Xiwen Du

List of Publications by Year
in descending order

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50	5,269	147801	197818
papers	citations	31 h-index	49 g-index

50	50	50	8032
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanomaterials via Laser Ablation/Irradiation in Liquid: A Review. Advanced Functional Materials, 2012, 22, 1333-1353.	14.9	775
2	Engineering surface atomic structure of single-crystal cobalt (II) oxide nanorods for superior electrocatalysis. Nature Communications, 2016, 7, 12876.	12.8	568
3	Theory-driven design of high-valence metal sites for water oxidation confirmed using in situ soft X-ray absorption. Nature Chemistry, 2018, 10, 149-154.	13.6	476
4	Activating cobalt(II) oxide nanorods for efficient electrocatalysis by strain engineering. Nature Communications, 2017, 8, 1509.	12.8	361
5	Rutheniumâ€Based Singleâ€Atom Alloy with High Electrocatalytic Activity for Hydrogen Evolution. Advanced Energy Materials, 2019, 9, 1803913.	19.5	270
6	Engineering NiO/NiFe LDH Intersection to Bypass Scaling Relationship for Oxygen Evolution Reaction via Dynamic Tridimensional Adsorption of Intermediates. Advanced Materials, 2019, 31, e1804769.	21.0	264
7	MOFâ€Based Hierarchical Structures for Solarâ€Thermal Clean Water Production. Advanced Materials, 2019, 31, e1808249.	21.0	233
8	Phase segregation reversibility in mixed-metal hydroxide water oxidation catalysts. Nature Catalysis, 2020, 3, 743-753.	34.4	199
9	Copper adparticle enabled selective electrosynthesis of n-propanol. Nature Communications, 2018, 9, 4614.	12.8	153
10	Irâ€“Oâ€“V Catalytic Group in Ir-Doped NiV(OH)₂ for Overall Water Splitting. ACS Energy Letters, 2019, 4, 1823-1829.	17.4	147
11	Progress and Challenges Toward the Rational Design of Oxygen Electrocatalysts Based on a Descriptor Approach. Advanced Science, 2020, 7, 1901614.	11.2	133
12	Stable Rhodium (IV) Oxide for Alkaline Hydrogen Evolution Reaction. Advanced Materials, 2020, 32, e1908521.	21.0	115
13	Top-Down Preparation of Active Cobalt Oxide Catalyst. ACS Catalysis, 2016, 6, 6699-6703.	11.2	113
14	Co₃O₄ Nanoparticles with Ultrasmall Size and Abundant Oxygen Vacancies for Boosting Oxygen Involved Reactions. Advanced Functional Materials, 2019, 29, 1903444.	14.9	108
15	A topâ€“down strategy towards monodisperse colloidal lead sulphide quantum dots. Nature Communications, 2013, 4, 1695.	12.8	106
16	Freestanding Ultrathin Metallic Nanosheets: Materials, Synthesis, and Applications. Advanced Materials, 2015, 27, 5396-5402.	21.0	102
17	Strongly Coupled Nafion Molecules and Ordered Porous CdS Networks for Enhanced Visibleâ€Light Photoelectrochemical Hydrogen Evolution. Advanced Materials, 2016, 28, 4935-4942.	21.0	95
18	Modest Oxygenâ€Defective Amorphous Manganeseâ€Based Nanoparticle Mullite with Superior Overall Electrocatalytic Performance for Oxygen Reduction Reaction. Small, 2017, 13, 1603903.	10.0	69

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19	Iridium Oxide Modified with Silver Single Atom for Boosting Oxygen Evolution Reaction in Acidic Media. ACS Energy Letters, 0, , 1588-1595.	17.4	69
20	ZnO nanosheets with atomically thin ZnS overlayers for photocatalytic water splitting. Journal of Materials Chemistry A, 2018, 6, 9057-9063.	10.3	59
21	Catalytically active and chemically inert CdIn₂S₄ coating on a CdS photoanode for efficient and stable water splitting. Nanoscale, 2017, 9, 6296-6301.	5.6	55
22	Laser-Generated Grain Boundaries in Ruthenium Nanoparticles for Boosting Oxygen Evolution Reaction. ACS Catalysis, 2020, 10, 12575-12581.	11.2	55
23	A Hydrogenâ€Deficient Nickelâ€“Cobalt Double Hydroxide for Photocatalytic Overall Water Splitting. Angewandte Chemie - International Edition, 2020, 59, 11510-11515.	13.8	55
24	Single crystalline Cu₂ZnSnS₄ nanosheet arrays for efficient photochemical hydrogen generation. RSC Advances, 2015, 5, 2543-2549.	3.6	53
25	Localized Defects on Copper Sulfide Surface for Enhanced Plasmon Resonance and Water Splitting. Small, 2017, 13, 1700867.	10.0	48
26	Tuning Spin State of Rockâ€Saltâ€Based Oxides by Manipulation of Crystallinity for Efficient Oxygen Electrocatalysis. Advanced Energy Materials, 2018, 8, 1703469.	19.5	48
27	Creating compressive stress at the NiOOH/NiO interface for water oxidation. Journal of Materials Chemistry A, 2020, 8, 10747-10754.	10.3	47
28	Synthesis of MoX2 (X = Se or S) monolayers with high-concentration 1Tâ€² phase on 4H/fcc-Au nanorods for hydrogen evolution. Nano Research, 2019, 12, 1301-1305.	10.4	44
29	CdS Nanoflake Arrays for Highly Efficient Light Trapping. Advanced Materials, 2015, 27, 740-745.	21.0	40
30	Arrays of Ultrathin CdS Nanoflakes with High-Energy Surface for Efficient Gas Detection. ACS Applied Materials & Interfaces, 2017, 9, 602-609.	8.0	38
31	Highly Conductive CdS Inverse Opals for Photochemical Solar Cells. Advanced Functional Materials, 2014, 24, 707-715.	14.9	34
32	Bond-Energy-Integrated Descriptor for Oxygen Electrocatalysis of Transition Metal Oxides. Journal of Physical Chemistry Letters, 2018, 9, 3387-3391.	4.6	34
33	A stable inverse opal structure of cadmium chalcogenide for efficient water splitting. Journal of Materials Chemistry A, 2015, 3, 18521-18527.	10.3	31
34	Valenceâ€State Effect of Iridium Dopant in NiFe(OH)₂ Catalyst for Hydrogen Evolution Reaction. Small, 2021, 17, e2100203.	10.0	31
35	Improving Interfacial Electron Transfer via Tuning Work Function of Electrodes for Electrocatalysis: From Theory to Experiment. Journal of Physical Chemistry C, 2019, 123, 28319-28326.	3.1	30
36	Sulfateâ€Enabled Nitrate Synthesis from Nitrogen Electrooxidation on a Rhodium Electrocatalyst. Angewandte Chemie - International Edition, 2022, 61, .	13.8	30

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37	Photochemical Synthesis of Ultrafine Cubic Boron Nitride Nanoparticles under Ambient Conditions. Angewandte Chemie - International Edition, 2015, 54, 7051-7054.	13.8	29
38	Laser synthesis of clean mesocrystal of cupric oxide for efficient gas sensing. Journal of Materials Chemistry A, 2016, 4, 2699-2704.	10.3	23
39	Porous Copper Microspheres for Selective Production of Multicarbon Fuels via CO₂ Electroreduction. Small, 2019, 15, e1902582.	10.0	23
40	Ultrafine Ag Nanoparticles as Active Catalyst for Electrocatalytic Hydrogen Production. ChemCatChem, 2019, 11, 5976-5981.	3.7	21
41	Advancing Photoelectrochemical Energy Conversion through Atomic Design of Catalysts. Advanced Science, 2022, 9, e2104363.	11.2	21
42	Laserâ€Ablationâ€Produced Cobalt Nickel Phosphate with Highâ€Valence Nickel Ions as an Active Catalyst for the Oxygen Evolution Reaction. Chemistry - A European Journal, 2020, 26, 2793-2797.	3.3	18
43	Sulfateâ€Enabled Nitrate Synthesis from Nitrogen Electrooxidation on a Rhodium Electrocatalyst. Angewandte Chemie, 2022, 134, .	2.0	9
44	Oxidized single nickel atoms embedded in Ru matrix for highly efficient hydrogen evolution reaction. Journal of Alloys and Compounds, 2021, 874, 159909.	5.5	8
45	CdO nanoflake arrays on ZnO nanorod arrays for efficient detection of diethyl ether. RSC Advances, 2016, 6, 2500-2503.	3.6	6
46	Tuning Band Structure of Cadmium Chalcogenide Nanoflake Arrays via Alloying for Efficient Photoelectrochemical Hydrogen Evolution. Langmuir, 2017, 33, 6457-6463.	3.5	6
47	A Hydrogenâ€Deficient Nickelâ€“Cobalt Double Hydroxide for Photocatalytic Overall Water Splitting. Angewandte Chemie, 2020, 132, 11607-11612.	2.0	6
48	Synergistic synthesis of quasi-monocrystal CdS nanoboxes with high-energy facets. Journal of Materials Chemistry A, 2015, 3, 23106-23112.	10.3	5
49	Engineering hollow electrodes for hybrid solar cells for efficient light harvesting and carrier collection. Journal of Materials Chemistry A, 2016, 4, 17260-17266.	10.3	3
50	Fine regulation of electron transfer in Ag@Co₃O₄ nanoparticles for boosting the oxygen evolution reaction. Chemical Communications, 2021, 57, 6284-6287.	4.1	3