

# Xianliang Fu

## List of Publications by Year in descending order

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41344

49  
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53230

85  
g-index

100  
all docs

100  
docs citations

100  
times ranked

7783  
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on the separation mechanisms of photogenerated electrons and holes for composite photocatalysts g-C <sub>3</sub> N <sub>4</sub> -WO <sub>3</sub> . Applied Catalysis B: Environmental, 2014, 150-151, 564-573.	20.2	572
2	Hydrogen Production over Titania-Based Photocatalysts. ChemSusChem, 2010, 3, 681-694.	6.8	404
3	Design of a direct Z-scheme photocatalyst: Preparation and characterization of Bi <sub>2</sub> O <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> with high visible light activity. Journal of Hazardous Materials, 2014, 280, 713-722.	12.4	344
4	Photocatalytic reforming of biomass: A systematic study of hydrogen evolution from glucose solution. International Journal of Hydrogen Energy, 2008, 33, 6484-6491.	7.1	301
5	Coupled systems for selective oxidation of aromatic alcohols to aldehydes and reduction of nitrobenzene into aniline using CdS/g-C <sub>3</sub> N <sub>4</sub> photocatalyst under visible light irradiation. Applied Catalysis B: Environmental, 2014, 158-159, 382-390.	20.2	255
6	In situ preparation of novel p-n junction photocatalyst BiOI/(BiO) <sub>2</sub> CO <sub>3</sub> with enhanced visible light photocatalytic activity. Journal of Hazardous Materials, 2012, 239-240, 316-324.	12.4	204
7	Electronic structure and optical properties of Ag <sub>3</sub> PO <sub>4</sub> photocatalyst calculated by hybrid density functional method. Applied Physics Letters, 2011, 99, .	3.3	191
8	Photocatalytic performance of tetragonal and cubic In <sub>2</sub> S <sub>3</sub> for the water splitting under visible light irradiation. Applied Catalysis B: Environmental, 2010, 95, 393-399.	20.2	175
9	Significantly enhanced visible-light photocatalytic activity of g-C <sub>3</sub> N <sub>4</sub> via ZnO modification and the mechanism study. Journal of Molecular Catalysis A, 2013, 368-369, 9-15.	4.8	162
10	Ag <sub>3</sub> PO <sub>4</sub> /ZnO: An efficient visible-light-sensitized composite with its application in photocatalytic degradation of Rhodamine B. Materials Research Bulletin, 2013, 48, 106-113.	5.2	157
11	What is the transfer mechanism of photogenerated carriers for the nanocomposite photocatalyst Ag <sub>3</sub> PO <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> , band transfer or a direct Z-scheme?. Physical Chemistry Chemical Physics, 2015, 17, 11577-11585.	2.8	155
12	Selective oxidation of aromatic alcohols to aromatic aldehydes by BN/metal sulfide with enhanced photocatalytic activity. Applied Catalysis B: Environmental, 2016, 182, 356-368.	20.2	144
13	Ultra-low content of Pt modified CdS nanorods: one-pot synthesis and high photocatalytic activity for H <sub>2</sub> production under visible light. Journal of Materials Chemistry A, 2015, 3, 23732-23742.	10.3	137
14	Fabrication, characterization and mechanism of a novel Z-scheme photocatalyst NaNbO <sub>3</sub> /WO <sub>3</sub> with enhanced photocatalytic activity. Dalton Transactions, 2013, 42, 10759.	3.3	132
15	Photocatalytic reforming of glycerol for H <sub>2</sub> evolution on Pt/TiO <sub>2</sub> : fundamental understanding the effect of co-catalyst Pt and the Pt deposition route. Journal of Materials Chemistry A, 2015, 3, 2271-2282.	10.3	129
16	Hydroxide ZnSn(OH) <sub>6</sub> : A promising new photocatalyst for benzene degradation. Applied Catalysis B: Environmental, 2009, 91, 67-72.	20.2	122
17	Efficient photocatalytic H <sub>2</sub> evolution, CO <sub>2</sub> reduction and N <sub>2</sub> fixation coupled with organic synthesis by cocatalyst and vacancies engineering. Applied Catalysis B: Environmental, 2021, 285, 119789.	20.2	120
18	Preparation and characterization of direct Z-scheme photocatalyst Bi <sub>2</sub> O <sub>3</sub> /NaNbO <sub>3</sub> and its reaction mechanism. Applied Surface Science, 2014, 292, 357-366.	6.1	119

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19	Ball milled h-BN: An efficient holes transfer promoter to enhance the photocatalytic performance of TiO <sub>2</sub> . Journal of Hazardous Materials, 2013, 244-245, 102-110.	12.4	116
20	One-step synthesis of 2D/2D-3D NiS/Zn <sub>3</sub> In <sub>2</sub> S <sub>6</sub> hierarchical structure toward solar-to-chemical energy transformation of biomass-relevant alcohols. Applied Catalysis B: Environmental, 2020, 266, 118617.	20.2	115
21	One-pot hydrothermal synthesis of highly efficient SnO <sub>x</sub> /Zn <sub>2</sub> SnO <sub>4</sub> composite photocatalyst for the degradation of methyl orange and gaseous benzene. Applied Catalysis B: Environmental, 2017, 200, 19-30.	20.2	112
22	Hydrothermal synthesis, characterization, and photocatalytic properties of Zn <sub>2</sub> SnO <sub>4</sub> . Journal of Solid State Chemistry, 2009, 182, 517-524.	2.9	108
23	Effective use of photogenerated electrons and holes in a system: Photocatalytic selective oxidation of aromatic alcohols to aldehydes and hydrogen production. Journal of Catalysis, 2018, 367, 159-170.	6.2	102
24	Efficient utilization of photogenerated electrons and holes for photocatalytic selective organic syntheses in one reaction system using a narrow band gap CdS photocatalyst. Green Chemistry, 2016, 18, 3628-3639.	9.0	101
25	V <sub>2</sub> O <sub>5</sub> /Al <sub>2</sub> O <sub>3</sub> composite photocatalyst: Preparation, characterization, and the role of Al <sub>2</sub> O <sub>3</sub> . Chemical Engineering Journal, 2012, 180, 170-177.	12.7	95
26	In situ photodeposition of MoS <sub>x</sub> on CdS nanorods as a highly efficient cocatalyst for photocatalytic hydrogen production. Journal of Materials Chemistry A, 2017, 5, 15287-15293.	10.3	93
27	Simultaneous dehydrogenation and hydrogenolysis of aromatic alcohols in one reaction system via visible-light-driven heterogeneous photocatalysis. Journal of Catalysis, 2018, 357, 247-256.	6.2	91
28	Effect of different solvent on the photocatalytic activity of ZnIn <sub>2</sub> S <sub>4</sub> for selective oxidation of aromatic alcohols to aromatic aldehydes under visible light irradiation. Applied Surface Science, 2016, 384, 161-174.	6.1	90
29	Synergistic effect of photocatalysis and thermocatalysis for selective oxidation of aromatic alcohols to aromatic aldehydes using Zn <sub>3</sub> In <sub>2</sub> S <sub>6</sub> @ZnO composite. Applied Catalysis B: Environmental, 2017, 218, 420-429.	20.2	90
30	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. Applied Catalysis B: Environmental, 2021, 281, 119443.	20.2	90
31	Insight into the Transfer Mechanism of Photogenerated Carriers for WO <sub>3</sub> /TiO <sub>2</sub> Heterojunction Photocatalysts: Is It the Transfer of Band or Z-Scheme? Why?. Journal of Physical Chemistry C, 2018, 122, 26326-26336.	3.1	88
32	Fabrication and characterization of novel Z-scheme photocatalyst WO <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> with high efficient visible light photocatalytic activity. Materials Chemistry and Physics, 2015, 149-150, 512-521.	4.0	86
33	Insight into the Transfer Mechanisms of Photogenerated Carriers for Heterojunction Photocatalysts with the Analogous Positions of Valence Band and Conduction Band: A Case Study of ZnO/TiO <sub>2</sub> . Journal of Physical Chemistry C, 2018, 122, 15409-15420.	3.1	84
34	Rational synthesis of Mn <sub>x</sub> Cd <sub>1-x</sub> S for enhanced photocatalytic H <sub>2</sub> evolution: Effects of S precursors and the feed ratio of Mn/Cd on its structure and performance. Journal of Colloid and Interface Science, 2019, 535, 469-480.	9.4	80
35	Chalcogenide photocatalysts for selective oxidation of aromatic alcohols to aldehydes using O <sub>2</sub> and visible light: A case study of CdIn <sub>2</sub> S <sub>4</sub> , CdS and In <sub>2</sub> S <sub>3</sub> . Chemical Engineering Journal, 2018, 348, 966-977.	12.7	79
36	Photocatalytic degradation of benzene over different morphology BiPO <sub>4</sub> : Revealing the significant contribution of high energy facets and oxygen vacancies. Applied Catalysis B: Environmental, 2019, 243, 780-789.	20.2	78

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37	Urea-based hydrothermal growth, optical and photocatalytic properties of single-crystalline In(OH) <sub>3</sub> nanocubes. <i>Journal of Colloid and Interface Science</i> , 2008, 325, 425-431.	9.4	75
38	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> . <i>ACS Catalysis</i> , 2016, 6, 957-968.	11.2	74
39	Solvothermal synthesis of CdIn <sub>2</sub> S <sub>4</sub> photocatalyst for selective photosynthesis of organic aromatic compounds under visible light. <i>Scientific Reports</i> , 2017, 7, 27.	3.3	72
40	Selective oxidation of aromatic alcohols to corresponding aromatic aldehydes using In <sub>2</sub> S <sub>3</sub> microsphere catalyst under visible light irradiation. <i>Chemical Engineering Journal</i> , 2014, 245, 107-116.	12.7	71
41	Controlled synthesis of Sn-based oxides via a hydrothermal method and their visible light photocatalytic performances. <i>RSC Advances</i> , 2017, 7, 27024-27032.	3.6	65
42	Effects of preparation method on the microstructure and photocatalytic performance of ZnSn(OH) <sub>6</sub> . <i>Applied Catalysis B: Environmental</i> , 2014, 148-149, 532-542.	20.2	64
43	The role of ball milled h-BN in the enhanced photocatalytic activity: A study based on the model of ZnO. <i>Applied Surface Science</i> , 2013, 280, 828-835.	6.1	60
44	Photocatalytic destruction of air pollutants with vacuum ultraviolet (VUV) irradiation. <i>Catalysis Today</i> , 2011, 175, 310-315.	4.4	59
45	MoS <sub>2</sub> /Zn <sub>3</sub> In <sub>2</sub> S <sub>6</sub> composite photocatalysts for enhancement of visible light-driven hydrogen production from formic acid. <i>Chinese Journal of Catalysis</i> , 2021, 42, 193-204.	14.0	55
46	Photocatalytic reforming of glucose over La doped alkali tantalate photocatalysts for H <sub>2</sub> production. <i>Catalysis Communications</i> , 2010, 12, 184-187.	3.3	53
47	Photocatalytic reforming of C <sub>3</sub> -polyols for H <sub>2</sub> production. <i>Applied Catalysis B: Environmental</i> , 2011, 106, 681-688.	20.2	53
48	Noble metal-free 0D/1D NiS <sub>x</sub> /CdS nanocomposites toward highly efficient photocatalytic contamination removal and hydrogen evolution under visible light. <i>Dalton Transactions</i> , 2018, 47, 12671-12683.	3.3	53
49	Integrating photonic bandgaps with surface plasmon resonance for the enhancement of visible-light photocatalytic performance. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23501-23511.	10.3	51
50	A new phosphidation route for the synthesis of NiP and their cocatalytic performances for photocatalytic hydrogen evolution over g-C <sub>3</sub> N <sub>4</sub> . <i>Journal of Energy Chemistry</i> , 2020, 48, 241-249.	12.9	51
51	Effect of Zn Vacancies in Zn <sub>3</sub> In <sub>2</sub> S <sub>6</sub> Nanosheets on Boosting Photocatalytic N <sub>2</sub> Fixation. <i>ACS Applied Energy Materials</i> , 2020, 3, 11275-11284.	5.1	49
52	Photocatalytic Performance of NiS/CdS Composite with Multistage Structure. <i>ACS Applied Energy Materials</i> , 2020, 3, 7736-7745.	5.1	48
53	Photocatalytic synthesis of Schiff base compounds in the coupled system of aromatic alcohols and nitrobenzene using CdXZn <sub>1-x</sub> S photocatalysts. <i>Journal of Catalysis</i> , 2018, 359, 151-160.	6.2	46
54	Crystal phase-controlled synthesis of BiPO <sub>4</sub> and the effect of phase structure on the photocatalytic degradation of gaseous benzene. <i>Chemical Engineering Journal</i> , 2017, 330, 433-441.	12.7	46

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55	Photocatalytic reforming of C3-polyols for H <sub>2</sub> production. Applied Catalysis B: Environmental, 2011, 106, 689-696.	20.2	45
56	Hydrothermal synthesis of MSn(OH) <sub>6</sub> (M = Co, Cu, Fe, Mg, Mn, Zn) and their photocatalytic activity for the destruction of gaseous benzene. Chemical Engineering Journal, 2015, 269, 168-179.	12.7	45
57	Ultra-low content of Pt modified CdS nanorods: Preparation, characterization, and application for photocatalytic selective oxidation of aromatic alcohols and reduction of nitroarenes in one reaction system. Journal of Hazardous Materials, 2018, 360, 182-192.	12.4	45
58	Photocatalytic organic transformations: Simultaneous oxidation of aromatic alcohols and reduction of nitroarenes on CdLa <sub>2</sub> S <sub>4</sub> in one reaction system. Applied Catalysis B: Environmental, 2018, 233, 1-10.	20.2	44
59	Coupled visible-light driven photocatalytic reactions over porphyrin-based MOF materials. Chemical Engineering Journal, 2022, 442, 136186.	12.7	44
60	Construction of two-dimensionally relative p-n heterojunction for efficient photocatalytic redox reactions under visible light. Applied Surface Science, 2020, 505, 144638.	6.1	37
61	The Hole Tunneling Heterojunction of Hematite-Based Photoanodes Accelerates Photosynthetic Reaction. Angewandte Chemie - International Edition, 2021, 60, 16009-16018.	13.8	37
62	Remarkable enhancement of photocatalytic performance via constructing a novel Z-scheme KNbO <sub>3</sub> /Bi <sub>2</sub> O <sub>3</sub> hybrid material. Materials Research Bulletin, 2017, 94, 352-360.	5.2	35
63	Compositional regulation and modification of the host CdS for efficient photocatalytic hydrogen production: Case study on MoS <sub>2</sub> decorated Co <sub>0.2</sub> Cd <sub>0.8</sub> S nanorods. Chemical Engineering Journal, 2019, 378, 122139.	12.7	33
64	The preparation and characterization of composite bismuth tungsten oxide with enhanced visible light photocatalytic activity. CrystEngComm, 2013, 15, 7943.	2.6	31
65	Preparation, characterization, and photocatalytic performance of Ce <sub>2</sub> S <sub>3</sub> for nitrobenzene reduction. Applied Surface Science, 2013, 275, 335-341.	6.1	31
66	Fabrication of hydrophilic S/In <sub>2</sub> O <sub>3</sub> core-shell nanocomposite for enhancement of photocatalytic performance under visible light irradiation. Applied Surface Science, 2015, 324, 188-197.	6.1	31
67	Photocatalytic reforming of ethanol to H <sub>2</sub> and CH <sub>4</sub> over ZnSn(OH) <sub>6</sub> nanocubes. International Journal of Hydrogen Energy, 2011, 36, 1524-1530.	7.1	30
68	Optimizing the precursor of sulfur source for hydrothermal synthesis of high performance CdS for photocatalytic hydrogen production. RSC Advances, 2018, 8, 11489-11497.	3.6	29
69	Low-crystalline PdCu alloy on large-area ultrathin 2D carbon nitride nanosheets for efficient photocatalytic Suzuki coupling. Applied Catalysis B: Environmental, 2022, 300, 120756.	20.2	29
70	Effect of oxygen mobility in the lattice of Au/TiO <sub>2</sub> on formaldehyde oxidation. Kinetics and Catalysis, 2012, 53, 239-246.	1.0	26
71	Metastable scheelite CdWO <sub>4</sub> :Eu <sup>3+</sup> nanophosphors: Solvothermal synthesis, phase transitions and their polymorph-dependent luminescence properties. Dyes and Pigments, 2017, 147, 283-290.	3.7	25
72	A Novel CdS/C <sub>3</sub> N <sub>4</sub> Composite Photocatalyst: Preparation, Characterization and Photocatalytic Performance with Different Reaction Solvents under Visible Light Irradiation. Chinese Journal of Chemistry, 2017, 35, 217-225.	4.9	25

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73	Amino acid-assisted synthesis of In <sub>2</sub> S <sub>3</sub> hierarchical architectures for selective oxidation of aromatic alcohols to aromatic aldehydes. RSC Advances, 2017, 7, 6457-6466.	3.6	22
74	Efficient H <sub>2</sub> evolution on Co <sub>3</sub> S <sub>4</sub> /Zn <sub>0.5</sub> Cd <sub>0.5</sub> S nanocomposites by photocatalytic synergistic reaction. Inorganic Chemistry Frontiers, 2022, 9, 1943-1955.	6.0	22
75	Preparation, characterization and photocatalytic activity evaluation of NaBiO <sub>3</sub> ·2H <sub>2</sub> O and NaBiO <sub>3</sub> ·xH <sub>2</sub> O nanosheets. Materials Chemistry and Physics, 2013, 142, 748-755.	4.0	20
76	Coordinating ultra-low content Au modified CdS with coupling selective oxidation and reduction system for improved photoexcited charge utilization. Journal of Catalysis, 2021, 402, 72-82.	6.2	19
77	Efficient photocatalytic H <sub>2</sub> production coupling with selective oxidation of aromatic alcohol under carbon neutrality. Applied Catalysis B: Environmental, 2021, 298, 120619.	20.2	18
78	Construction of NiP <sub>x</sub> /MoS <sub>2</sub> /NiS/CdS composite to promote photocatalytic H <sub>2</sub> production from glucose solution. Journal of the American Ceramic Society, 2021, 104, 5307-5316.	3.8	17
79	Mo-W based copper oxides: Preparation, characterizations, and photocatalytic reduction of nitrobenzene. Materials Chemistry and Physics, 2013, 141, 719-726.	4.0	16
80	Theoretical Studies on DNA-Cleavage Mechanism of Copper(II) Complexes: Probing Generation of Reactive Oxygen Species. Journal of Chemical Information and Modeling, 2018, 58, 859-866.	5.4	14
81	A Comprehensive Understanding of the Melting Temperature of Nanocrystals: Implications for Catalysis. ACS Applied Nano Materials, 2020, 3, 1583-1591.	5.0	10
82	One-Pot Synthesis of ZnO<sub>2</sub>/ZnO Composite with Enhanced Photocatalytic Performance for Organic Dye Removal. Journal of Nanoscience and Nanotechnology, 2013, 13, 657-665.	0.9	9
83	Ultrasonication-Assisted Synthesis of ZnxCd <sub>1-x</sub> S for Enhanced Visible-Light Photocatalytic Activity. Catalysts, 2020, 10, 276.	3.5	9
84	H <sub>2</sub> O <sub>2</sub> promoting effect on photocatalytic degradation of organic pollutants in an aqueous solution without an external H <sub>2</sub> supply. Applied Catalysis A: General, 2010, 380, 178-184.	4.3	8
85	Sodium titanate nanowires as a stable and easily handled precursor for the shape controlled synthesis of TiO <sub>2</sub> and their photocatalytic performance. CrystEngComm, 2014, 16, 616-626.	2.6	8
86	Colored TiO <sub>2</sub> hollow spheres for efficient water-splitting photocatalysts. RSC Advances, 2016, 6, 108969-108973.	3.6	8
87	Hydrogenation of Cinnamaldehyde to Hydrocinnamyl Alcohol on Pt/Graphite Catalyst. ChemistrySelect, 2019, 4, 2018-2023.	1.5	8
88	Visible-Light-Driven H <sub>2</sub> Evolution with Cobalt Complexes in Aqueous Solution: Theoretical and Experimental Study. Journal of Physical Chemistry C, 2019, 123, 30351-30359.	3.1	8
89	One-Pot Solid-State Reaction Approach to Synthesize Ag-Cu <sub>2</sub> O/GO Ternary Nanocomposites with Enhanced Visible-Light-Responsive Photocatalytic Activity. International Journal of Photoenergy, 2017, 2017, 1-8.	2.5	7
90	The morphology and photocatalytic performance of Zn(OH)F under different synthetic conditions. Journal of Fluorine Chemistry, 2020, 237, 109600.	1.7	5

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91	Theoretical study on the DNA interaction properties of copper(II) complexes. Computational Biology and Chemistry, 2019, 80, 244-248.	2.3	4
92	Progress in Photocatalytic Synthesis of Benzimidazoles. ChemistrySelect, 2021, 6, 12628-12643.	1.5	4
93	Unraveling Electron Structure and Reaction Mechanisms of Functionalized Nickel-Based Complexes for Efficient Hydrogen Evolution. Journal of Physical Chemistry C, 2022, 126, 1857-1871.	3.1	4
94	Accelerating Nickel-Based Molecular Construction via DFT Guidance for Advanced Photocatalytic Hydrogen Production. ACS Applied Materials & Interfaces, 2022, 14, 17486-17499.	8.0	4
95	Recent advances in special morphologic photocatalysts for NO <sub>x</sub> removal. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	6.0	4
96	Synthesis of novel morphology-controlled Bi(OH)CrO <sub>4</sub> with high visible light photocatalytic activity. Materials Research Bulletin, 2013, 48, 3292-3297.	5.2	3
97	The Hole Tunneling Heterojunction of Hematite-Based Photoanodes Accelerates Photosynthetic Reaction. Angewandte Chemie, 2021, 133, 16145-16154.	2.0	2
98	Pt/ $\text{TiO}_2$ Coupled with Water-Splitting Catalyst for Organic Pollutant Photodegradation: Insight into the Primary Reaction Mechanism. Research Letters in Physical Chemistry, 2008, 2008, 1-5.	0.3	1
99	Laser bonding of glass and glass with constant temperature output. , 2018, , .		1