

# Bin Wang

## List of Publications by Year in descending order

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43  
papers

2,336  
citations

218381  
26  
h-index

253896  
43  
g-index

45  
all docs

45  
docs citations

45  
times ranked

2900  
citing authors

#	ARTICLE	IF	CITATIONS
1	Boosting photocatalytic hydrogen evolution of g-C <sub>3</sub> N <sub>4</sub> catalyst via lowering the Fermi level of co-catalyst. Nano Research, 2022, 15, 1128-1134.	5.8	38
2	Constructing the Fe/Cr double (oxy)hydroxides on Fe <sub>3</sub> O <sub>4</sub> for boosting the electrochemical oxygen evolution in alkaline seawater and domestic sewage. Applied Catalysis B: Environmental, 2022, 302, 120847.	10.8	30
3	N-doped CNT as electron transport promoter by bridging CoP and carbon cloth toward enhanced alkaline hydrogen evolution. Chemical Engineering Journal, 2022, 430, 132824.	6.6	42
4	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
5	Synthesis and electrocatalytic performance of ultrathin noble metal nanosheets. CrystEngComm, 2022, 24, 1319-1333.	1.3	5
6	Boosting the hydrogen evolution reaction of N-C@CoP through an N atom induced p-d orbital coupling. Chemical Engineering Journal, 2022, 446, 137132.	6.6	5
7	A co-coordination strategy to realize janus-type bimetallic phosphide as highly efficient and durable bifunctional catalyst for water splitting. Journal of Materials Science and Technology, 2021, 74, 11-20.	5.6	53
8	Fe <sub>2</sub> O <sub>3</sub> /NiO Interface for the Electrochemical Oxygen Evolution in Seawater and Domestic Sewage. ACS Applied Materials & Interfaces, 2021, 13, 37152-37161.	4.0	32
9	Constructing the Z-scheme TiO <sub>2</sub> /Au/BiOI nanocomposite for enhanced photocatalytic nitrogen fixation. Applied Surface Science, 2021, 556, 149785.	3.1	54
10	Understanding the doping effect on hydrogen evolution activity of transition-metal phosphides: Modeled with Ni <sub>2</sub> P. Applied Catalysis B: Environmental, 2021, 295, 120283.	10.8	90
11	Formation of pyrophosphates across grain boundaries induces the formation of mismatched but oriented interfaces in silver phosphate polyopods. Applied Surface Science, 2021, 563, 149980.	3.1	1
12	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
13	Neighboring effect induced by V and Cr doping in FeCoP nanoarrays for the hydrogen evolution reaction with Pt-like performance. Journal of Materials Chemistry A, 2020, 8, 1184-1192.	5.2	45
14	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
15	Vertical V-Doped CoP Nanowall Arrays as a Highly Efficient and Stable Electrocatalyst for the Hydrogen Evolution Reaction at all pH Values. ACS Applied Energy Materials, 2020, 3, 1027-1035.	2.5	38
16	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
17	Tailoring the electronic structure by constructing the heterointerface of RuO <sub>2</sub> @NiO for overall water splitting with ultralow overpotential and extra-long lifetime. Journal of Materials Chemistry A, 2020, 8, 18945-18954.	5.2	29
18	A ternary photocatalyst of all-solid-state Z-scheme TiO <sub>2</sub> @Au@BiOBr for efficiently degrading various dyes. Journal of Alloys and Compounds, 2020, 839, 155597.	2.8	31

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19	Ion redistributions at interfaces facilitate nucleation and growth of branched Ag <sub>3</sub> PO <sub>4</sub> polypods. <i>Materials Letters</i> , 2020, 272, 127848.	1.3	0
20	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
21	Electrochemically Modifying the Electronic Structure of IrO <sub>2</sub> Nanoparticles for Overall Electrochemical Water Splitting with Extensive Adaptability. <i>Advanced Energy Materials</i> , 2020, 10, 2001600.	10.2	123
22	Intrinsic insight on localized surface plasmon resonance enhanced methanol electro-oxidation over a Au@AgPt hollow urchin-like nanostructure. <i>Journal of Materials Chemistry A</i> , 2020, 8, 6638-6646.	5.2	19
23	The electric-dipole effect of Pt-Ni for enhanced catalytic dehydrogenation of ammonia borane. <i>Journal of Alloys and Compounds</i> , 2020, 844, 156253.	2.8	14
24	Bridging effect of Co heteroatom between g-C <sub>3</sub> N <sub>4</sub> and Pt NPs for enhanced photocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2020, 394, 124964.	6.6	40
25	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
26	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
27	Single Metal Atom Photocatalysis. <i>Small Methods</i> , 2019, 3, 1800447.	4.6	140
28	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
29	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
30	<i>In situ</i> characterization of kinetics and mass transport of PbSe nanowire growth <i>via</i> LS and VLS mechanisms. <i>Nanoscale</i> , 2019, 11, 5874-5878.	2.8	9
31	Localized surface plasmon enhanced electrocatalytic methanol oxidation of AgPt bimetallic nanoparticles with an ultra-thin shell. <i>Chemical Communications</i> , 2019, 55, 3943-3946.	2.2	24
32	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
33	Enhanced photocatalytic hydrogen evolution by partially replaced corner-site C atom with P in g-C <sub>3</sub> N <sub>4</sub> . <i>Applied Catalysis B: Environmental</i> , 2019, 244, 486-493.	10.8	103
34	Modification of Carbon Nanotubes via Birch Reaction for Enhanced HER Catalyst by Constructing Pearl Necklace-Like NiCo <sub>2</sub> P <sub>2</sub> -CNT Composite. <i>Small</i> , 2018, 14, e1804388.	5.2	15
35	Mechanistic Understanding of the Growth Kinetics and Dynamics of Nanoparticle Superlattices by Coupling Interparticle Forces from Real-Time Measurements. <i>ACS Nano</i> , 2018, 12, 12778-12787.	7.3	34
36	Black TiO <sub>2</sub> for solar hydrogen conversion. <i>Journal of Materiomics</i> , 2017, 3, 96-111.	2.8	73

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37	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
38	Surface Reconstruction of Facet-Functionalized SrTiO <sub>3</sub> Nanocrystals for Photocatalytic Hydrogen Evolution. <i>ChemCatChem</i> , 2016, 8, 798-804.	1.8	34
39	Transformation of zincblende nanoparticles into wurtzite microrods by a dissolution-regrowth process: an intergrowth homojunction with enhanced photocatalytic activity. <i>Catalysis Science and Technology</i> , 2016, 6, 3371-3377.	2.1	22
40	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
41	Insight into Cd <sub>0.9</sub> Zn <sub>0.1</sub> S solid-solution nanotetrapods: Growth mechanism and their application for photocatalytic hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 20455-20464.	3.8	26
42	Surface Activation of Faceted Photocatalyst: When Metal Cocatalyst Determines the Nature of the Facets. <i>Advanced Science</i> , 2015, 2, 1500153.	5.6	25
43	SrTiO <sub>3</sub> 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