Quan-Jun Xiang

List of Publications by Citations

95 papers	17,010 citations	50 h-index	99 g-index
99 ext. papers	19,544 ext. citations	10.1 avg, IF	7.6 L-index

#	Paper	IF	Citations
95	Graphene-based semiconductor photocatalysts. *Chemical Society Reviews*, **2012**, 41, 782-96	58.5	2274
94	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, 6575-8	16.4	2059
93	Preparation and Enhanced Visible-Light Photocatalytic H2-Production Activity of Graphene/C3N4 Composites. *Journal of Physical Chemistry C*, **2011**, 115, 7355-7363	3.8	1511
92	CdS-Based photocatalysts. *Energy and Environmental Science*, **2018**, 11, 1362-1391	35.4	765
91	Enhanced photocatalytic H□production activity of graphene-modified titania nanosheets. *Nanoscale*, **2011**, 3, 3670-8	7.7	678
90	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	21.8	646
89	Graphene-Based Photocatalysts for Solar-Fuel Generation. *Angewandte Chemie - International Edition*, **2015**, 54, 11350-66	16.4	604
88	Quantitative characterization of hydroxyl radicals produced by various photocatalysts. *Journal of Colloid and Interface Science*, **2011**, 357, 163-7	9.3	527
87	Graphene-Based Photocatalysts for Hydrogen Generation. *Journal of Physical Chemistry Letters*, **2013**, 4, 753-9	6.4	463
86	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	21.8	456
85	Fabrication and enhanced visible-light photocatalytic activity of carbon self-doped TiO2 sheets with exposed {001} facets. *Journal of Materials Chemistry*, **2011**, 21, 1049-1057		360
84	Enhanced photocatalytic activity of hierarchical macro/mesoporous TiO2□graphene composites for photodegradation of acetone in air. *Applied Catalysis B: Environmental*, **2012**, 119-120, 109-116	21.8	329
83	Nitrogen self-doped nanosized TiO2 sheets with exposed {001} facets for enhanced visible-light photocatalytic activity. *Chemical Communications*, **2011**, 47, 6906-8	5.8	319
82	Improved visible-light photocatalytic activity of porous carbon self-doped ZnO nanosheet-assembled flowers. *CrystEngComm*, **2011**, 13, 2533	3.3	300
81	Review on Metal Sulphide-based Z-scheme Photocatalysts. *ChemCatChem*, **2019**, 11, 1394-1411	5.2	292
80	Graphene-modified nanosized Ag3PO4 photocatalysts for enhanced visible-light photocatalytic activity and stability. *Applied Catalysis B: Environmental*, **2015**, 162, 196-203	21.8	276
79	Nitrogen and sulfur co-doped TiO2 nanosheets with exposed {001} facets: synthesis, characterization and visible-light photocatalytic activity. *Physical Chemistry Chemical Physics*, **2011**, 13, 4853-61	3.6	264

78	Tunable photocatalytic selectivity of TiO2 films consisted of flower-like microspheres with exposed {001} facets. *Chemical Communications*, **2011**, 47, 4532-4	5.8	237
77	One-step hydrothermal fabrication and photocatalytic activity of surface-fluorinated TiO2 hollow microspheres and tabular anatase single micro-crystals with high-energy facets. *CrystEngComm*, **2010**, 12, 872-879	3.3	226
76	Hierarchical porous CdS nanosheet-assembled flowers with enhanced visible-light photocatalytic H2-production performance. *Applied Catalysis B: Environmental*, **2013**, 138-139, 299-303	21.8	225
75	Hierarchical Layered WS2 /Graphene-Modified CdS Nanorods for Efficient Photocatalytic Hydrogen Evolution. *ChemSusChem*, **2016**, 9, 996-1002	8.3	223
74	Effect of calcination temperature on morphology and photocatalytic activity of anatase TiO2 nanosheets with exposed {001} facets. *Applied Catalysis B: Environmental*, **2011**, 104, 275-281	21.8	183
73	A review on 2D MoS2 cocatalysts in photocatalytic H2 production. *Journal of Materials Science and Technology*, **2020**, 56, 89-121	9.1	182
72	Low-temperature solid-state preparation of ternary CdS/g-C3N4/CuS nanocomposites for enhanced visible-light photocatalytic H2-production activity. *Applied Surface Science*, **2017**, 391, 432-439	6.7	179
71	Ni-based photocatalytic H2-production cocatalysts2. *Chinese Journal of Catalysis*, **2019**, 40, 240-288	11.3	173
70	Crystalline Carbon Nitride Supported Copper Single Atoms for Photocatalytic CO Reduction with Nearly 100% CO Selectivity. *ACS Nano*, **2020**, 14, 10552-10561	16.7	155
69	Roles of MoS2 and Graphene as Cocatalysts in the Enhanced Visible-Light Photocatalytic H2 Production Activity of Multiarmed CdS Nanorods. *ChemCatChem*, **2015**, 7, 943-951	5.2	153
68	Enhanced photocatalytic H-production activity of C-dots modified g-CN/TiO nanosheets composites. *Journal of Colloid and Interface Science*, **2018**, 513, 866-876	9.3	153
67	Enhancement of photocatalytic H2 production activity of CdS nanorods by cobalt-based cocatalyst modification. *Catalysis Science and Technology*, **2016**, 6, 6207-6216	5.5	138
66	Surface and interface engineering of hierarchical photocatalysts. *Applied Surface Science*, **2019**, 471, 43-87	6.7	135
65	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	6.7	132
64	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	11.3	126
63	Two-Dimensional Transition Metal MXene-Based Photocatalysts for Solar Fuel Generation. *Journal of Physical Chemistry Letters*, **2019**, 10, 3488-3494	6.4	125
62	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	14.7	115
61	Design and application of active sites in g-C3N4-based photocatalysts. *Journal of Materials Science and Technology*, **2020**, 56, 69-88	9.1	108

60	Plasma-modified TiCT/CdS hybrids with oxygen-containing groups for high-efficiency photocatalytic hydrogen production. *Nanoscale*, **2019**, 11, 18797-18805	7.7	91
59	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	9.3	91
58	Single Ni Atoms Anchored on Porous Few-Layer g-C N for Photocatalytic CO Reduction: The Role of Edge Confinement. *Small*, **2020**, 16, e2002411	11	87
57	Effects of crystalline phase and morphology on the visible light photocatalytic H□production activity of CdS nanocrystals. *Dalton Transactions*, **2014**, 43, 7245-53	4.3	84
56	Porous graphitic carbon nitride for solar photocatalytic applications. *Nanoscale Horizons*, **2020**, 5, 765-786	10.8	79
55	Enhanced photocatalytic hydrogen production activity of highly crystalline carbon nitride synthesized by hydrochloric acid treatment. *Chinese Journal of Catalysis*, **2020**, 41, 21-30	11.3	76
54	Photocatalytic Activity of Hierarchical Flower-Like TiO2 Superstructures with Dominant {001} Facets. *Chinese Journal of Catalysis*, **2011**, 32, 525-531	11.3	69
53	Mechanisms of Mn(II) catalytic oxidation on ferrihydrite surfaces and the formation of manganese (oxyhydr)oxides. *Geochimica Et Cosmochimica Acta*, **2017**, 211, 79-96	5.5	67
52	Crystalline isotype heptazine-/triazine-based carbon nitride heterojunctions for an improved hydrogen evolution. *Applied Catalysis B: Environmental*, **2020**, 268, 118381	21.8	66
51	Synthesis of Mn2O3 microstructures and their energy storage ability studies. *Electrochimica Acta*, **2013**, 106, 360-371	6.7	63
50	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	7	56
49	Single Au Atoms Anchored on Amino-Group-Enriched Graphitic Carbon Nitride for Photocatalytic CO Reduction. *ChemSusChem*, **2020**, 13, 1979-1985	8.3	55
48	Structural engineering of 3D hierarchical Cd0.8Zn0.2S for selective photocatalytic CO2 reduction. *Chinese Journal of Catalysis*, **2021**, 42, 131-140	11.3	54
47	Plasma-based surface modification of g-C3N4 nanosheets for highly efficient photocatalytic hydrogen evolution. *Applied Surface Science*, **2019**, 495, 143520	6.7	52
46	Highly crystalline carbon nitride hollow spheres with enhanced photocatalytic performance. *Chinese Journal of Catalysis*, **2021**, 42, 627-636	11.3	50
45	One-Step Solid-Phase Synthesis of 2D Ultrathin CdS Nanosheets for Enhanced Visible-Light Photocatalytic Hydrogen Evolution. *Solar Rrl*, **2019**, 3, 1900062	7.1	48
44	Microwave-hydrothermal preparation and visible-light photoactivity of plasmonic photocatalyst Ag-TiO2 nanocomposite hollow spheres. *Chemistry - an Asian Journal*, **2010**, 5, 1466-74	4.5	48
43	Amine-functionalized graphitic carbon nitride decorated with small-sized Au nanoparticles for photocatalytic CO reduction. *Journal of Colloid and Interface Science*, **2020**, 570, 11-19	9.3	46

42	Interfacial modification of titanium dioxide to enhance photocatalytic efficiency towards H production. *Journal of Colloid and Interface Science*, **2019**, 556, 376-385	9.3	44
41	Nanosheet-assembled hierarchical flower-like g-CN for enhanced photocatalytic CO reduction activity. *Chemical Communications*, **2020**, 56, 2443-2446	5.8	42
40	Photokatalysatoren auf Graphenbasis f□ die Produktion von Solarbrennstoffen. *Angewandte Chemie*, **2015**, 127, 11508-11524	3.6	42
39	Truncated octahedral bipyramidal TiO2/MXene Ti3C2 hybrids with enhanced photocatalytic H2 production activity. *Nanoscale Advances*, **2019**, 1, 1812-1818	5.1	38
38	Construction of an Ultrathin S-Scheme Heterojunction Based on Few-Layer g-C3N4 and Monolayer Ti3C2Tx MXene for Photocatalytic CO2 Reduction. *Solar Rrl*, **2021**, 5, 2000351	7.1	38
37	Carbon-Graphitic Carbon Nitride Hybrids for Heterogeneous Photocatalysis. *Small*, **2021**, 17, e2005231	11	37
36	Dual-Single-Atom Tailoring with Bifunctional Integration for High-Performance CO Photoreduction. *Advanced Materials*, **2021**, e2105135	24	31
35	State-of-the-art recent progress in MXene-based photocatalysts: a comprehensive review. *Nanoscale*, **2021**, 13, 9463-9504	7.7	31
34	Effects of morphology and exposed facets of □Fe2O3 nanocrystals on photocatalytic water oxidation. *RSC Advances*, **2015**, 5, 52210-52216	3.7	30
33	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	3.7	27
32	Transition-Metal-Ion (Fe, Co, Cr, Mn, Etc.) Doping of TiO Nanotubes: A General Approach. *Inorganic Chemistry*, **2019**, 58, 12511-12515	5.1	26
31	Targeted regulation of exciton dissociation in graphitic carbon nitride by vacancy modification for efficient photocatalytic CO2 reduction. *Applied Catalysis B: Environmental*, **2021**, 292, 120179	21.8	26
30	Review of Water-Assisted Crystallization for TiO Nanotubes. *Nano-Micro Letters*, **2018**, 10, 77	19.5	24
29	Metal phosphide modified CdxZn1□S solid solutions as a highly active visible-light photocatalyst for hydrogen evolution. *Applied Catalysis A: General*, **2020**, 590, 117336	5.1	23
28	Local structure of Cu2 + in Cu-doped hexagonal turbostratic birnessite and Cu2 + stability under acid treatment. *Chemical Geology*, **2017**, 466, 512-523	4.2	22
27	Highly enhanced degradation of organic pollutants in hematite/sulfite/photo system. *Chemical Engineering Journal*, **2020**, 386, 124007	14.7	21
26	Steering the behavior of photogenerated carriers in semiconductor photocatalysts: a new insight and perspective. *Journal of Materials Chemistry A*,	13	21
25	Construction of efficient active sites through cyano-modified graphitic carbon nitride for photocatalytic CO2 reduction. *Chinese Journal of Catalysis*, **2021**, 42, 1608-1616	11.3	21

24	Synthesis and photocatalytic H2-production activity of plasma-treated Ti3C2Tx MXene modified graphitic carbon nitride. *Journal of the American Ceramic Society*, **2020**, 103, 849-858	3.8	20
23	Facile hydrothermal synthesis and electrochemical properties of orthorhombic LiMnO2 cathode materials for rechargeable lithium batteries. *RSC Advances*, **2014**, 4, 13693-13703	3.7	19
22	Ternary Reduced Graphene Oxide/g-C3N4/Ag-AgCl Nanocomposites for Controlled Visible-Light Photocatalytic Selectivity. *ChemistrySelect*, **2016**, 1, 1006-1015	1.8	19
21	Recent advances in crystalline carbon nitride for photocatalysis. *Journal of Materials Science and Technology*, **2021**, 91, 224-240	9.1	15
20	Effects of Mn average oxidation state on the oxidation behaviors of As(III) and Cr(III) by vernadite. *Applied Geochemistry*, **2018**, 94, 35-45	3.5	12
19	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	21.8	12
18	Hydrogen evolution promotion of Au-nanoparticles-decorated TiO2 nanotube arrays prepared by dip-loading approach. *Journal of the American Ceramic Society*, **2019**, 102, 5873-5880	3.8	10
17	Construction 0D/2D heterojunction by highly dispersed AgS quantum dots (QDs) loaded on the g-CN nanosheets for photocatalytic hydrogen evolution. *Journal of Colloid and Interface Science*, **2022**, 607, 662-675	9.3	9
16	Semiconductor terahertz modulator arrays: the size and edge effect. *Optics Letters*, **2018**, 43, 3021-3024	3	8
15	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	3.8	7
14	Crystalline Intramolecular Ternary Carbon Nitride Homojunction for Photocatalytic Hydrogen Evolution. *ACS Catalysis*,6345-6358	13.1	7
13	Fabrication of Heterostructured Metal Oxide/TiO Nanotube Arrays Prepared via Thermal Decomposition and Crystallization. *Inorganic Chemistry*, **2018**, 57, 10249-10256	5.1	6
12	Thermal insulation design for efficient and scalable solar water interfacial evaporation and purification. *Journal of Materials Science and Technology*, **2021**, 66, 157-162	9.1	6
11	Accordion-like composite of carbon-coated Fe3O4 nanoparticle decorated Ti3C2 MXene with enhanced electrochemical performance. *Journal of Materials Science*, **2021**, 56, 2486-2496	4.3	6
10	Site-Specific Electron-Driving Observations of CO -to-CH Photoreduction on Co-doped CeO /Crystalline Carbon Nitride S-scheme Heterojunctions.. *Advanced Materials*, **2022**, e2200929	24	6
9	Magnetite/Iron Foil as an Effective and Nonfiltration Catalyst for Heterogeneous Fenton-like Reactions under Neutral Conditions. *Inorganic Chemistry*, **2019**, 58, 4718-4721	5.1	5
8	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	11.3	5
7	Synthesis and Visible-Light Photocatalytic Performance of Cadmium Sulfide and Oxide Hexagonal Nanoplates. *ChemPlusChem*, **2014**, 79, n/a-n/a	2.8	4

6	Internal Electric Field on Steering Charge Migration: Modulations, Determinations and Energy-Related Applications. *Advanced Functional Materials*,2110258	15.6	4
5	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**,	16.4	3
4	An Effective Approach to Fabricate Self-Supported Fe3O4 Nanocrystals Derived from Iron Substrate. *Journal of the Electrochemical Society*, **2019**, 166, D99-D103	3.9	2
3	UV Radiation Cumulative Recording Based on Amorphous TiO Nanotubes. *ACS Sensors*, **2019**, 4, 2429-2434	9.2	2
2	In situ oxidation of ultrathin Ti3C2Tx MXene modified with crystalline g-C3N4 nanosheets for photocatalytic H2 evolution. *International Journal of Hydrogen Energy*, **2021**, 47, 4546-4546	6.7	2
1	Cu clusters immobilized on Cd-defective cadmium sulfide nano-rods towards photocatalytic CO2 reduction. *Journal of Materials Science and Technology*, **2022**, 118, 54-63	9.1	1