

# Yingguang Zhang

## List of Publications by Year in descending order

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71  
papers

4,966  
citations

100601

38  
h-index

104191

69  
g-index

72  
all docs

72  
docs citations

72  
times ranked

6640  
citing authors

#	ARTICLE	IF	CITATIONS
1	Monolayered Bi <sub>2</sub> WO <sub>6</sub> nanosheets mimicking heterojunction interface with open surfaces for photocatalysis. <i>Nature Communications</i> , 2015, 6, 8340.	5.8	578
2	Visible-Light Driven Overall Conversion of CO <sub>2</sub> and H <sub>2</sub> O to CH <sub>4</sub> and O <sub>2</sub> on 3D-SiC@2D-MoS <sub>2</sub> Heterostructure. <i>Journal of the American Chemical Society</i> , 2018, 140, 14595-14598.	6.6	361
3	Photocatalytic reduction of CO <sub>2</sub> on BiOX <sub>1/4</sub> § Effect of halogen element type and surface oxygen vacancy mediated mechanism. <i>Applied Catalysis B: Environmental</i> , 2020, 274, 119063.	10.8	243
4	Direct and indirect Z-scheme heterostructure-coupled photosystem enabling cooperation of CO <sub>2</sub> reduction and H <sub>2</sub> O oxidation. <i>Nature Communications</i> , 2020, 11, 3043.	5.8	200
5	Nitrogen-doped titanium dioxide visible light photocatalyst: Spectroscopic identification of photoactive centers. <i>Journal of Catalysis</i> , 2010, 276, 201-214.	3.1	185
6	In situ constructing interfacial contact MoS <sub>2</sub> /ZnIn <sub>2</sub> S <sub>4</sub> heterostructure for enhancing solar photocatalytic hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2018, 233, 112-119.	10.8	181
7	BiVO <sub>4</sub> /Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> heterojunction enabling efficient photocatalytic reduction of CO <sub>2</sub> with H <sub>2</sub> O to CH <sub>3</sub> OH and CO. <i>Applied Catalysis B: Environmental</i> , 2020, 270, 118876.	10.8	179
8	Persian buttercup-like BiOBr <sub>x</sub> Cl <sub>1-x</sub> solid solution for photocatalytic overall CO <sub>2</sub> reduction to CO and O <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , 2019, 243, 734-740.	10.8	159
9	Surface oxygen vacancy and defect engineering of WO <sub>3</sub> for improved visible light photocatalytic performance. <i>Catalysis Science and Technology</i> , 2018, 8, 4399-4406.	2.1	158
10	Enhanced visible-light-driven photocatalytic removal of NO: Effect on layer distortion on g-C <sub>3</sub> N <sub>4</sub> by H <sub>2</sub> heating. <i>Applied Catalysis B: Environmental</i> , 2015, 179, 106-112.	10.8	131
11	A low-cost and dendrite-free rechargeable aluminium-ion battery with superior performance. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17420-17425.	5.2	111
12	Plasmonic control of solar-driven CO <sub>2</sub> conversion at the metal/ZnO interfaces. <i>Applied Catalysis B: Environmental</i> , 2019, 256, 117823.	10.8	95
13	Vacuum heat-treatment of carbon nitride for enhancing photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2014, 2, 17797-17807.	5.2	94
14	Intimately Contacted Ni <sub>2</sub> P on CdS Nanorods for Highly Efficient Photocatalytic H <sub>2</sub> Evolution: New Phosphidation Route and the Interfacial Separation Mechanism of Charge Carriers. <i>Applied Catalysis B: Environmental</i> , 2021, 281, 119443.	10.8	90
15	Layered C <sub>3</sub> N <sub>3</sub> S <sub>3</sub> Polymer/Graphene Hybrids as Metal-Free Catalysts for Selective Photocatalytic Oxidation of Benzylic Alcohols under Visible Light. <i>ACS Catalysis</i> , 2014, 4, 3302-3306.	5.5	89
16	Amorphous Ta <sub>2</sub> O <sub>x</sub> N <sub>y</sub> -wrapped TiO <sub>2</sub> rutile nanorods for enhanced solar photoelectrochemical water splitting. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 481-489.	10.8	86
17	CuI-BiOI/Cu film for enhanced photo-induced charge separation and visible-light antibacterial activity. <i>Applied Catalysis B: Environmental</i> , 2018, 235, 238-245.	10.8	85
18	Non-noble metal thickness-tunable Bi <sub>2</sub> MoO <sub>6</sub> nanosheets for highly efficient visible-light-driven nitrobenzene reduction into aniline. <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118087.	10.8	80

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19	Openmouthed $\hat{I}^2$ -SiC hollow-sphere with highly photocatalytic activity for reduction of CO <sub>2</sub> with H <sub>2</sub> O. Applied Catalysis B: Environmental, 2017, 206, 158-167.	10.8	79
20	Synthesis of caged iodine-modified ZnO nanomaterials and study on their visible light photocatalytic antibacterial properties. Applied Catalysis B: Environmental, 2019, 256, 117873.	10.8	79
21	Integrating single Ni sites into biomimetic networks of covalent organic frameworks for selective photoreduction of CO <sub>2</sub> . Chemical Science, 2020, 11, 6915-6922.	3.7	78
22	The effect of halogen on BiOX (X = Cl, Br, I)/Bi <sub>2</sub> WO <sub>6</sub> heterojunction for visible-light-driven photocatalytic benzyl alcohol selective oxidation. Applied Catalysis A: General, 2018, 567, 65-72.	2.2	75
23	High-Rate, Tunable Syngas Production with Artificial Photosynthetic Cells. Angewandte Chemie - International Edition, 2019, 58, 7718-7722.	7.2	75
24	Trace Amount of SnO <sub>2</sub> -Decorated ZnSn(OH) <sub>6</sub> as Highly Efficient Photocatalyst for Decomposition of Gaseous Benzene: Synthesis, Photocatalytic Activity, and the Unrevealed Synergistic Effect between ZnSn(OH) <sub>6</sub> and SnO <sub>2</sub> . ACS Catalysis, 2016, 6, 957-968.	5.5	74
25	MnSb <sub>2</sub> S <sub>4</sub> Monolayer as an Anode Material for Metal-Ion Batteries. Chemistry of Materials, 2018, 30, 3208-3214.	3.2	74
26	Room-Temperature Activation of H <sub>2</sub> by a Surface Frustrated Lewis Pair. Angewandte Chemie - International Edition, 2019, 58, 9501-9505.	7.2	72
27	Robust Photocatalytic H <sub>2</sub> O <sub>2</sub> Production by Octahedral Cd <sub>3</sub> (C <sub>3</sub> N <sub>3</sub> S <sub>3</sub> ) <sub>2</sub> Coordination Polymer under Visible Light. Scientific Reports, 2015, 5, 16947.	1.6	71
28	Synergy of metal and nonmetal dopants for visible-light photocatalysis: a case-study of Sn and N co-doped TiO <sub>2</sub> . Physical Chemistry Chemical Physics, 2016, 18, 9636-9644.	1.3	68
29	Defect engineering of metal-oxide interface for proximity of photooxidation and photoreduction. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10232-10237.	3.3	63
30	Ultrathin nanosheets of molecular sieve SAPO-5: A new photocatalyst for efficient photocatalytic reduction of CO <sub>2</sub> with H <sub>2</sub> O to methane. Applied Catalysis B: Environmental, 2016, 187, 11-18.	10.8	62
31	Heterojunction: important strategy for constructing composite photocatalysts. Science Bulletin, 2017, 62, 599-601.	4.3	57
32	<i>In situ</i> hydrothermal etching fabrication of CaTiO <sub>3</sub> on TiO <sub>2</sub> nanosheets with heterojunction effects to enhance CO <sub>2</sub> adsorption and photocatalytic reduction. Catalysis Science and Technology, 2019, 9, 336-346.	2.1	56
33	Mechanistic insights into toluene degradation under VUV irradiation coupled with photocatalytic oxidation. Journal of Hazardous Materials, 2020, 399, 122967.	6.5	48
34	Controllable synthesis of Bi <sub>2</sub> WO <sub>6</sub> nanoplate self-assembled hierarchical erythrocyte microspheres via a one-pot hydrothermal reaction with enhanced visible light photocatalytic activity. Applied Surface Science, 2017, 403, 326-334.	3.1	46
35	Freestanding single layers of non-layered material $\hat{I}^3$ -Ga <sub>2</sub> O <sub>3</sub> as an efficient photocatalyst for overall water splitting. Journal of Materials Chemistry A, 2017, 5, 9702-9708.	5.2	46
36	PdSn/NiO/NaTaO <sub>3</sub> :La for photocatalytic ammonia synthesis by reduction of NO <sub>3</sub> <sup>-</sup> with formic acid in aqueous solution. Journal of Catalysis, 2018, 361, 303-312.	3.1	45

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37	Photocatalytic reduction of CO <sub>2</sub> to CO over the TiO <sub>2</sub> "Highly dispersed HZSM-5 zeolite containing Fe. Applied Catalysis B: Environmental, 2017, 203, 725-730.	10.8	44
38	Reconstructing Dual-Induced {0 0 1} Facets Bismuth Oxychloride Nanosheets Heterostructures: An Effective Strategy to Promote Photocatalytic Oxygen Evolution. Solar Rrl, 2019, 3, 1900059.	3.1	44
39	Phase Transition of Two-Dimensional $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Nanosheets from Ultrathin $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Nanosheets and Their Photocatalytic Hydrogen Evolution Activities. ACS Omega, 2018, 3, 14469-14476.	1.6	40
40	Simultaneous excitation of PdCl <sub>2</sub> hybrid mesoporous g-C <sub>3</sub> N <sub>4</sub> molecular/solid-state photocatalysts for enhancing the visible-light-induced oxidative removal of nitrogen oxides. Applied Catalysis B: Environmental, 2016, 184, 174-181.	10.8	39
41	More efficiently enhancing photocatalytic activity by embedding Pt within anatase "rutile TiO <sub>2</sub> heterophase junction than exposing Pt on the outside surface. Journal of Catalysis, 2019, 372, 8-18.	3.1	37
42	Distortion of the Coordination Structure and High Symmetry of the Crystal Structure in In <sub>4</sub> SnS <sub>8</sub> Microflowers for Enhancing Visible-Light Photocatalytic CO <sub>2</sub> Reduction. ACS Catalysis, 2021, 11, 11029-11039.	5.5	37
43	HZSM-5 zeolites containing impurity iron species for the photocatalytic reduction of CO <sub>2</sub> with H <sub>2</sub> O. Catalysis Science and Technology, 2016, 6, 7579-7585.	2.1	33
44	Monolayer Bi <sub>2</sub> WO <sub>6</sub> "MoO <sub>6</sub> Solid Solutions for Structural Polarity to Boost Photocatalytic Reduction of Nitrobenzene under Visible Light. ACS Sustainable Chemistry and Engineering, 2021, 9, 2465-2474.	3.2	32
45	Oxygen vacancy modulation of two-dimensional $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanosheets as efficient catalysts for photocatalytic hydrogen evolution. Nanoscale, 2018, 10, 21509-21517.	2.8	31
46	Probing the Electronic Structure and Photoactivation Process of Nitrogen-Doped TiO <sub>2</sub> Using DRS, PL, and EPR. ChemPhysChem, 2012, 13, 1542-1550.	1.0	29
47	Metallic Pt and PtO <sub>2</sub> Dual-Cocatalyst-Loaded Binary Composite RGO-CN <sub>x</sub> for the Photocatalytic Production of Hydrogen and Hydrogen Peroxide. ACS Sustainable Chemistry and Engineering, 2021, 9, 6380-6389.	3.2	29
48	Rapid water disinfection over a Ag/AgBr/covalent triazine-based framework composite under visible light. Dalton Transactions, 2018, 47, 7077-7082.	1.6	24
49	Understanding structure-function relationships in HZSM-5 zeolite catalysts for photocatalytic oxidation of isopropyl alcohol. Journal of Catalysis, 2019, 377, 322-331.	3.1	21
50	One-step synthesis of mesoporous Pt "Nb <sub>2</sub> O <sub>5</sub> nanocomposites with enhanced photocatalytic hydrogen production activity. RSC Advances, 2016, 6, 96809-96815.	1.7	20
51	Large-scale preparation of heterometallic chalcogenide MnSb <sub>2</sub> S <sub>4</sub> monolayer nanosheets with a high visible-light photocatalytic activity for H <sub>2</sub> evolution. Chemical Communications, 2016, 52, 13381-13384.	2.2	18
52	Room-Temperature Activation of H <sub>2</sub> by a Surface Frustrated Lewis Pair. Angewandte Chemie, 2019, 131, 9601-9605.	1.6	18
53	Regulation of the rutile/anatase TiO <sub>2</sub> heterophase interface by Ni <sub>12</sub> P <sub>5</sub> to improve photocatalytic hydrogen evolution. Catalysis Science and Technology, 2020, 10, 3709-3719.	2.1	18
54	Simple Fabrication of SnO <sub>2</sub> Quantum-Dot-Modified TiO <sub>2</sub> Nanorod Arrays with High Photoelectrocatalytic Activity for Overall Water Splitting. ChemPhysChem, 2018, 19, 2717-2723.	1.0	16

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55	Towards a comprehensive insight into efficient hydrogen production by self-assembled Ru(bpy) <sub>3</sub> <sup>2+</sup> "polymer" Pt artificial photosystems. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 10726-10736.	1.3	15
56	In situ construction of a heterojunction over the surface of a sandwich structure semiconductor for highly efficient photocatalytic H <sub>2</sub> evolution under visible light irradiation. <i>Nanoscale</i> , 2017, 9, 14423-14430.	2.8	15
57	One-step green conversion of benzyl bromide to aldehydes on NaOH-modified g-C <sub>3</sub> N <sub>4</sub> with dioxygen under LED visible light. <i>Catalysis Science and Technology</i> , 2019, 9, 3270-3278.	2.1	15
58	Ranking the relative CO <sub>2</sub> electrochemical reduction activity in carbon materials. <i>Carbon</i> , 2019, 154, 108-114.	5.4	14
59	Fabrication of 2H/3C-SiC heterophase junction nanocages for enhancing photocatalytic CO <sub>2</sub> reduction. <i>Journal of Colloid and Interface Science</i> , 2022, 622, 31-39.	5.0	14
60	High-Rate, Tunable Syngas Production with Artificial Photosynthetic Cells. <i>Angewandte Chemie</i> , 2019, 131, 7800-7804.	1.6	12
61	Enhanced bacterial disinfection by Cu/BiOI/rGO hydrogel under visible light irradiation. <i>RSC Advances</i> , 2021, 11, 20446-20456.	1.7	11
62	The effect of excitation wavelength on the photodeposition of Pt on polyhedron BiVO <sub>4</sub> with exposing {010} and {110} facets for photocatalytic performance. <i>Catalysis Communications</i> , 2019, 123, 100-104.	1.6	10
63	Construction of the Rutile/Anatase Micro-Heterophase Junction Photocatalyst from Anatase by Liquid Nitrogen Quenching Method. <i>ACS Applied Energy Materials</i> , 2021, 4, 10172-10186.	2.5	9
64	Photocatalytic Chlorination of Methane Using Alkali Chloride Solution. <i>ACS Catalysis</i> , 2022, 12, 7004-7013.	5.5	9
65	Sn <sup>2+</sup> and Cu <sup>2+</sup> Self-Codoped Cu <sub>2</sub> ZnSnS <sub>4</sub> Nanosheets Switching from p-Type to n-Type Semiconductors for Visible-Light-Driven CO <sub>2</sub> Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 8825-8834.	3.2	9
66	Interim Anatase Coating Layer Stabilizes Rutile@Cr <sub>x</sub> O <sub>y</sub> Photoanode for Visible-Light-Driven Water Oxidation. <i>ChemPhysChem</i> , 2015, 16, 1352-1355.	1.0	8
67	Multimetal tantalate CsBi <sub>2</sub> Ta <sub>5</sub> O <sub>16</sub> for photocatalytic conversion of CO <sub>2</sub> with H <sub>2</sub> O into CH <sub>4</sub> and O <sub>2</sub> . <i>Applied Surface Science</i> , 2022, 588, 152933.	3.1	8
68	Post-synthetic regulation of the structure, morphology and photoactivity of graphitic carbon nitride by heat-vacuum treatment. <i>Materials and Design</i> , 2017, 114, 208-213.	3.3	7
69	Controlling 1T/2H heterophase junctions in the MoS <sub>2</sub> microsphere for the highly efficient photocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2021, 11, 7914-7921.	2.1	4
70	Photochemistry of Nitrate Ion: Reduction by Formic Acid under UV Irradiation. <i>Photochemistry and Photobiology</i> , 2022, 98, 404-411.	1.3	2
71	AuPd nanoparticle-decorated ultrathin Bi <sub>2</sub> TiO <sub>4</sub> F <sub>2</sub> sheets for photocatalytic methane oxidation. <i>New Journal of Chemistry</i> , 2022, 46, 10545-10549.	1.4	1