

Bin Wang

List of Publications by Year in descending order

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43
papers

2,336
citations

218381

26
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253896

43
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docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Synergy of Dopants and Defects in Graphitic Carbon Nitride with Exceptionally Modulated Band Structures for Efficient Photocatalytic Oxygen Evolution. <i>Advanced Materials</i> , 2019, 31, e1903545.	11.1	604
2	Single Metal Atom Photocatalysis. <i>Small Methods</i> , 2019, 3, 1800447.	4.6	140
3	Constructing ultrathin CoP nanomeshes by Er-doping for highly efficient bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5769-5778.	5.2	128
4	Electrochemically Modifying the Electronic Structure of IrO ₂ Nanoparticles for Overall Electrochemical Water Splitting with Extensive Adaptability. <i>Advanced Energy Materials</i> , 2020, 10, 2001600.	10.2	123
5	Enhanced photocatalytic hydrogen evolution by partially replaced corner-site C atom with P in g-C ₃ N ₄ . <i>Applied Catalysis B: Environmental</i> , 2019, 244, 486-493.	10.8	103
6	SrTiO ₃ single crystals enclosed with high-indexed {023} facets and {001} facets for photocatalytic hydrogen and oxygen evolution. <i>Applied Catalysis B: Environmental</i> , 2015, 166-167, 320-326.	10.8	93
7	Understanding the doping effect on hydrogen evolution activity of transition-metal phosphides: Modeled with Ni ₂ P. <i>Applied Catalysis B: Environmental</i> , 2021, 295, 120283.	10.8	90
8	Black TiO ₂ for solar hydrogen conversion. <i>Journal of Materiomics</i> , 2017, 3, 96-111.	2.8	73
9	Orienting the charge transfer path of type-II heterojunction for photocatalytic hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 256, 117853.	10.8	65
10	Improving the plasmonic efficiency of the Au nanorod-semiconductor photocatalysis toward water reduction by constructing a unique hot-dog nanostructure. <i>Nano Energy</i> , 2017, 33, 469-475.	8.2	55
11	Constructing the Z-scheme TiO ₂ /Au/BiOI nanocomposite for enhanced photocatalytic nitrogen fixation. <i>Applied Surface Science</i> , 2021, 556, 149785.	3.1	54
12	A co-coordination strategy to realize janus-type bimetallic phosphide as highly efficient and durable bifunctional catalyst for water splitting. <i>Journal of Materials Science and Technology</i> , 2021, 74, 11-20.	5.6	53
13	Surface-engineered mesoporous Pt nanodendrites with Ni dopant for highly enhanced catalytic performance in hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12800-12807.	5.2	45
14	Neighboring effect induced by V and Cr doping in FeCoP nanoarrays for the hydrogen evolution reaction with Pt-like performance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1184-1192.	5.2	45
15	N-doped CNT as electron transport promoter by bridging CoP and carbon cloth toward enhanced alkaline hydrogen evolution. <i>Chemical Engineering Journal</i> , 2022, 430, 132824.	6.6	42
16	Phosphorus and Yttrium Codoped Co(OH)F Nanoarray as Highly Efficient and Bifunctional Electrocatalysts for Overall Water Splitting. <i>Small</i> , 2019, 15, e1904105.	5.2	40
17	Bridging effect of Co heteroatom between g-C ₃ N ₄ and Pt NPs for enhanced photocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2020, 394, 124964.	6.6	40
18	Vertical V-Doped CoP Nanowall Arrays as a Highly Efficient and Stable Electrocatalyst for the Hydrogen Evolution Reaction at all pH Values. <i>ACS Applied Energy Materials</i> , 2020, 3, 1027-1035.	2.5	38

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19	Boosting photocatalytic hydrogen evolution of g-C ₃ N ₄ catalyst via lowering the Fermi level of co-catalyst. Nano Research, 2022, 15, 1128-1134.	5.8	38
20	Surface Reconstruction of Facet-Functionalized SrTiO ₃ Nanocrystals for Photocatalytic Hydrogen Evolution. ChemCatChem, 2016, 8, 798-804.	1.8	34
21	Mechanistic Understanding of the Growth Kinetics and Dynamics of Nanoparticle Superlattices by Coupling Interparticle Forces from Real-Time Measurements. ACS Nano, 2018, 12, 12778-12787.	7.3	34
22	Electrochemical formation of PtRu bimetallic nanoparticles for highly efficient and pH-universal hydrogen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 2090-2098.	5.2	33
23	Fe ₂ O ₃ /NiO Interface for the Electrochemical Oxygen Evolution in Seawater and Domestic Sewage. ACS Applied Materials & Interfaces, 2021, 13, 37152-37161.	4.0	32
24	A ternary photocatalyst of all-solid-state Z-scheme TiO ₂ @Au@BiOBr for efficiently degrading various dyes. Journal of Alloys and Compounds, 2020, 839, 155597.	2.8	31
25	Constructing the Fe/Cr double (oxy)hydroxides on Fe ₃ O ₄ for boosting the electrochemical oxygen evolution in alkaline seawater and domestic sewage. Applied Catalysis B: Environmental, 2022, 302, 120847.	10.8	30
26	Trace doping of early transition metal enabled efficient and durable oxygen reduction catalysis on Pt-based ultrathin nanowires. Applied Catalysis B: Environmental, 2022, 303, 120918.	10.8	30
27	Tailoring the electronic structure by constructing the heterointerface of RuO ₂ @NiO for overall water splitting with ultralow overpotential and extra-long lifetime. Journal of Materials Chemistry A, 2020, 8, 18945-18954.	5.2	29
28	Insight into Cd _{0.9} Zn _{0.1} S solid-solution nanotetrapods: Growth mechanism and their application for photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 20455-20464.	3.8	26
29	Surface Activation of Faceted Photocatalyst: When Metal Cocatalyst Determines the Nature of the Facets. Advanced Science, 2015, 2, 1500153.	5.6	25
30	Localized surface plasmon enhanced electrocatalytic methanol oxidation of AgPt bimetallic nanoparticles with an ultra-thin shell. Chemical Communications, 2019, 55, 3943-3946.	2.2	24
31	Transformation of zincblende nanoparticles into wurtzite microrods by a dissolution-regrowth process: an intergrowth homojunction with enhanced photocatalytic activity. Catalysis Science and Technology, 2016, 6, 3371-3377.	2.1	22
32	An LSPR-based "push-pull" synergetic effect for the enhanced photocatalytic performance of a gold nanorod@cuprous oxide-gold nanoparticle ternary composite. Nanoscale, 2020, 12, 1912-1920.	2.8	20
33	Intrinsic insight on localized surface plasmon resonance enhanced methanol electro-oxidation over a Au@AgPt hollow urchin-like nanostructure. Journal of Materials Chemistry A, 2020, 8, 6638-6646.	5.2	19
34	Modification of Carbon Nanotubes via Birch Reaction for Enhanced HER Catalyst by Constructing Pearl Necklace-Like NiCo ₂ P ₂ @CNT Composite. Small, 2018, 14, e1804388.	5.2	15
35	The "electric-dipole" effect of Pt@Ni for enhanced catalytic dehydrogenation of ammonia borane. Journal of Alloys and Compounds, 2020, 844, 156253.	2.8	14
36	2D hydrogenated boride as a reductant and stabilizer for <i>in situ</i> synthesis of ultrafine and surfactant-free carbon supported noble metal electrocatalysts with enhanced activity and stability. Journal of Materials Chemistry A, 2020, 8, 18856-18862.	5.2	11

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37	<i>In situ</i> characterization of kinetics and mass transport of PbSe nanowire growth via LS and VLS mechanisms. <i>Nanoscale</i> , 2019, 11, 5874-5878.	2.8	9
38	Symmetry breaking in semiconductor nanocrystals via kinetic-controlled surface diffusion: a strategy for manipulating the junction structure. <i>Nanoscale</i> , 2016, 8, 15970-15977.	2.8	8
39	Highly efficient wurtzite/zinc blende CdS visible light photocatalyst with high charge separation efficiency and stability. <i>Journal of Chemical Physics</i> , 2020, 152, 244703.	1.2	8
40	Synthesis and electrocatalytic performance of ultrathin noble metal nanosheets. <i>CrystEngComm</i> , 2022, 24, 1319-1333.	1.3	5
41	Boosting the hydrogen evolution reaction of N-C@CoP through an N atom induced p-d orbital coupling. <i>Chemical Engineering Journal</i> , 2022, 446, 137132.	6.6	5
42	Formation of pyrophosphates across grain boundaries induces the formation of mismatched but oriented interfaces in silver phosphate polypods. <i>Applied Surface Science</i> , 2021, 563, 149980.	3.1	1
43	Ion redistributions at interfaces facilitate nucleation and growth of branched Ag ₃ PO ₄ polypods. <i>Materials Letters</i> , 2020, 272, 127848.	1.3	0