Pinxian Xi

List of Publications by Year in descending order

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86 papers	10,044 citations	41339 49 h-index	51602 86 g-index
86 all docs	86 docs citations	86 times ranked	10264 citing authors

#	Article	IF	Citations
1	Oxygen Vacancies Dominated NiS₂/CoS₂ Interface Porous Nanowires for Portable Znâ€“Air Batteries Driven Water Splitting Devices. Advanced Materials, 2017, 29, 1704681.	21.0	533
2	NiO/CoN Porous Nanowires as Efficient Bifunctional Catalysts for Znâ€“Air Batteries. ACS Nano, 2017, 11, 2275-2283.	14.6	456
3	Niâ€“Câ€“N Nanosheets as Catalyst for Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2016, 138, 14546-14549.	13.7	424
4	Recent Development of Oxygen Evolution Electrocatalysts in Acidic Environment. Advanced Materials, 2021, 33, e2006328.	21.0	392
5	Epitaxial Heterogeneous Interfaces on Nâ€NiMoO₄/NiS₂ Nanowires/Nanosheets to Boost Hydrogen and Oxygen Production for Overall Water Splitting. Advanced Functional Materials, 2019, 29, 1805298.	14.9	378
6	MOFâ€Derived Hollow CoS Decorated with CeO_x Nanoparticles for Boosting Oxygen Evolution Reaction Electrocatalysis. Angewandte Chemie - International Edition, 2018, 57, 8654-8658.	13.8	369
7	A facile chemical method to produce superparamagnetic graphene oxideâ€“Fe₃O₄hybrid composite and its application in the removal of dyes from aqueous solution. Journal of Materials Chemistry, 2012, 22, 1033-1039.	6.7	347
8	Iridium Single Atoms Coupling with Oxygen Vacancies Boosts Oxygen Evolution Reaction in Acid Media. Journal of the American Chemical Society, 2020, 142, 18378-18386.	13.7	334
9	P Dopants Triggered New Basal Plane Active Sites and Enlarged Interlayer Spacing in MoS₂ Nanosheets toward Electrocatalytic Hydrogen Evolution. ACS Energy Letters, 2017, 2, 745-752.	17.4	304
10	Ce-Doped NiFe-Layered Double Hydroxide Ultrathin Nanosheets/Nanocarbon Hierarchical Nanocomposite as an Efficient Oxygen Evolution Catalyst. ACS Applied Materials & Interfaces, 2018, 10, 6336-6345.	8.0	276
11	FeS₂/CoS₂ Interface Nanosheets as Efficient Bifunctional Electrocatalyst for Overall Water Splitting. Small, 2018, 14, e1801070.	10.0	273
12	Heterostructure-Promoted Oxygen Electrocatalysis Enables Rechargeable Zincâ€“Air Battery with Neutral Aqueous Electrolyte. Journal of the American Chemical Society, 2018, 140, 17624-17631.	13.7	258
13	Accelerated Hydrogen Evolution Reaction in CoS₂ by Transition-Metal Doping. ACS Energy Letters, 2018, 3, 779-786.	17.4	231
14	Activating and Optimizing Activity of CoS₂ for Hydrogen Evolution Reaction through the Synergic Effect of N Dopants and S Vacancies. ACS Energy Letters, 2017, 2, 1022-1028.	17.4	229
15	Hybrids of Cobalt/Iron Phosphides Derived from Bimetalâ€“Organic Frameworks as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2017, 9, 362-370.	8.0	223
16	Engineering Lower Coordination Atoms onto NiO/Co₃O₄ Heterointerfaces for Boosting Oxygen Evolution Reactions. ACS Catalysis, 2020, 10, 12376-12384.	11.2	223
17	A Selfâ€Standing Highâ€Performance Hydrogen Evolution Electrode with Nanostructured NiCo₂O₄/CuS Heterostructures. Advanced Functional Materials, 2015, 25, 6814-6822.	14.9	215
18	Surfactant free RGO/Pd nanocomposites as highly active heterogeneous catalysts for the hydrolytic dehydrogenation of ammonia borane for chemical hydrogen storage. Nanoscale, 2012, 4, 5597.	5.6	202

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19	Significance of Engineering the Octahedral Units to Promote the Oxygen Evolution Reaction of Spinel Oxides. Advanced Materials, 2019, 31, e1902509.	21.0	201
20	Atomicâ€Level Coupled Interfaces and Lattice Distortion on CuS/NiS₂ Nanocrystals Boost Oxygen Catalysis for Flexible Znâ€Air Batteries. Advanced Functional Materials, 2017, 27, 1703779.	14.9	200
21	Optimized Metal Chalcogenides for Boosting Water Splitting. Advanced Science, 2020, 7, 1903070.	11.2	190
22	Self-supported nanoporous NiCo₂O₄nanowires with cobaltâ€“nickel layered oxide nanosheets for overall water splitting. Nanoscale, 2016, 8, 1390-1400.	5.6	180
23	Bimetallic Nickel Cobalt Sulfide as Efficient Electrocatalyst for Znâ€“Air Battery and Water Splitting. Nano-Micro Letters, 2019, 11, 2.	27.0	179
24	Atomic Arrangement in Metalâ€Doped NiS₂ Boosts the Hydrogen Evolution Reaction in Alkaline Media. Angewandte Chemie - International Edition, 2019, 58, 18676-18682.	13.8	174
25	Selfâ€Powered Waterâ€Splitting Devices by Coreâ€“Shell NiFe@Nâ€Graphiteâ€Based Znâ€“Air Batteries. Advanced Functional Materials, 2018, 28, 1706928.	14.9	155
26	Interfacial Defect Engineering for Improved Portable Zincâ€“Air Batteries with a Broad Working Temperature. Angewandte Chemie - International Edition, 2019, 58, 9459-9463.	13.8	139
27	Atomic Sulfur Filling Oxygen Vacancies Optimizes H Absorption and Boosts the Hydrogen Evolution Reaction in Alkaline Media. Angewandte Chemie - International Edition, 2021, 60, 14117-14123.	13.8	129
28	NiCo₂O₄â€Based Nanosheets with Uniform 4 nm Mesopores for Excellent Znâ€“Air Battery Performance. Advanced Materials, 2020, 32, e2001651.	21.0	120
29	Uncovering the Promotion of CeO₂/CoS_{1.97} Heterostructure with Specific Spatial Architectures on Oxygen Evolution Reaction. Advanced Materials, 2021, 33, e2102593.	21.0	118
30	Dualâ€Native Vacancy Activated Basal Plane and Conductivity of MoSe₂ with Highâ€Efficiency Hydrogen Evolution Reaction. Small, 2018, 14, e1704150.	10.0	114
31	Activation of the MoSe₂ basal plane and Se-edge by B doping for enhanced hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 510-515.	10.3	110
32	An electrochemical biosensor for ascorbic acid based on carbon-supported PdNinanoparticles. Biosensors and Bioelectronics, 2013, 44, 183-190.	10.1	102
33	Phase Transformation Fabrication of a Cu₂S Nanoplate as an Efficient Catalyst for Water Oxidation with Glycine. Inorganic Chemistry, 2015, 54, 3281-3289.	4.0	102
34	Ultrafast Hole Trapping and Relaxation Dynamics in p-Type CuS Nanodisks. Journal of Physical Chemistry Letters, 2015, 6, 2671-2675.	4.6	97
35	Electronic structure modulation of NiS₂ by transition metal doping for accelerating the hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 4971-4976.	10.3	93
36	Controllable tuning of Fe-N nanosheets by Co substitution for enhanced oxygen evolution reaction. Nano Energy, 2019, 57, 644-652.	16.0	90

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37	A one-step method to produce grapheneâ€“Fe₃O₄composites and their excellent catalytic activities for three-component coupling of aldehyde, alkyne and amine. Journal of Materials Chemistry A, 2013, 1, 651-656.	10.3	85
38	MOFâ€Derived Hollow CoS Decorated with CeO_x Nanoparticles for Boosting Oxygen Evolution Reaction Electrocatalysis. Angewandte Chemie, 2018, 130, 8790-8794.	2.0	84
39	Ar²⁺ Beam Irradiation-Induced Multivancancies in MoSe₂ Nanosheet for Enhanced Electrochemical Hydrogen Evolution. ACS Energy Letters, 2018, 3, 2167-2172.	17.4	73
40	Transition-metal-doped NiSe2 nanosheets towards efficient hydrogen evolution reactions. Nano Research, 2018, 11, 6051-6061.	10.4	72
41	High-index faceted CuFeS₂ nanosheets with enhanced behavior for boosting hydrogen evolution reaction. Nanoscale, 2017, 9, 9230-9237.	5.6	70
42	Zn-doped MoSe2 nanosheets as high-performance electrocatalysts for hydrogen evolution reaction in acid media. Electrochimica Acta, 2019, 296, 701-708.	5.2	70
43	Metallic CuCo2S4 nanosheets of atomic thickness as efficient bifunctional electrocatalysts for portable, flexible Zn-air batteries. Nanoscale, 2018, 10, 6581-6588.	5.6	69
44	A New Hexagonal Cobalt Nanosheet Catalyst for Selective CO₂ Conversion to Ethanal. Journal of the American Chemical Society, 2021, 143, 15335-15343.	13.7	64
45	Energy-level engineered hollow N-doped NiS1.03 for Znâ€“Air batteries. Energy Storage Materials, 2020, 25, 202-209.	18.0	62
46	Copper dopants improved the hydrogen evolution activity of earth-abundant cobalt pyrite catalysts by activating the electrocatalytically inert sulfur sites. Journal of Materials Chemistry A, 2017, 5, 17601-17608.	10.3	61
47	Facile synthesis of Pd-based bimetallic nanocrystals and their application as catalysts for methanol oxidation reaction. Nanoscale, 2013, 5, 6124.	5.6	60
48	Active basal plane catalytic activity and conductivity in Zn doped MoS2 nanosheets for efficient hydrogen evolution. Electrochimica Acta, 2018, 260, 24-30.	5.2	58
49	Fluorescent graphene oxide composites synthesis and its biocompatibility study. Journal of Materials Chemistry, 2012, 22, 9308.	6.7	54
50	Tailoring Oxygen Reduction Reaction Pathway on Spinel Oxides via Surficial Geometricalâ€Site Occupation Modification Driven by the Oxygen Evolution Reaction. Advanced Materials, 2022, 34, e2202874.	21.0	52
51	Effective Construction of High-quality Iron Oxy-hydroxides and Co-doped Iron Oxy-hydroxides Nanostructures: Towards the Promising Oxygen Evolution Reaction Application. Scientific Reports, 2017, 7, 43590.	3.3	51
52	Cu and Co nanoparticle-Co-decorated N-doped graphene nanosheets: a high efficiency bifunctional electrocatalyst for rechargeable Znâ€“air batteries. Journal of Materials Chemistry A, 2019, 7, 12851-12858.	10.3	50
53	N⁺-ion irradiation engineering towards the efficient oxygen evolution reaction on NiO nanosheet arrays. Journal of Materials Chemistry A, 2019, 7, 4729-4733.	10.3	48
54	Transition Metal (Fe, Co and Ni)â^'Carbideâ^'Nitride (Mâ^'Câ^'N) Nanocatalysts: Structure and Electrocatalytic Applications. ChemCatChem, 2019, 11, 2780-2792.	3.7	46

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55	In Situ Activated Co_{3â€“x}Ni_xO₄ as a Highly Active and Ultrastable Electrocatalyst for Hydrogen Generation. ACS Catalysis, 2021, 11, 8174-8182.	11.2	43
56	MC3T3-E1 preosteoblast cell-mediated mineralization of hydroxyapatite by poly-dopamine-functionalized graphene oxide. Journal of Bioactive and Compatible Polymers, 2015, 30, 289-301.	2.1	41
57	Lattice siteâ€“dependent metal leaching in perovskites toward a honeycomb-like water oxidation catalyst. Science Advances, 2021, 7, eabk1788.	10.3	41
58	Atomic Arrangement in Metalâ€Doped NiS₂ Boosts the Hydrogen Evolution Reaction in Alkaline Media. Angewandte Chemie, 2019, 131, 18849-18855.	2.0	38
59	The Energy Level Regulation of CoMo Carbonate Hydroxide for the Enhanced Oxygen Evolution Reaction Activity. ACS Sustainable Chemistry and Engineering, 2019, 7, 6161-6169.	6.7	35
60	Synthesis of silk-like FeS2/NiS2 hybrid nanocrystals with improved reversible oxygen catalytic performance in a Zn-air battery. Chinese Journal of Catalysis, 2019, 40, 43-51.	14.0	34
61	Boosting the Electrocatalytic Oxygen Evolution of Perovskite LaCo<sub>1â€“_xFe_xO₃ by the Construction of Yolkâ€Shell Nanostructures and Electronic Modulation. Small, 2022, 18, .	10.0	31
62	A coumarin-derived fluorescent chemosensor for selectively detecting Cu2+: Synthesis, DFT calculations and cell imaging applications. Talanta, 2014, 124, 139-145.	5.5	29
63	Activation of defective nickel molybdate nanowires for enhanced alkaline electrochemical hydrogen evolution. Nanoscale, 2018, 10, 16539-16546.	5.6	29
64	Activation Strategies of Perovskiteâ€Type Structure for Applications in Oxygenâ€Related Electrocatalysts. Small Methods, 2021, 5, e2100012.	8.6	29
65	Surface-Electronic-Structure Reconstruction of Perovskite via Double-Cation Gradient Etching for Superior Water Oxidation. Nano Letters, 2021, 21, 8166-8174.	9.1	29
66	Ruthenium-modified porous NiCo2O4 nanosheets boost overall water splitting in alkaline solution. Chinese Chemical Letters, 2022, 33, 4930-4935.	9.0	29
67	Atomic Sulfur Filling Oxygen Vacancies Optimizes H Absorption and Boosts the Hydrogen Evolution Reaction in Alkaline Media. Angewandte Chemie, 2021, 133, 14236-14242.	2.0	27
68	Controlling the Cation Exsolution of Perovskite to Customize Heterostructure Active Site for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2022, 14, 25638-25647.	8.0	26
69	Nanocomposites CoPt-x/Diatomite-C as oxygen reversible electrocatalysts for zinc-air batteries: Diatomite boosted the catalytic activity and durability. Electrochimica Acta, 2018, 284, 119-127.	5.2	25
70	Hierarchical ultrathin Mo(S_xSe_{1â€“x})₂nanosheets with tunable ferromagnetism and efficient hydrogen evolution reaction activity: towards defect site effect. CrystEngComm, 2015, 17, 6420-6425.	2.6	23
71	Interfacial Defect Engineering for Improved Portable Zincâ€“Air Batteries with a Broad Working Temperature. Angewandte Chemie, 2019, 131, 9559-9563.	2.0	23
72	Highâ€Quality Copper Sulfide Nanocrystals with Diverse Shapes and Their Catalysis for Electrochemical Reduction of H₂O₂. Particle and Particle Systems Characterization, 2015, 32, 536-541.	2.3	20

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73	Cu₂O/CuO@rGO heterostructure derived from metalâ€“organic-frameworks as an advanced electrocatalyst for non-enzymatic electrochemical H₂O₂sensor. RSC Advances, 2016, 6, 103116-103123.	3.6	20
74	A turn-on chemosensor for Hg2+ in aqueous media and its application in â€œMCTâ€•imaging in living cells. Dalton Transactions, 2011, 40, 6382.	3.3	19
75	CoFe₂O₄ nanoparticles as efficient bifunctional catalysts applied in Znâ€“air battery. Journal of Materials Research, 2018, 33, 590-600.	2.6	18
76	In Situ Growth of Ceria on Ceriumâ€“Nitrogenâ€“Carbon as Promoter for Oxygen Evolution Reaction. Advanced Materials Interfaces, 2017, 4, 1700272.	3.7	17
77	Synthesis of manganese phosphate hybrid nanoflowers by collagen-templated biomineralization. RSC Advances, 2018, 8, 2708-2713.	3.6	17
78	Atomic Insights of Iron Doping in Nickel Hydroxide Nanosheets for Enhanced Oxygen Catalysis to Boost Broad Temperature Workable Zincâ€'Air Batteries. ChemCatChem, 2019, 11, 6002-6007.	3.7	17
79	Surface chlorine doped perovskite-type cobaltate lanthanum for water oxidation. Chinese Journal of Catalysis, 2022, 43, 1485-1492.	14.0	16
80	Construction of surface lattice oxygen in metallic Nâ€'CuCoS1.97 porous nanowire for wearable Znâ€'air battery. Journal of Energy Chemistry, 2019, 34, 1-9.	12.9	15
81	Construction and Application of Interfacial Inorganic Nanostructures. Chinese Journal of Chemistry, 2020, 38, 772-786.	4.9	13
82	Atomic-level correlation between the electrochemical performance of an oxygen-evolving catalyst and the effects of CeO2 functionalization. Nano Research, 2022, 15, 2994-3000.	10.4	13
83	Progress in In Situ Research on Dynamic Surface Reconstruction of Electrocatalysts for Oxygen Evolution Reaction. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	12
84	Electronic engineering of amorphous Feâ€“Coâ€“S sites in hetero-nanoframes for oxygen evolution and flexible Alâ€“air batteries. Journal of Materials Chemistry A, 2022, 10, 19757-19768.	10.3	11
85	Supramolecular architecture built of Co(II) and a tripodal ligand containing 1-D water tapes with (H₂O)₁₆ cluster units. Journal of Coordination Chemistry, 2011, 64, 1885-1893.	2.2	9
86	Controlled fabrication of collagen-zinc phosphate hierarchical hybrid nanoflowers via a biomineralization process. New Journal of Chemistry, 2018, 42, 12824-12829.	2.8	6