Bin Zhang

List of Publications by Year
in descending order

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218 papers	22,835 citations	9264 74 h-index	9103 144 g-index
237 all docs	237 docs citations	237 times ranked	18420 citing authors

#	Article	IF	Citations
1	Recent advances in transition metal phosphide nanomaterials: synthesis and applications in hydrogen evolution reaction. Chemical Society Reviews, 2016, 45, 1529-1541.	38.1	2,664
2	Single-Atom Au/NiFe Layered Double Hydroxide Electrocatalyst: Probing the Origin of Activity for Oxygen Evolution Reaction. Journal of the American Chemical Society, 2018, 140, 3876-3879.	13.7	817
3	Unveiling the Activity Origin of a Copperâ€based Electrocatalyst for Selective Nitrate Reduction to Ammonia. Angewandte Chemie - International Edition, 2020, 59, 5350-5354.	13.8	760
4	Thermally stable single atom Pt/m-Al2O3 for selective hydrogenation and CO oxidation. Nature Communications, 2017, 8, 16100.	12.8	545
5	Boosting Selective Nitrate Electroreduction to Ammonium by Constructing Oxygen Vacancies in TiO₂. ACS Catalysis, 2020, 10, 3533-3540.	11.2	481
6	Nitrate electroreduction: mechanism insight, in situ characterization, performance evaluation, and challenges. Chemical Society Reviews, 2021, 50, 6720-6733.	38.1	481
7	Metallic WO₂â€“Carbon Mesoporous Nanowires as Highly Efficient Electrocatalysts for Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2015, 137, 6983-6986.	13.7	470
8	Recent advances in porous Pt-based nanostructures: synthesis and electrochemical applications. Chemical Society Reviews, 2014, 43, 2439.	38.1	443
9	Anion-exchange synthesis of nanoporous FeP nanosheets as electrocatalysts for hydrogen evolution reaction. Chemical Communications, 2013, 49, 6656.	4.1	439
10	Ni3Se2 nanoforest/Ni foam as a hydrophilic, metallic, and self-supported bifunctional electrocatalyst for both H2 and O2 generations. Nano Energy, 2016, 24, 103-110.	16.0	377
11	Recent advances in non-noble metal electrocatalysts for nitrate reduction. Chemical Engineering Journal, 2021, 403, 126269.	12.7	375
12	Stabilizing a Platinum₁ Singleâ€Atom Catalyst on Supported Phosphomolybdic Acid without Compromising Hydrogenation Activity. Angewandte Chemie - International Edition, 2016, 55, 8319-8323.	13.8	350
13	Biomolecule-Assisted Synthesis and Electrochemical Hydrogen Storage of Bi2S3Flowerlike Patterns with Well-Aligned Nanorods. Journal of Physical Chemistry B, 2006, 110, 8978-8985.	2.6	334
14	Boosting Hydrogen Production by Anodic Oxidation of Primary Amines over a NiSe Nanorod Electrode. Angewandte Chemie - International Edition, 2018, 57, 13163-13166.	13.8	312
15	Engineering oxygen-containing and amino groups into two-dimensional atomically-thin porous polymeric carbon nitrogen for enhanced photocatalytic hydrogen production. Energy and Environmental Science, 2018, 11, 566-571.	30.8	304
16	Synthesis of ultrathin CdS nanosheets as efficient visible-light-driven water splitting photocatalysts for hydrogen evolution. Chemical Communications, 2013, 49, 9803.	4.1	303
17	Electrochemical synthesis of nitric acid from air and ammonia through waste utilization. National Science Review, 2019, 6, 730-738.	9.5	296
18	Recent advances in nanostructured transition metal phosphides: synthesis and energy-related applications. Energy and Environmental Science, 2020, 13, 4564-4582.	30.8	268

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19	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 22470-22474.	13.8	257
20	Sub-1.1 nm ultrathin porous CoP nanosheets with dominant reactive {200} facets: a high mass activity and efficient electrocatalyst for the hydrogen evolution reaction. Chemical Science, 2017, 8, 2769-2775.	7.4	243
21	Anchoring CoO Domains on CoSe₂ Nanobelts as Bifunctional Electrocatalysts for Overall Water Splitting in Neutral Media. Advanced Science, 2016, 3, 1500426.	11.2	236
22	Recent Advances in Plasmonic Nanostructures for Enhanced Photocatalysis and Electrocatalysis. Advanced Materials, 2021, 33, e2000086.	21.0	232
23	Unveiling the In Situ Dissolution and Polymerization of Mo in Ni₄Mo Alloy for Promoting the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2021, 60, 7051-7055.	13.8	228
24	Engineering Sulfur Defects, Atomic Thickness, and Porous Structures into Cobalt Sulfide Nanosheets for Efficient Electrocatalytic Alkaline Hydrogen Evolution. ACS Catalysis, 2018, 8, 8077-8083.	11.2	219
25	Ni₂P Nanosheets/Ni Foam Composite Electrode for Long-Lived and pH-Tolerable Electrochemical Hydrogen Generation. ACS Applied Materials & Interfaces, 2015, 7, 2376-2384.	8.0	216
26	Nanoporous Singleâ€Crystalâ€Like Cd_xZn_{1â^'x}S Nanosheets Fabricated by the Cationâ€Exchange Reaction of Inorganicâ€“Organic Hybrid ZnSâ€“Amine with Cadmium Ions. Angewandte Chemie - International Edition, 2012, 51, 897-900.	13.8	212
27	Nanoporous Hollow Transition Metal Chalcogenide Nanosheets Synthesized via the Anion-Exchange Reaction of Metal Hydroxides with Chalcogenide Ions. ACS Nano, 2014, 8, 10909-10919.	14.6	208
28	Synergetic Transformation of Solid Inorganicâ€“Organic Hybrids into Advanced Nanomaterials for Catalytic Water Splitting. Accounts of Chemical Research, 2018, 51, 1711-1721.	15.6	196
29	Oxygen Vacancy Engineering in Photocatalysis. Solar Rrl, 2020, 4, 2000037.	5.8	196
30	Selfâ€Templateâ€Directed Synthesis of Porous Perovskite Nanowires at Room Temperature for Highâ€Performance Visibleâ€Light Photodetectors. Angewandte Chemie - International Edition, 2015, 54, 5693-5696.	13.8	192
31	Integrating Hydrogen Production with Aqueous Selective Semiâ€Dehydrogenation of Tetrahydroisoquinolines over a Ni₂P Bifunctional Electrode. Angewandte Chemie - International Edition, 2019, 58, 12014-12017.	13.8	189
32	In Situ Electrochemical Conversion of an Ultrathin Tannin Nickel Iron Complex Film as an Efficient Oxygen Evolution Reaction Electrocatalyst. Angewandte Chemie - International Edition, 2019, 58, 3769-3773.	13.8	188
33	Recent Advances in Electrochemical Hydrogen Production from Water Assisted by Alternative Oxidation Reactions. ChemElectroChem, 2019, 6, 3214-3226.	3.4	187
34	Hierarchical Nanosheetâ€Based MoS₂ Nanotubes Fabricated by an Anionâ€Exchange Reaction of MoO₃â€“Amine Hybrid Nanowires. Angewandte Chemie - International Edition, 2013, 52, 8602-8606.	13.8	180
35	Understanding the Nature of Ammonia Treatment to Synthesize Oxygen Vacancy-Enriched Transition Metal Oxides. CheM, 2019, 5, 376-389.	11.7	171
36	Biomolecule-Assisted Synthesis and Electrochemical Hydrogen Storage of Porous Spongelike Ni3S2 Nanostructures Grown Directly on Nickel Foils. Chemistry - A European Journal, 2006, 12, 2337-2342.	3.3	169

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37	Promoting selective electroreduction of nitrates to ammonia over electron-deficient Co modulated by rectifying Schottky contacts. Science China Chemistry, 2020, 63, 1469-1476.	8.2	155
38	General Selfâ€Template Synthesis of Transitionâ€Metal Oxide and Chalcogenide Mesoporous Nanotubes with Enhanced Electrochemical Performances. Angewandte Chemie - International Edition, 2016, 55, 9055-9059.	13.8	154
39	Cu₂O Nanocrystals: Surfactant-Free Room-Temperature Morphology-Modulated Synthesis and Shape-Dependent Heterogeneous Organic Catalytic Activities. Journal of Physical Chemistry C, 2011, 115, 15288-15296.	3.1	152
40	Hydrogen evolution activity enhancement by tuning the oxygen vacancies in self-supported mesoporous spinel oxide nanowire arrays. Nano Research, 2018, 11, 603-613.	10.4	152
41	Rational design of semiconductor-based photocatalysts for advanced photocatalytic hydrogen production: the case of cadmium chalcogenides. Inorganic Chemistry Frontiers, 2016, 3, 591-615.	6.0	151
42	Integrating Hydrogen Production with Aqueous Selective Semiâ€Dehydrogenation of Tetrahydroisoquinolines over a Ni₂P Bifunctional Electrode. Angewandte Chemie, 2019, 131, 12142-12145.	2.0	138
43	Structurally Disordered RuO₂ Nanosheets with Rich Oxygen Vacancies for Enhanced Nitrate Electroreduction to Ammonia. Angewandte Chemie - International Edition, 2022, 61, .	13.8	135
44	Progress and Challenges Toward the Rational Design of Oxygen Electrocatalysts Based on a Descriptor Approach. Advanced Science, 2020, 7, 1901614.	11.2	133
45	Versatile Applications of Metal Singleâ€Atom @ 2D Material Nanoplatforms. Advanced Science, 2019, 6, 1901787.	11.2	128
46	Co and Pt Dualâ€Singleâ€Atoms with Oxygenâ€Coordinated Coâ€“Oâ€“Pt Dimer Sites for Ultrahigh Photocatalytic Hydrogen Evolution Efficiency. Advanced Materials, 2021, 33, e2003327.	21.0	123
47	Enhancing Oxygen Evolution Reaction at High Current Densities on Amorphousâ€Like Niâ€“Feâ€“S Ultrathin Nanosheets via Oxygen Incorporation and Electrochemical Tuning. Advanced Science, 2017, 4, 1600343.	11.2	121
48	Unveiling hydrocerussite as an electrochemically stable active phase for efficient carbon dioxide electroreduction to formate. Nature Communications, 2020, 11, 3415.	12.8	121
49	Boosting Photoelectrochemical Water Oxidation Activity and Stability of Mo-Doped BiVO₄ through the Uniform Assembly Coating of NiFeâ€“Phenolic Networks. ACS Energy Letters, 2018, 3, 1648-1654.	17.4	116
50	Electrosynthesis of Nitrate via the Oxidation of Nitrogen on Tensileâ€Strained Palladium Porous Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 4474-4478.	13.8	116
51	Synthesis of Hollow Cd_xZn_{1â^'x}Se Nanoframes through the Selective Cation Exchange of Inorganicâ€“Organic Hybrid ZnSeâ€“Amine Nanoflakes with Cadmium Ions. Angewandte Chemie - International Edition, 2012, 51, 3211-3215.	13.8	109
52	In situ electrochemically converting Fe2O3-Ni(OH)2 to NiFe2O4-NiOOH: a highly efficient electrocatalyst towards water oxidation. Science China Materials, 2017, 60, 324-334.	6.3	107
53	Potential-tuned selective electrosynthesis of azoxy-, azo- and amino-aromatics over a CoP nanosheet cathode. National Science Review, 2020, 7, 285-295.	9.5	107
54	Superficial Hydroxyl and Amino Groups Synergistically Active Polymeric Carbon Nitride for CO₂ Electroreduction. ACS Catalysis, 2019, 9, 10983-10989.	11.2	105

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55	Unveiling in situ evolved In/In2O3â˜ heterostructure as the active phase of In2O3 toward efficient electroreduction of CO2 to formate. Science Bulletin, 2020, 65, 1547-1554.	9.0	105
56	Direct Electrosynthesis of Urea from Carbon Dioxide and Nitric Oxide. ACS Energy Letters, 2022, 7, 284-291.	17.4	105
57	1D Tellurium Nanostructures: Photothermally Assisted Morphology-Controlled Synthesis and Applications in Preparing Functional Nanoscale Materials. Advanced Functional Materials, 2007, 17, 486-492.	14.9	104
58	Plasma-Assisted Synthesis of NiSe₂ Ultrathin Porous Nanosheets with Selenium Vacancies for Supercapacitor. ACS Applied Materials & Interfaces, 2018, 10, 41861-41865.	8.0	104
59	Selenium vacancy-rich CoSe₂ ultrathin nanomeshes with abundant active sites for electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2019, 7, 2536-2540.	10.3	99
60	Electrosynthesis of urea from nitrite and CO2 over oxygen vacancy-rich ZnO porous nanosheets. Cell Reports Physical Science, 2021, 2, 100378.	5.6	95
61	Efficient Electrosynthesis of Syngas with Tunable CO/H₂Ratios over Zn_xCd_{1â˜x}Sâ€Amine Inorganicâ€“Organic Hybrids. Angewandte Chemie - International Edition, 2019, 58, 18908-18912.	13.8	94
62	Insights into Singleâ€Atom Metalâ€“Support Interactions in Electrocatalytic Water Splitting. Small Methods, 2019, 3, 1800481.	8.6	94
63	Facile synthesis of 3D Pdâ€“P nanoparticle networks with enhanced electrocatalytic performance towards formic acid electrooxidation. Chemical Communications, 2014, 50, 13451-13453.	4.1	93
64	Unveiling the Activity Origin of a Copperâ€based Electrocatalyst for Selective Nitrate Reduction to Ammonia. Angewandte Chemie, 2020, 132, 5388-5392.	2.0	92
65	Amorphous nanomaterials in electrocatalytic water splitting. Chinese Journal of Catalysis, 2021, 42, 1287-1296.	14.0	92
66	Selective Transfer Semihydrogenation of Alkynes with H₂O (D₂O) as the H (D) Source over a Pdâ€P Cathode. Angewandte Chemie - International Edition, 2020, 59, 21170-21175.	13.8	91
67	Cu clusters/TiO_{2â˜x} with abundant oxygen vacancies for enhanced electrocatalytic nitrate reduction to ammonia. Journal of Materials Chemistry A, 2022, 10, 6448-6453.	10.3	91
68	Thermally-assisted photocatalytic CO2 reduction to fuels. Chemical Engineering Journal, 2021, 408, 127280.	12.7	90
69	Oxide-Derived Coreâ€“Shell Cu@Zn Nanowires for Urea Electrosynthesis from Carbon Dioxide and Nitrate in Water. ACS Nano, 2022, 16, 9095-9104.	14.6	86
70	Promoting nitric oxide electroreduction to ammonia over electron-rich Cu modulated by Ru doping. Science China Chemistry, 2021, 64, 1493-1497.	8.2	83
71	Recent advances in electrocatalytic nitrite reduction. Chemical Communications, 2022, 58, 2777-2787.	4.1	83
72	L-Cysteine-Assisted Synthesis of PbS Nanocube-Based Pagoda-like Hierarchical Architectures. Journal of Physical Chemistry C, 2008, 112, 2831-2835.	3.1	80

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73	Biomolecule-assisted synthesis of single-crystalline selenium nanowires and nanoribbons via a novel flake-cracking mechanism. Nanotechnology, 2006, 17, 385-390.	2.6	79
74	Converting copper sulfide to copper with surface sulfur for electrocatalytic alkyne semi-hydrogenation with water. Nature Communications, 2021, 12, 3881.	12.8	77
75	Self-Floating Carbonized Tissue Membrane Derived from Commercial Facial Tissue for Highly Efficient Solar Steam Generation. ACS Sustainable Chemistry and Engineering, 2019, 7, 2911-2915.	6.7	76
76	Facile one-step room-temperature synthesis of Pt₃Ni nanoparticle networks with improved electro-catalytic properties. Chemical Communications, 2012, 48, 2665-2667.	4.1	75
77	Nanowire Transformation by Size-Dependent Cation Exchange Reactions. Nano Letters, 2010, 10, 149-155.	9.1	74
78	Synthesis of dendritic Ptâ€“Niâ€“P alloy nanoparticles with enhanced electrocatalytic properties. Chemical Communications, 2015, 51, 12012-12015.	4.1	72
79	Mediator-free Z-scheme photocatalytic system based on ultrathin CdS nanosheets for efficient hydrogen evolution. Journal of Materials Chemistry A, 2016, 4, 13626-13635.	10.3	71
80	Boosting Hydrogen Production by Anodic Oxidation of Primary Amines over a NiSe Nanorod Electrode. Angewandte Chemie, 2018, 130, 13347-13350.	2.0	69
81	Electrocatalytic Deuteration of Halides with D₂O as the Deuterium Source over a Copper Nanowire Arrays Cathode. Angewandte Chemie - International Edition, 2020, 59, 18527-18531.	13.8	68
82	Electrocatalytic Reduction of Low-Concentration Nitric Oxide into Ammonia over Ru Nanosheets. ACS Energy Letters, 2022, 7, 1187-1194.	17.4	68
83	Unveiling the Activity Origin of Iron Nitride as Catalytic Material for Efficient Hydrogenation of CO₂ to C₂₊ Hydrocarbons. Angewandte Chemie - International Edition, 2021, 60, 4496-4500.	13.8	67
84	Photothermally Assisted Solution-Phase Synthesis of Microscale Tubes, Rods, Shuttles, and an Urchin-Like Assembly of Single-Crystalline Trigonal Selenium. Angewandte Chemie - International Edition, 2006, 45, 2571-2574.	13.8	65
85	Self-template synthesis of double-layered porous nanotubes with spatially separated photoredox surfaces for efficient photocatalytic hydrogen production. Science Bulletin, 2018, 63, 601-608.	9.0	65
86	Integrated selective nitrite reduction to ammonia with tetrahydroisoquinoline semi-dehydrogenation over a vacancy-rich Ni bifunctional electrode. Journal of Materials Chemistry A, 2021, 9, 239-243.	10.3	65
87	Electrocatalytic Reduction of CO₂ to Ethanol at Close to Theoretical Potential via Engineering Abundant Electronâ€Donating Cu^{Î´+} Species. Angewandte Chemie - International Edition, 2022, 61, .	13.8	64
88	Size-Dependent Waveguide Dispersion in Nanowire Optical Cavities: Slowed Light and Dispersionless Guiding. Nano Letters, 2009, 9, 1684-1688.	9.1	63
89	Photogenerated Carriers Boost Water Splitting Activity over Transition-Metal/Semiconducting Metal Oxide Bifunctional Electrocatalysts. ACS Catalysis, 2017, 7, 6464-6470.	11.2	62
90	Self-supporting transition metal chalcogenides on metal substrates for catalytic water splitting. Chemical Engineering Journal, 2021, 421, 129645.	12.7	62

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91	Porous single-crystalline CdS nanosheets as efficient visible light catalysts for aerobic oxidative coupling of amines to imines. RSC Advances, 2013, 3, 22944.	3.6	61
92	Thermally assisted photocatalytic conversion of CO₂â€“H₂O to C₂H₄over carbon doped In₂S₃nanosheets. Journal of Materials Chemistry A, 2020, 8, 10175-10179.	10.3	61
93	Covalent triazine framework-supported palladium as a ligand-free catalyst for the selective double carbonylation of aryl iodides under ambient pressure of CO. Chemical Communications, 2016, 52, 2960-2963.	4.1	60
94	Photoimmobilized Ni Clusters Boost Photodehydrogenative Coupling of Amines to Imines via Enhanced Hydrogen Evolution Kinetics. ACS Catalysis, 2020, 10, 3904-3910.	11.2	60
95	Hydrogen Production on a Hybrid Photocatalytic System Composed of Ultrathin CdS Nanosheets and a Molecular Nickel Complex. Chemistry - A European Journal, 2015, 21, 4571-4575.	3.3	59
96	Enhancing Electrocatalytic Water Splitting Activities via Photothermal Effect over Bifunctional Nickel/Reduced Graphene Oxide Nanosheets. ACS Sustainable Chemistry and Engineering, 2019, 7, 3710-3714.	6.7	59
97	Electrostatic Repulsion-Controlled Formation of Polydopamineâ€“Gold Janus Particles. Langmuir, 2012, 28, 13060-13065.	3.5	58
98	Design of continuous built-in band bending in self-supported CdS nanorod-based hierarchical architecture for efficient photoelectrochemical hydrogen production. Nano Energy, 2018, 43, 236-243.	16.0	58
99	A Facile Strategy for Constructing a Carbonâ€Particleâ€Modified Metalâ€“Organic Framework for Enhancing the Efficiency of CO₂ Electroreduction into Formate. Angewandte Chemie - International Edition, 2021, 60, 23394-23402.	13.8	58
100	Promoting charge carrier utilization by integrating layered double hydroxide nanosheet arrays with porous BiVO4 photoanode for efficient photoelectrochemical water splitting. Science China Materials, 2017, 60, 193-207.	6.3	57
101	Recent Progress, Challenges, and Prospects in Two-Dimensional Photo-Catalyst Materials and Environmental Remediation. Nano-Micro Letters, 2020, 12, 167.	27.0	57
102	Self-supported Pt nanoclusters via galvanic replacement from Cu2O nanocubes as efficient electrocatalysts. Nanoscale, 2013, 5, 7397.	5.6	56
103	Sulfur Vacancy-Promoted Highly Selective Electrosynthesis of Functionalized Aminoarenes via Transfer Hydrogenation of Nitroarenes with H ₂ O over a Co ₃ S _{4â^'} _x Nanosheet Cathode. CCS Chemistry, 2021, 3, 507-515.	7.8	56
104	Ru-Doped Pd Nanoparticles for Nitrogen Electrooxidation to Nitrate. ACS Catalysis, 2021, 11, 14032-14037.	11.2	56
105	Soft, Oxidative Stripping of Alkyl Thiolate Ligands from Hydroxyapatiteâ€Supported Gold Nanoclusters for Oxidation Reactions. Chemistry - an Asian Journal, 2016, 11, 532-539.	3.3	55
106	Photocatalytic conversion of CO2 into light olefins over TiO2 nanotube confined Cu clusters with high ratio of Cu+. Applied Catalysis B: Environmental, 2020, 263, 118133.	20.2	54
107	Self-template synthesis of hierarchically structured Co3O4@NiO bifunctional electrodes for selective nitrate reduction and tetrahydroisoquinolines semi-dehydrogenation. Science China Materials, 2020, 63, 2530-2538.	6.3	54
108	Electrocatalytic construction of the C-N bond from the derivates of CO2 and N2. Science China Chemistry, 2022, 65, 204-206.	8.2	54

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109	Ultrathin-nanosheet-based 3D hierarchical porous In₂S₃ microspheres: chemical transformation synthesis, characterization, and enhanced photocatalytic and photoelectrochemical property. Journal of Materials Chemistry A, 2015, 3, 1930-1934.	10.3	52
110	N-doped graphene wrapped hexagonal metallic cobalt hierarchical nanosheet as a highly efficient water oxidation electrocatalyst. Journal of Materials Chemistry A, 2017, 5, 8897-8902.	10.3	50
111	Optimization Strategies for Selective CO2 Electroreduction to Fuels. Transactions of Tianjin University, 2021, 27, 180-200.	6.4	50
112	Adjusting the electronic structure by Ni incorporation: a generalized in situ electrochemical strategy to enhance water oxidation activity of oxyhydroxides. Journal of Materials Chemistry A, 2017, 5, 13336-13340.	10.3	49
113	Photothermally assisted photocatalytic conversion of CO₂â€“H₂O into fuels over a WNâ€“WO₃ Z-scheme heterostructure. Journal of Materials Chemistry A, 2020, 8, 1077-1083.	10.3	48
114	Electrochemical and Surfaced-Enhanced Raman Spectroscopic Investigation of CO and SCN-Adsorbed on Aucoreâ˜PtshellNanoparticles Supported on GC Electrodes. Langmuir, 2005, 21, 7449-7455.	3.5	47
115	Electrochemical Synthesis of Nitric Acid from Nitrogen Oxidation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	47
116	Selectivity Origin of Organic Electrosynthesis Controlled by Electrode Materials: A Case Study on Pinacols. ACS Catalysis, 2021, 11, 8958-8967.	11.2	45
117	Dissolution of the Heteroatom Dopants and Formation of Ortho-Quinone Moieties in the Doped Carbon Materials during Water Electrooxidation. Journal of the American Chemical Society, 2022, 144, 3250-3258.	13.7	45
118	Hierarchical ultrathin-branched CdS nanowire arrays with enhanced photocatalytic performance. Journal of Materials Chemistry A, 2015, 3, 19507-19516.	10.3	44
119	Interfacial nanodroplets guided construction of hierarchical Au, Au-Pt and Au-Pd particles as excellent catalysts. Scientific Reports, 2014, 4, 4849.	3.3	43
120	Integrating photocatalytic reduction of CO2 with selective oxidation of tetrahydroisoquinoline over InPâ€“In2O3 Z-scheme p-n junction. Science China Chemistry, 2020, 63, 28-34.	8.2	43
121	Catalytic Role of Metal Nanoparticles in Selectivity Control over Photodehydrogenative Coupling of Primary Amines to Imines and Secondary Amines. ACS Catalysis, 2021, 11, 6656-6661.	11.2	43
122	Compositionâ€Tunable Ptâ€“Co Alloy Nanoparticle Networks: Facile Roomâ€Temperature Synthesis and Supportless Electrocatalytic Applications. ChemPhysChem, 2012, 13, 2601-2609.	2.1	42
123	Conversion of Sb₂Te₃ Hexagonal Nanoplates into Threeâ€Dimensional Porous Singleâ€Crystalâ€Like Networkâ€Structured Te Plates Using Oxygen and Tartaric Acid. Angewandte Chemie - International Edition, 2012, 51, 1459-1463.	13.8	42
124	Electrosynthesis of Syngas via the Co-Reduction of CO2 and H2O. Cell Reports Physical Science, 2020, 1, 100237.	5.6	42
125	Engineering Nitrogen Vacancy in Polymeric Carbon Nitride for Nitrate Electroreduction to Ammonia. ACS Applied Materials & Interfaces, 2021, 13, 54967-54973.	8.0	42
126	Hydrogen photogeneration from water on the biomimetic hybrid artificial photocatalytic systems of semiconductors and earth-abundant metal complexes: progress and challenges. Catalysis Science and Technology, 2015, 5, 3084-3096.	4.1	40

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127	Field-induced reagent concentration and sulfur adsorption enable efficient electrocatalytic semihydrogenation of alkynes. Science Advances, 2022, 8, eabm9477.	10.3	40
128	One-step synthesis of three-dimensional Pd polyhedron networks with enhanced electrocatalytic performance. Chemical Communications, 2012, 48, 3881.	4.1	39
129	Solution-Phase Synthesis and Electrochemical Hydrogen Storage of Ultra-Long Single-Crystal Selenium Submicrotubes. Journal of Physical Chemistry B, 2005, 109, 22830-22835.	2.6	38
130	Porous metastable Î³-MnS networks: biomolecule-assisted synthesis and optical properties. Nanotechnology, 2007, 18, 215608.	2.6	38
131	Zn-Doped CoS₂ Nanoarrays for an Efficient Oxygen Evolution Reaction: Understanding the Doping Effect for a Precatalyst. ACS Applied Materials & Interfaces, 2022, 14, 14235-14242.	8.0	35
132	Light-induced BiOBr nanosheets accelerated highly regioselective intermolecular trifluoromethylation/arylation of alkenes to synthesize CF3-containing aza-heterocycles. Tetrahedron, 2015, 71, 4344-4351.	1.9	34
133	Integrating Hydrogen Production and Transfer Hydrogenation with Selenite Promoted Electrooxidation of Î±â€Nitrotoluenes to Eâ€Nitroethenes. Angewandte Chemie - International Edition, 2021, 60, 22010-22016.	13.8	34
134	Pearson's principle-inspired strategy for the synthesis of amorphous transition metal hydroxide hollow nanocubes for electrocatalytic oxygen evolution. Materials Chemistry Frontiers, 2018, 2, 1523-1528.	5.9	33
135	Temperature-regulated reversible transformation of spinel-to-oxyhydroxide active species for electrocatalytic water oxidation. Journal of Materials Chemistry A, 2020, 8, 1631-1635.	10.3	33
136	Sulfur copolymer nanowires with enhanced visible-light photoresponse. Chemical Communications, 2014, 50, 11208-11210.	4.1	32
137	Unveiling the Promotion of Surfaceâ€Adsorbed Chalcogenate on the Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie, 2020, 132, 22656-22660.	2.0	32
138	Sulfateâ€Enabled Nitrate Synthesis from Nitrogen Electrooxidation on a Rhodium Electrocatalyst. Angewandte Chemie - International Edition, 2022, 61, .	13.8	30
139	Selective C4â€“F bond cleavage of pentafluorobenzene: synthesis of N-tetrafluoroarylated heterocyclic compounds. Tetrahedron Letters, 2013, 54, 4649-4652.	1.4	29
140			

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145	Active Cocatalysts for Photocatalytic Hydrogen Evolution Derived from Nickel or Cobalt Amine Complexes. Angewandte Chemie - International Edition, 2017, 56, 14804-14806.	13.8	28
146	Engineering transition metal phosphide nanomaterials as highly active electrocatalysts for water splitting. Dalton Transactions, 2017, 46, 16770-16773.	3.3	28
147	Electrosynthesis of Nitrate via the Oxidation of Nitrogen on Tensileâ€Strained Palladium Porous Nanosheets. Angewandte Chemie, 2021, 133, 4524-4528.	2.0	28
148	A facile solution-phase deposition approach to porous selenium materials. Journal of Materials Chemistry, 2007, 17, 2706.	6.7	27
149	Converting 2D inorganicâ€“organic ZnSeâ€“DETA hybrid nanosheets into 3D hierarchical nanosheet-based ZnSe microspheres with enhanced visible-light-driven photocatalytic performances. Nanoscale, 2015, 7, 9752-9759.	5.6	27
150	In-situ photo-reducing graphene oxide to create Zn0.5Cd0.5S porous nanosheets/RGO composites as highly stable and efficient photoelectrocatalysts for visible-light-driven water splitting. International Journal of Hydrogen Energy, 2014, 39, 702-710.	7.1	26
151	Synergism of interparticle electrostatic repulsion modulation and heat-induced fusion: a generalized one-step approach to porous network-like noble metals and their alloy nanostructures. Journal of Materials Chemistry, 2012, 22, 349-354.	6.7	25
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153	Light triggered addition/annulation of 2-isocyanobiphenyls toward 6-trifluoromethyl-phenanthridines under photocatalyst-free conditions. RSC Advances, 2015, 5, 76363-76367.	3.6	24
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