Zhongxin Song

List of Publications by Year
in descending order

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306	33,163	2538 96	4750 169
papers	citations	h-index	g-index

313	313	313	24404
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Platinum single-atom and cluster catalysis of the hydrogen evolution reaction. Nature Communications, 2016, 7, 13638.	5.8	1,521
2	High oxygen-reduction activity and durability of nitrogen-doped graphene. Energy and Environmental Science, 2011, 4, 760.	15.6	1,153
3	Understanding and recent development of carbon coating on LiFePO₄cathode materials for lithium-ion batteries. Energy and Environmental Science, 2012, 5, 5163-5185.	15.6	839
4	Recent Developments and Understanding of Novel Mixed Transitionâ€Metal Oxides as Anodes in Lithium Ion Batteries. Advanced Energy Materials, 2016, 6, 1502175.	10.2	756
5	Single-atom Catalysis Using Pt/Graphene Achieved through Atomic Layer Deposition. Scientific Reports, 2013, 3, .	1.6	719
6	Tailoring grain boundary structures and chemistry of Ni-rich layered cathodes for enhanced cycle stability of lithium-ion batteries. Nature Energy, 2018, 3, 600-605.	19.8	613
7	An Isolated Zincâ€“Cobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. Angewandte Chemie - International Edition, 2019, 58, 2622-2626.	7.2	494
8	Metal organic frameworks for energy storage and conversion. Energy Storage Materials, 2016, 2, 35-62.	9.5	483
9	Ultrathin MoS₂/Nitrogenâ€Doped Graphene Nanosheets with Highly Reversible Lithium Storage. Advanced Energy Materials, 2013, 3, 839-844.	10.2	440
10	Rational Design of Hierarchical â€œCeramicâ€inâ€Polymerâ€•and â€œPolymerâ€inâ€Ceramicâ€•Electrolytes for Dendriteâ€Free Solidâ€State Batteries. Advanced Energy Materials, 2019, 9, 1804004.	10.2	422
11	Olivine LiFePO₄: the remaining challenges for future energy storage. Energy and Environmental Science, 2015, 8, 1110-1138.	15.6	412
12	Pt-Based electrocatalysts with high atom utilization efficiency: from nanostructures to single atoms. Energy and Environmental Science, 2019, 12, 492-517.	15.6	400
13	Highly stable single Pt atomic sites anchored on aniline-stacked graphene for hydrogen evolution reaction. Energy and Environmental Science, 2019, 12, 1000-1007.	15.6	392
14	Recent developments and insights into the understanding of Na metal anodes for Na-metal batteries. Energy and Environmental Science, 2018, 11, 2673-2695.	15.6	388
15	Tin Oxide with Controlled Morphology and Crystallinity by Atomic Layer Deposition onto Graphene Nanosheets for Enhanced Lithium Storage. Advanced Functional Materials, 2012, 22, 1647-1654.	7.8	384
16	Atomic layer deposited Pt-Ru dual-metal dimers and identifying their active sites for hydrogen evolution reaction. Nature Communications, 2019, 10, 4936.	5.8	371
17	Progress and perspectives on halide lithium conductors for all-solid-state lithium batteries. Energy and Environmental Science, 2020, 13, 1429-1461.	15.6	366
18	Atomic layer deposition of solid-state electrolyte coated cathode materials with superior high-voltage cycling behavior for lithium ion battery application. Energy and Environmental Science, 2014, 7, 768-778.	15.6	363

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19	Air-stable Li₃InCl₆ electrolyte with high voltage compatibility for all-solid-state batteries. Energy and Environmental Science, 2019, 12, 2665-2671.	15.6	345
20	Determining the limiting factor of the electrochemical stability window for PEO-based solid polymer electrolytes: main chain or terminal â€“OH group?. Energy and Environmental Science, 2020, 13, 1318-1325.	15.6	342
21	Towards high-performance solid-state Liâ€“S batteries: from fundamental understanding to engineering design. Chemical Society Reviews, 2020, 49, 2140-2195.	18.7	337
22	Layer by layer assembly of sandwiched graphene/SnO2 nanorod/carbon nanostructures with ultrahigh lithium ion storage properties. Energy and Environmental Science, 2013, 6, 2900.	15.6	335
23	Single-Atom Catalysts: From Design to Application. Electrochemical Energy Reviews, 2019, 2, 539-573.	13.1	320
24	Ultrafine MoO₂â€Carbon Microstructures Enable Ultralongâ€Life Powerâ€Type Sodium Ion Storage by Enhanced Pseudocapacitance. Advanced Energy Materials, 2017, 7, 1602880.	10.2	306
25	Promoting the Transformation of Li₂S₂ to Li₂S: Significantly Increasing Utilization of Active Materials for Highâ€Sulfurâ€Loading Liâ€“S Batteries. Advanced Materials, 2019, 31, e1901220.	11.1	303
26	Structural Design of Lithiumâ€“Sulfur Batteries: From Fundamental Research to Practical Application. Electrochemical Energy Reviews, 2018, 1, 239-293.	13.1	298
27	From Lithiumâ€Oxygen to Lithiumâ€Air Batteries: Challenges and Opportunities. Advanced Energy Materials, 2016, 6, 1502164.	10.2	296
28	Superior Stable and Long Life Sodium Metal Anodes Achieved by Atomic Layer Deposition. Advanced Materials, 2017, 29, 1606663.	11.1	273
29	Design of a mixed conductive garnet/Li interface for dendrite-free solid lithium metal batteries. Energy and Environmental Science, 2020, 13, 127-134.	15.6	269
30	Recent Advances in MOFâ€Derived Single Atom Catalysts for Electrochemical Applications. Advanced Energy Materials, 2020, 10, 2001561.	10.2	265
31	Site-Occupation-Tuned Superionic Li_xScCl_{3+x}Halide Solid Electrolytes for All-Solid-State Batteries. Journal of the American Chemical Society, 2020, 142, 7012-7022.	6.6	260
32	Inorganicâ€“Organic Coating via Molecular Layer Deposition Enables Long Life Sodium Metal Anode. Nano Letters, 2017, 17, 5653-5659.	4.5	243
33	Radially Oriented Singleâ€Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode Material for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1803963.	10.2	240
34	Flexible rechargeable lithium ion batteries: advances and challenges in materials and process technologies. Journal of Materials Chemistry A, 2014, 2, 10712-10738.	5.2	238
35	Extremely Stable Platinum Nanoparticles Encapsulated in a Zirconia Nanocage by Areaâ€Selective Atomic Layer Deposition for the Oxygen Reduction Reaction. Advanced Materials, 2015, 27, 277-281.	11.1	238
36	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie - International Edition, 2019, 58, 16427-16432.	7.2	232

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37	Nitrogen Doping Effects on Carbon Nanotubes and the Origin of the Enhanced Electrocatalytic Activity of Supported Pt for Proton-Exchange Membrane Fuel Cells. Journal of Physical Chemistry C, 2011, 115, 3769-3776.	1.5	228
38	Surface Doping to Enhance Structural Integrity and Performance of Liâ€Rich Layered Oxide. Advanced Energy Materials, 2018, 8, 1802105.	10.2	228
39	Surface and Subsurface Reactions of Lithium Transition Metal Oxide Cathode Materials: An Overview of the Fundamental Origins and Remedying Approaches. Advanced Energy Materials, 2018, 8, 1802057.	10.2	207
40	Stabilizing the Interface of NASICON Solid Electrolyte against Li Metal with Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2018, 10, 31240-31248.	4.0	207
41	A Novel Organic â€œPolyureaâ€•Thin Film for Ultralongâ€Life Lithiumâ€Metal Anodes via Molecularâ€Layer Deposition. Advanced Materials, 2019, 31, e1806541.	11.1	204
42	All-solid-state lithium batteries enabled by sulfide electrolytes: from fundamental research to practical engineering design. Energy and Environmental Science, 2021, 14, 2577-2619.	15.6	201
43	Recent advances and perspectives on thin electrolytes for high-energy-density solid-state lithium batteries. Energy and Environmental Science, 2021, 14, 643-671.	15.6	200
44	LiFePO4â€“graphene as a superior cathode material for rechargeable lithium batteries: impact of stacked graphene and unfolded graphene. Energy and Environmental Science, 2013, 6, 1521.	15.6	199
45	Sodiumâ€Oxygen Batteries: A Comparative Review from Chemical and Electrochemical Fundamentals to Future Perspective. Advanced Materials, 2016, 28, 7065-7093.	11.1	198
46	Atomic Feâ€Doped MOFâ€Derived Carbon Polyhedrons with High Activeâ€Center Density and Ultraâ€High Performance toward PEM Fuel Cells. Advanced Energy Materials, 2019, 9, 1802856.	10.2	196
47	Cobaltâ€Doped SnS₂ with Dual Active Centers of Synergistic Absorptionâ€Catalysis Effect for Highâ€S Loading Liâ€S Batteries. Advanced Functional Materials, 2019, 29, 1806724.	7.8	186
48	Efficient Trapping and Catalytic Conversion of Polysulfides by VS₄ Nanosites for Liâ€“S Batteries. ACS Energy Letters, 2019, 4, 755-762.	8.8	185
49	A Versatile Snâ€Substituted Argyrodite Sulfide Electrolyte for Allâ€Solidâ€State Li Metal Batteries. Advanced Energy Materials, 2020, 10, 1903422.	10.2	183
50	Li₂CO₃: A Critical Issue for Developing Solid Garnet Batteries. ACS Energy Letters, 2020, 5, 252-262.	8.8	177
51	Ultrastable Anode Interface Achieved by Fluorinating Electrolytes for All-Solid-State Li Metal Batteries. ACS Energy Letters, 2020, 5, 1035-1043.	8.8	176
52	A high-energy sulfur cathode in carbonate electrolyte by eliminating polysulfides via solid-phase lithium-sulfur transformation. Nature Communications, 2018, 9, 4509.	5.8	175
53	New Strategy for Polysulfide Protection Based on Atomic Layer Deposition of TiO₂ onto Ferroelectricâ€Encapsulated Cathode: Toward Ultrastable Freeâ€Standing Room Temperature Sodiumâ€“Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1705537.	7.8	167
54	Insight into MoS₂â€“MoN Heterostructure to Accelerate Polysulfide Conversion toward Highâ€Energyâ€Density Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2003314.	10.2	159

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55	Safe and Durable High-Temperature Lithiumâ€“Sulfur Batteries via Molecular Layer Deposited Coating. Nano Letters, 2016, 16, 3545-3549.	4.5	157
56	Tuning the Anodeâ€“Electrolyte Interface Chemistry for Garnetâ€Based Solidâ€State Li Metal Batteries. Advanced Materials, 2020, 32, e2000030.	11.1	156
57	Unravelling the Chemistry and Microstructure Evolution of a Cathodic Interface in Sulfide-Based All-Solid-State Li-Ion Batteries. ACS Energy Letters, 2019, 4, 2480-2488.	8.8	154
58	Solidâ€State Plastic Crystal Electrolytes: Effective Protection Interlayers for Sulfideâ€Based Allâ€Solidâ€State Lithium Metal Batteries. Advanced Functional Materials, 2019, 29, 1900392.	7.8	154
59	Ultrahigh Rate and Longâ€Life Sodiumâ€Ion Batteries Enabled by Engineered Surface and Nearâ€Surface Reactions. Advanced Materials, 2018, 30, 1702486.	11.1	153
60	g-C₃N₄ promoted MOF derived hollow carbon nanopolyhedra doped with high density/fraction of single Fe atoms as an ultra-high performance non-precious catalyst towards acidic ORR and PEM fuel cells. Journal of Materials Chemistry A, 2019, 7, 5020-5030.	5.2	152
61	On rechargeability and reaction kinetics of sodiumâ€“air batteries. Energy and Environmental Science, 2014, 7, 3747-3757.	15.6	150
62	Boosting the performance of lithium batteries with solid-liquid hybrid electrolytes: Interfacial properties and effects of liquid electrolytes. Nano Energy, 2018, 48, 35-43.	8.2	143
63	Engineered Graphene Materials: Synthesis and Applications for Polymer Electrolyte Membrane Fuel Cells. Advanced Materials, 2017, 29, 1601741.	11.1	142
64	In Situ Li₃PS₄ Solidâ€State Electrolyte Protection Layers for Superior Longâ€Life and Highâ€Rate Lithiumâ€Metal Anodes. Advanced Materials, 2018, 30, e1804684.	11.1	140
65	Going Beyond Lithium Hybrid Capacitors: Proposing a New Highâ€Performing Sodium Hybrid Capacitor System for Nextâ€Generation Hybrid Vehicles Made with Bioâ€Inspired Activated Carbon. Advanced Energy Materials, 2016, 6, 1502199.	10.2	137
66	Discharge product morphology and increased charge performance of lithiumâ€“oxygen batteries with graphene nanosheet electrodes: the effect of sulphur doping. Journal of Materials Chemistry, 2012, 22, 20170.	6.7	136
67	A flexible electron-blocking interfacial shield for dendrite-free solid lithium metal batteries. Nature Communications, 2021, 12, 176.	5.8	136
68	Hierarchically porous LiFePO4/nitrogen-doped carbon nanotubes composite as a cathode for lithium ion batteries. Journal of Materials Chemistry, 2012, 22, 7537.	6.7	135
69	Potential of metal-free â€œgraphene alloyâ€• as electrocatalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 1795-1810.	5.2	133
70	An Airâ€Stable and Dendriteâ€Free Li Anode for Highly Stable Allâ€Solidâ€State Sulfideâ€Based Li Batteries. Advanced Energy Materials, 2019, 9, 1902125.	10.2	133
71	Honeycomb-like Hard Carbon Derived from Pine Pollen as High-Performance Anode Material for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 42796-42803.	4.0	129
72	Nitrogen-doped carbon nanotubes with high activity for oxygen reduction in alkaline media. International Journal of Hydrogen Energy, 2011, 36, 2258-2265.	3.8	128

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73	Enhanced Performance of P2â€Na_{0.66}(Mn_{0.54}Co_{0.13}Ni_{0.13})O₂ Cathode for Sodiumâ€Ion Batteries by Ultrathin Metal Oxide Coatings via Atomic Layer Deposition. Advanced Functional Materials, 2017, 27, 1701870.	7.8	128
74	Toward High Areal Energy and Power Density Electrode for Li-Ion Batteries via Optimized 3D Printing Approach. ACS Applied Materials & Interfaces, 2018, 10, 39794-39801.	4.0	126
75	Graphene Oxideâ€Template Controlled Cuboidâ€Shaped Highâ€Capacity VS₄ Nanoparticles as Anode for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1801806.	7.8	125
76	Li₁₀Ge(P_{1â€“x}Sb_x)₂S₁₂ Lithium-Ion Conductors with Enhanced Atmospheric Stability. Chemistry of Materials, 2020, 32, 2664-2672.	3.2	125
77	Molecular Layer Deposition for Energy Conversion and Storage. ACS Energy Letters, 2018, 3, 899-914.	8.8	123
78	Towards high performance Li metal batteries: Nanoscale surface modification of 3D metal hosts for pre-stored Li metal anodes. Nano Energy, 2018, 54, 375-382.	8.2	123
79	Insights into interfacial effect and local lithium-ion transport in polycrystalline cathodes of solid-state batteries. Nature Communications, 2020, 11, 5700.	5.8	122
80	Highâ€Performance Liâ€“SeS_x Allâ€Solidâ€State Lithium Batteries. Advanced Materials, 2019, 31, e1808100.	11.1	121
81	Tiâ€Based Oxide Anode Materials for Advanced Electrochemical Energy Storage: Lithium/Sodium Ion Batteries and Hybrid Pseudocapacitors. Small, 2019, 15, e1904740.	5.2	121
82	Atomic scale enhancement of metalâ€“support interactions between Pt and ZrC for highly stable electrocatalysts. Energy and Environmental Science, 2015, 8, 1450-1455.	15.6	120
83	Nanoscale Manipulation of Spinel Lithium Nickel Manganese Oxide Surface by Multisite Ti Occupation as Highâ€Performance Cathode. Advanced Materials, 2017, 29, 1703764.	11.1	119
84	Soft X-ray XANES studies of various phases related to LiFePO4 based cathode materials. Energy and Environmental Science, 2012, 5, 7007.	15.6	116
85	An Isolated Zincâ€“Cobalt Atomic Pair for Highly Active and Durable Oxygen Reduction. Angewandte Chemie, 2019, 131, 2648-2652.	1.6	116
86	Engineering the Low Coordinated Pt Single Atom to Achieve the Superior Electrocatalytic Performance toward Oxygen Reduction. Small, 2020, 16, e2003096.	5.2	110
87	Cu-doped P2-Na_{0.5}Ni_{0.33}Mn_{0.67}O₂ encapsulated with MgO as a novel high voltage cathode with enhanced Na-storage properties. Journal of Materials Chemistry A, 2017, 5, 8408-8415.	5.2	109
88	Pt/Pd Single-Atom Alloys as Highly Active Electrochemical Catalysts and the Origin of Enhanced Activity. ACS Catalysis, 2019, 9, 9350-9358.	5.5	106
89	Recent Progress on MOF-Derived Nanomaterials as Advanced Electrocatalysts in Fuel Cells. Catalysts, 2016, 6, 116.	1.6	105
90	Metal Halide Superionic Conductors for All-Solid-State Batteries. Accounts of Chemical Research, 2021, 54, 1023-1033.	7.6	105

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91	High Capacity, Dendriteâ€Free Growth, and Minimum Volume Change Na Metal Anode. Small, 2018, 14, e1703717.	5.2	104
92	WO3 nanowires on carbon papers: electronic transport, improved ultraviolet-light photodetectors and excellent field emitters. Journal of Materials Chemistry, 2011, 21, 6525.	6.7	103
93	Engineering defect-rich Fe-doped NiO coupled Ni cluster nanotube arrays with excellent oxygen evolution activity. Applied Catalysis B: Environmental, 2021, 285, 119809.	10.8	103
94	Defects enriched hollow porous Co-N-doped carbons embedded with ultrafine CoFe/Co nanoparticles as bifunctional oxygen electrocatalyst for rechargeable flexible solid zinc-air batteries. Nano Research, 2021, 14, 868-878.	5.8	102
95	Tunable porous structure of metal organic framework derived carbon and the application in lithiumâ€“sulfur batteries. Journal of Power Sources, 2016, 302, 174-179.	4.0	100
96	Stability of Li₂CO₃ in cathode of lithium ion battery and its influence on electrochemical performance. RSC Advances, 2016, 6, 19233-19237.	1.7	99
97	High-performance all-solid-state Liâ€“Se batteries induced by sulfide electrolytes. Energy and Environmental Science, 2018, 11, 2828-2832.	15.6	99
98	Active and Stable Ptâ€“Ni Alloy Octahedra Catalyst for Oxygen Reduction via Near-Surface Atomical Engineering. ACS Catalysis, 2020, 10, 4205-4214.	5.5	98
99	Highly Stable Na_{2/3}(Mn_{0.54}Ni_{0.13}Co_{0.13})O₂ Cathode Modified by Atomic Layer Deposition for Sodiumâ€Ion Batteries. ChemSusChem, 2015, 8, 2537-2543.	3.6	97
100	Engineering the Pores of Biomassâ€Derived Carbon: Insights for Achieving Ultrahigh Stability at High Power in Highâ€Energy Supercapacitors. ChemSusChem, 2017, 10, 2805-2815.	3.6	96
101	Highly Stable Lithium Metal Anode Interface via Molecular Layer Deposition Zircone Coatings for Long Life Nextâ€Generation Battery Systems. Angewandte Chemie - International Edition, 2019, 58, 15797-15802.	7.2	96
102	Antiperovskite Electrolytes for Solid-State Batteries. Chemical Reviews, 2022, 122, 3763-3819.	23.0	96
103	Origin of the high oxygen reduction reaction of nitrogen and sulfur co-doped MOF-derived nanocarbon electrocatalysts. Materials Horizons, 2017, 4, 900-907.	6.4	95
104	Origin of Superionic Li₃Y_{1â€“x}In_xCl₆ Halide Solid Electrolytes with High Humidity Tolerance. Nano Letters, 2020, 20, 4384-4392.	4.5	94
105	Surface aging at olivine LiFePO₄: a direct visual observation of iron dissolution and the protection role of nano-carbon coating. Journal of Materials Chemistry A, 2013, 1, 1579-1586.	5.2	93
106	Graphene Nanoribbons Derived from the Unzipping of Carbon Nanotubes: Controlled Synthesis and Superior Lithium Storage Performance. Journal of Physical Chemistry C, 2014, 118, 881-890.	1.5	93
107	A universal wet-chemistry synthesis of solid-state halide electrolytes for all-solid-state lithium-metal batteries. Science Advances, 2021, 7, eabh1896.	4.7	93
108	Automated Four-Point Probe Measurement of Nanowires Inside a Scanning Electron Microscope. IEEE Nanotechnology Magazine, 2011, 10, 674-681.	1.1	92

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109	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. Angewandte Chemie, 2019, 131, 16579-16584.	1.6	92
110	A metal-organic framework-derived bifunctional catalyst for hybrid sodium-air batteries. Applied Catalysis B: Environmental, 2019, 241, 407-414.	10.8	92
111	Novel approach toward a binder-free and current collector-free anode configuration: highly flexible nanoporous carbon nanotube electrodes with strong mechanical strength harvesting improved lithium storage. Journal of Materials Chemistry, 2012, 22, 18847.	6.7	91
112	Interface Design and Development of Coating Materials in Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1801323.	7.8	91
113	Unveiling the Nature of Pt Singleâ€Atom Catalyst during Electrocatalytic Hydrogen Evolution and Oxygen Reduction Reactions. Small, 2021, 17, e2007245.	5.2	91
114	Solvent-Free Approach for Interweaving Freestanding and Ultrathin Inorganic Solid Electrolyte Membranes. ACS Energy Letters, 2022, 7, 410-416.	8.8	91
115	Manipulating Interfacial Nanostructure to Achieve Highâ€Performance Allâ€Solidâ€State Lithiumâ€Ion Batteries. Small Methods, 2019, 3, 1900261.	4.6	90
116	Ultrasmall MoS₂ embedded in carbon nanosheets-coated Sn/SnO_x as anode material for high-rate and long life Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 4576-4582.	5.2	89
117	Three-Dimensional Nanostructured Air Electrode for Sodiumâ€“Oxygen Batteries: A Mechanism Study toward the Cyclability of the Cell. Chemistry of Materials, 2015, 27, 3040-3047.	3.2	86
118	Atomic Layer Deposition of Lithium Niobium Oxides as Potential Solid-State Electrolytes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 1654-1661.	4.0	85
119	Interfaces in Garnetâ€Based Allâ€Solidâ€State Lithium Batteries. Advanced Energy Materials, 2020, 10, 2001318.	10.2	85
120	Robust Metallic Lithium Anode Protection by the Molecularâ€Layerâ€Deposition Technique. Small Methods, 2018, 2, 1700417.	4.6	84
121	Mitigating the Interfacial Degradation in Cathodes for High-Performance Oxide-Based Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2019, 11, 4954-4961.	4.0	83
122	An Airâ€Stable and Liâ€Metalâ€Compatible Glassâ€Ceramic Electrolyte enabling Highâ€Performance Allâ€Solidâ€State Li Metal Batteries. Advanced Materials, 2021, 33, e2006577.	11.1	82
123	Detection of Electrochemical Reaction Products from the Sodiumâ€“Oxygen Cell with Solid-State ²³Na NMR Spectroscopy. Journal of the American Chemical Society, 2017, 139, 595-598.	6.6	81
124	A general strategy for preparing pyrrolic-N4 type single-atom catalysts via pre-located isolated atoms. Nature Communications, 2021, 12, 6806.	5.8	81
125	Eliminating the Detrimental Effects of Conductive Agents in Sulfide-Based Solid-State Batteries. ACS Energy Letters, 2020, 5, 1243-1251.	8.8	80
126	Electrocatalysts by atomic layer deposition for fuel cell applications. Nano Energy, 2016, 29, 220-242.	8.2	79

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127	Superior sodium storage of novel VO₂nano-microspheres encapsulated into crumpled reduced graphene oxide. Journal of Materials Chemistry A, 2017, 5, 4850-4860.	5.2	79
128	Atomic layer deposited coatings to significantly stabilize anodes for Li ion batteries: effects of coating thickness and the size of anode particles. Journal of Materials Chemistry A, 2014, 2, 2306.	5.2	78
129	Advanced Support Materials and Interactions for Atomically Dispersed Nobleâ€Metal Catalysts: From Support Effects to Design Strategies. Advanced Energy Materials, 2022, 12, 2102556.	10.2	78
130	Stabilization of all-solid-state Liâ€“S batteries with a polymerâ€“ceramic sandwich electrolyte by atomic layer deposition. Journal of Materials Chemistry A, 2018, 6, 23712-23719.	5.2	77
131	Dynamics of the Garnet/Li Interface for Dendrite-Free Solid-State Batteries. ACS Energy Letters, 2020, 5, 2156-2164.	8.8	76
132	Phaseâ€Separated Moâ€“Ni Alloy for Hydrogen Oxidation and Evolution Reactions with High Activity and Enhanced Stability. Advanced Energy Materials, 2021, 11, 2003511.	10.2	76
133	Non-Aqueous Approach to Synthesize Amorphous/Crystalline Metal Oxide-Graphene Nanosheet Hybrid Composites. Journal of Physical Chemistry C, 2010, 114, 18330-18337.	1.5	75
134	Tailoring interactions of carbon and sulfur in Liâ€“S battery cathodes: significant effects of carbonâ€“heteroatom bonds. Journal of Materials Chemistry A, 2014, 2, 12866.	5.2	75
135	Single-atom catalysts by the atomic layer deposition technique. National Science Review, 2018, 5, 628-630.	4.6	75
136	Composite Nanostructure Construction on the Grain Surface of Liâ€Rich Layered Oxides. Advanced Materials, 2020, 32, e1906070.	11.1	74
137	Î³-Fe₂O₃@CNTs Anode Materials for Lithium Ion Batteries Investigated by Electron Energy Loss Spectroscopy. Chemistry of Materials, 2017, 29, 3499-3506.	3.2	73
138	Insight into the Microstructure and Ionic Conductivity of Cold Sintered NASICON Solid Electrolyte for Solid-State Batteries. ACS Applied Materials & Interfaces, 2019, 11, 27890-27896.	4.0	72
139	Engineering the conductive carbon/PEO interface to stabilize solid polymer electrolytes for all-solid-state high voltage LiCoO₂ batteries. Journal of Materials Chemistry A, 2020, 8, 2769-2776.	5.2	72
140	Unraveling the Origin of Moisture Stability of Halide Solid-State Electrolytes by In Situ and Operando Synchrotron X-ray Analytical Techniques. Chemistry of Materials, 2020, 32, 7019-7027.	3.2	69
141	Toward a Sodiumâ€“â€œAirâ€•Battery: Revealing the Critical Role of Humidity. Journal of Physical Chemistry C, 2015, 119, 13433-13441.	1.5	66
142	Highly Exposed Active Sites of Defect-Enriched Derived MOFs for Enhanced Oxygen Reduction Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 17855-17862.	3.2	66
143	Tuning the dual-active sites of ZIF-67 derived porous nanomaterials for boosting oxygen catalysis and rechargeable Zn-air batteries. Nano Research, 2021, 14, 2353.	5.8	66
144	Full Concentration Gradientâ€Tailored Liâ€Rich Layered Oxides for Highâ€Energy Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2001358.	11.1	65

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145	Bifunctional Ptâ€“Co₃O₄ electrocatalysts for simultaneous generation of hydrogen and formate via energy-saving alkaline seawater/methanol co-electrolysis. Journal of Materials Chemistry A, 2021, 9, 6316-6324.	5.2	65
146	Tailoring Li₆PS₅Br ionic conductivity and understanding of its role in cathode mixtures for high performance all-solid-state Liâ€“S batteries. Journal of Materials Chemistry A, 2019, 7, 10412-10421.	5.2	64
147	Advanced Highâ€Voltage Allâ€Solidâ€State Liâ€Ion Batteries Enabled by a Dualâ€Halogen Solid Electrolyte. Advanced Energy Materials, 2021, 11, 2100836.	10.2	64
148	Deciphering Interfacial Chemical and Electrochemical Reactions of Sulfideâ€Based Allâ€Solidâ€State Batteries. Advanced Energy Materials, 2021, 11, 2100210.	10.2	63
149	Synchrotronâ€Based Xâ€ray Absorption Fine Structures, Xâ€ray Diffraction, and Xâ€ray Microscopy Techniques Applied in the Study of Lithium Secondary Batteries. Small Methods, 2018, 2, 1700341.	4.6	62
150	3D Vertically Aligned Li Metal Anodes with Ultrahigh Cycling Currents and Capacities of 10 mA cm^{â^'2}/20 mAh cm^{â^'2} Realized by Selective Nucleation within Microchannel Walls. Advanced Energy Materials, 2020, 10, 1903753.	10.2	62
151	Superionic Fluorinated Halide Solid Electrolytes for Highly Stable Liâ€Metal in Allâ€Solidâ€State Li Batteries. Advanced Energy Materials, 2021, 11, 2101915.	10.2	61
152	Sodium Superionic Conductors (NASICONs) as Cathode Materials for Sodium-Ion Batteries. Electrochemical Energy Reviews, 2021, 4, 793-823.	13.1	59
153	Atomic Layer Deposited Lithium Silicates as Solid-State Electrolytes for All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2017, 9, 31786-31793.	4.0	58
154	Confined sub-nanometer PtCo clusters as a highly efficient and robust electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2021, 9, 5468-5474.	5.2	58
155	A bifunctional solid state catalyst with enhanced cycling stability for Na and Liâ€“O₂cells: revealing the role of solid state catalysts. Energy and Environmental Science, 2017, 10, 286-295.	15.6	55
156	Carbon-Decorated Na₃V₂(PO₄)₃ as Ultralong Lifespan Cathodes for High-Energy-Density Symmetric Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 25036-25043.	4.0	55
157	Atomic layer deposited Li4Ti5O12 on nitrogen-doped carbon nanotubes. RSC Advances, 2013, 3, 7285.	1.7	54
158	Encapsulating Pt Nanoparticles inside a Derived Two-Dimensional Metalâ€“Organic Frameworks for the Enhancement of Catalytic Activity. ACS Applied Materials & Interfaces, 2020, 12, 10359-10368.	4.0	54
159	Temperatureâ€Dependent Chemical and Physical Microstructure of Li Metal Anodes Revealed through Synchrotronâ€Based Imaging Techniques. Advanced Materials, 2020, 32, e2002550.	11.1	53
160	Anhydride Post-Synthetic Modification in a Hierarchical Metalâ€“Organic Framework. Journal of the American Chemical Society, 2020, 142, 4419-4428.	6.6	53
161	Gradiently Sodiated Alucone as an Interfacial Stabilizing Strategy for Solidâ€State Na Metal Batteries. Advanced Functional Materials, 2020, 30, 2001118.	7.8	53
162	Recent Development of Electrocatalytic CO₂ Reduction Application to Energy Conversion. Small, 2021, 17, e2100323.	5.2	53

#	Article	IF	Citations
163	All-Organic Sodium Hybrid Capacitor: A New, High-Energy, High-Power Energy Storage System Bridging Batteries and Capacitors. Chemistry of Materials, 2017, 29, 7122-7130.	3.2	52
164	Recent Advances on Sodiumâ€“Oxygen Batteries: A Chemical Perspective. Accounts of Chemical Research, 2018, 51, 1532-1540.	7.6	51
165	In situ formation of highly controllable and stable Na₃PS₄ as a protective layer for Na metal anode. Journal of Materials Chemistry A, 2019, 7, 4119-4125.	5.2	51
166	High Tap Density Co and Ni Containing P2â€Na_{0.66}MnO₂ Buckyballs: A Promising High Voltage Cathode for Stable Sodiumâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1801898.	7.8	50
167	Highly Stable Halideâ€Electrolyteâ€Based Allâ€Solidâ€State Liâ€“Se Batteries. Advanced Materials, 2022, 34, e2200856.	11.1	50
168	The application of carbon materials in nonaqueous Naâ€O₂ batteries. , 2019, 1, 141-164.		49
169	Origin of High Ionic Conductivity of Scâ€Doped Sodiumâ€Rich NASICON Solidâ€State Electrolytes. Advanced Functional Materials, 2021, 31, 2102129.	7.8	49
170	Observation of lithiation-induced structural variations in TiO₂ nanotube arrays by X-ray absorption fine structure. Journal of Materials Chemistry A, 2015, 3, 412-419.	5.2	48
171	Atomic layer deposited tantalum oxide to anchor Pt/C for a highly stable catalyst in PEMFCs. Journal of Materials Chemistry A, 2017, 5, 9760-9767.	5.2	48
172	Ultrahighâ€Capacity and Longâ€Life Lithiumâ€“Metal Batteries Enabled by Engineering Carbon Nanofiberâ€“Stabilized Graphene Aerogel Film Host. Small, 2018, 14, e1803310.	5.2	48
173	Regulated lithium plating and stripping by a nano-scale gradient inorganicâ€“organic coating for stable lithium metal anodes. Energy and Environmental Science, 2021, 14, 4085-4094.	15.6	48
174	Interaction of Carbon Coating on LiFePO₄: A Local Visualization Study of the Influence of Impurity Phases. Advanced Functional Materials, 2013, 23, 806-814.	7.8	47
175	High-Performance and Recyclable Al-Air Coin Cells Based on Eco-friendly Chitosan Hydrogel Membranes. ACS Applied Materials & Interfaces, 2018, 10, 19730-19738.	4.0	47
176	Ultralow Loading and High-Performing Pt Catalyst for a Polymer Electrolyte Membrane Fuel Cell Anode Achieved by Atomic Layer Deposition. ACS Catalysis, 2019, 9, 5365-5374.	5.5	47
177	Transition of the Reaction from Threeâ€Phase to Twoâ€Phase by Using a Hybrid Conductor for Highâ€Energyâ€Density Highâ€Rate Solidâ€State Liâ€O₂ Batteries. Angewandte Chemie - International Edition, 2021, 60, 5821-5826.	7.2	47
178	Three growth modes and mechanisms for highly structure-tunable SnO2 nanotube arrays of template-directed atomic layer deposition. Journal of Materials Chemistry, 2011, 21, 12321.	6.7	46
179	Sizeâ€Mediated Recurring Spinel Subâ€nanodomains in Liâ€and Mnâ€Rich Layered Cathode Materials. Angewandte Chemie - International Edition, 2020, 59, 14313-14320.	7.2	46
180	Stable Silicon Anodes by Molecular Layer Deposited Artificial Zincone Coatings. Advanced Functional Materials, 2021, 31, 2010526.	7.8	46

#	Article	IF	Citations
181	Realizing Solidâ€Phase Reaction in Liâ€“S Batteries via Localized Highâ€Concentration Carbonate Electrolyte. Advanced Energy Materials, 2021, 11, 2101004.	10.2	46
182	Utilizing the full capacity of carbon black as anode for Na-ion batteries via solvent co-intercalation. Nano Research, 2017, 10, 4378-4387.	5.8	45
183	Highâ€Performance Ammonium Cobalt Phosphate Nanosheet Electrocatalyst for Alkaline Saline Water Oxidation. Advanced Science, 2021, 8, 2100498.	5.6	45
184	Exfoliation of graphite to few-layer graphene in aqueous media with vinylimidazole-based polymer as high-performance stabilizer. Carbon, 2016, 99, 249-260.	5.4	43
185	Anisotropically Electrochemicalâ€“Mechanical Evolution in Solidâ€State Batteries and Interfacial Tailored Strategy. Angewandte Chemie - International Edition, 2019, 58, 18647-18653.	7.2	43
186	Three-dimensional Composite Catalysts for Alâ€“O₂ Batteries Composed of CoMn₂O₄ Nanoneedles Supported on Nitrogen-Doped Carbon Nanotubes/Graphene. ACS Applied Materials & Interfaces, 2019, 11, 21526-21535.	4.0	42
187	Ultra-high performance of Li/Na ion batteries using N/O dual dopant porous hollow carbon nanocapsules as an anode. Journal of Materials Chemistry A, 2019, 7, 11117-11126.	5.2	42
188	A Series of Ternary Metal Chloride Superionic Conductors for Highâ€Performance Allâ€Solidâ€State Lithium Batteries. Advanced Energy Materials, 2022, 12, .	10.2	42
189	Carbon coated bimetallic sulfide nanodots/carbon nanorod heterostructure enabling long-life lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 25625-25631.	5.2	41
190	A 3D-printed ultra-high Se loading cathode for high energy density quasi-solid-state Liâ€“Se batteries. Journal of Materials Chemistry A, 2020, 8, 278-286.	5.2	41
191	New Insights into the Highâ€Performance Black Phosphorus Anode for Lithiumâ€Ion Batteries. Advanced Materials, 2021, 33, e2101259.	11.1	41
192	Heterostructural coaxial nanotubes of CNT@Fe2O3 via atomic layer deposition: effects of surface functionalization and nitrogen-doping. Journal of Nanoparticle Research, 2011, 13, 1207-1218.	0.8	40
193	Suppressing Corrosion of Aluminum Foils via Highly Conductive Graphene-like Carbon Coating in High-Performance Lithium-Based Batteries. ACS Applied Materials & Interfaces, 2019, 11, 32826-32832.	4.0	39
194	3D Porous Garnet/Gel Polymer Hybrid Electrolyte for Safe Solid-State Liâ€“O₂ Batteries with Long Lifetimes. Chemistry of Materials, 2020, 32, 10113-10119.	3.2	39
195	Interrogation of the Reaction Mechanism in a Naâ€“O₂ Battery Using In Situ Transmission Electron Microscopy. ACS Nano, 2020, 14, 3669-3677.	7.3	39
196	3D boron doped carbon nanorods/carbon-microfiber hybrid composites: synthesis and applications in a highly stable proton exchange membrane fuel cell. Journal of Materials Chemistry, 2011, 21, 18195.	6.7	38
197	Nanoscale stabilization of Liâ€“sulfur batteries by atomic layer deposited Al2O3. RSC Advances, 2014, 4, 27126.	1.7	38
198	New Insight of Pyrroleâ€Like Nitrogen for Boosting Hydrogen Evolution Activity and Stability of Pt Single Atoms. Small, 2021, 17, e2004453.	5.2	38

#	Article	IF	Citations
199	Revealing the charge/discharge mechanism of Naâ€“O₂ cells by in situ soft X-ray absorption spectroscopy. Energy and Environmental Science, 2018, 11, 2073-2077.	15.6	37
200	On the Cycling Performance of Naâ€O₂ Cells: Revealing the Impact of the Superoxide Crossover toward the Metallic Na Electrode. Advanced Functional Materials, 2018, 28, 1801904.	7.8	37
201	Recent advances and strategies in the stabilization of singleâ€atom catalysts for electrochemical applications. , 2020, 2, 488-520.		37
202	Band Engineering Induced Conducting 2Hâ€Phase MoS₂ by Pdï£¿Sï£¿Re Sites Modification for Hydrogen Evolution Reaction. Advanced Energy Materials, 2022, 12, .	10.2	37
203	Thermal and chemical durability of nitrogen-doped carbon nanotubes. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	36
204	How to Control the Discharge Products in Naâ€“O₂ Cells: Direct Evidence toward the Role of Functional Groups at the Air Electrode Surface. Journal of Physical Chemistry Letters, 2017, 8, 4794-4800.	2.1	36
205	Tailoring the Mechanical and Electrochemical Properties of an Artificial Interphase for Highâ€Performance Metallic Lithium Anode. Advanced Energy Materials, 2020, 10, 2001139.	10.2	36
206	Structure and Charge Regulation Strategy Enabling Superior Cyclability for Niâ€Rich Layered Cathode Materials. Small, 2021, 17, e2104282.	5.2	36
207	Electron and Ion Coâ€Conductive Catalyst Achieving Instant Transformation of Lithium Polysulfide towards Li₂S. Advanced Materials, 2021, 33, e2105362.	11.1	36
208	Ultralongâ€Life Quasiâ€Solidâ€State Liâ€O₂ Batteries Enabled by Coupling Advanced Air Electrode Design with Li Metal Anode Protection. Small Methods, 2019, 3, 1800437.	4.6	35
209	Atomic Layer Deposited Nonâ€Noble Metal Oxide Catalyst for Sodiumâ€“Air Batteries: Tuning the Morphologies and Compositions of Discharge Product. Advanced Functional Materials, 2017, 27, 1606662.	7.8	34
210	Implanting CNT Forest onto Carbon Nanosheets as Multifunctional Hosts for Highâ€Performance Lithium Metal Batteries. Small Methods, 2019, 3, 1800546.	4.6	34
211	Reversible Silicon Anodes with Long Cycles by Multifunctional Volumetric Buffer Layers. ACS Applied Materials & Interfaces, 2021, 13, 4093-4101.	4.0	34
212	Combustion combined with ball milling to produce nanoscale La2O3 coated on LiMn2O4 for optimized Li-ion storage performance at high temperature. Journal of Applied Electrochemistry, 2018, 48, 135-145.	1.5	33
213	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.	5.2	32
214	Multi-functional nanowall arrays with unrestricted Li⁺ transport channels and an integrated conductive network for high-areal-capacity Liâ€“S batteries. Journal of Materials Chemistry A, 2018, 6, 22958-22965.	5.2	31
215	Selective atomic layer deposition of RuO_x catalysts on shape-controlled Pd nanocrystals with significantly enhanced hydrogen evolution activity. Journal of Materials Chemistry A, 2018, 6, 24397-24406.	5.2	31
216	High-performance alcohol electrooxidation on Pt₃Snâ€“SnO₂ nanocatalysts synthesized through the transformation of Ptâ€“Sn nanoparticles. Journal of Materials Chemistry A, 2020, 8, 592-598.	5.2	31

#	Article	IF	Citations
217	Highly interconnected hollow graphene nanospheres as an advanced high energy and high power cathode for sodium metal batteries. Journal of Materials Chemistry A, 2018, 6, 9846-9853.	5.2	30
218	Visualizing the Oxidation Mechanism and Morphological Evolution of the Cubicâ€Shaped Superoxide Discharge Product in Naâ€“Air Batteries. Advanced Functional Materials, 2019, 29, 1808332.	7.8	30
219	All-Solid-State Lithium Metal Batteries with Sulfide Electrolytes: Understanding Interfacial Ion and Electron Transport. Accounts of Materials Research, 2022, 3, 21-32.	5.9	30
220	Insights into the electronic origin of enhancing the catalytic activity of Co3O4 for oxygen evolution by single atom ruthenium. Nano Today, 2020, 34, 100955.	6.2	29
221	Understanding the Critical Role of Binders in Phosphorus/Carbon Anode for Sodiumâ€Ion Batteries through Unexpected Mechanism. Advanced Functional Materials, 2020, 30, 2000060.	7.8	29
222	Insight into Ion Diffusion Dynamics/Mechanisms and Electronic Structure of Highly Conductive Sodium-Rich Na_{3+x}La_xZr_{2â€“x}Si₂PO₁₂ (0 â‰¤ x â‰¤ 0.5) Solid-State Electrolytes. ACS Applied Materials & Interfaces, 2021, 13, 13132-13138.	4.0	27
223	Improving dispersion and integration of singleâ€walled carbon nanotubes in epoxy composites by using a reactive noncovalent dispersant. Journal of Polymer Science Part A, 2012, 50, 4548-4556.	2.5	26
224	Highly Stable and Active Pt/Nb-TiO₂Carbon-Free Electrocatalyst for Proton Exchange Membrane Fuel Cells. Journal of Nanotechnology, 2012, 2012, 1-8.	1.5	26
225	Atomic layer deposited aluminium phosphate thin films on N-doped CNTs. RSC Advances, 2013, 3, 4492.	1.7	26
226	Titanium Dioxide/Lithium Phosphate Nanocomposite Derived from Atomic Layer Deposition as a Highâ€Performance Anode for Lithium Ion Batteries. Advanced Materials Interfaces, 2016, 3, 1600369.	1.9	26
227	Unveiling the Interfacial Instability of the Phosphorus/Carbon Anode for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 30763-30773.	4.0	26
228	Highly stable one-dimensional Pt nanowires with modulated structural disorder towards the oxygen reduction reaction. Journal of Materials Chemistry A, 2019, 7, 24830-24836.	5.2	26
229	Highly Dispersed Nonprecious Metal Catalyst for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 17481-17491.	4.0	25
230	A facile route to synthesize titanium oxide nanowires via water-assisted chemical vapor deposition. Journal of Nanoparticle Research, 2011, 13, 385-391.	0.8	24
231	O₂/O₂^{â€“} Crossover- and Dendrite-Free Hybrid Solid-State Naâ€“O₂ Batteries. Chemistry of Materials, 2019, 31, 9024-9031.	3.2	24
232	Fast Charging All Solidâ€State Lithium Batteries Enabled by Rational Design of Dual Verticallyâ€Aligned Electrodes. Advanced Functional Materials, 2020, 30, 2005357.	7.8	24
233	Revealing the Chemical Mechanism of NaO₂ Decomposition by In Situ Raman Imaging. Chemistry of Materials, 2018, 30, 5156-5160.	3.2	23
234	Design of a 3D-Porous Structure with Residual Carbon for High-Performance Ni-Rich Cathode Materials. ACS Applied Materials & Interfaces, 2019, 11, 2500-2506.	4.0	23

#	Article	IF	Citations
235	Highâ€Performance Quasiâ€Solidâ€State Naâ€Air Battery via Gel Cathode by Confining Moisture. Advanced Functional Materials, 2021, 31, 2011151.	7.8	23
236	Novel High-Energy-Density Rechargeable Hybrid Sodiumâ€“Air Cell with Acidic Electrolyte. ACS Applied Materials & Interfaces, 2018, 10, 23748-23756.	4.0	22
237	Enhancing metalâ€“support interaction by in situ ion-exchanging strategy for high performance Pt catalysts in hydrogen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 16582-16589.	5.2	22
238	Reviving Anode Protection Layer in Naâ€O₂ Batteries: Failure Mechanism and Resolving Strategy. Advanced Energy Materials, 2021, 11, 2003789.	10.2	22
239	Atomic Layer Deposition of Hierarchical CNTs@FePO₄ Architecture as a 3D Electrode for Lithiumâ€Ion and Sodiumâ€Ion Batteries. Advanced Materials Interfaces, 2016, 3, 1600468.	1.9	21
240	Aligning the binder effect on sodiumâ€“air batteries. Journal of Materials Chemistry A, 2018, 6, 1473-1484.	5.2	21
241	Stabilizing LiNi_{0.8}Co_{0.15}Mn_{0.05}O₂ Cathode by Doping Sulfate for Lithiumâ€Ion Batteries. ChemSusChem, 2021, 14, 2721-2730.	3.6	21
242	Emerging Characterization Techniques for Electrode Interfaces in Sulfideâ€Based Allâ€Solidâ€State Lithium Batteries. Small Structures, 2022, 3, 2100146.	6.9	21
243	Additive Manufacturing of Two-Dimensional Conductive Metalâ€“Organic Framework with Multidimensional Hybrid Architectures for High-Performance Energy Storage. Nano Letters, 2022, 22, 1198-1206.	4.5	21
244	Multilayer graphene synthesized using magnetron sputtering for planar supercapacitor application. Canadian Journal of Chemistry, 2015, 93, 160-164.	0.6	20
245	Controllable Synthesis of Co@CoO_x/Helical Nitrogen-Doped Carbon Nanotubes toward Oxygen Reduction Reaction as Binder-free Cathodes for Alâ€“Air Batteries. ACS Applied Materials & Interfaces, 2020, 12, 16512-16520.	4.0	20
246	Fastâ€Charging Halideâ€Based Allâ€Solidâ€State Batteries by Manipulation of Current Collector Interface. Advanced Functional Materials, 2022, 32, .	7.8	20
247	Aqueous dispersion of pristine single-walled carbon nanotubes prepared by using a vinylimidazole-based polymer dispersant. RSC Advances, 2013, 4, 2327-2338.	1.7	18
248	Minimizing Polysulfide Shuttle Effect in Lithium-Ion Sulfur Batteries by Anode Surface Passivation. ACS Applied Materials & Interfaces, 2018, 10, 21965-21972.	4.0	18
249	Highly Stable Lithium Metal Anode Interface via Molecular Layer Deposition Zircone Coatings for Long Life Nextâ€Generation Battery Systems. Angewandte Chemie, 2019, 131, 15944-15949.	1.6	18
250	Highly Active and Durable Ultrasmall Pd Nanocatalyst Encapsulated in Ultrathin Silica Layers by Selective Deposition for Formic Acid Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 43130-43137.	4.0	18
251	Nanomechanical elasticity and fracture studies of lithium phosphate (LPO) and lithium tantalate (LTO) solid-state electrolytes. Nanoscale, 2019, 11, 18730-18738.	2.8	17
252	Phase Evolution of a Prenucleator for Fast Li Nucleation in Allâ€Solidâ€State Lithium Batteries. Advanced Energy Materials, 2020, 10, 2001191.	10.2	17

#	Article	IF	Citations
253	Phosphorene Degradation: Visualization and Quantification of Nanoscale Phase Evolution by Scanning Transmission X-ray Microscopy. Chemistry of Materials, 2020, 32, 1272-1280.	3.2	17
254	A study on the bactericidal properties of Cu-coated carbon nanotubes. Frontiers of Materials Science in China, 2007, 1, 147-150.	0.5	16
255	Atomic Layer Deposition for Energy and Environmental Applications. Advanced Materials Interfaces, 2016, 3, .	1.9	16
256	ALD derived Fe3+- doping toward high performance P2â€“Na0.75Ni0.2Co0.2Mn0.6O2 cathode material for sodium ion batteries. Materials Today Energy, 2019, 14, 100353.	2.5	16
257	Engineering a â€œnanonetâ€•reinforced polymer electrolyte for long-life Liâ€“O2 batteries. Journal of Materials Chemistry A, 2019, 7, 24947-24952.	5.2	16
258	Tuning and understanding the electronic effect of Coâ€“Moâ€“O sites in bifunctional electrocatalysts for ultralong-lasting rechargeable zincâ€“air batteries. Journal of Materials Chemistry A, 2021, 9, 21716-21722.	5.2	16
259	Designing High-Performance Nanostructured P2-type Cathode Based on a Template-free Modified Pechini Method for Sodium-Ion Batteries. ACS Omega, 2018, 3, 8309-8316.	1.6	15
260	Variable-Energy Hard X-ray Photoemission Spectroscopy: A Nondestructive Tool to Analyze the Cathodeâ€“Solid-State Electrolyte Interface. ACS Applied Materials & Interfaces, 2020, 12, 2293-2298.	4.0	15
261	Lithiumâ€ion Batteries: Radially Oriented Singleâ€Crystal Primary Nanosheets Enable Ultrahigh Rate and Cycling Properties of LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode Material for Lithiumâ€ion Batteries (Adv. Energy Mater. 15/2019). Advanced Energy Materials, 2019, 9, 1970051.	10.2	14
262	Transition of the Reaction from Threeâ€Phase to Twoâ€Phase by Using a Hybrid Conductor for Highâ€Energyâ€Density Highâ€Rate Solidâ€State Liâ€O₂ Batteries. Angewandte Chemie, 2021, 133, 5885-5890.	1.6	14
263	Coreâ€“Shell Structured Cu(OH)₂@NiFe(OH)_x Nanotube Electrocatalysts for Methanol Oxidation Based Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 8723-8732.	2.4	14
264	Batteries: Tin Oxide with Controlled Morphology and Crystallinity by Atomic Layer Deposition onto Graphene Nanosheets for Enhanced Lithium Storage (Adv. Funct. Mater. 8/2012). Advanced Functional Materials, 2012, 22, 1646-1646.	7.8	13
265	Thermal Stability of Alumina-Overcoated Au₂₅ Clusters for Catalysis. ACS Applied Nano Materials, 2018, 1, 6904-6911.	2.4	13
266	Non Noble Metal Catalyst for Oxygen Reduction Reaction and Its Characterization by Simulated Fuel Cell Test. Journal of the Electrochemical Society, 2018, 165, J3008-J3015.	1.3	13
267	Engineering Surface Oxygenated Functionalities on Commercial Carbon toward Ultrafast Sodium Storage in Ether-Based Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 37116-37127.	4.0	13
268	Phosphorene Nanosheets Exfoliated from Low-Cost and High-Quality Black Phosphorus for Hydrogen Evolution. ACS Applied Nano Materials, 2020, 3, 7508-7515.	2.4	13
269	Anisotropically Electrochemicalâ€“Mechanical Evolution in Solidâ€State Batteries and Interfacial Tailored Strategy. Angewandte Chemie, 2019, 131, 18820-18826.	1.6	12
270	Realizing Highâ€Performance Liâ€S Batteries through Additive Manufactured and Chemically Enhanced Cathodes. Small Methods, 2021, 5, e2100176.	4.6	12

#	Article	IF	Citations
271	Rational design of Ru species on N-doped graphene promoting water dissociation for boosting hydrogen evolution reaction. Science China Chemistry, 2022, 65, 521-531.	4.2	12
272	Morphology- and lattice stability-dependent performance of nanostructured Li4Ti5O12 probed by in situ high-pressure Raman spectroscopy and synchrotron X-ray diffraction. CrystEngComm, 2016, 18, 736-743.	1.3	11
273	Enhancement of PEMFC performance by using carbon nanotubes supported Pt¿Co alloy catalysts. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 12-16.	0.8	10
274	Porosity Development at Li-Rich Layered Cathodes in All-Solid-State Battery during In Situ Delithiation. Nano Letters, 2022, 22, 4905-4911.	4.5	10
275	One-step in situ synthesis and characterization of W₁₈O₄₉@carbon coaxial nanocables. Journal of Materials Research, 2009, 24, 1833-1841.	1.2	9
276	Understanding the Influence of Crystallographic Structure on Controlling the Shape of Noble Metal Nanostructures. Crystal Growth and Design, 2011, 11, 5457-5460.	1.4	9
277	A facile approach to synthesize poly(4-vinylpyridine)/multi-walled carbon nanotubes nanocomposites: highly water-dispersible carbon nanotubes decorated with gold nanoparticles. Colloid and Polymer Science, 2011, 289, 783-789.	1.0	9
278	Totally atom-economical synthesis of nano/micro structured nickel hydroxide realized by an Niâ€“O₂ fuel cell. Green Chemistry, 2015, 17, 1446-1452.	4.6	9
279	Sizeâ€Mediated Recurring Spinel Subâ€nanodomains in Liâ€•and Mnâ€Rich Layered Cathode Materials. Angewandte Chemie, 2020, 132, 14419-14426.	1.6	9
280	Fracture and Fatigue of Al2O3-Graphene Nanolayers. Nano Letters, 2021, 21, 437-444.	4.5	9
281	Ion Motor as a New Universal Strategy for the Boosting the Performance of Zn-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 30839-30846.	4.0	9
282	A Simple and Facile Approach to Synthesize Water-Soluble Multiwalled Carbon Nanotubes Wrapped by Poly(4-Vinylpyridine). Journal of Macromolecular Science - Physics, 2011, 50, 679-687.	0.4	8
283	Pt/TiSi_x-NCNT Novel Janus Nanostructure: A New Type of High-Performance Electrocatalyst. ACS Applied Materials & Interfaces, 2018, 10, 10771-10777.	4.0	8
284	Revealing Dopant Local Structure of Se-Doped Black Phosphorus. Chemistry of Materials, 2021, 33, 2029-2036.	3.2	8
285	Influence of modulation ratio on structure and properties of nanoscale ZrB2/ZrAlN multilayered coatings. Science China Technological Sciences, 2010, 53, 772-775.	2.0	7
286	Probing heat generation and release in a 57.5 A h high-energy-density Li-ion pouch cell with a nickel-rich cathode and SiO_x/graphite anode. Journal of Materials Chemistry A, 2022, 10, 1227-1235.	5.2	6
287	Lithium-Ion Batteries: Rational Design of Atomic-Layer-Deposited LiFePO4as a High-Performance Cathode for Lithium-Ion Batteries (Adv. Mater. 37/2014). Advanced Materials, 2014, 26, 6358-6358.	11.1	5
288	Nanostructured Materials for Li-Ion Batteries and Beyond. Nanomaterials, 2016, 6, 63.	1.9	5

#	Article	IF	Citations
289	Investigation of the Lithiation Mechanism of Fe₃O₄â€Based Composite Anode: the Effect of the Carbon Matrix. ChemistrySelect, 2016, 1, 3979-3991.	0.7	4
290	Self-assembly synthesis and mechanism investigation of branched coreâ€“shell hybrids of tin nanowires and carbon nanotubes. Journal of Materials Research, 2013, 28, 969-975.	1.2	3
291	Antipoisoning Performance of Platinum Catalysts with Varying Carbon Nanotube Properties: Electrochemically Revealing the Importance of Defects. ChemElectroChem, 2017, 4, 296-303.	1.7	3
292	Hierarchical Hybrid of Few-Layer Graphene upon Tungsten Monocarbide Nanowires: Controlled Synthesis and Electrocatalytic Performance for Methanol Oxidation. ACS Applied Energy Materials, 2019, 2, 328-337.	2.5	3
293	Automated four-point probe measurement of nanowires inside a scanning electron microscope. , 2010, , .		2
294	Titelbild: A Highly Durable Platinum Nanocatalyst for Proton Exchange Membrane Fuel Cells: Multiarmed Starlike Nanowire Single Crystal (Angew. Chem. 2/2011). Angewandte Chemie, 2011, 123, 341-341.	1.6	2
295	Facile Synthesis of Crystalline SnO₂ Nanowires on Various Current Collector Substrates. Journal of the Chinese Chemical Society, 2012, 59, 1288-1293.	0.8	2
296	Capacitors: Going Beyond Lithium Hybrid Capacitors: Proposing a New Highâ€Performing Sodium Hybrid Capacitor System for Nextâ€Generation Hybrid Vehicles Made with Bioâ€Inspired Activated Carbon (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock 1	10.2	2
297	Sodiumâ€Ion Batteries: Ultrafine MoO₂â€Carbon Microstructures Enable Ultralongâ€Life Powerâ€Type Sodium Ion Storage by Enhanced Pseudocapacitance (Adv. Energy Mater. 15/2017). Advanced Energy Materials, 2017, 7, .	10.2	2
298	Visualization of the secondary phase in LiFePO4 ingots with advanced mapping techniques. Canadian Journal of Chemical Engineering, 2019, 97, 2218-2223.	0.9	2
299	Lithium Metal Anode: Processing and Interface Engineering. Batteries and Supercaps, 2021, 4, 690-691.	2.4	2
300	A MEMS tensile testing device for mechanical characterization of individual nanowires. , 2010, , .		1
301	Cover Picture: A Highly Durable Platinum Nanocatalyst for Proton Exchange Membrane Fuel Cells: Multiarmed Starlike Nanowire Single Crystal (Angew. Chem. Int. Ed. 2/2011). Angewandte Chemie - International Edition, 2011, 50, 325-325.	7.2	1
302	Platinum single-atom and cluster catalysis of the hydrogen evolution reaction. , 0, .		1
303	Advanced Carbon Materials for Electrochemical Energy Conversion and Storage. World Scientific Series on Carbon Nanoscience, 2012, , 55-94.	0.1	0
304	Batteries: Atomic Layer Deposition of Hierarchical CNTs@FePO4 Architecture as a 3D Electrode for Lithium-Ion and Sodium-Ion Batteries (Adv. Mater. Interfaces 21/2016). Advanced Materials Interfaces, 2016, 3, .	1.9	0
305	RÃ¼cktitelbild: Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Over	1.6	0
306	A Series of Ternary Metal Chloride Superionic Conductors for Highâ€Performance Allâ€Solidâ€State Lithium Batteries (Adv. Energy Mater. 21/2022). Advanced Energy Materials, 2022, 12, .	10.2	0