

# Zhongwei Chen

## List of Publications by Year in descending order

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453  
papers

51,064  
citations

944

115  
h-index

2071

204  
g-index

488  
all docs

488  
docs citations

488  
times ranked

34610  
citing authors

#	ARTICLE	IF	CITATIONS
1	30 Years of Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018, 30, e1800561.	11.1	3,039
2	Batteries and fuel cells for emerging electric vehicle markets. <i>Nature Energy</i> , 2018, 3, 279-289.	19.8	1,944
3	A review on non-precious metal electrocatalysts for PEM fuel cells. <i>Energy and Environmental Science</i> , 2011, 4, 3167.	15.6	1,651
4	Electrically Rechargeable Zinc-Air Batteries: Progress, Challenges, and Perspectives. <i>Advanced Materials</i> , 2017, 29, 1604685.	11.1	1,143
5	A review of graphene and graphene oxide sponge: material synthesis and applications to energy and the environment. <i>Energy and Environmental Science</i> , 2014, 7, 1564.	15.6	996
6	Supportless Pt and PtPd Nanotubes as Electrocatalysts for Oxygen-Reduction Reactions. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 4060-4063.	7.2	780
7	Automotive Li-Ion Batteries: Current Status and Future Perspectives. <i>Electrochemical Energy Reviews</i> , 2019, 2, 1-28.	13.1	745
8	Silicon-Based Anodes for Lithium-Ion Batteries: From Fundamentals to Practical Applications. <i>Small</i> , 2018, 14, 1702737.	5.2	650
9	Durability investigation of carbon nanotube as catalyst support for proton exchange membrane fuel cell. <i>Journal of Power Sources</i> , 2006, 158, 154-159.	4.0	570
10	New Concepts in Electrolytes. <i>Chemical Reviews</i> , 2020, 120, 6783-6819.	23.0	554
11	A Soluble and Highly Conductive Ionomer for High-Performance Hydroxide Exchange Membrane Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6499-6502.	7.2	541
12	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. <i>Electrochemical Energy Reviews</i> , 2018, 1, 35-53.	13.1	514
13	One-pot synthesis of a mesoporous NiCo <sub>2</sub> O <sub>4</sub> nanoplatelet and graphene hybrid and its oxygen reduction and evolution activities as an efficient bi-functional electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4754.	5.2	491
14	A review of composite solid-state electrolytes for lithium batteries: fundamentals, key materials and advanced structures. <i>Chemical Society Reviews</i> , 2020, 49, 8790-8839.	18.7	461
15	The application of graphene and its composites in oxygen reduction electrocatalysis: a perspective and review of recent progress. <i>Energy and Environmental Science</i> , 2016, 9, 357-390.	15.6	456
16	Revisiting the Role of Polysulfides in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2018, 30, e1705590.	11.1	456
17	Functionalized Graphene Oxide Nanocomposite Membrane for Low Humidity and High Temperature Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20774-20781.	1.5	410
18	Recent progress and perspectives on bi-functional oxygen electrocatalysts for advanced rechargeable metal-air batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7107-7134.	5.2	408

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19	Interlayer Material Selection for Lithium-Sulfur Batteries. <i>Joule</i> , 2019, 3, 361-386.	11.7	406
20	Recent Progress in Electrically Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1805230.	11.1	398
21	Highly Active and Durable Core-Shell Structured Bifunctional Catalyst for Rechargeable Metal-Air Battery Application. <i>Nano Letters</i> , 2012, 12, 1946-1952.	4.5	392
22	Highly Active Nitrogen-Doped Carbon Nanotubes for Oxygen Reduction Reaction in Fuel Cell Applications. <i>Journal of Physical Chemistry C</i> , 2009, 113, 21008-21013.	1.5	350
23	Nitrogen doped carbon nanotubes and their impact on the oxygen reduction reaction in fuel cells. <i>Carbon</i> , 2010, 48, 3057-3065.	5.4	347
24	Ultrathin, transparent, and flexible graphene films for supercapacitor application. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	347
25	Multifunctional TiO <sub>2</sub> /C/MnO <sub>2</sub> Core-Shell Double-Shell Nanowire Arrays as High-Performance 3D Electrodes for Lithium Ion Batteries. <i>Nano Letters</i> , 2013, 13, 5467-5473.	4.5	338
26	Structural and chemical synergistic encapsulation of polysulfides enables ultralong-life lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2016, 9, 2533-2538.	15.6	330
27	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9640-9645.	7.2	312
28	Recycling of mixed cathode lithium-ion batteries for electric vehicles: Current status and future outlook. , 2020, 2, 6-43.		300
29	Recent Advances in Flexible Zinc-Based Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1802605.	10.2	296
30	Engineering Energy Level of Metal Center: Ru Single-Atom Site for Efficient and Durable Oxygen Reduction Catalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 19800-19806.	6.6	288
31	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. <i>Nature Reviews Materials</i> , 2020, 5, 276-294.	23.3	284
32	Nafion/Zeolite Nanocomposite Membrane by in Situ Crystallization for a Direct Methanol Fuel Cell. <i>Chemistry of Materials</i> , 2006, 18, 5669-5675.	3.2	276
33	A flexible solid-state electrolyte for wide-scale integration of rechargeable zinc-air batteries. <i>Energy and Environmental Science</i> , 2016, 9, 663-670.	15.6	275
34	Free-Standing Layer-By-Layer Hybrid Thin Film of Graphene-MnO <sub>2</sub> Nanotube as Anode for Lithium Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 1855-1860.	2.1	271
35	The Current State of Aqueous Zn-Based Rechargeable Batteries. <i>ACS Energy Letters</i> , 2020, 5, 1665-1675.	8.8	271
36	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. <i>Chemical Society Reviews</i> , 2020, 49, 5407-5445.	18.7	264

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37	Biologically Inspired Highly Durable Iron Phthalocyanine Catalysts for Oxygen Reduction Reaction in Polymer Electrolyte Membrane Fuel Cells. <i>Journal of the American Chemical Society</i> , 2010, 132, 17056-17058.	6.6	259
38	Orbital Interactions in Bi-Sn Bimetallic Electrocatalysts for Highly Selective Electrochemical CO <sub>2</sub> Reduction toward Formate Production. <i>Advanced Energy Materials</i> , 2018, 8, 1802427.	10.2	259
39	Advanced Extremely Durable 3D Bifunctional Air Electrodes for Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2014, 4, 1301389.	10.2	258
40	Flexible High-Energy Polymer-Electrolyte-Based Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , 2015, 27, 5617-5622.	11.1	258
41	Pomegranate-Inspired Design of Highly Active and Durable Bifunctional Electrocatalysts for Rechargeable Metal-Air Batteries. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 4977-4982.	7.2	258
42	Graphene-Based Flexible Supercapacitors: Pulse-Electropolymerization of Polypyrrole on Free-Standing Graphene Films. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17612-17620.	1.5	255
43	Stringed $\alpha$ -tube on cube-nanohybrids as compact cathode matrix for high-loading and lean-electrolyte lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2018, 11, 2372-2381.	15.6	255
44	Sulfonated Ordered Mesoporous Carbon as a Stable and Highly Active Protonic Acid Catalyst. <i>Chemistry of Materials</i> , 2007, 19, 2395-2397.	3.2	249
45	Interpenetrating Triphase Cobalt-Based Nanocomposites as Efficient Bifunctional Oxygen Electrocatalysts for Long-Lasting Rechargeable Zn-Air Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702900.	10.2	242
46	Hollow Multivoid Nanocuboids Derived from Ternary Ni-Co-Fe Prussian Blue Analog for Dual-Electrocatalysis of Oxygen and Hydrogen Evolution Reactions. <i>Advanced Functional Materials</i> , 2018, 28, 1802129.	7.8	242
47	Ni-Rich/Co-Poor Layered Cathode for Automotive Li-Ion Batteries: Promises and Challenges. <i>Advanced Energy Materials</i> , 2020, 10, 1903864.	10.2	242
48	Preferentially Engineering Fe <sub>4</sub> Edge Sites onto Graphitic Nanosheets for Highly Active and Durable Oxygen Electrocatalysis in Rechargeable Zn-Air Batteries. <i>Advanced Materials</i> , 2020, 32, e2004900.	11.1	235
49	Self-Assembled NiO/Ni(OH) <sub>2</sub> Nanoflakes as Active Material for High-Power and High-Energy Hybrid Rechargeable Battery. <i>Nano Letters</i> , 2016, 16, 1794-1802.	4.5	222
50	Development and Simulation of Sulfur-doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction. <i>Advanced Functional Materials</i> , 2014, 24, 4325-4336.	7.8	214
51	Facile Hydrothermal Synthesis of VS <sub>2</sub> /Graphene Nanocomposites with Superior High-Rate Capability as Lithium-Ion Battery Cathodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13044-13052.	4.0	210
52	Conductive Nanocrystalline Niobium Carbide as High-Efficiency Polysulfides Tamer for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1704865.	7.8	210
53	Polyaniline-derived Non-Precious Catalyst for the Polymer Electrolyte Fuel Cell Cathode. <i>ECS Transactions</i> , 2008, 16, 159-170.	0.3	209
54	Chemisorption of polysulfides through redox reactions with organic molecules for lithium-sulfur batteries. <i>Nature Communications</i> , 2018, 9, 705.	5.8	207

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55	Low-Bandgap Se-Deficient Antimony Selenide as a Multifunctional Polysulfide Barrier toward High-Performance Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2020, 32, e1904876.	11.1	206
56	Controllable Urchin-Like NiCo <sub>2</sub> S <sub>4</sub> Microsphere Synergized with Sulfur-Doped Graphene as Bifunctional Catalyst for Superior Rechargeable Zn-Air Battery. <i>Advanced Functional Materials</i> , 2018, 28, 1706675.	7.8	203
57	Revealing the Rapid Electrocatalytic Behavior of Ultrafine Amorphous Defective Nb <sub>2</sub> O <sub>5</sub> Nanocluster toward Superior Li-S Performance. <i>ACS Nano</i> , 2020, 14, 4849-4860.	7.3	201
58	Carbon Nanotube Film by Filtration as Cathode Catalyst Support for Proton-Exchange Membrane Fuel Cell. <i>Langmuir</i> , 2005, 21, 9386-9389.	1.6	196
59	In Situ Polymer Graphenization Ingrained with Nanoporosity in a Nitrogenous Electrocatalyst Boosting the Performance of Polymer-Electrolyte Membrane Fuel Cells. <i>Advanced Materials</i> , 2017, 29, 1604456.	11.1	192
60	Microporous framework membranes for precise molecule/ion separations. <i>Chemical Society Reviews</i> , 2021, 50, 986-1029.	18.7	191
61	Dynamic electrocatalyst with current-driven oxyhydroxide shell for rechargeable zinc-air battery. <i>Nature Communications</i> , 2020, 11, 1952.	5.8	185
62	Flexible Rechargeable Zinc-Air Batteries through Morphological Emulation of Human Hair Array. <i>Advanced Materials</i> , 2016, 28, 6421-6428.	11.1	183
63	Synergistic Engineering of Defects and Architecture in Binary Metal Chalcogenide toward Fast and Reliable Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900228.	10.2	177
64	Synergistic Bifunctional Catalyst Design based on Perovskite Oxide Nanoparticles and Intertwined Carbon Nanotubes for Rechargeable Zinc-Air Battery Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 902-910.	4.0	176
65	Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a High-Efficiency Lithium Polysulfide Conversion Process. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2371-2378.	7.2	176
66	Two-Dimensional Phosphorus-Doped Carbon Nanosheets with Tunable Porosity for Oxygen Reactions in Zinc-Air Batteries. <i>ACS Catalysis</i> , 2018, 8, 2464-2472.	5.5	175
67	Oxygen Reduction on Graphene-Carbon Nanotube Composites Doped Sequentially with Nitrogen and Sulfur. <i>ACS Catalysis</i> , 2014, 4, 2734-2740.	5.5	174
68	Lithium-Sulfur Batteries for Commercial Applications. <i>Chem</i> , 2018, 4, 3-7.	5.8	174
69	Polysulfide Regulation by the Zwitterionic Barrier toward Durable Lithium-Sulfur Batteries. <i>Journal of the American Chemical Society</i> , 2020, 142, 3583-3592.	6.6	174
70	Enhancing Oxygen Reduction Activity of Pt-based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18334-18348.	7.2	174
71	Manganese dioxide nanotube and nitrogen-doped carbon nanotube based composite bifunctional catalyst for rechargeable zinc-air battery. <i>Electrochimica Acta</i> , 2012, 69, 295-300.	2.6	173
72	Defect Engineering of Chalcogen-Tailored Oxygen Electrocatalysts for Rechargeable Quasi-Solid-State Zinc-Air Batteries. <i>Advanced Materials</i> , 2017, 29, 1702526.	11.1	171

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73	Electrospun porous nanorod perovskite oxide/nitrogen-doped graphene composite as a bi-functional catalyst for metal air batteries. <i>Nano Energy</i> , 2014, 10, 192-200.	8.2	168
74	Co <sup>2+</sup> /N Decorated Hierarchically Porous Graphene Aerogel for Efficient Oxygen Reduction Reaction in Acid. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 6488-6495.	4.0	166
75	Nitrogen-Doped Carbon Nanotubes as Platinum Catalyst Supports for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21982-21988.	1.5	165
76	Sulfur Atoms Bridging Few-Layered MoS <sub>2</sub> with S-Doped Graphene Enable Highly Robust Anode for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2015, 5, 1501106.	10.2	165
77	3D Porous Carbon Sheets with Multidirectional Ion Pathways for Fast and Durable Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702381.	10.2	165
78	Sulfur covalently bonded graphene with large capacity and high rate for high-performance sodium-ion batteries anodes. <i>Nano Energy</i> , 2015, 15, 746-754.	8.2	164
79	Pt <sup>2+</sup> /Ru Supported on Double-Walled Carbon Nanotubes as High-Performance Anode Catalysts for Direct Methanol Fuel Cells. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15353-15358.	1.2	163
80	3-Dimensional porous N-doped graphene foam as a non-precious catalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3343-3350.	5.2	163
81	Evidence of covalent synergy in silicon-sulfur-graphene yielding highly efficient and long-life lithium-ion batteries. <i>Nature Communications</i> , 2015, 6, 8597.	5.8	163
82	Constructing multifunctional solid electrolyte interface via in-situ polymerization for dendrite-free and low N/P ratio lithium metal batteries. <i>Nature Communications</i> , 2021, 12, 186.	5.8	163
83	Three-dimensionally ordered macro-microporous metal organic frameworks with strong sulfur immobilization and catalyzation for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2020, 72, 104685.	8.2	160
84	Template-guided synthesis of Co nanoparticles embedded in hollow nitrogen doped carbon tubes as a highly efficient catalyst for rechargeable Zn-air batteries. <i>Nano Energy</i> , 2020, 71, 104592.	8.2	157
85	Laminated Cross-Linked Nanocellulose/Graphene Oxide Electrolyte for Flexible Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2016, 6, 1600476.	10.2	155
86	Strings of Porous Carbon Polyhedrons as Self-Standing Cathode Host for High-Energy-Density Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6176-6180.	7.2	153
87	Cationic and anionic redox in lithium-ion based batteries. <i>Chemical Society Reviews</i> , 2020, 49, 1688-1705.	18.7	152
88	Rational design of tailored porous carbon-based materials for CO <sub>2</sub> capture. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20985-21003.	5.2	150
89	Implementing an in-situ carbon network in Si/reduced graphene oxide for high performance lithium-ion battery anodes. <i>Nano Energy</i> , 2016, 19, 187-197.	8.2	148
90	Tailoring FeN <sub>4</sub> Sites with Edge Enrichment for Boosted Oxygen Reduction Performance in Proton Exchange Membrane Fuel Cell. <i>Advanced Energy Materials</i> , 2019, 9, 1803737.	10.2	148

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91	An all-aqueous redox flow battery with unprecedented energy density. <i>Energy and Environmental Science</i> , 2018, 11, 2010-2015.	15.6	147
92	Biomass-derived nitrogen-doped hierarchical porous carbon as efficient sulfur host for lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2020, 44, 61-67.	7.1	147
93	3D Ordered Mesoporous Bifunctional Oxygen Catalyst for Electrically Rechargeable Zinc-Air Batteries. <i>Small</i> , 2016, 12, 2707-2714.	5.2	144
94	Hierarchical Defective Fe <sub>3</sub> C@C Hollow Microsphere Enables Fast and Long-Lasting Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2001165.	7.8	144
95	Engineering Oversaturated Fe <sub>5</sub> Multifunctional Catalytic Sites for Durable Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26622-26629.	7.2	144
96	Recent Progress on Flexible Zn-Air Batteries. <i>Energy Storage Materials</i> , 2021, 35, 538-549.	9.5	143
97	Defect Engineering for Expediting Li-S Chemistry: Strategies, Mechanisms, and Perspectives. <i>Advanced Energy Materials</i> , 2021, 11, 2100332.	10.2	143
98	Highly Active Porous Carbon-Supported Nonprecious Metal-N Electro catalyst for Oxygen Reduction Reaction in PEM Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8048-8053.	1.5	141
99	Two Ships in a Bottle-Design for Zn-Ag-O Catalyst Enabling Selective and Long-Lasting CO <sub>2</sub> Electroreduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 6855-6864.	6.6	139
100	Polyaniline nanofibre supported platinum nanoelectrocatalysts for direct methanol fuel cells. <i>Nanotechnology</i> , 2006, 17, 5254-5259.	1.3	137
101	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous Li-O <sub>2</sub> Batteries: Recent Progress and Perspective. <i>Advanced Energy Materials</i> , 2018, 8, 1800348.	10.2	137
102	Paper-based all-solid-state flexible micro-supercapacitors with ultra-high rate and rapid frequency response capabilities. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3754-3764.	5.2	136
103	Quasi-Covalently Coupled Ni-Cu Atomic Pair for Synergistic Electroreduction of CO <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2022, 144, 9661-9671.	6.6	134
104	Ionothermal Synthesis of Oriented Zeolite AEL Films and Their Application as Corrosion-Resistant Coatings. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 525-528.	7.2	133
105	Determination of Iron Active Sites in Pyrolyzed Iron-Based Catalysts for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2012, 2, 2761-2768.	5.5	133
106	Multidimensional Ordered Bifunctional Air Electrode Enables Flash Reactants Shuttling for High-Energy Flexible Zn-Air Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900911.	10.2	133
107	An Oxygen-Vacancy-Rich Semiconductor-Supported Bifunctional Catalyst for Efficient and Stable Zinc-Air Batteries. <i>Advanced Materials</i> , 2019, 31, e1806761.	11.1	133
108	Enhanced Reversible Sodium-Ion Intercalation by Synergistic Coupling of Few-Layered MoS <sub>2</sub> and S-Doped Graphene. <i>Advanced Functional Materials</i> , 2017, 27, 1702562.	7.8	132

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109	Nitrogen doped carbon nanotubes synthesized from aliphatic diamines for oxygen reduction reaction. <i>Electrochimica Acta</i> , 2011, 56, 1570-1575.	2.6	131
110	Metal-organic frameworks derived platinum-cobalt bimetallic nanoparticles in nitrogen-doped hollow porous carbon capsules as a highly active and durable catalyst for oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 496-503.	10.8	131
111	Nitrogen-doped hollow porous carbon polyhedrons embedded with highly dispersed Pt nanoparticles as a highly efficient and stable hydrogen evolution electrocatalyst. <i>Nano Energy</i> , 2017, 40, 88-94.	8.2	128
112	Is the rapid initial performance loss of Fe/N/C non precious metal catalysts due to micropore flooding?. <i>Energy and Environmental Science</i> , 2017, 10, 296-305.	15.6	127
113	Multigrain Platinum Nanowires Consisting of Oriented Nanoparticles Anchored on Sulfur-Doped Graphene as a Highly Active and Durable Oxygen Reduction Electrocatalyst. <i>Advanced Materials</i> , 2015, 27, 1229-1234.	11.1	126
114	Engineering the Conductive Network of Metal Oxide-Based Sulfur Cathode toward Efficient and Longevous Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2002076.	10.2	126
115	Nitrogen-doped carbon nanotubes as air cathode catalysts in zinc-air battery. <i>Electrochimica Acta</i> , 2011, 56, 5080-5084.	2.6	123
116	Ship in a Bottle-Design of Highly Efficient Bifunctional Electrocatalysts for Long-Lasting Rechargeable Zn-Air Batteries. <i>ACS Nano</i> , 2019, 13, 7062-7072.	7.3	120
117	Vertically rooting multifunctional tentacles on carbon scaffold as efficient polysulfide barrier toward superior lithium-sulfur batteries. <i>Nano Energy</i> , 2019, 64, 103905.	8.2	119
118	Magnetic-Field-Stimulated Efficient Photocatalytic N <sub>2</sub> Fixation over Defective BaTiO <sub>3</sub> Perovskites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11910-11918.	7.2	119
119	Nanotechnology for environmentally sustainable electromobility. <i>Nature Nanotechnology</i> , 2016, 11, 1039-1051.	15.6	117
120	Self-Templated Hierarchically Porous Carbon Nanorods Embedded with Atomic Fe <sub>4</sub> Active Sites as Efficient Oxygen Reduction Electrocatalysts in Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2008085.	7.8	117
121	Engineered Si Electrode Nanoarchitecture: A Scalable Postfabrication Treatment for the Production of Next-Generation Li-Ion Batteries. <i>Nano Letters</i> , 2014, 14, 277-283.	4.5	116
122	CNT-threaded N-doped porous carbon film as binder-free electrode for high-capacity supercapacitor and Li-S battery. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9775-9784.	5.2	115
123	Dual phase Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> -TiO <sub>2</sub> nanowire arrays as integrated anodes for high-rate lithium-ion batteries. <i>Nano Energy</i> , 2014, 9, 383-391.	8.2	114
124	The Dual-Play of 3D Conductive Scaffold Embedded with Co, N Codoped Hollow Polyhedra toward High-Performance Li-S Full Cell. <i>Advanced Energy Materials</i> , 2018, 8, 1802561.	10.2	114
125	A MOF-Derivative Decorated Hierarchical Porous Host Enabling Ultrahigh Rates and Superior Long-Term Cycling of Dendrite-Free Zn Metal Anodes. <i>Advanced Materials</i> , 2022, 34, e2110047.	11.1	114
126	Relating Catalysis between Fuel Cell and Metal-Air Batteries. <i>Matter</i> , 2020, 2, 32-49.	5.0	112



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127	Free-Standing Functionalized Graphene Oxide Solid Electrolytes in Electrochemical Gas Sensors. <i>Advanced Functional Materials</i> , 2016, 26, 1729-1736.	7.8	110
128	3d-Orbital Occupancy Regulated Ir-Co Atomic Pair Toward Superior Bifunctional Oxygen Electrocatalysis. <i>ACS Catalysis</i> , 2021, 11, 8837-8846.	5.5	110
129	d-Orbital steered active sites through ligand editing on heterometal imidazole frameworks for rechargeable zinc-air battery. <i>Nature Communications</i> , 2020, 11, 5858.	5.8	109
130	Graphene Quantum Dots-Based Advanced Electrode Materials: Design, Synthesis and Their Applications in Electrochemical Energy Storage and Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 2001275.	10.2	109
131	Aqueous intercalation-type electrode materials for grid-level energy storage: Beyond the limits of lithium and sodium. <i>Nano Energy</i> , 2018, 50, 229-244.	8.2	108
132	Design of Highly Active Perovskite Oxides for Oxygen Evolution Reaction by Combining Experimental and ab Initio Studies. <i>ACS Catalysis</i> , 2015, 5, 4337-4344.	5.5	107
133	Synthesis and Characterization of $\text{Fe}_2\text{O}_3$ for $\text{H}_2\text{S}$ Removal at Low Temperature. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 8469-8478.	1.8	105
134	3D N-doped hybrid architectures assembled from OD T-Nb <sub>2</sub> O <sub>5</sub> embedded in carbon microtubes toward high-rate Li-ion capacitors. <i>Nano Energy</i> , 2019, 56, 118-126.	8.2	105
135	Hierarchically Porous Multimetal-Based Carbon Nanorod Hybrid as an Efficient Oxygen Catalyst for Rechargeable Zinc-Air Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1908167.	7.8	105
136	Modulating Metal-Organic Frameworks as Advanced Oxygen Electrocatalysts. <i>Advanced Energy Materials</i> , 2021, 11, 2003291.	10.2	105
137	Tantalum-Based Electrocatalyst for Polysulfide Catalysis and Retention for High-Performance Lithium-Sulfur Batteries. <i>Matter</i> , 2020, 3, 920-934.	5.0	104
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139	Amorphizing metal-organic framework towards multifunctional polysulfide barrier for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2021, 86, 106094.	8.2	103
140	Carbon-Coated Silicon Nanowires on Carbon Fabric as Self-Supported Electrodes for Flexible Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 9551-9558.	4.0	101
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146	Constructing metal-free and cost-effective multifunctional separator for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2019, 59, 390-398.	8.2	96
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158	Regulated coordination environment of Ni single atom catalyst toward high-efficiency oxygen electrocatalysis for rechargeable Zinc-air batteries. <i>Energy Storage Materials</i> , 2021, 35, 723-730.	9.5	89
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223	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2019, 131, 9742-9747.	1.6	59
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