Rong Xu

List of Publications by Year
in descending order

97 papers	10,404 citations	29994 54 h-index	33814 99 g-index
102 all docs	102 docs citations	102 times ranked	13908 citing authors

#	Article	IF	Citations
1	Mesoporous carbon nitride with in situ sulfur doping for enhanced photocatalytic hydrogen evolution from water under visible light. Journal of Materials Chemistry, 2012, 22, 15006.	6.7	632
2	Nickel Nanoparticles Encapsulated in Fewâ€Layer Nitrogenâ€Doped Graphene Derived from Metalâ€“Organic Frameworks as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. Advanced Materials, 2017, 29, 1605957.	11.1	507
3	Metal-free carbonaceous electrocatalysts and photocatalysts for water splitting. Chemical Society Reviews, 2016, 45, 3039-3052.	18.7	499
4	Highly efficient and noble metal-free NiS/CdS photocatalysts for H2 evolution from lactic acid sacrificial solution under visible light. Chemical Communications, 2010, 46, 7631.	2.2	450
5	Aminoâ€Assisted Anchoring of CsPbBr₃ Perovskite Quantum Dots on Porous gâ€C₃N₄ for Enhanced Photocatalytic CO₂ Reduction. Angewandte Chemie - International Edition, 2018, 57, 13570-13574.	7.2	432
6	Post-synthesis modification of a metalâ€“organic framework to construct a bifunctional photocatalyst for hydrogen production. Energy and Environmental Science, 2013, 6, 3229.	15.6	336
7	Unique Pï£¿Coï£¿N Surface Bonding States Constructed on gâ€C₃N₄ Nanosheets for Drastically Enhanced Photocatalytic Activity of H₂ Evolution. Advanced Functional Materials, 2017, 27, 1604328.	7.8	329
8	Investigating the Role of Tunable Nitrogen Vacancies in Graphitic Carbon Nitride Nanosheets for Efficient Visible-Light-Driven H₂ Evolution and CO₂ Reduction. ACS Sustainable Chemistry and Engineering, 2017, 5, 7260-7268.	3.2	322
9	Formation of 1D Hierarchical Structures Composed of Ni₃S₂ Nanosheets on CNTs Backbone for Supercapacitors and Photocatalytic H₂ Production. Advanced Energy Materials, 2012, 2, 1497-1502.	10.2	321
10	Metal-free photocatalysts for various applications in energy conversion and environmental purification. Green Chemistry, 2017, 19, 882-899.	4.6	261
11	Growth of Metalâ€“Metal Oxide Nanostructures on Freestanding Graphene Paper for Flexible Biosensors. Advanced Functional Materials, 2012, 22, 2487-2494.	7.8	246
12	Carbon nitride nanosheets for photocatalytic hydrogen evolution: remarkably enhanced activity by dye sensitization. Catalysis Science and Technology, 2013, 3, 1703.	2.1	225
13	Nitrogen-doped cobalt phosphate@nanocarbon hybrids for efficient electrocatalytic oxygen reduction. Energy and Environmental Science, 2016, 9, 2563-2570.	15.6	216
14	Nickel-based cocatalysts for photocatalytic hydrogen production. Applied Surface Science, 2015, 351, 779-793.	3.1	213
15	A Highly Efficient Oxygen Evolution Catalyst Consisting of Interconnected Nickelâ€“Ironâ€Layered Double Hydroxide and Carbon Nanodomains. Advanced Materials, 2018, 30, 1705106.	11.1	209
16	Self-assembled Fe₃O₄-layered double hydroxide colloidal nanohybrids with excellent performance for treatment of organic dyes in water. Journal of Materials Chemistry, 2011, 21, 1218-1225.	6.7	206
17	Recent progress in g-C₃N₄ based low cost photocatalytic system: activity enhancement and emerging applications. Catalysis Science and Technology, 2015, 5, 5048-5061.	2.1	206
18	Isolated Squareâ€Planar Copper Center in Boron Imidazolate Nanocages for Photocatalytic Reduction of CO₂ to CO. Angewandte Chemie - International Edition, 2019, 58, 11752-11756.	7.2	194

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19	Photocatalytic reduction of CO2: a brief review on product analysis and systematic methods. Analytical Methods, 2013, 5, 1086.	1.3	186
20	Photochemical Deposition of Pt on CdS for H₂ Evolution from Water: Markedly Enhanced Activity by Controlling Pt Reduction Environment. Journal of Physical Chemistry C, 2013, 117, 783-790.	1.5	178
21	A spongy nickel-organic CO ₂ reduction photocatalyst for nearly 100% selective CO production. Science Advances, 2017, 3, e1700921.	4.7	175
22	Aminoâ€Assisted Anchoring of CsPbBr₃ Perovskite Quantum Dots on Porous gâ€C₃N₄ for Enhanced Photocatalytic CO₂ Reduction. Angewandte Chemie, 2018, 130, 13758-13762.	1.6	172
23	Phosphonate-Based Metalâ€“Organic Framework Derived Coâ€“Pâ€“C Hybrid as an Efficient Electrocatalyst for Oxygen Evolution Reaction. ACS Catalysis, 2017, 7, 6000-6007.	5.5	149
24	Silver Nanoparticles Deposited Layered Double Hydroxide Nanoporous Coatings with Excellent Antimicrobial Activities. Advanced Functional Materials, 2012, 22, 780-787.	7.8	145
25	Photocatalytic Reduction of Carbon Dioxide over Selfâ€Assembled Carbon Nitride and Layered Double Hydroxide: The Role of Carbon Dioxide Enrichment. ChemCatChem, 2014, 6, 2315-2321.	1.8	130
26	Research advances towards large-scale solar hydrogen production from water. EnergyChem, 2019, 1, 100014.	10.1	130
27	Porous Fe2O3 nanocubes derived from MOFs for highly reversible lithium storage. CrystEngComm, 2013, 15, 9332.	1.3	124
28	Kinetically Controlling Phase Transformations of Crystalline Mercury Selenidostannates through Surfactant Media. Inorganic Chemistry, 2013, 52, 4148-4150.	1.9	121
29	Direct Assembly of Anisotropic Layered Double Hydroxide (LDH) Nanocrystals on Spherical Template for Fabrication of Drug-LDH Hollow Nanospheres. Chemistry of Materials, 2009, 21, 781-783.	3.2	120
30	Immobilizing CdS quantum dots and dendritic Pt nanocrystals on thiolated graphene nanosheets toward highly efficient photocatalytic H2 evolution. Nanoscale, 2013, 5, 9830.	2.8	110
31	Effect of depositing silver nanoparticles on BiVO₄in enhancing visible light photocatalytic inactivation of bacteria in water. Journal of Materials Chemistry A, 2014, 2, 6209-6217.	5.2	107
32	Rational Design of Catalytic Centers in Crystalline Frameworks. Advanced Materials, 2018, 30, e1707582.	11.1	103
33	Hierarchically Structured Janus Membrane Surfaces for Enhanced Membrane Distillation Performance. ACS Applied Materials & Interfaces, 2019, 11, 25524-25534.	4.0	97
34	In vivo Biocompatibility, Biodistribution and Therapeutic Efficiency of Titania Coated Upconversion Nanoparticles for Photodynamic Therapy of Solid Oral Cancers. Theranostics, 2016, 6, 1844-1865.	4.6	92
35	Hybrid Functionals Study of Band Bowing, Band Edges and Electronic Structures of Cd_{1â€“x}Zn_xS Solid Solution. Journal of Physical Chemistry C, 2011, 115, 19741-19748.	1.5	88
36	MOF-derived hierarchical hollow spheres composed of carbon-confined Ni nanoparticles for efficient CO₂ methanation. Catalysis Science and Technology, 2019, 9, 731-738.	2.1	87

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37	Single-layer MoS₂nanosheet grafted upconversion nanoparticles for near-infrared fluorescence imaging-guided deep tissue cancer phototherapy. Nanoscale, 2016, 8, 7861-7865.	2.8	84
38	Isolated Ni single atoms in nitrogen doped ultrathin porous carbon templated from porous g-C3N4 for high-performance CO2 reduction. Nano Energy, 2020, 77, 105158.	8.2	83
39	Template-Free Synthesis of Highly Uniform Î±-GaOOH Spindles and Conversion to Î±-Ga₂O₃ and Î²-Ga₂O₃. Crystal Growth and Design, 2008, 8, 1282-1287.	1.4	80
40	Highly active ZnxCd1â^'xS photocatalysts containing earth abundant elements only for H2 production from water under visible light. Catalysis Science and Technology, 2011, 1, 940.	2.1	80
41	Bio-inspired organic cobalt(<scp>ii</scp>) phosphonates toward water oxidation. Energy and Environmental Science, 2015, 8, 526-534.	15.6	79
42	Magnetic Hollow Spheres Assembled from Graphene-Encapsulated Nickel Nanoparticles for Efficient Photocatalytic CO₂ Reduction. ACS Applied Energy Materials, 2019, 2, 7670-7678.	2.5	78
43	A highly efficient noble metal free photocatalytic hydrogen evolution system containing MoP and CdS quantum dots. Nanoscale, 2016, 8, 14438-14447.	2.8	77
44	Cobalt Phosphateâ€"ZnO Composite Photocatalysts for Oxygen Evolution from Photocatalytic Water Oxidation. Industrial & Engineering Chemistry Research, 2012, 51, 9945-9951.	1.8	71
45	Bifunctional metalâ€"organic frameworks toward photocatalytic CO2 reduction by post-synthetic ligand exchange. Rare Metals, 2019, 38, 413-419.	3.6	68
46	Ni²⁺-doped Zn_xCd_{1â^'x}S photocatalysts from single-source precursors for efficient solar hydrogen production under visible light irradiation. Catalysis Science and Technology, 2012, 2, 581-588.	2.1	66
47	Synthesis of unusual coral-like layered double hydroxide microspheres in a nonaqueous polar solvent/surfactant system. Journal of Materials Chemistry, 2008, 18, 2112.	6.7	64
48	Wetting-regulated gas-involving (photo)electrocatalysis: biomimetics in energy conversion. Chemical Society Reviews, 2021, 50, 10674-10699.	18.7	63
49	CdS quantum dots and tungsten carbide supported on anataseâ€"rutile composite TiO₂ for highly efficient visible-light-driven photocatalytic H₂ evolution from water. Catalysis Science and Technology, 2016, 6, 2206-2213.	2.1	62
50	The Origin of Visible Light Absorption in Chalcogen Element (S, Se, and Te)-Doped Anatase TiO₂ Photocatalysts. Journal of Physical Chemistry C, 2010, 114, 7063-7069.	1.5	61
51	A crystalline Cuâ€"Snâ€"S framework for high-performance lithium storage. Journal of Materials Chemistry A, 2015, 3, 19410-19416.	5.2	60
52	A facile synthesis of monodispersed hierarchical layered double hydroxide on silica spheres for efficient removal of pharmaceuticals from water. Journal of Materials Chemistry A, 2013, 1, 3877.	5.2	59
53	ZnO/ZnFe₂O₄ Magnetic Fluorescent Bifunctional Hollow Nanospheres: Synthesis, Characterization, and Their Optical/Magnetic Properties. Journal of Physical Chemistry C, 2010, 114, 17455-17459.	1.5	58
54	Y2O3:Tb Nanocrystals Self-Assembly into Nanorods by Oriented Attachment Mechanism. Journal of Physical Chemistry C, 2007, 111, 7893-7897.	1.5	57

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55	Metalâ€“organic framework immobilized cobalt oxide nanoparticles for efficient photocatalytic water oxidation. Journal of Materials Chemistry A, 2015, 3, 20607-20613.	5.2	57
56	Anchoring Active Pt²⁺/Pt⁰ Hybrid Nanodots on gâ€C₃N₄ Nitrogen Vacancies for Photocatalytic H₂ Evolution. ChemSusChem, 2019, 12, 2029-2034.	3.6	54
57	Tb-doped iron oxide: bifunctional fluorescent and magnetic nanocrystals. Journal of Materials Chemistry, 2009, 19, 3696.	6.7	51
58	High Refractive Index Inorganicâ€“Organic Interpenetrating Polymer Network (IPN) Hydrogel Nanocomposite toward Artificial Cornea Implants. ACS Macro Letters, 2012, 1, 876-881.	2.3	48
59	Manipulating Intermediates at the Auâ€“TiO₂ Interface over InP Nanopillar Array for Photoelectrochemical CO₂ Reduction. ACS Catalysis, 2021, 11, 11416-11428.	5.5	48
60	Evolution of hydrogen by few-layered black phosphorus under visible illumination. Journal of Materials Chemistry A, 2017, 5, 24874-24879.	5.2	45
61	Formation of Sn@C Yolkâ€“Shell Nanospheres and Coreâ€“Sheath Nanowires for Highly Reversible Lithium Storage. Particle and Particle Systems Characterization, 2013, 30, 873-880.	1.2	43
62	Development of high refractive ZnS/PVP/PDMAA hydrogel nanocomposites for artificial cornea implants. Acta Biomaterialia, 2014, 10, 1167-1176.	4.1	43
63	Nickel-complexes with a mixed-donor ligand for photocatalytic hydrogen evolution from aqueous solutions under visible light. RSC Advances, 2012, 2, 8293.	1.7	38
64	In situ formation of amorphous Fe-based bimetallic hydroxides from metal-organic frameworks as efficient oxygen evolution catalysts. Chinese Journal of Catalysis, 2021, 42, 1370-1378.	6.9	37
65	A surfactant-thermal method to prepare crystalline thioantimonate for high-performance lithium-ion batteries. Inorganic Chemistry Frontiers, 2016, 3, 111-116.	3.0	32
66	Isolated Squareâ€Planar Copper Center in Boron Imidazolate Nanocages for Photocatalytic Reduction of CO₂ to CO. Angewandte Chemie, 2019, 131, 11878-11882.	1.6	32
67	Rational Synthesis of Amorphous Ironâ€Nickel Phosphonates for Highly Efficient Photocatalytic Water Oxidation with Almost 100â€‰% Yield. Angewandte Chemie - International Edition, 2020, 59, 1171-1175.	7.2	32
68	Surfactant-thermal method to prepare two novel two-dimensional Mnâ€“Sbâ€“S compounds for photocatalytic applications. Journal of Solid State Chemistry, 2014, 220, 118-123.	1.4	31
69	Robust ion-transporting ceramic membrane with an internal short circuit for oxygen production. Journal of Materials Chemistry A, 2013, 1, 9150.	5.2	28
70	Flame Synthesized Blue TiO_{2âˆ'}_x with Tunable Oxygen Vacancies from Surface to Grain Boundary to Bulk. Small Methods, 2021, 5, e2000928.	4.6	28
71	Syntheses, crystal structures, and photocatalytic properties of two ammonium-directed Agâ€“Sbâ€“S complexes. Inorganic Chemistry Frontiers, 2017, 4, 954-959.	3.0	26
72	Self-template synthesis of CdS/NiS_x heterostructured nanohybrids for efficient photocatalytic hydrogen evolution. Dalton Transactions, 2017, 46, 10650-10656.	1.6	25

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73	Premixed Stagnation Flame Synthesized TiO₂ Nanoparticles with Mixed Phases for Efficient Photocatalytic Hydrogen Generation. ACS Sustainable Chemistry and Engineering, 2018, 6, 14470-14479.	3.2	25
74	New Family of Plasmonic Photocatalysts without Noble Metals. Chemistry of Materials, 2019, 31, 2320-2327.	3.2	25
75	Emerging applications of nanocatalysts synthesized by flame aerosol processes. Current Opinion in Chemical Engineering, 2018, 20, 39-49.	3.8	24
76	Single-Ni Sites Embedded in Multilayer Nitrogen-Doped Graphene Derived from Amino-Functionalized MOF for Highly Selective CO₂ Electroreduction. ACS Sustainable Chemistry and Engineering, 2021, 9, 3792-3801.	3.2	24
77	Oxygen permeation behavior through Ce_{0.9}Gd_{0.1}O_{2â˜Î´} membranes electronically short-circuited by dual-phase Ce_{0.9}Gd_{0.1}O_{2â˜Î´}â€“Ag decoration. Journal of Materials Chemistry A, 2015, 3, 19033-19041.	5.2	21
78	Effective separation of water-DMSO through solvent resistant membrane distillation (SR-MD). Water Research, 2021, 197, 117103.	5.3	21
79	Crystalline Inâ€“Sbâ€“S framework for highly-performed lithium/sodium storage. Journal of Materials Chemistry A, 2017, 5, 14198-14205.	5.2	20
80	Co₃O₄ and Fe_xCo_{3â€“x}O₄ Nanoparticles/Films Synthesized in a Vapor-Fed Flame Aerosol Reactor for Oxygen Evolution. ACS Applied Energy Materials, 2018, 1, 655-665.	2.5	20
81	Investigating CO₂ Methanation on Ni and Ru: DFT Assisted Microkinetic Analysis. ChemCatChem, 2021, 13, 2420-2433.	1.8	19
82	Development of optically transparent ZnS/poly(vinylpyrrolidone) nanocomposite films with high refractive indices and high Abbe numbers. Journal of Applied Polymer Science, 2013, 129, 1793-1798.	1.3	14
83	Novel Nickel-Based Single-Atom Alloy Catalyst for CO₂ Conversion Reactions: Computational Screening and Reaction Mechanism Analysis. Journal of Physical Chemistry C, 2021, 125, 4041-4055.	1.5	14
84	Homoepitaxial growth on semiconductor nanocrystals for efficient and stable visible-light photocatalytic hydrogen evolution. Nanoscale, 2017, 9, 17794-17801.	2.8	11
85	Bimetallic MOF derived nickel nanoclusters supported by nitrogen-doped carbon for efficient electrocatalytic CO2 reduction. Nano Research, 2023, 16, 4546-4553.	5.8	11
86	Super-resolution imaging of photogenerated charges on CdS/g-C₃N₄ heterojunctions and its correlation with photoactivity. Nanoscale, 2022, 14, 5612-5624.	2.8	10
87	TiO2 with controllable oxygen vacancies for efficient isopropanol degradation: photoactivity and reaction mechanism. Catalysis Science and Technology, 2021, 11, 4060-4071.	2.1	9
88	Elucidating Reaction Pathways of the CO₂ Electroreduction via Tailorable Tortuosities and Oxidation States of Cu Nanostructures. Advanced Functional Materials, 2022, 32, .	7.8	9
89	CdS nanoparticles loaded on porous poly-melamineâ€“formaldehyde polymer for photocatalytic dye degradation. Research on Chemical Intermediates, 2017, 43, 5083-5090.	1.3	8
90	TEMPO-Oxidized Microcrystalline Cellulose for Rapid Adsorption of Ammonium. Industrial & Engineering Chemistry Research, 2022, 61, 7665-7673.	1.8	6

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91	Hydrophobic ceramic membranes fabricated via fatty acid chloride modification for solvent resistant membrane distillation (SR-MD). Journal of Membrane Science, 2022, 658, 120715.	4.1	5
92	Rational Synthesis of Amorphous Ironâ€Nickel Phosphonates for Highly Efficient Photocatalytic Water Oxidation with Almost 100â€‰% Yield. Angewandte Chemie, 2020, 132, 1187-1191.	1.6	4
93	Development of metal sulfideâ€“based photocatalysts for hydrogen evolution under visible light. , 2020, , 369-384.		4
94	Photocatalysis. Beilstein Journal of Nanotechnology, 2014, 5, 1071-1072.	1.5	2
95	Effect of molecular weight and substrate on silicone segregation from UV resin at plasma polymerized mold interface. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 442-450.	2.4	1
96	Fabrication of a catalytic polymer composite sheet enabling visible light-driven photocatalytic disinfection of water. Research on Chemical Intermediates, 2016, 42, 4827-4838.	1.3	1
97	Report on the 4th Asia Pacific Congress on Catalysis (APCAT 4). Catalysis Surveys From Asia, 2007, 11, 192-193.	1.0	0