels, 2021, 35, 6250-6264.	5.1	5
188	Less is more: tiny amounts of insoluble multi-functional nanoporous additives play a big role in lithium secondary batteries. Journal of Materials Chemistry A, 2022, 10, 8047-8058.	10.3	5
189	Seamlessly integrated alloy-polymer interphase for high-rate and long-life lithium metal anodes. Materials Today Energy, 2022, 26, 100988.	4.7	5
190	Fabrication of submillimeter-sized single-crystalline graphene arrays by a commercial printing-assisted CVD method. RSC Advances, 2017, 7, 17800-17805.	3.6	4
191	Synergy effects on blending Li-rich and classical layered cathode oxides with improved electrochemical performance. Ceramics International, 2019, 45, 15097-15107.	4.8	4
192	In Situ Incorporation of Superâ€Small Metallic High Capacity Nanoparticles and Mesoporous Structures for Highâ€Performance TiO₂/SnO₂/Sn/Carbon Nanohybrid Lithiumâ€Ion Battery Anodes. Energy Technology, 2020, 8, 2000034.	3.8	4
193	Large graphene-induced shift of surface-plasmon resonances of gold films: Effective-medium theory for atomically thin materials. Physical Review Research, 2020, 2, .	3.6	4
194	Thermosetting High-Rate and High-Safety Polymer/Inorganic Composite Separator for Lithium-Ion Battery through a Fast Scalable Photo Cross-Linking Process. Energy & Fuels, 2021, 35, 18746-18755.	5.1	4
195	A Lithium-Ion Battery Cathode with Enhanced Wettability toward an Electrolyte Fabricated by a Fast Light Curing of Photoactive Slurry. Energy & Fuels, 2022, 36, 3313-3318.	5.1	4
196	Facile fabrication of stable and high-rate Si/NiSix/CNTs Li-ion anodes with a buffering interface. RSC Advances, 2016, 6, 78559-78563.	3.6	3
197	Graphene Sheets: Planar Alignment of Graphene Sheets by a Rotating Magnetic Field for Full Exploitation of Graphene as a 2D Material (Adv. Funct. Mater. 46/2018). Advanced Functional Materials, 2018, 28, 1870330.	14.9	3
198	Graphene Nanoscrolls with Confined Silicon Nanoparticles as a Durable Anode for Lithiumâ€Ion Batteries. ChemNanoMat, 2019, 5, 748-753.	2.8	3

#	Article	IF	Citations
199	High Li-Ion Conductivity Artificial Interface Enabled by Li-Grafted Graphene Oxide for Stable Li Metal Pouch Cell. ACS Applied Materials & Interfaces, 2021, 13, 29500-29510.	8.0	3
200	Understanding the steric effect of graphene in graphene wrapped silicon suboxides anodes for Li-ion batteries. Journal of Power Sources, 2022, 522, 231007.	7.8	3
201	In Situ Synthesis and Dual Functionalization of Nano Silicon Enabled by a Semisolid Lithium Rechargeable Flow Battery. ACS Applied Materials & Interfaces, 2022, 14, 28748-28759.	8.0	3
202	Patterning of graphene microscale structures using electrohydrodynamic atomisation deposition of photoresist moulds. Micro and Nano Letters, 2014, 9, 136-140.	1.3	2
203	Establishment of a reliable transfer process for fabricating chemical vapor deposition-grown graphene films with advanced and repeatable electrical properties. RSC Advances, 2018, 8, 19846-19851.	3.6	2
204	Epoxy Resin Enables Facile Scalable Synthesis of CuO/C Nanohybrid Lithiumâ€ion Battery Anode with Enhanced Electrochemical Performance. ChemistrySelect, 2020, 5, 5479-5487.	1.5	2
205	Growth of wrinkle-free and ultra-flat Bi-layer graphene on sapphire substrate using Cu sacrificial layer. Nanotechnology, 2021, 32, 475603.	2.6	2
206	Laser-induced dynamic alignment and nonlinear-like optical transmission in liquid suspensions of 2D atomically thin nanomaterials. Optics Express, 2021, 29, 36389.	3.4	2
207	Ultrafine SnO₂/Sn Nanoparticles Embedded into an In Situ Generated Meso-/Macroporous Carbon Matrix with a Tunable Pore Size. Langmuir, 2022, 38, 1689-1697.	3.5	2
208	Carbon-coated monoclinic NbOPO4 with polyanionic framework for rechargeable aqueous lithium-ion batteries beyond 2 V. Electrochimica Acta, 2022, 426, 140579.	5.2	2
209	Continuous fast pyrolysis synthesis of TiO₂/C nanohybrid lithiumâ€ion battery anode. Nano Select, 2021, 2, 1770-1778.	3.7	1
210	Si/SiOC/Carbon Lithiumâ€ion Battery Negative Electrode with Multiple Buffer Media Derived from Crossâ€Linked Dimethacrylate and Poly (dimethyl siloxane). ChemistrySelect, 2021, 6, 10348-10354.	1.5	1
211	Relating the orientation of graphene on Cu grains by Euler Angles. Surfaces and Interfaces, 2022, 30, 101837.	3.0	1
212	Porous silicon derived from 130Ânm StÃ¶ber silica as lithiumâ€ion battery anode. Nano Select, 2021, 2, 1554-1565.	3.7	0
213	Superâ€Small TiO 2 Nanoparticles Homogeneously Embedded in Mesoporous Carbon Matrix Based on Dental Methacrylates and KOH Activation. ChemistrySelect, 2021, 6, 1508-1518.	1.5	0
214	Nano Structured LiMnPO4 cathode Materials with High Rate Capability. ECS Meeting Abstracts, 2014, , .	0.0	0