

Xiao-Peng Han

List of Publications by Year in descending order

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193
papers

17,944
citations

9786

73
h-index

14208

128
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203
all docs

203
docs citations

203
times ranked

15727
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructured Mn-based oxides for electrochemical energy storage and conversion. <i>Chemical Society Reviews</i> , 2015, 44, 699-728.	38.1	740
2	Enhancing Electrocatalytic Oxygen Reduction on MnO ₂ with Vacancies. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 2474-2477.	13.8	623
3	Atomically Dispersed Binary Co-Ni Sites in Nitrogen-Doped Hollow Carbon Nanocubes for Reversible Oxygen Reduction and Evolution. <i>Advanced Materials</i> , 2019, 31, e1905622.	21.0	537
4	Phase and composition controllable synthesis of cobalt manganese spinel nanoparticles towards efficient oxygen electrocatalysis. <i>Nature Communications</i> , 2015, 6, 7345.	12.8	500
5	Generation of Nanoparticle, Atomic-Cluster, and Single-Atom Cobalt Catalysts from Zeolitic Imidazole Frameworks by Spatial Isolation and Their Use in Zinc-Air Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5359-5364.	13.8	500
6	Decoupling electrolytes towards stable and high-energy rechargeable aqueous zinc-manganese dioxide batteries. <i>Nature Energy</i> , 2020, 5, 440-449.	39.5	430
7	Unique Cobalt Sulfide/Reduced Graphene Oxide Composite as an Anode for Sodium-Ion Batteries with Superior Rate Capability and Long Cycling Stability. <i>Small</i> , 2016, 12, 1359-1368.	10.0	423
8	Identifying the Key Role of Pyridinic-N-Co Bonding in Synergistic Electrocatalysis for Reversible ORR/OER. <i>Advanced Materials</i> , 2018, 30, e1800005.	21.0	394
9	NiCo ₂ S ₄ nanocrystals anchored on nitrogen-doped carbon nanotubes as a highly efficient bifunctional electrocatalyst for rechargeable zinc-air batteries. <i>Nano Energy</i> , 2017, 31, 541-550.	16.0	365
10	Thickness-Dependent Facet Junction Control of Layered BiOIO ₃ Single Crystals for Highly Efficient CO ₂ Photoreduction. <i>Advanced Functional Materials</i> , 2018, 28, 1804284.	14.9	358
11	3D Porous Fe ₂ O ₃ @C Nanocomposite as High-Performance Anode Material of Na-Ion Batteries. <i>Advanced Energy Materials</i> , 2015, 5, 1401123.	19.5	320
12	Identifying the Activation of Bimetallic Sites in NiCo ₂ S ₄ @g-C ₃ N ₄ /CNT Hybrid Electrocatalysts for Synergistic Oxygen Reduction and Evolution. <i>Advanced Materials</i> , 2019, 31, e1808281.	21.0	315
13	Ultrathin Co ₃ O ₄ Layers with Large Contact Area on Carbon Fibers as High-Performance Electrode for Flexible Zinc-Air Battery Integrated with Flexible Display. <i>Advanced Energy Materials</i> , 2017, 7, 1700779.	19.5	309
14	Atomically Thin Mesoporous Co ₃ O ₄ Layers Strongly Coupled with Ni-GrGO Nanosheets as High-Performance Bifunctional Catalysts for 1D Knittable Zinc-Air Batteries. <i>Advanced Materials</i> , 2018, 30, 1703657.	21.0	302
15	Ultrafine Pt Nanoparticle-Decorated Pyrite-Type CoS ₂ Nanosheet Arrays Coated on Carbon Cloth as a Bifunctional Electrode for Overall Water Splitting. <i>Advanced Energy Materials</i> , 2018, 8, 1800935.	19.5	286
16	Phase and composition controlled synthesis of cobalt sulfide hollow nanospheres for electrocatalytic water splitting. <i>Nanoscale</i> , 2018, 10, 4816-4824.	5.6	256
17	Cobalt Sulfide Nanosheet/Graphene/Carbon Nanotube Nanocomposites as Flexible Electrodes for Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12594-12599.	13.8	252
18	Identifying Dense NiSe ₂ /CoSe ₂ Heterointerfaces Coupled with Surface High-Valence Bimetallic Sites for Synergistically Enhanced Oxygen Electrocatalysis. <i>Advanced Materials</i> , 2020, 32, e2000607.	21.0	251

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19	Dual-Sites Coordination Engineering of Single Atom Catalysts for Flexible Metal-Air Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2101242.	19.5	247
20	Hydrogenated Uniform Pt Clusters Supported on Porous CaMnO_3 as a Bifunctional Electrocatalyst for Enhanced Oxygen Reduction and Evolution. <i>Advanced Materials</i> , 2014, 26, 2047-2051.	21.0	244
21	Engineering Catalytic Active Sites on Cobalt Oxide Surface for Enhanced Oxygen Electrocatalysis. <i>Advanced Energy Materials</i> , 2018, 8, 1702222.	19.5	243
22	Electronic and Defective Engineering of Electrospun CaMnO_3 Nanotubes for Enhanced Oxygen Electrocatalysis in Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1800612.	19.5	234
23	Porous nanocomposite gel polymer electrolyte with high ionic conductivity and superior electrolyte retention capability for long-cycle-life flexible zinc-air batteries. <i>Nano Energy</i> , 2019, 56, 454-462.	16.0	212
24	Sequential Electrodeposition of Bifunctionally Active Structures in MoO_3/NiO Composite Electrocatalysts for Selective Hydrogen and Oxygen Evolution. <i>Advanced Materials</i> , 2020, 32, e2003414.	21.0	206
25	Ternary doped porous carbon nanofibers with excellent ORR and OER performance for zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10918-10925.	10.3	199
26	Utilizing solar energy to improve the oxygen evolution reaction kinetics in zinc-air battery. <i>Nature Communications</i> , 2019, 10, 4767.	12.8	199
27	Spontaneous Synthesis of Silver-Nanoparticle-Decorated Transition-Metal Hydroxides for Enhanced Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7245-7250.	13.8	196
28	A Rechargeable Zn-Air Battery with High Energy Efficiency and Long Life Enabled by a Highly Water-Retentive Gel Electrolyte with Reaction Modifier. <i>Advanced Materials</i> , 2020, 32, e1908127.	21.0	172
29	Spherical nano-Sb@C composite as a high-rate and ultra-stable anode material for sodium-ion batteries. <i>Nano Research</i> , 2015, 8, 3384-3393.	10.4	165
30	Porous calcium-manganese oxide microspheres for electrocatalytic oxygen reduction with high activity. <i>Chemical Science</i> , 2013, 4, 368-376.	7.4	164
31	Nitrogen, Fluorine, and Boron Ternary Doped Carbon Fibers as Cathode Electrocatalysts for Zinc-Air Batteries. <i>Small</i> , 2018, 14, e1800737.	10.0	159
32	Lattice-Strain Engineering of Homogeneous $\text{NiS}_{0.5}\text{Se}_{0.5}$ Core-Shell Nanostructure as a Highly Efficient and Robust Electrocatalyst for Overall Water Splitting. <i>Advanced Materials</i> , 2020, 32, e2000231.	21.0	158
33	Electrodeposition of metals and alloys from ionic liquids. <i>Journal of Alloys and Compounds</i> , 2016, 654, 163-170.	5.5	156
34	Metal-Air Batteries: From Static to Flow System. <i>Advanced Energy Materials</i> , 2018, 8, 1801396.	19.5	156
35	Morphology-Controllable Synthesis of Zn-Co-Mixed Sulfide Nanostructures on Carbon Fiber Paper Toward Efficient Rechargeable Zinc-Air Batteries and Water Electrolysis. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12574-12583.	8.0	154
36	Controllable synthesis of nickel sulfide nanocatalysts and their phase-dependent performance for overall water splitting. <i>Nanoscale</i> , 2019, 11, 5646-5654.	5.6	148

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37	Dislocation-Strained IrNi Alloy Nanoparticles Driven by Thermal Shock for the Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2020, 32, e2006034.	21.0	148
38	Battery Technologies for Grid-Level Large-Scale Electrical Energy Storage. <i>Transactions of Tianjin University</i> , 2020, 26, 92-103.	6.4	146
39	Ferroelectric polarization promoted bulk charge separation for highly efficient CO ₂ photoreduction of SrBi ₄ Ti ₄ O ₁₅ . <i>Nano Energy</i> , 2019, 56, 840-850.	16.0	144
40	Porous perovskite CaMnO ₃ as an electrocatalyst for rechargeable Li-O ₂ batteries. <i>Chemical Communications</i> , 2014, 50, 1497-1499.	4.1	140
41	Lattice-Matching Formed Mesoporous Transition Metal Oxide Heterostructures Advance Water Splitting by Active Fe-O-Cu Bridges. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	139
42	Highly Active and Durable Single-Atom Tungsten-Doped Ni _{0.5} Se _{0.5} Nanosheet@NiS _{0.5} Se _{0.5} Nanorod Heterostructures for Water Splitting. <i>Advanced Materials</i> , 2022, 34, e2107053.	21.0	136
43	Pitaya-like Sn@C nanocomposites as high-rate and long-life anode for lithium-ion batteries. <i>Nanoscale</i> , 2014, 6, 2827-2832.	5.6	133
44	Sub-2 nm Thiophosphate Nanosheets with Heteroatom Doping for Enhanced Oxygen Electrocatalysis. <i>Advanced Functional Materials</i> , 2021, 31, 2100618.	14.9	133
45	Spinel LiNi _{0.5} Mn _{1.5} O ₄ cathode for rechargeable lithium ion batteries: Nano vs micro, ordered phase (P4332) vs disordered phase (Fd $\bar{3}m$). <i>Nano Research</i> , 2013, 6, 679-687.	10.4	126
46	Clarifying the Controversial Catalytic Performance of Co(OH) ₂ and Co ₃ O ₄ for Oxygen Reduction/Evolution Reactions toward Efficient Zn-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22694-22703.	8.0	121
47	Electrochemical approach to prepare integrated air electrodes for highly stretchable zinc-air battery array with tunable output voltage and current for wearable electronics. <i>Nano Energy</i> , 2017, 39, 101-110.	16.0	120
48	Engineering Co ₉ S ₈ /WS ₂ array films as bifunctional electrocatalysts for efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23361-23368.	10.3	117
49	Controllable Synthesis of Ni _x Se (0.5 ≤ x ≤ 1) Nanocrystals for Efficient Rechargeable Zinc-Air Batteries and Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13675-13684.	8.0	116
50	μ-MnO ₂ nanostructures directly grown on Ni foam: a cathode catalyst for rechargeable Li-O ₂ batteries. <i>Nanoscale</i> , 2014, 6, 3522.	5.6	112
51	Recycling Application of LiMnO ₂ Batteries as Rechargeable Lithium-Air Batteries. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4338-4343.	13.8	109
52	Generation of Nanoparticle, Atomic Cluster, and Single-Atom Cobalt Catalysts from Zeolitic Imidazole Frameworks by Spatial Isolation and Their Use in Zinc-Air Batteries. <i>Angewandte Chemie</i> , 2019, 131, 5413-5418.	2.0	106
53	NiO-induced synthesis of PdNi bimetallic hollow nanocrystals with enhanced electrocatalytic activities toward ethanol and formic acid oxidation. <i>Nano Energy</i> , 2017, 42, 353-362.	16.0	104
54	Encapsulating Cobalt Nanoparticles in Interconnected N-Doped Hollow Carbon Nanofibers with Enriched Co _{1/2} Ni _{1/2} C Moiety for Enhanced Oxygen Electrocatalysis in Zn-Air Batteries. <i>Advanced Science</i> , 2021, 8, e2101438.	11.2	104

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55	In Situ Fabrication of Heterostructure on Nickel Foam with Tuned Composition for Enhancing Waterâ€‘Splitting Performance. <i>Small</i> , 2018, 14, e1803666.	10.0	100
56	Oxygen Bubble-Templated Hierarchical Porous μ -MnO ₂ as a Superior Catalyst for Rechargeable Li-O ₂ Batteries. <i>Small</i> , 2015, 11, 809-813.	10.0	90
57	Ultrathin Co ₃ O ₄ nanofilm as an efficient bifunctional catalyst for oxygen evolution and reduction reaction in rechargeable zincâ€‘air batteries. <i>Nanoscale</i> , 2017, 9, 8623-8630.	5.6	90
58	Porous perovskite calciumâ€‘manganese oxide microspheres as an efficient catalyst for rechargeable sodiumâ€‘oxygen batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3320-3324.	10.3	86
59	Engineering the Surface Metal Active Sites of Nickel Cobalt Oxide Nanoplates toward Enhanced Oxygen Electrocatalysis for Znâ€‘Air Battery. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4915-4921.	8.0	84
60	Pt-Decorated highly porous flower-like Ni particles with high mass activity for ammonia electro-oxidation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11060-11068.	10.3	83
61	Boosting Energy Efficiency and Stability of Liâ€‘CO ₂ Batteries via Synergy between Ru Atom Clusters and Singleâ€‘Atom Ruâ€‘N ₄ sites in the Electrocatalyst Cathode. <i>Advanced Materials</i> , 2022, 34, e2200559.	21.0	83
62	Acceptorâ€‘Doping Accelerated Charge Separation in Cu ₂ O Photocathode for Photoelectrochemical Water Splitting: Theoretical and Experimental Studies. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18463-18467.	13.8	82
63	Carbonâ€‘based cathode materials for rechargeable zincâ€‘air batteries: From current collectors to bifunctional integrated air electrodes. , 2020, 2, 370-386.		82
64	Long-Shelf-Life Polymer Electrolyte Based on Tetraethylammonium Hydroxide for Flexible Zincâ€‘Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 28909-28917.	8.0	81
65	Inversely Tuning the CO ₂ Electroreduction and Hydrogen Evolution Activity on Metal Oxide via Heteroatom Doping. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7602-7606.	13.8	81
66	Size effect of lithium peroxide on charging performance of Liâ€‘O ₂ batteries. <i>Nanoscale</i> , 2014, 6, 177-180.	5.6	80
67	Isolated Platinum Atoms Stabilized by Amorphous Tungstenic Acid: Metalâ€‘Support Interaction for Synergistic Oxygen Activation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9351-9356.	13.8	80
68	Atomically Dispersed Selenium Sites on Nitrogenâ€‘Doped Carbon for Efficient Electrocatalytic Oxygen Reduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	80
69	Electrochemical Oxidation of Chlorine-Doped Co(OH) ₂ Nanosheet Arrays on Carbon Cloth as a Bifunctional Oxygen Electrode. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 796-805.	8.0	79
70	Micronanostructured Design of Dendriteâ€‘Free Zinc Anodes and Their Applications in Aqueous Zincâ€‘Based Rechargeable Batteries. <i>Small Structures</i> , 2021, 2, 2000128.	12.0	79
71	Heterointerface Engineering of Hierarchically Assembling Layered Double Hydroxides on Cobalt Selenide as Efficient Trifunctional Electrocatalysts for Water Splitting and Zincâ€‘Air Battery. <i>Advanced Science</i> , 2022, 9, e2104522.	11.2	79
72	Facile solvothermal synthesis of CaMn ₂ O ₄ nanorods for electrochemical oxygen reduction. <i>Journal of Materials Chemistry</i> , 2012, 22, 15812.	6.7	76

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73	Nanosheets assembled into nickel sulfide nanospheres with enriched Ni ³⁺ active sites for efficient water-splitting and zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23787-23793.	10.3	76
74	A review of non-noble metal-based electrocatalysts for CO ₂ electroreduction. <i>Rare Metals</i> , 2021, 40, 3019.	7.1	74
75	Rational Design and Spontaneous Sulfurization of NiCo ^(oxy) Hydroxysulfides Nanosheets with Modulated Local Electronic Configuration for Enhancing Oxygen Electrocatalysis. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	74
76	Mesoporous Decoration of Freestanding Palladium Nanotube Arrays Boosts the Electrocatalysis Capabilities toward Formic Acid and Formate Oxidation. <i>Advanced Energy Materials</i> , 2019, 9, 1900955.	19.5	72
77	Chemical etching of manganese oxides for electrocatalytic oxygen reduction reaction. <i>Chemical Communications</i> , 2015, 51, 11599-11602.	4.1	71
78	Enhanced light harvesting and electron-hole separation for efficient photocatalytic hydrogen evolution over Cu ₇ S ₄ -wrapped Cu ₂ O nanocubes. <i>Applied Catalysis B: Environmental</i> , 2019, 246, 202-210.	20.2	71
79	Low-temperature strategy toward Ni-NC@Ni core-shell nanostructure with Single-Ni sites for efficient CO ₂ electroreduction. <i>Nano Energy</i> , 2020, 77, 105010.	16.0	70
80	In Situ Electrodeposition of Cobalt Sulfide Nanosheet Arrays on Carbon Cloth as a Highly Efficient Bifunctional Electrocatalyst for Oxygen Evolution and Reduction Reactions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 30433-30440.	8.0	69
81	Atomic Layer Co ₃ O ₄ Nanosheets: The Key to Knittable Zn-Air Batteries. <i>Small</i> , 2018, 14, e1702987.	10.0	68
82	Uniform MnO ₂ nanostructures supported on hierarchically porous carbon as efficient electrocatalysts for rechargeable Li-O ₂ batteries. <i>Nano Research</i> , 2015, 8, 156-164.	10.4	65
83	Mapping the Design of Electrolyte Materials for Electrically Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , 2021, 33, e2006461.	21.0	63
84	Long-battery-life flexible zinc-air battery with near-neutral polymer electrolyte and nanoporous integrated air electrode. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25449-25457.	10.3	61
85	Thermal Shock-Activated Spontaneous Growing of Nanosheets for Overall Water Splitting. <i>Nano-Micro Letters</i> , 2020, 12, 162.	27.0	59
86	A Co ₃ O ₄ @MnO ₂ /Ni nanocomposite as a carbon- and binder-free cathode for rechargeable Li-O ₂ batteries. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 866-871.	6.0	58
87	Nanocomposite of Fe ₂ O ₃ @C/MnO ₂ as an Efficient Cathode Catalyst for Rechargeable Lithium-Oxygen Batteries. <i>Small</i> , 2015, 11, 5545-5550.	10.0	57
88	Electrodeposition of alloys and compounds from high-temperature molten salts. <i>Journal of Alloys and Compounds</i> , 2017, 690, 228-238.	5.5	54
89	Interface engineering of NiS ₂ /CoS ₂ nanohybrids as bifunctional electrocatalysts for rechargeable solid state Zn-air battery. <i>Journal of Power Sources</i> , 2019, 437, 226893.	7.8	54
90	Flexible and Wearable Power Sources for Next-Generation Wearable Electronics. <i>Batteries and Supercaps</i> , 2020, 3, 1262-1274.	4.7	53

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91	Surface modification of Li-rich layered Li[Li _{0.17} Ni _{0.17} Co _{0.10} Mn _{0.56}]O ₂ oxide with LiV ₃ O ₈ as a cathode material for Li-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 690, 256-266.	5.5	52
92	Controllable synthesis of Co ₂ P nanorods as high-efficiency bifunctional electrocatalyst for overall water splitting. <i>Journal of Power Sources</i> , 2018, 402, 345-352.	7.8	51
93	Multiple Twin Boundary-Regulated Metastable Pd for Ethanol Oxidation Reaction. <i>Advanced Energy Materials</i> , 2022, 12, 2103505.	19.5	51
94	Phase Transfer of Mo ₂ C Induced by Boron Doping to Boost Nitrogen Reduction Reaction Catalytic Activity. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	51
95	Controlled synthesis of porous spinel cobaltite core-shell microspheres as high-performance catalysts for rechargeable Li-O ₂ batteries. <i>Nano Energy</i> , 2015, 13, 718-726.	16.0	48
96	Tunable Periodically Ordered Mesoporosity in Palladium Membranes Enables Exceptional Enhancement of Intrinsic Electrocatalytic Activity for Formic Acid Oxidation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5092-5101.	13.8	45
97	Pt embedded Ni ₃ Se ₂ @NiOOH core-shell dendrite-like nanoarrays on nickel as bifunctional electrocatalysts for overall water splitting. <i>Science China Materials</i> , 2019, 62, 1096-1104.	6.3	43
98	Engineering cobalt sulfide/oxide heterostructure with atomically mixed interfaces for synergistic electrocatalytic water splitting. <i>Nano Research</i> , 2022, 15, 1246-1253.	10.4	43
99	Defective Bimetallic Selenides for Selective CO ₂ Electroreduction to CO. <i>Advanced Materials</i> , 2022, 34, e2106354.	21.0	43
100	Synthesis of Cubic-Shaped Pt Particles with (100) Preferential Orientation by a Quick, One-Step and Clean Electrochemical Method. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18856-18864.	8.0	39
101	Cobalt-Doped NiS ₂ Micro/Nanostructures with Complete Solid Solubility as High-Performance Cathode Materials for Actual High-Specific-Energy Thermal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 50377-50387.	8.0	39
102	Developing Indium-based Ternary Spinel Selenides for Efficient Solid Flexible Zn-Air Batteries and Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 8115-8123.	8.0	38
103	One-step synthesis of the PdPt bimetallic nanodendrites with controllable composition for methanol oxidation reaction. <i>Science China Materials</i> , 2018, 61, 697-706.	6.3	37
104	Bifunctional hydroxyl group over polymeric carbon nitride to achieve photocatalytic H ₂ O ₂ production in ethanol aqueous solution with an apparent quantum yield of 52.8% at 420 nm. <i>Chemical Communications</i> , 2019, 55, 13279-13282.	4.1	37
105	Tungsten disulfide-based nanomaterials for energy conversion and storage. <i>Tungsten</i> , 2020, 2, 109-133.	4.8	37
106	Air-stable phosphorus-doped molybdenum nitride for enhanced electrocatalytic hydrogen evolution. <i>Communications Chemistry</i> , 2018, 1, .	4.5	36
107	$\frac{3}{4} \text{Co}^{3+}$ "æž, è; ðæ; ié†â±žâCE-â°ç%©èf1/2æ°è1/2-âCE-ç"µâ,-âCE-â%ç"ç©¶è;â±•. <i>Science China Materials</i> , 2023, 64, 1-26.		
108	Investigation of failure mechanism of rechargeable zinc-air batteries with poly(acrylic acid) alkaline gel electrolyte during discharge-charge cycles at different current densities. <i>Chemical Engineering Journal</i> , 2022, 429, 132331.	12.7	36

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109	Charge redistribution of Co on cobalt (II) oxide surface for enhanced oxygen evolution electrocatalysis. <i>Nano Energy</i> , 2019, 61, 267-274.	16.0	35
110	The anion effect on the oxygen reduction of MnX (X = O, S, and Se) catalysts. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3425-3431.	10.3	34
111	Ultrafast Synthesis for Functional Nanomaterials. <i>Cell Reports Physical Science</i> , 2021, 2, 100302.	5.6	34
112	Enhanced hydrogen production from ammonia borane over CuNi alloy nanoparticles supported on TiO ₂ (B)/anatase mixed-phase nanofibers with high specific surface area. <i>Journal of Alloys and Compounds</i> , 2020, 815, 152431.	5.5	33
113	Improving the Electrocatalytic Activity of Pt Monolayer Catalysts for Electrooxidation of Methanol, Ethanol and Ammonia by Tailoring the Surface Morphology of the Supporting Core. <i>ChemElectroChem</i> , 2016, 3, 537-551.	3.4	32
114	Pyrite-Type CoS ₂ Nanoparticles Supported on Nitrogen-Doped Graphene for Enhanced Water Splitting. <i>Frontiers in Chemistry</i> , 2018, 6, 569.	3.6	32
115	Investigation of the Environmental Stability of Poly(vinyl alcohol)-KOH Polymer Electrolytes for Flexible Zinc-Air Batteries. <i>Frontiers in Chemistry</i> , 2019, 7, 678.	3.6	32
116	Understanding the Gap between Academic Research and Industrial Requirements in Rechargeable Zinc-Ion Batteries. <i>Batteries and Supercaps</i> , 2021, 4, 60-71.	4.7	32
117	Strategies for Optimizing the Photocatalytic Water-Splitting Performance of Metal-Organic Framework-Based Materials. <i>Small Science</i> , 2021, 1, 2100060.	9.9	31
118	Phase and composition controllable synthesis of nickel phosphide-based nanoparticles via a low-temperature process for efficient electrocatalytic hydrogen evolution. <i>Electrochimica Acta</i> , 2017, 258, 866-875.	5.2	31
119	Bimetallic Multi-Level Layered CoNiOOH/Ni ₃ S ₂ @NF Nanosheet for Hydrogen Evolution Reaction in Alkaline Medium. <i>Small</i> , 2022, 18, e2106904.	10.0	31
120	Polypyrrole-coated hierarchical porous composites nanoarchitectures for advanced solid-state flexible hybrid devices. <i>Nano Energy</i> , 2016, 19, 307-317.	16.0	30
121	Recent Progress in Advanced Characterization Methods for Silicon-Based Lithium-Ion Batteries. <i>Small Methods</i> , 2019, 3, 1900158.	8.6	30
122	Kirigami-Inspired Flexible and Stretchable Zinc-Air Battery Based on Metal-Coated Sponge Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 54833-54841.	8.0	30
123	Co ₃ O ₄ nanoparticles supported on N-doped electrospinning carbon nanofibers as an efficient and bifunctional oxygen electrocatalyst for rechargeable Zn-air batteries. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 3554-3561.	6.0	29
124	A highly efficient electrocatalyst of perovskite LaNiO ₃ for nonaqueous Li-O ₂ batteries with superior cycle stability. <i>Journal of Alloys and Compounds</i> , 2016, 664, 750-755.	5.5	28
125	Size- and Density-Controllable Fabrication of the Platinum Nanoparticle/ITO Electrode by Pulse Potential Electrodeposition for Ammonia Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 27765-27772.	8.0	28
126	Engineering Pyrite-Type Bimetallic Ni-Doped CoS ₂ Nanoneedle Arrays over a Wide Compositional Range for Enhanced Oxygen and Hydrogen Electrocatalysis with Flexible Property. <i>Catalysts</i> , 2017, 7, 366.	3.5	28

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127	Regulating metal active sites of atomically-thin nickel-doped spinel cobalt oxide toward enhanced oxygen electrocatalysis. <i>Chemical Engineering Journal</i> , 2022, 435, 134261.	12.7	28
128	Cobalt sulfides constructed heterogeneous interfaces decorated on N,S-codoped carbon nanosheets as a highly efficient bifunctional oxygen electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13926-13935.	10.3	27
129	Ex situ characterization of metallurgical inclusions in X100 pipeline steel before and after immersion in a neutral pH bicarbonate solution. <i>Journal of Alloys and Compounds</i> , 2016, 673, 28-37.	5.5	26
130	Porous Zinc Anode Design for Zn-air Chemistry. <i>Frontiers in Chemistry</i> , 2019, 7, 656.	3.6	26
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