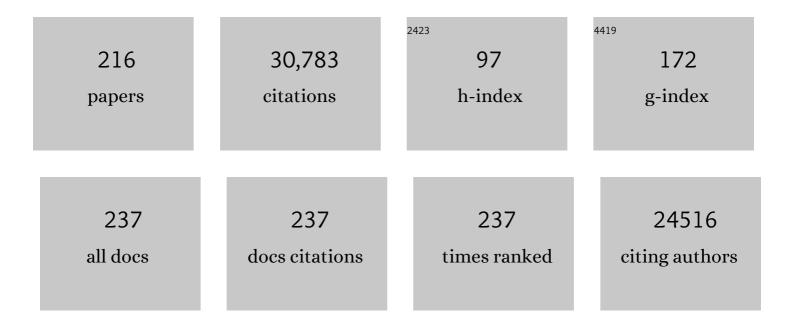
Xin-Bo Zhang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5174942/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Oxygen electrocatalysts in metal–air batteries: from aqueous to nonaqueous electrolytes. Chemical Society Reviews, 2014, 43, 7746-7786.	18.7	1,264
2	Electrochemical Reduction of N ₂ under Ambient Conditions for Artificial N ₂ Fixation and Renewable Energy Storage Using N ₂ /NH ₃ Cycle. Advanced Materials, 2017, 29, 1604799.	11.1	969
3	ZIFâ€8 Derived Grapheneâ€Based Nitrogenâ€Đoped Porous Carbon Sheets as Highly Efficient and Durable Oxygen Reduction Electrocatalysts. Angewandte Chemie - International Edition, 2014, 53, 14235-14239.	7.2	849
4	In Situ Coupling of Strung Co ₄ N and Intertwined N–C Fibers toward Free-Standing Bifunctional Cathode for Robust, Efficient, and Flexible Zn–Air Batteries. Journal of the American Chemical Society, 2016, 138, 10226-10231.	6.6	839
5	Advances and challenges for flexible energy storage and conversion devices and systems. Energy and Environmental Science, 2014, 7, 2101.	15.6	767
6	Metal–organic framework (MOF) as a template for syntheses of nanoporous carbons as electrode materials for supercapacitor. Carbon, 2010, 48, 456-463.	5.4	621
7	Nitrogenâ€Doped Porous Carbon Nanosheets as Lowâ€Cost, Highâ€Performance Anode Material for Sodiumâ€ion Batteries. ChemSusChem, 2013, 6, 56-60.	3.6	593
8	Integrated Three-Dimensional Carbon Paper/Carbon Tubes/Cobalt-Sulfide Sheets as an Efficient Electrode for Overall Water Splitting. ACS Nano, 2016, 10, 2342-2348.	7.3	575
9	Tailoring deposition and morphology of discharge products towards high-rate and long-life lithium-oxygen batteries. Nature Communications, 2013, 4, 2438.	5.8	519
10	Synthesis of Perovskiteâ€Based Porous La _{0.75} Sr _{0.25} MnO ₃ Nanotubes as a Highly Efficient Electrocatalyst for Rechargeable Lithium–Oxygen Batteries. Angewandte Chemie - International Edition, 2013, 52, 3887-3890.	7.2	482
11	One-Step Seeding Growth of Magnetically Recyclable Au@Co Coreâ^'Shell Nanoparticles: Highly Efficient Catalyst for Hydrolytic Dehydrogenation of Ammonia Borane. Journal of the American Chemical Society, 2010, 132, 5326-5327.	6.6	453
12	Artificial Protection Film on Lithium Metal Anode toward Longâ€Cycleâ€Life Lithium–Oxygen Batteries. Advanced Materials, 2015, 27, 5241-5247.	11.1	439
13	Ironâ€Nanoparticleâ€Catalyzed Hydrolytic Dehydrogenation of Ammonia Borane for Chemical Hydrogen Storage. Angewandte Chemie - International Edition, 2008, 47, 2287-2289.	7.2	433
14	Engraving Copper Foil to Give Largeâ€Scale Binderâ€Free Porous CuO Arrays for a Highâ€Performance Sodiumâ€ion Battery Anode. Advanced Materials, 2014, 26, 2273-2279.	11.1	427
15	Liquidâ€Phase Chemical Hydrogen Storage: Catalytic Hydrogen Generation under Ambient Conditions. ChemSusChem, 2010, 3, 541-549.	3.6	396
16	<i>In Situ</i> Fabrication of Porous Graphene Electrodes for High-Performance Energy Storage. ACS Nano, 2013, 7, 2422-2430.	7.3	394
17	Graphene Oxide Gelâ€Đerived, Freeâ€Standing, Hierarchically Porous Carbon for Highâ€Capacity and Highâ€Rate Rechargeable Liâ€O ₂ Batteries. Advanced Functional Materials, 2012, 22, 3699-3705.	7.8	390
18	C and N Hybrid Coordination Derived Co–C–N Complex as a Highly Efficient Electrocatalyst for Hydrogen Evolution Reaction, Journal of the American Chemical Society, 2015, 137, 15070-15073	6.6	377

#	Article	IF	CITATIONS
19	Materials Design and System Construction for Conventional and Newâ€Concept Supercapacitors. Advanced Science, 2017, 4, 1600382.	5.6	365
20	Electrospun materials for lithium and sodium rechargeable batteries: from structure evolution to electrochemical performance. Energy and Environmental Science, 2015, 8, 1660-1681.	15.6	362
21	Reactive Multifunctional Templateâ€Induced Preparation of Feâ€Nâ€Doped Mesoporous Carbon Microspheres Towards Highly Efficient Electrocatalysts for Oxygen Reduction. Advanced Materials, 2016, 28, 7948-7955.	11.1	342
22	3D ordered macroporous LaFeO3 as efficient electrocatalyst for Li–O2 batteries with enhanced rate capability and cyclic performance. Energy and Environmental Science, 2014, 7, 2213.	15.6	339
23	Boron- and nitrogen-based chemical hydrogen storage materials. International Journal of Hydrogen Energy, 2009, 34, 2303-2311.	3.8	337
24	Homogeneous CoO on Graphene for Binderâ€Free and Ultralongâ€Life Lithium Ion Batteries. Advanced Functional Materials, 2013, 23, 4345-4353.	7.8	333
25	A Biodegradable Polydopamineâ€Derived Electrode Material for Highâ€Capacity and Longâ€Life Lithiumâ€ŀon and Sodiumâ€ŀon Batteries. Angewandte Chemie - International Edition, 2016, 55, 10662-10666.	7.2	325
26	Tailored Aromatic Carbonyl Derivative Polyimides for Highâ€Power and Long ycle Sodiumâ€Organic Batteries. Advanced Energy Materials, 2014, 4, 1301651.	10.2	319
27	An Efficient Threeâ€Dimensional Oxygen Evolution Electrode. Angewandte Chemie - International Edition, 2013, 52, 5248-5253.	7.2	307
28	Synergistic Effect between Metal–Nitrogen–Carbon Sheets and NiO Nanoparticles for Enhanced Electrochemical Waterâ€Oxidation Performance. Angewandte Chemie - International Edition, 2015, 54, 10530-10534.	7.2	301
29	Functional and stability orientation synthesis of materials and structures in aprotic Li–O ₂ batteries. Chemical Society Reviews, 2018, 47, 2921-3004.	18.7	282
30	Novel DMSO-based electrolyte for high performance rechargeable Li–O2 batteries. Chemical Communications, 2012, 48, 6948.	2.2	281
31	Flexible lithium–oxygen battery based on a recoverable cathode. Nature Communications, 2015, 6, 7892.	5.8	279
32	Room-Temperature Hydrogen Generation from Hydrous Hydrazine for Chemical Hydrogen Storage. Journal of the American Chemical Society, 2009, 131, 9894-9895.	6.6	278
33	Prevention of dendrite growth and volume expansion to give high-performance aprotic bimetallic Li-Na alloy–O2 batteries. Nature Chemistry, 2019, 11, 64-70.	6.6	265
34	Challenges and perspectives for manganeseâ€based oxides for advanced aqueous zincâ€ion batteries. InformaAnA-MateriAily, 2020, 2, 237-260.	8.5	264
35	Self-assembly of ultrathin porous NiO nanosheets/graphene hierarchical structure for high-capacity and high-rate lithium storage. Journal of Materials Chemistry, 2012, 22, 2844.	6.7	248
36	Transformation of Rusty Stainlessâ€Steel Meshes into Stable, Lowâ€Cost, and Binderâ€Free Cathodes for Highâ€Performance Potassiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2017, 56, 7881-7885.	7.2	241

#	Article	IF	CITATIONS
37	Facile, mild and fast thermal-decomposition reduction of graphene oxide in air and its application in high-performance lithium batteries. Chemical Communications, 2012, 48, 976-978.	2.2	240
38	Recent Progress in Electrocatalyst for Liâ€O ₂ Batteries. Advanced Energy Materials, 2017, 7, 1700875.	10.2	235
39	Cathode Surfaceâ€Induced, Solvationâ€Mediated, Micrometerâ€Sized Li ₂ O ₂ Cycling for Li–O ₂ Batteries. Advanced Materials, 2016, 28, 9620-9628.	11.1	232
40	Surfactantâ€Free Aqueous Synthesis of Pure Singleâ€Crystalline SnSe Nanosheet Clusters as Anode for High Energy―and Powerâ€Đensity Sodiumâ€ŀon Batteries. Advanced Materials, 2017, 29, 1602469.	11.1	231
41	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie - International Edition, 2019, 58, 9464-9469.	7.2	226
42	Converting cobalt oxide subunits in cobalt metal-organic framework into agglomerated Co3O4 nanoparticles as an electrode material for lithium ion battery. Journal of Power Sources, 2010, 195, 857-861.	4.0	223
43	Electrostatic Induced Stretch Growth of Homogeneous β-Ni(OH)2 on Graphene with Enhanced High-Rate Cycling for Supercapacitors. Scientific Reports, 2014, 4, 3669.	1.6	222
44	Rhodium–nickel nanoparticles grown on graphene as highly efficient catalyst for complete decomposition of hydrous hydrazine at room temperature for chemical hydrogen storage. Energy and Environmental Science, 2012, 5, 6885.	15.6	214
45	Three-dimensionally ordered macroporous FeF3 and its in situ homogenous polymerization coating for high energy and power density lithium ion batteries. Energy and Environmental Science, 2012, 5, 8538.	15.6	213
46	Room temperature hydrolytic dehydrogenation of ammonia borane catalyzed by Co nanoparticles. Journal of Power Sources, 2010, 195, 1091-1094.	4.0	202
47	High-Energy-Density Flexible Potassium-Ion Battery Based on Patterned Electrodes. Joule, 2018, 2, 736-746.	11.7	199
48	Bimetallic Au–Ni Nanoparticles Embedded in SiO ₂ Nanospheres: Synergetic Catalysis in Hydrolytic Dehydrogenation of Ammonia Borane. Chemistry - A European Journal, 2010, 16, 3132-3137.	1.7	196
49	General and Controllable Synthesis Strategy of Metal Oxide/TiO2 Hierarchical Heterostructures with Improved Lithium-Ion Battery Performance. Scientific Reports, 2012, 2, 701.	1.6	195
50	Advanced catalysts for sustainable hydrogen generation and storage via hydrogen evolution and carbon dioxide/nitrogen reduction reactions. Progress in Materials Science, 2018, 92, 64-111.	16.0	195
51	Synthesis of Longtime Water/Air-Stable Ni Nanoparticles and Their High Catalytic Activity for Hydrolysis of Ammoniaâ^Borane for Hydrogen Generation. Inorganic Chemistry, 2009, 48, 7389-7393.	1.9	185
52	Reconstructed Orthorhombic V2O5 Polyhedra for Fast Ion Diffusion in K-Ion Batteries. CheM, 2019, 5, 168-179.	5.8	174
53	In Situ Activating Ubiquitous Rust towards Low ost, Efficient, Free‧tanding, and Recoverable Oxygen Evolution Electrodes. Angewandte Chemie - International Edition, 2016, 55, 9937-9941.	7.2	173
54	Preparation and catalysis of poly(N-vinyl-2-pyrrolidone) (PVP) stabilized nickel catalyst for hydrolytic dehydrogenation of ammonia borane. International Journal of Hydrogen Energy, 2009, 34, 3816-3822.	3.8	170

#	Article	IF	CITATIONS
55	Magnetically Recyclable Fe@Pt Coreâ^'Shell Nanoparticles and Their Use as Electrocatalysts for Ammonia Borane Oxidation: The Role of Crystallinity of the Core. Journal of the American Chemical Society, 2009, 131, 2778-2779.	6.6	170
56	Alkali Metal Anodes for Rechargeable Batteries. CheM, 2019, 5, 313-338.	5.8	170
57	Facile synthesis of a Co ₃ O ₄ –carbon nanotube composite and its superior performance as an anode material for Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 1141-1147.	5.2	169
58	In situ anchoring of Co9S8 nanoparticles on N and S co-doped porous carbon tube as bifunctional oxygen electrocatalysts. NPG Asia Materials, 2016, 8, e308-e308.	3.8	164
59	Recent Advances toward the Rational Design of Efficient Bifunctional Air Electrodes for Rechargeable Zn–Air Batteries. Small, 2018, 14, e1703843.	5.2	163
60	Macroporous Interconnected Hollow Carbon Nanofibers Inspired by Goldenâ€Toad Eggs toward a Binderâ€Free, Highâ€Rate, and Flexible Electrode. Advanced Materials, 2016, 28, 7494-7500.	11.1	162
61	In Situ Construction of Stable Tissueâ€Directed/Reinforced Bifunctional Separator/Protection Film on Lithium Anode for Lithium–Oxygen Batteries. Advanced Materials, 2017, 29, 1606552.	11.1	162
62	Facile and effective synthesis of reduced graphene oxide encapsulated sulfur via oil/water system for high performance lithium sulfur cells. Journal of Materials Chemistry, 2012, 22, 11452.	6.7	161
63	Flexible Metal–Air Batteries: Progress, Challenges, and Perspectives. Small Methods, 2018, 2, 1700231.	4.6	157
64	Magnetically recyclable Fe–Ni alloy catalyzed dehydrogenation of ammonia borane in aqueous solution under ambient atmosphere. Journal of Power Sources, 2009, 194, 478-481.	4.0	156
65	Flexible Electrodes for Sodiumâ€lon Batteries: Recent Progress and Perspectives. Advanced Materials, 2017, 29, 1703012.	11.1	156
66	Multi-ring aromatic carbonyl compounds enabling high capacity and stable performance of sodium-organic batteries. Energy and Environmental Science, 2015, 8, 3160-3165.	15.6	155
67	Electrospun V ₂ O ₅ Nanostructures with Controllable Morphology as Highâ€Performance Cathode Materials for Lithiumâ€ion Batteries. Chemistry - A European Journal, 2012, 18, 8987-8993.	1.7	153
68	In situ synthesis of magnetically recyclable graphene-supported Pd@Co core–shell nanoparticles as efficient catalysts for hydrolytic dehydrogenation of ammonia borane. Journal of Materials Chemistry, 2012, 22, 12468.	6.7	147
69	Reversible Nitrogen Fixation Based on a Rechargeable Lithium-Nitrogen Battery for Energy Storage. CheM, 2017, 2, 525-532.	5.8	146
70	Gelatin-derived sustainable carbon-based functional materials for energy conversion and storage with controllability of structure and component. Science Advances, 2015, 1, e1400035.	4.7	144
71	Hollow Ni–SiO2 nanosphere-catalyzed hydrolytic dehydrogenation of ammonia borane for chemical hydrogen storage. Journal of Power Sources, 2009, 191, 209-216.	4.0	138
72	A Flexible and Wearable Lithium–Oxygen Battery with Record Energy Density achieved by the Interlaced Architecture inspired by Bamboo Slips. Advanced Materials, 2016, 28, 8413-8418.	11.1	138

#	Article	IF	CITATIONS
73	Non-noble metals applied to solar water splitting. Energy and Environmental Science, 2018, 11, 3128-3156.	15.6	134
74	A Biodegradable Polydopamineâ€Derived Electrode Material for Highâ€Capacity and Longâ€Life Lithiumâ€Ion and Sodiumâ€Ion Batteries. Angewandte Chemie, 2016, 128, 10820-10824.	1.6	131
75	Decorating Waste Cloth via Industrial Wastewater for Tubeâ€Type Flexible and Wearable Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1603719.	11.1	131
76	One-step and rapid synthesis of "clean―and monodisperse dendritic Pt nanoparticles and their high performance toward methanol oxidation and p-nitrophenol reduction. Nanoscale, 2012, 4, 1549.	2.8	130
77	Engineering Ultrathin C ₃ N ₄ Quantum Dots on Graphene as a Metal-Free Water Reduction Electrocatalyst. ACS Catalysis, 2018, 8, 3965-3970.	5.5	130
78	Efficient PdNi and PdNi@Pd-catalyzed hydrogen generation via formic acid decomposition at room temperature. Chemical Communications, 2013, 49, 10028.	2.2	129
79	Recent Progress on Stability Enhancement for Cathode in Rechargeable Nonâ€Aqueous Lithiumâ€Oxygen Battery. Advanced Energy Materials, 2015, 5, 1500633.	10.2	128
80	Progress of rechargeable lithium metal batteries based on conversion reactions. National Science Review, 2017, 4, 54-70.	4.6	128
81	In Situ Coupling FeM (M = Ni, Co) with Nitrogenâ€Đoped Porous Carbon toward Highly Efficient Trifunctional Electrocatalyst for Overall Water Splitting and Rechargeable Zn–Air Battery. Advanced Sustainable Systems, 2017, 1, 1700020.	2.7	122
82	Flexible and Foldable Li–O ₂ Battery Based on Paperâ€Ink Cathode. Advanced Materials, 2015, 27, 8095-8101.	11.1	117
83	One-step hydrothermal synthesis of SnS2/graphene composites as anode material for highly efficient rechargeable lithium ion batteries. RSC Advances, 2012, 2, 5084.	1.7	115
84	In Situ Designing a Gradient Li ⁺ Capture and Quasiâ€Spontaneous Diffusion Anode Protection Layer toward Longâ€Life Liâ^'O ₂ Batteries. Advanced Materials, 2020, 32, e2004157.	11.1	114
85	Recent progress on transition metal oxides as advanced materials for energy conversion and storage. Energy Storage Materials, 2021, 42, 317-369.	9.5	113
86	Flexible 1D Batteries: Recent Progress and Prospects. Advanced Materials, 2020, 32, e1901961.	11.1	111
87	Pure Singleâ€Crystalline Na _{1.1} V ₃ O _{7.9} Nanobelts as Superior Cathode Materials for Rechargeable Sodiumâ€ion Batteries. Advanced Science, 2015, 2, 1400018.	5.6	110
88	High aspect ratio γ-MnOOH nanowires for high performance rechargeable nonaqueous lithium–oxygen batteries. Chemical Communications, 2012, 48, 7598.	2.2	109
89	Recent advances in metal–nitrogen–carbon catalysts for electrochemical water splitting. Materials Chemistry Frontiers, 2017, 1, 2155-2173.	3.2	109
90	Nanoengineered Ultralight and Robust All-Metal Cathode for High-Capacity, Stable Lithium–Oxygen Batteries. ACS Central Science, 2017, 3, 598-604.	5.3	109

#	Article	IF	CITATIONS
91	Bloodâ€Capillaryâ€Inspired, Freeâ€Standing, Flexible, and Lowâ€Cost Superâ€Hydrophobic Nâ€CNTs@SS Catho for Highâ€Capacity, Highâ€Rate, and Stable Liâ€Air Batteries. Advanced Energy Materials, 2018, 8, 1702242.	des 10.2	108
92	Lithium–Air Batteries: Air-Electrochemistry and Anode Stabilization. Accounts of Chemical Research, 2021, 54, 632-641.	7.6	104
93	Dendritic Niâ€Pâ€Coated Melamine Foam for a Lightweight, Lowâ€Cost, and Amphipathic Threeâ€Dimensional Current Collector for Binderâ€Free Electrodes. Advanced Materials, 2014, 26, 7264-7270.	11.1	103
94	Three-dimensional interconnected Ni(Fe)OxHy nanosheets on stainless steel mesh as a robust integrated oxygen evolution electrode. Nano Research, 2018, 11, 1294-1300.	5.8	103
95	Cableâ€Type Waterâ€Survivable Flexible Liâ€O ₂ Battery. Small, 2016, 12, 3101-3105.	5.2	102
96	In situ generated FeF 3 in homogeneous iron matrix toward high-performance cathode material for sodium-ion batteries. Nano Energy, 2014, 10, 295-304.	8.2	101
97	A stable sulfone based electrolyte for high performance rechargeable Li–O2 batteries. Chemical Communications, 2012, 48, 11674.	2.2	99
98	Iron-chelated hydrogel-derived bifunctional oxygen electrocatalyst for high-performance rechargeable Zn–air batteries. Nano Research, 2017, 10, 4436-4447.	5.8	98
99	Co-gelation synthesis of porous graphitic carbons with high surface area and their applications. Carbon, 2011, 49, 161-169.	5.4	97
100	Facile and controllable one-pot synthesis of an ordered nanostructure of Co(OH)2 nanosheets and their modification by oxidation for high-performance lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 3764.	6.7	94
101	The PVDF-HFP gel polymer electrolyte for Li-O 2 battery. Solid State Ionics, 2018, 318, 88-94.	1.3	93
102	Self-assembled large-area Co(OH)2 nanosheets/ionic liquid modified graphene heterostructures toward enhanced energy storage. Journal of Materials Chemistry, 2012, 22, 3404.	6.7	88
103	Direct electrodeposition of cobalt oxide nanosheets on carbon paper as free-standing cathode for Li–O ₂ battery. Journal of Materials Chemistry A, 2014, 2, 6081-6085.	5.2	83
104	Recent Progress on the Development of Metalâ€Air Batteries. Advanced Sustainable Systems, 2017, 1, 1700036.	2.7	83
105	Designing a self-healing protective film on a lithium metal anode for long-cycle-life lithium-oxygen batteries. Energy Storage Materials, 2019, 18, 382-388.	9.5	83
106	Protecting the Lithium Metal Anode for a Safe Flexible Lithiumâ€Air Battery in Ambient Air. Angewandte Chemie - International Edition, 2019, 58, 18240-18245.	7.2	81
107	Facile and Lowâ€Cost Synthesis of Largeâ€Area Pure V ₂ O ₅ Nanosheets for Highâ€Capacity and Highâ€Rate Lithium Storage over a Wide Temperature Range. ChemPlusChem, 2012, 77, 124-128.	1.3	80
108	The developments and challenges of cerium half-cell in zinc–cerium redox flow battery for energy storage. Electrochimica Acta, 2013, 90, 695-704.	2.6	80

#	Article	IF	CITATIONS
109	An Illuminationâ€Assisted Flexible Selfâ€Powered Energy System Based on a Li–O ₂ Battery. Angewandte Chemie - International Edition, 2019, 58, 16411-16415.	7.2	78
110	Co–SiO2 nanosphere-catalyzed hydrolytic dehydrogenation of ammonia borane for chemical hydrogen storage. Journal of Power Sources, 2010, 195, 8209-8214.	4.0	76
111	Crystallographic and electrochemical characteristics of La0.7Mg0.3Ni3.5â^'x(Al0.5Mo0.5)x (x=0–0.8) hydrogen storage alloys. Journal of Power Sources, 2006, 154, 290-297.	4.0	72
112	Highâ€Performance Integrated Selfâ€Package Flexible Li–O ₂ Battery Based on Stable Composite Anode and Flexible Gas Diffusion Layer. Advanced Materials, 2017, 29, 1700378.	11.1	72
113	Nâ€Doped C@Zn ₃ B ₂ O ₆ as a Low Cost and Environmentally Friendly Anode Material for Naâ€Ion Batteries: High Performance and New Reaction Mechanism. Advanced Materials, 2019, 31, e1805432.	11.1	72
114	The Stabilization Effect of CO ₂ in Lithium–Oxygen/CO ₂ Batteries. Angewandte Chemie - International Edition, 2020, 59, 16661-16667.	7.2	71
115	A new fuel cell using aqueous ammonia-borane as the fuel. Journal of Power Sources, 2007, 168, 167-171.	4.0	69
116	Ultrathin, Lightweight, and Wearable Liâ€O ₂ Battery with High Robustness and Gravimetric/Volumetric Energy Density. Small, 2017, 13, 1602952.	5.2	69
117	Ethnopharmacology of Hypericum species in China: A comprehensive review on ethnobotany, phytochemistry and pharmacology. Journal of Ethnopharmacology, 2020, 254, 112686.	2.0	69
118	A renaissance of <i>N</i> , <i>N</i> -dimethylacetamide-based electrolytes to promote the cycling stability of Li–O ₂ batteries. Energy and Environmental Science, 2020, 13, 3075-3081.	15.6	68
119	Green and Facile Fabrication of MWNTs@Sb ₂ S ₃ @PPy Coaxial Nanocables for Highâ€Performance Naâ€Ion Batteries. Particle and Particle Systems Characterization, 2016, 33, 493-499.	1.2	66
120	Hierarchical Co3O4 porous nanowires as an efficient bifunctional cathode catalyst for long life Li-O2 batteries. Nano Research, 2015, 8, 576-583.	5.8	65
121	Organic Carbonyl Compounds for Sodiumâ€lon Batteries: Recent Progress and Future Perspectives. Chemistry - A European Journal, 2018, 24, 18235-18245.	1.7	65
122	Integrating 3D Flower-Like Hierarchical Cu ₂ NiSnS ₄ with Reduced Graphene Oxide as Advanced Anode Materials for Na-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 9178-9184.	4.0	64
123	In Situ CVD Derived Co–N–C Composite as Highly Efficient Cathode for Flexible Li–O ₂ Batteries. Small, 2018, 14, e1800590.	5.2	64
124	High apacity and Stable Liâ€O ₂ Batteries Enabled by a Trifunctional Soluble Redox Mediator. Angewandte Chemie - International Edition, 2020, 59, 19311-19319.	7.2	62
125	Electrode Protection in High-Efficiency Li–O ₂ Batteries. ACS Central Science, 2020, 6, 2136-2148.	5.3	62
126	CO2–expanded ethanol chemical synthesis of a Fe3O4@graphene composite and its good electrochemical properties as anode material for Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 3954.	5.2	58

#	Article	IF	CITATIONS
127	Co-embedded N-doped carbon fibers as highly efficient and binder-free cathode for Na–O 2 batteries. Energy Storage Materials, 2017, 6, 1-8.	9.5	57
128	Low-cost and facile one-pot synthesis of pure single-crystalline ε-Cu0.95V2O5 nanoribbons: high capacity cathode material for rechargeable Li-ion batteries. Chemical Communications, 2011, 47, 5250.	2.2	56
129	Suppressing Sodium Dendrites by Multifunctional Polyvinylidene Fluoride (PVDF) Interlayers with Nonthrough Pores and High Flux/Affinity of Sodium Ions toward Long Cycle Life Sodium Oxygenâ€Batteries. Advanced Functional Materials, 2018, 28, 1703931.	7.8	54
130	Composition-tunable synthesis of "clean―syngas via a one-step synthesis of metal-free pyridinic-N-enriched self-supported CNTs: the synergy of electrocatalyst pyrolysis temperature and potential. Green Chemistry, 2017, 19, 4284-4288.	4.6	53
131	In Situ Activating Ubiquitous Rust towards Low ost, Efficient, Freeâ€Standing, and Recoverable Oxygen Evolution Electrodes. Angewandte Chemie, 2016, 128, 10091-10095.	1.6	50
132	An Adjustableâ€Porosity Plastic Crystal Electrolyte Enables Highâ€Performance Allâ€Solidâ€State Lithiumâ€Oxygen Batteries. Angewandte Chemie - International Edition, 2020, 59, 9382-9387.	7.2	50
133	Hybrid electrolyte with robust garnet-ceramic electrolyte for lithium anode protection in lithium-oxygen batteries. Nano Research, 2018, 11, 3434-3441.	5.8	49
134	Effect of Mn content on the structure and electrochemical characteristics of La0.7Mg0.3Ni2.975â^'xCo0.525Mnx (x=0–0.4) hydrogen storage alloys. Electrochimica Acta, 2005, 50, 2911-2918.	2.6	48
135	Mild and Costâ€Effective Oneâ€Pot Synthesis of Pure Singleâ€Crystalline βâ€Ag _{0.33} V ₂ O ₅ Nanowires for Rechargeable Liâ€ion Batteries. ChemSusChem, 2011, 4, 1091-1094.	3.6	48
136	Recent Progresses and Prospects of Cathode Materials for Non-aqueous Potassium-Ion Batteries. Electrochemical Energy Reviews, 2018, 1, 548-566.	13.1	48
137	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie, 2019, 131, 9564-9569.	1.6	47
138	Transformation of Rusty Stainlessâ€Steel Meshes into Stable, Lowâ€Cost, and Binderâ€Free Cathodes for Highâ€Performance Potassiumâ€Ion Batteries. Angewandte Chemie, 2017, 129, 7989-7993.	1.6	46
139	Li–air batteries: Decouple to stabilize. Nature Energy, 2017, 2, .	19.8	46
140	Silver-Intermediated Perovskite La _{0.9} FeO _{3â^îî} toward High-Performance Cathode Catalysts for Nonaqueous Lithium–Oxygen Batteries. ACS Catalysis, 2019, 9, 11743-11752.	5.5	46
141	Highly efficient and selective CO2 electro-reduction with atomic Fe-C-N hybrid coordination on porous carbon nematosphere. Nano Research, 2019, 12, 2318-2323.	5.8	45
142	Complete Dehydrogenation of N ₂ H ₄ BH ₃ over Nobleâ€Metalâ€Free Ni _{0.5} Fe _{0.5} –CeO <i>_x</i> /MILâ€101 with High Activity and 100% H ₂ Selectivity. Advanced Energy Materials, 2018, 8, 1800625.	10.2	44
143	Decoupled aqueous batteries using pH-decoupling electrolytes. Nature Reviews Chemistry, 2022, 6, 505-517.	13.8	44
144	Hydronium Ion Batteries: A Sustainable Energy Storage Solution. Angewandte Chemie - International Edition, 2017, 56, 6378-6380.	7.2	43

#	Article	IF	CITATIONS
145	P3-type K _{0.33} Co _{0.53} Mn _{0.47} O ₂ ·0.39H ₂ O: a novel bifunctional electrode for Na-ion batteries. Materials Horizons, 2017, 4, 1122-1127.	6.4	41
146	Hybrid solid electrolyte enabled dendrite-free Li anodes for high-performance quasi-solid-state lithium-oxygen batteries. National Science Review, 2021, 8, nwaa150.	4.6	41
147	Imine-Rich Poly(<i>o</i> -phenylenediamine) as High-Capacity Trifunctional Organic Electrode for Alkali-Ion Batteries. CCS Chemistry, 2019, 1, 365-372.	4.6	40
148	A Low-Volatile and Durable Deep Eutectic Electrolyte for High-Performance Lithium–Oxygen Battery. Journal of the American Chemical Society, 2022, 144, 5827-5833.	6.6	39
149	Rapid and shape-controlled synthesis of "clean―star-like and concave Pd nanocrystallites and their high performance toward methanol oxidation. Journal of Materials Chemistry, 2012, 22, 14861.	6.7	38
150	A high performance anion exchange membrane-type ammonia borane fuel cell. Journal of Power Sources, 2008, 182, 515-519.	4.0	37
151	Effect of La/Ce ratio on the structure and electrochemical characteristics of La0.7â~'xCexMg0.3Ni2.8Co0.5 (x=0.1–0.5) hydrogen storage alloys. Electrochimica Acta, 2005, 50, 1957-1964.	2.6	36
152	pH-switched luminescence and sensing properties of a carbon dot–polyaniline composite. RSC Advances, 2013, 3, 5475.	1.7	36
153	Electrochemical oxidation of ammonia borane on gold electrode. International Journal of Hydrogen Energy, 2009, 34, 174-179.	3.8	35
154	Crystal structure and electrochemical properties of rare earth non-stoichiometric AB5-type alloy as negative electrode material in Ni-MH battery. Journal of Solid State Chemistry, 2004, 177, 2373-2377.	1.4	34
155	Superior Oxygen Reduction Electrocatalyst: Hollow Porous Spinel Microsphere. CheM, 2018, 4, 196-198.	5.8	34
156	Crystallographic and Electrochemical Characteristics of La0.7Mg0.3Ni5.0?x(Al0.5Mo0.5)x Hydrogen-Storage Alloys. ChemPhysChem, 2005, 6, 520-525.	1.0	33
157	Synthesis and electrochemical properties of LiFePO4/C composite cathode material prepared by a new route using supercritical carbon dioxide as a solvent. Journal of Materials Chemistry, 2011, 21, 6975.	6.7	33
158	Growth of Ruâ€Modified Co ₃ O ₄ Nanosheets on Carbon Textiles toward Flexible and Efficient Cathodes for Flexible Li–O ₂ Batteries. Particle and Particle Systems Characterization, 2016, 33, 500-505.	1.2	33
159	Decorating carbon nanofibers with Mo 2 C nanoparticles towards hierarchically porous and highly catalytic cathode for high-performance Li-O 2 batteries. Science Bulletin, 2018, 63, 433-440.	4.3	33
160	Synthesis of porous and metallic CoB nanosheets towards a highly efficient electrocatalyst for rechargeable Na–O ₂ batteries. Energy and Environmental Science, 2018, 11, 2833-2838.	15.6	33
161	In Situ Coupling of Colloidal Silica and Li Salt Anion toward Stable Li Anode for Long-Cycle-Life Li-O2 Batteries. Matter, 2019, 1, 881-892.	5.0	33
162	Cation Segregation of A-Site Deficiency Perovskite La _{0.85} FeO _{3â~î(} Nanoparticles toward High-Performance Cathode Catalysts for Rechargeable Li-O ₂ Battery. ACS Applied Materials & Interfaces, 2018, 10, 25465-25472.	4.0	31

#	Article	IF	CITATIONS
163	The development and challenges of rechargeable non-aqueous lithium–air batteries. International Journal of Smart and Nano Materials, 2013, 4, 27-46.	2.0	30
164	Trace Amounts of Water-Induced Distinct Growth Behaviors of NiO Nanostructures on Graphene in CO2-Expanded Ethanol and Their Applications in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 7065-7071.	4.0	29
165	Optimized nitrogen-doped carbon with a hierarchically porous structure as a highly efficient cathode for Na–O ₂ batteries. Journal of Materials Chemistry A, 2016, 4, 10008-10013.	5.2	29
166	High apacity and Stable Liâ€O ₂ Batteries Enabled by a Trifunctional Soluble Redox Mediator. Angewandte Chemie, 2020, 132, 19473-19481.	1.6	28
167	Achieving of High Density/Utilization of Active Groups via Synergic Integration of C=N and C=O Bonds for Ultra-Stable and High-Rate Lithium-Ion Batteries. Research, 2018, 2018, 1936735.	2.8	28
168	Soluble and Perfluorinated Polyelectrolyte for Safe and Highâ€Performance Liâ^'O ₂ Batteries. Angewandte Chemie - International Edition, 2022, 61, e202116635.	7.2	28
169	Photoinduced decoration of NiO nanosheets/Ni foam with Pd nanoparticles towards a carbon-free and self-standing cathode for a lithium–oxygen battery with a low overpotential and long cycle life. Materials Horizons, 2018, 5, 298-302.	6.4	27
170	Unique Structural Trends in the Lanthanoid Oxocarbonyl Complexes. Inorganic Chemistry, 2008, 47, 4826-4831.	1.9	26
171	N,O-codoped porous carbon nanosheets for capacitors with ultra-high capacitance. Science China Materials, 2016, 59, 547-557.	3.5	26
172	Lithium and Stannum Hybrid Anodes for Flexible Wireâ€Type Lithium–Oxygen Batteries. Small Structures, 2020, 1, 2000015.	6.9	26
173	Solvation Effect on the Improved Sodium Storage Performance of Nâ€Heteropentacenequinone for Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 26806-26812.	7.2	26
174	Crystallographic and electrochemical characteristics of La0.7Mg0.3Ni3â^'x(Al0.5Mo0.5)x (x = 0–0.4) hydrogen storage alloys. Electrochimica Acta, 2005, 50, 3407-3413.	2.6	24
175	CeO2@NiCo2O4 nanowire arrays on carbon textiles as high performance cathode for Li-O2 batteries. Science China Chemistry, 2017, 60, 1540-1545.	4.2	24
176	Hydrogenâ€Bondâ€Assisted Solution Discharge in Aprotic Li–O ₂ Batteries. Advanced Materials, 2022, 34, e2110416.	11.1	24
177	Anchoring Ironâ€EDTA Complex on Graphene toward the Synthesis of Highly Efficient Feâ€N Oxygen Reduction Electrocatalyst for Fuel Cells. Chinese Journal of Chemistry, 2018, 36, 287-292.	2.6	22
178	P3-type K _{0.32} Fe _{0.35} Mn _{0.65} O ₂ ·0.39H ₂ O: a promising cathode for Na-ion full batteries. Journal of Materials Chemistry A, 2018, 6, 13075-13081.	5.2	22
179	Integrated Bismuth Oxide Ultrathin Nanosheets/Carbon Foam Electrode for Highly Selective and Energyâ€Efficient Electrocatalytic Conversion of CO ₂ to HCOOH. Chemistry - A European Journal, 2020, 26, 4013-4018.	1.7	21
180	α-MnO2 hollow clews for rechargeable Li-air batteries with improved cyclability. Science Bulletin, 2012, 57, 4210-4214.	1.7	19

#	Article	IF	CITATIONS
181	Structure and electrochemical characteristics of RENi3 alloy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 117, 123-128.	1.7	18
182	Experimental and theoretical investigation of the cycle durability against CO and degradation mechanism of the LaNi5 hydrogen storage alloy. Journal of Alloys and Compounds, 2007, 446-447, 208-211.	2.8	18
183	A binder-free, flexible cathode for rechargeable Na-O2 batteries. Chinese Journal of Catalysis, 2016, 37, 1172-1179.	6.9	18
184	Batteries: Homogeneous CoO on Graphene for Binderâ€Free and Ultralongâ€Life Lithium Ion Batteries (Adv. Funct. Mater. 35/2013). Advanced Functional Materials, 2013, 23, 4274-4274.	7.8	17
185	Copper tetrazolate based metalâ€organic frameworks as highly efficient catalysts for artificially chemical and electrochemical CO ₂ conversion. Nano Select, 2020, 1, 311-319.	1.9	17
186	Interface between Lithium Metal and Garnet Electrolyte: Recent Progress and Perspective. Batteries and Supercaps, 2020, 3, 1006-1015.	2.4	17
187	Structure and electrochemical characteristics of Ti0.25â^'xZrxV0.35Cr0.1Ni0.3(x=0.05–0.15) alloys. Intermetallics, 2005, 13, 1141-1145.	1.8	15
188	Hydroniumionenbatterien: eine nachhaltige Lösung zur Energiespeicherung. Angewandte Chemie, 2017, 129, 6476-6478.	1.6	14
189	Preparation and performance of a sulfur/graphene composite for rechargeable lithium-sulfur battery. Journal of Physics: Conference Series, 2012, 339, 012003.	0.3	13
190	Non-noble-metal bismuth nanoparticle-decorated bismuth vanadate nanoarray photoanode for efficient water splitting. Materials Chemistry Frontiers, 2018, 2, 1799-1804.	3.2	13
191	An Adjustableâ€Porosity Plastic Crystal Electrolyte Enables Highâ€Performance Allâ€Solidâ€State Lithiumâ€Oxygen Batteries. Angewandte Chemie, 2020, 132, 9468-9473.	1.6	13
192	Designing multi-shelled metal oxides: towards high energy-density lithium-ion batteries. Science China Materials, 2016, 59, 521-522.	3.5	12
193	Creation of a rigid host framework with optimum crystal structure and interface for zero-strain K-ion storage. Energy and Environmental Science, 2022, 15, 1529-1535.	15.6	12
194	Three Birds with One Stone: An Integrated Cathode–Electrolyte Structure for Highâ€Performance Solid‣tate Lithium–Oxygen Batteries. Small, 2022, 18, e2107833.	5.2	11
195	Ligand centered electrocatalytic efficient CO2 reduction reaction at low overpotential on single-atom Ni regulated molecular catalyst. Nano Research, 2022, 15, 5816-5823.	5.8	11
196	The role of anisotropic structure and its aspect ratio: high-loading carbon nanospheres supported Pt nanowires with high performance toward methanol electrooxidation. RSC Advances, 2012, 2, 401-403.	1.7	10
197	Hybrid Film from Nickel Oxide and Oxygenated Carbon Nanotube as Flexible Electrodes for Pseudocapacitors. ChemNanoMat, 2016, 2, 698-703.	1.5	10
198	Crystallographic and Electrochemical Characteristics ofLa0.7Mg0.3Ni4.5-x(Al0.5Mo0.5)x (x = 0-0.8) Hydrogen Storage Alloys. European Journal of Inorganic Chemistry, 2005, 2005, 2235-2241.	1.0	9

#	Article	IF	CITATIONS
199	Electrodes: Engraving Copper Foil to Give Largeâ€Scale Binderâ€Free Porous CuO Arrays for a Highâ€Performance Sodiumâ€Ion Battery Anode (Adv. Mater. 14/2014). Advanced Materials, 2014, 26, 2284-2284.	11.1	9
200	Electrochemical properties of Ti0.17Zr0.08V0.35Cr0.10Ni0.30 alloy electrode. Journal of Applied Electrochemistry, 2006, 36, 739-743.	1.5	8
201	Structural Optimization of Metal Oxyhalide for <scp>CO₂</scp> Reduction with High Selectivity and Current Density. Chinese Journal of Chemistry, 2020, 38, 1752-1756.	2.6	8
202	Investigation of Pt nanoparticles with controlled size supported on carbon for dimethyl ether electrooxidation. Journal of Power Sources, 2013, 225, 231-239.	4.0	7
203	Stretchable Electrode Breakthrough: Archimedean Spiral Coil Lithium Anode. Joule, 2018, 2, 1654-1656.	11.7	7
204	Pt/C anodic catalysts with controlled morphology for direct dimethyl ether fuel cell: The role of consecutive surface. Electrochimica Acta, 2011, 56, 5966-5971.	2.6	6
205	The Stabilization Effect of CO 2 in Lithium–Oxygen/CO 2 Batteries. Angewandte Chemie, 2020, 132, 16804.	1.6	6
206	Existence of the Naâ^'Hδ-··Hδâ€~+â~'O Dihydrogen Bond in the Hydrogenation Process by Na2O:  A First-Principles Identification. Journal of Physical Chemistry C, 2007, 111, 5064-5068.	1.5	5
207	CO Adsorption on a LaNi ₅ Hydrogen Storage Alloy Surface: A Theoretical Investigation. ChemPhysChem, 2008, 9, 1564-1569.	1.0	5
208	Soluble and Perfluorinated Polyelectrolyte for Safe and Highâ€Performance Liâ^'O ₂ Batteries. Angewandte Chemie, 2022, 134, .	1.6	4
209	The structure and electrochemical characteristics of La0.67Mg0.33 (Ni0.8Co0.1Mn0.1) x (x=2.5–5.0) multiphase alloys for nickel-metal hydride batteries. Journal of Solid State Electrochemistry, 2006, 10, 236-242.	1.2	3
210	Crystal structure and electrochemical characteristics of La0.9Mg0.1Ni5â^'xSnx (x=0.1, 0.2, 0.3, 0.4) alloy electrodes. Scripta Materialia, 2005, 53, 1123-1128.	2.6	2
211	Dehydrogenation Reaction for NaOH System: A Firstâ€Principles Study. ChemPhysChem, 2007, 8, 1979-1987.	1.0	2
212	Lithium Ion Batteries: Graphene Oxide Gelâ€Derived, Freeâ€Standing, Hierarchically Porous Carbon for Highâ€Capacity and Highâ€Rate Rechargeable Liâ€O ₂ Batteries (Adv. Funct. Mater. 17/2012). Advanced Functional Materials, 2012, 22, 3745-3745.	7.8	2
213	Solvation Effect on the Improved Sodium Storage Performance of Nâ€heteropentacenequinone. Angewandte Chemie, 0, , .	1.6	2
214	Overcharge to Remove Cathode Passivation Layer for Reviving Failed Li–O ₂ Batteries. CCS Chemistry, 2023, 5, 641-653.	4.6	2
215	Crystallographic and electrochemical characteristics of La0.7Mg0.3Ni5.5â^'x (Al0.5Mo0.5) x (x=0 to 0.8) hydrogen storage alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 2025-2030.	1.1	1
216	Structures and electrochemical characteristics of several kinds of alloys. Research on Chemical Intermediates, 2006, 32, 403-417.	1.3	0