Quan-Jun Xiang

List of Publications by Year
in descending order

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96 papers	22,075 citations	16411 64 h-index	33814 99 g-index
99 all docs	99 docs citations	99 times ranked	18093 citing authors

#	Article	IF	Citations
1	Graphene-based semiconductor photocatalysts. Chemical Society Reviews, 2012, 41, 782-796.	18.7	2,497
2	Synergetic Effect of MoS₂ and Graphene as Cocatalysts for Enhanced Photocatalytic H₂ Production Activity of TiO₂ Nanoparticles. Journal of the American Chemical Society, 2012, 134, 6575-6578.	6.6	2,245
3	Preparation and Enhanced Visible-Light Photocatalytic H₂-Production Activity of Graphene/C₃N₄ Composites. Journal of Physical Chemistry C, 2011, 115, 7355-7363.	1.5	1,694
4	CdS-Based photocatalysts. Energy and Environmental Science, 2018, 11, 1362-1391.	15.6	1,220
5	Enhanced photocatalytic H2-production activity of graphene-modified titania nanosheets. Nanoscale, 2011, 3, 3670.	2.8	742
6	Preparation, characterization and visible-light-driven photocatalytic activity of Fe-doped titania nanorods and first-principles study for electronic structures. Applied Catalysis B: Environmental, 2009, 90, 595-602.	10.8	700
7	Grapheneâ€Based Photocatalysts for Solarâ€Fuel Generation. Angewandte Chemie - International Edition, 2015, 54, 11350-11366.	7.2	692
8	Quantitative characterization of hydroxyl radicals produced by various photocatalysts. Journal of Colloid and Interface Science, 2011, 357, 163-167.	5.0	592
9	Pivotal role of fluorine in enhanced photocatalytic activity of anatase TiO2 nanosheets with dominant (001) facets for the photocatalytic degradation of acetone in air. Applied Catalysis B: Environmental, 2010, 96, 557-564.	10.8	509
10	Graphene-Based Photocatalysts for Hydrogen Generation. Journal of Physical Chemistry Letters, 2013, 4, 753-759.	2.1	501
11	Review on Metal Sulphideâ€based Zâ€scheme Photocatalysts. ChemCatChem, 2019, 11, 1394-1411.	1.8	439
12	Crystalline Carbon Nitride Supported Copper Single Atoms for Photocatalytic CO₂ Reduction with Nearly 100% CO Selectivity. ACS Nano, 2020, 14, 10552-10561.	7.3	417
13	Fabrication and enhanced visible-light photocatalytic activity of carbon self-doped TiO₂sheets with exposed {001} facets. Journal of Materials Chemistry, 2011, 21, 1049-1057.	6.7	390
14	A review on 2D MoS2 cocatalysts in photocatalytic H2 production. Journal of Materials Science and Technology, 2020, 56, 89-121.	5.6	364
15	Enhanced photocatalytic activity of hierarchical macro/mesoporous TiO2â€“graphene composites for photodegradation of acetone in air. Applied Catalysis B: Environmental, 2012, 119-120, 109-116.	10.8	356
16	Nitrogen self-doped nanosized TiO2 sheets with exposed {001} facets for enhanced visible-light photocatalytic activity. Chemical Communications, 2011, 47, 6906.	2.2	342
17	Improved visible-light photocatalytic activity of porous carbon self-doped ZnO nanosheet-assembled flowers. CrystEngComm, 2011, 13, 2533.	1.3	328
18	Graphene-modified nanosized Ag 3 PO 4 photocatalysts for enhanced visible-light photocatalytic activity and stability. Applied Catalysis B: Environmental, 2015, 162, 196-203.	10.8	298

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19	Nitrogen and sulfur co-doped TiO₂nanosheets with exposed {001} facets: synthesis, characterization and visible-light photocatalytic activity. Physical Chemistry Chemical Physics, 2011, 13, 4853-4861.	1.3	282
20	Constructing low-cost Ni3C/twin-crystal Zn0.5Cd0.5S heterojunction/homojunction nanohybrids for efficient photocatalytic H2 evolution. Chinese Journal of Catalysis, 2021, 42, 25-36.	6.9	272
21	Hierarchical Layered WS₂/Grapheneâ€Modified CdS Nanorods for Efficient Photocatalytic Hydrogen Evolution. ChemSusChem, 2016, 9, 996-1002.	3.6	257
22	Tunable photocatalytic selectivity of TiO2 films consisted of flower-like microspheres with exposed {001} facets. Chemical Communications, 2011, 47, 4532.	2.2	250
23	Hierarchical porous CdS nanosheet-assembled flowers with enhanced visible-light photocatalytic H2-production performance. Applied Catalysis B: Environmental, 2013, 138-139, 299-303.	10.8	249
24	One-step hydrothermal fabrication and photocatalytic activity of surface-fluorinated TiO₂hollow microspheres and tabular anatase single micro-crystals with high-energy facets. CrystEngComm, 2010, 12, 872-879.	1.3	241
25	Ni-based photocatalytic H2-production cocatalysts2. Chinese Journal of Catalysis, 2019, 40, 240-288.	6.9	239
26	Effect of calcination temperature on morphology and photocatalytic activity of anatase TiO2 nanosheets with exposed {0 0 1} facets. Applied Catalysis B: Environmental, 2011, 104, 275-281.	10.8	211
27	Design and application of active sites in g-C3N4-based photocatalysts. Journal of Materials Science and Technology, 2020, 56, 69-88.	5.6	211
28	Low-temperature solid-state preparation of ternary CdS/g-C 3 N 4 /CuS nanocomposites for enhanced visible-light photocatalytic H 2 -production activity. Applied Surface Science, 2017, 391, 432-439.	3.1	200
29	Two-Dimensional Transition Metal MXene-Based Photocatalysts for Solar Fuel Generation. Journal of Physical Chemistry Letters, 2019, 10, 3488-3494.	2.1	193
30	Enhanced photocatalytic H2-production activity of C-dots modified g-C3N4/TiO2 nanosheets composites. Journal of Colloid and Interface Science, 2018, 513, 866-876.	5.0	178
31	Single Ni Atoms Anchored on Porous Fewâ€Layer gâ€C₃N₄ for Photocatalytic CO₂ Reduction: The Role of Edge Confinement. Small, 2020, 16, e2002411.	5.2	175
32	Strongly coupled 2D-2D nanojunctions between P-doped Ni2S (Ni2SP) cocatalysts and CdS nanosheets for efficient photocatalytic H2 evolution. Chemical Engineering Journal, 2020, 390, 124496.	6.6	174
33	Surface and interface engineering of hierarchical photocatalysts. Applied Surface Science, 2019, 471, 43-87.	3.1	170
34	Dualâ€Singleâ€Atom Tailoring with Bifunctional Integration for Highâ€Performance CO₂ Photoreduction. Advanced Materials, 2021, 33, e2105135.	11.1	168
35	Enhancement of photocatalytic H₂ production activity of CdS nanorods by cobalt-based cocatalyst modification. Catalysis Science and Technology, 2016, 6, 6207-6216.	2.1	165
36	Roles of MoS₂ and Graphene as Cocatalysts in the Enhanced Visibleâ€Light Photocatalytic H₂ Production Activity of Multiarmed CdS Nanorods. ChemCatChem, 2015, 7, 943-951.	1.8	164

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37	2D/2D BiVO4/CsPbBr3 S-scheme heterojunction for photocatalytic CO2 reduction: Insights into structure regulation and Fermi level modulation. Applied Catalysis B: Environmental, 2022, 304, 120979.	10.8	163
38	Porous graphitic carbon nitride for solar photocatalytic applications. Nanoscale Horizons, 2020, 5, 765-786.	4.1	152
39	Visible-light-driven CdSe quantum dots/graphene/TiO2 nanosheets composite with excellent photocatalytic activity for E. coli disinfection and organic pollutant degradation. Applied Surface Science, 2018, 457, 846-855.	3.1	151
40	Plasma-modified Ti₃C₂T_x/CdS hybrids with oxygen-containing groups for high-efficiency photocatalytic hydrogen production. Nanoscale, 2019, 11, 18797-18805.	2.8	134
41	Crystalline isotype heptazine-/triazine-based carbon nitride heterojunctions for an improved hydrogen evolution. Applied Catalysis B: Environmental, 2020, 268, 118381.	10.8	130
42	Structural engineering of 3D hierarchical Cd0.8Zn0.2S for selective photocatalytic CO2 reduction. Chinese Journal of Catalysis, 2021, 42, 131-140.	6.9	129
43	Highly crystalline carbon nitride hollow spheres with enhanced photocatalytic performance. Chinese Journal of Catalysis, 2021, 42, 627-636.	6.9	125
44	Constructing functionalized plasmonic gold/titanium dioxide nanosheets with small gold nanoparticles for efficient photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2019, 555, 94-103.	5.0	122
45	Enhanced photocatalytic hydrogen production activity of highly crystalline carbon nitride synthesized by hydrochloric acid treatment. Chinese Journal of Catalysis, 2020, 41, 21-30.	6.9	119
46	Single Au Atoms Anchored on Aminoâ€Groupâ€Enriched Graphitic Carbon Nitride for Photocatalytic CO₂ Reduction. ChemSusChem, 2020, 13, 1979-1985.	3.6	117
47	Microwaveâ€Hydrothermal Preparation and Visibleâ€Light Photoactivity of Plasmonic Photocatalyst Agâ€TiO₂ Nanocomposite Hollow Spheres. Chemistry - an Asian Journal, 2010, 5, 1466-1474.	1.7	105
48	Crystalline Intramolecular Ternary Carbon Nitride Homojunction for Photocatalytic Hydrogen Evolution. ACS Catalysis, 2022, 12, 6345-6358.	5.5	101
49	Mechanisms of Mn(II) catalytic oxidation on ferrihydrite surfaces and the formation of manganese (oxyhydr)oxides. Geochimica Et Cosmochimica Acta, 2017, 211, 79-96.	1.6	100
50	Effects of crystalline phase and morphology on the visible light photocatalytic H₂-production activity of CdS nanocrystals. Dalton Transactions, 2014, 43, 7245-7253.	1.6	99
51	Copper and platinum dual-single-atoms supported on crystalline graphitic carbon nitride for enhanced photocatalytic CO2 reduction. Chinese Journal of Catalysis, 2022, 43, 451-460.	6.9	99
52	Recent advances in crystalline carbon nitride for photocatalysis. Journal of Materials Science and Technology, 2021, 91, 224-240.	5.6	97
53	Carbonâ€“Graphitic Carbon Nitride Hybrids for Heterogeneous Photocatalysis. Small, 2021, 17, e2005231.	5.2	96
54	Steering the behavior of photogenerated carriers in semiconductor photocatalysts: a new insight and perspective. Journal of Materials Chemistry A, 2021, 9, 23765-23782.	5.2	92

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55	Siteâ€Specific Electronâ€Driving Observations of CO₂â€toâ€CH₄ Photoreduction on Coâ€Doped CeO₂/Crystalline Carbon Nitride Sâ€Scheme Heterojunctions. Advanced Materials, 2022, 34, e2200929.	11.1	90
56	State-of-the-art recent progress in MXene-based photocatalysts: a comprehensive review. Nanoscale, 2021, 13, 9463-9504.	2.8	87
57	Targeted regulation of exciton dissociation in graphitic carbon nitride by vacancy modification for efficient photocatalytic CO2 reduction. Applied Catalysis B: Environmental, 2021, 292, 120179.	10.8	85
58	Photocatalytic Activity of Hierarchical Flower-Like TiO2 Superstructures with Dominant {001} Facets. Chinese Journal of Catalysis, 2011, 32, 525-531.	6.9	82
59	Construction of an Ultrathin Sâ€Scheme Heterojunction Based on Fewâ€Layer gâ€C₃N₄ and Monolayer Ti₃C₂T_x MXene for Photocatalytic CO₂ Reduction. Solar Rrl, 2021, 5, 2000351.	3.1	79
60	Plasma-based surface modification of g-C3N4 nanosheets for highly efficient photocatalytic hydrogen evolution. Applied Surface Science, 2019, 495, 143520.	3.1	77
61	Enhanced photocatalytic hydrogen evolution activity of carbon and nitrogen self-doped TiO2 hollow sphere with the creation of oxygen vacancy and Ti3+. Materials Today Energy, 2018, 10, 132-140.	2.5	74
62	Synthesis of Mn2O3 microstructures and their energy storage ability studies. Electrochimica Acta, 2013, 106, 360-371.	2.6	71
63	Amine-functionalized graphitic carbon nitride decorated with small-sized Au nanoparticles for photocatalytic CO2 reduction. Journal of Colloid and Interface Science, 2020, 570, 11-19.	5.0	70
64	Oneâ€Step Solidâ€Phase Synthesis of 2D Ultrathin CdS Nanosheets for Enhanced Visibleâ€Light Photocatalytic Hydrogen Evolution. Solar Rrl, 2019, 3, 1900062.	3.1	67
65	Construction of efficient active sites through cyano-modified graphitic carbon nitride for photocatalytic CO2 reduction. Chinese Journal of Catalysis, 2021, 42, 1608-1616.	6.9	67
66	Interfacial modification of titanium dioxide to enhance photocatalytic efficiency towards H2 production. Journal of Colloid and Interface Science, 2019, 556, 376-385.	5.0	63
67	Truncated octahedral bipyramidal TiO₂/MXene Ti₃C₂ hybrids with enhanced photocatalytic H₂ production activity. Nanoscale Advances, 2019, 1, 1812-1818.	2.2	63
68	Internal Electric Field on Steering Charge Migration: Modulations, Determinations and Energyâ€Related Applications. Advanced Functional Materials, 2022, 32, .	7.8	63
69	Nanosheet-assembled hierarchical flower-like g-C₃N₄ for enhanced photocatalytic CO₂ reduction activity. Chemical Communications, 2020, 56, 2443-2446.	2.2	60
70	Transition-Metal-Ion (Fe, Co, Cr, Mn, Etc.) Doping of TiO₂ Nanotubes: A General Approach. Inorganic Chemistry, 2019, 58, 12511-12515.	1.9	49
71	Synthesis and photocatalytic H₂â€production activity of plasmaâ€treated Ti₃C₂T_x MXene modified graphitic carbon nitride. Journal of the American Ceramic Society, 2020, 103, 849-858.	1.9	49
72	Highly enhanced degradation of organic pollutants in hematite/sulfite/photo system. Chemical Engineering Journal, 2020, 386, 124007.	6.6	46

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73	Construction 0D/2D heterojunction by highly dispersed Ag2S quantum dots (QDs) loaded on the g-C3N4 nanosheets for photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2022, 607, 662-675.	5.0	46
74	Cu clusters immobilized on Cd-defective cadmium sulfide nano-rods towards photocatalytic CO2 reduction. Journal of Materials Science and Technology, 2022, 118, 54-63.	5.6	44
75	Highly Efficient Photocatalytic Reduction of CO₂ to CO by In Situ Formation of a Hybrid Catalytic System Based on Molecular Iron Quaterpyridine Covalently Linked to Carbon Nitride. Angewandte Chemie - International Edition, 2022, 61, .	7.2	43
76	Effects of morphology and exposed facets of Î±-Fe₂O₃ nanocrystals on photocatalytic water oxidation. RSC Advances, 2015, 5, 52210-52216.	1.7	35
77	A solid-state approach to fabricate a CdS/CuS nano-heterojunction with promoted visible-light photocatalytic H₂-evolution activity. RSC Advances, 2016, 6, 76269-76272.	1.7	35
78	Review of Water-Assisted Crystallization for TiO2 Nanotubes. Nano-Micro Letters, 2018, 10, 77.	14.4	32
79	Local structure of Cu2+ in Cu-doped hexagonal turbostratic birnessite and Cu2+ stability under acid treatment. Chemical Geology, 2017, 466, 512-523.	1.4	31
80	Metal phosphide modified CdxZn1â^'xS solid solutions as a highly active visible-light photocatalyst for hydrogen evolution. Applied Catalysis A: General, 2020, 590, 117336.	2.2	28
81	In situ oxidation of ultrathin Ti3C2Tx MXene modified with crystalline g-C3N4 nanosheets for photocatalytic H2 evolution. International Journal of Hydrogen Energy, 2022, 47, 4546-4558.	3.8	28
82	Accordion-like composite of carbon-coated Fe3O4 nanoparticle decorated Ti3C2 MXene with enhanced electrochemical performance. Journal of Materials Science, 2021, 56, 2486-2496.	1.7	25
83	Ternary Reduced Graphene Oxide/gâ€C₃N₄/Agâ€AgCl Nanocomposites for Controlled Visibleâ€Light Photocatalytic Selectivity. ChemistrySelect, 2016, 1, 1006-1015.	0.7	23
84	Effects of Mn average oxidation state on the oxidation behaviors of As(III) and Cr(III) by vernadite. Applied Geochemistry, 2018, 94, 35-45.	1.4	23
85	Thermal insulation design for efficient and scalable solar water interfacial evaporation and purification. Journal of Materials Science and Technology, 2021, 66, 157-162.	5.6	22
86	Facile hydrothermal synthesis and electrochemical properties of orthorhombic LiMnO₂cathode materials for rechargeable lithium batteries. RSC Advances, 2014, 4, 13693-13703.	1.7	21
87	Au cluster anchored on TiO2/Ti3C2 hybrid composites for efficient photocatalytic CO2 reduction. Rare Metals, 2022, 41, 3045-3059.	3.6	18
88	Hydrogen evolution promotion of Auâ€nanoparticlesâ€decorated TiO 2 nanotube arrays prepared by dipâ€loading approach. Journal of the American Ceramic Society, 2019, 102, 5873-5880.	1.9	17
89	Semiconductor terahertz modulator arrays: the size and edge effect. Optics Letters, 2018, 43, 3021.	1.7	10
90	Magnetite/Iron Foil as an Effective and Nonfiltration Catalyst for Heterogeneous Fenton-like Reactions under Neutral Conditions. Inorganic Chemistry, 2019, 58, 4718-4721.	1.9	9

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91	Preparation of Au/TiO₂/MoS₂ Plasmonic Composite Photocatalysts with Enhanced Photocatalytic Hydrogen Generation Activity. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2018, 34, 414-423.	2.2	8
92	Synthesis and Visibleâ€Light Photocatalytic Performance of Cadmium Sulfide and Oxide Hexagonal Nanoplates. ChemPlusChem, 2014, 79, 1726-1732.	1.3	7
93	Fabrication of Heterostructured Metal Oxide/TiO₂ Nanotube Arrays Prepared via Thermal Decomposition and Crystallization. Inorganic Chemistry, 2018, 57, 10249-10256.	1.9	7
94	UV Radiation Cumulative Recording Based on Amorphous TiO₂ Nanotubes. ACS Sensors, 2019, 4, 2429-2434.	4.0	6
95	Highly Efficient Photocatalytic Reduction of CO₂ to CO by In Situ Formation of a Hybrid Catalytic System Based on Molecular Iron Quaterpyridine Covalently Linked to Carbon Nitride. Angewandte Chemie, 2022, 134, .	1.6	6
96	An Effective Approach to Fabricate Self-Supported Fe3O4 Nanocrystals Derived from Iron Substrate. Journal of the Electrochemical Society, 2019, 166, D99-D103.	1.3	2