Zou Zhigang

List of Publications by Year
in descending order

284 papers	15,657 citations	19608 61 h-index	22764 112 g-index
288 all docs	288 docs citations	288 times ranked	16233 citing authors

#	Article	IF	Citations
1	Photoelectrochemical cells for solar hydrogen production: current state of promising photoelectrodes, methods to improve their properties, and outlook. Energy and Environmental Science, 2013, 6, 347-370.	15.6	969
2	Stateâ€ofâ€theâ€Art Progress in Diverse Heterostructured Photocatalysts toward Promoting Photocatalytic Performance. Advanced Functional Materials, 2015, 25, 998-1013.	7.8	706
3	Polymeric g-C₃N₄ Coupled with NaNbO₃ Nanowires toward Enhanced Photocatalytic Reduction of CO₂ into Renewable Fuel. ACS Catalysis, 2014, 4, 3637-3643.	5.5	580
4	Solar hydrogen generation from seawater with a modified BiVO4 photoanode. Energy and Environmental Science, 2011, 4, 4046.	15.6	564
5	Robust Hollow Spheres Consisting of Alternating Titania Nanosheets and Graphene Nanosheets with High Photocatalytic Activity for CO₂ Conversion into Renewable Fuels. Advanced Functional Materials, 2012, 22, 1215-1221.	7.8	373
6	An In Situ Simultaneous Reductionâ€Hydrolysis Technique for Fabrication of TiO₂â€Graphene 2D Sandwichâ€Like Hybrid Nanosheets: Grapheneâ€Promoted Selectivity of Photocatalyticâ€Driven Hydrogenation and Coupling of CO₂ into Methane and Ethane. Advanced Functional Materials, 2013, 23, 1743-1749.	7.8	357
7	Versatile Grapheneâ€Promoting Photocatalytic Performance of Semiconductors: Basic Principles, Synthesis, Solar Energy Conversion, and Environmental Applications. Advanced Functional Materials, 2013, 23, 4996-5008.	7.8	335
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	Hexahedron Prism-Anchored Octahedronal CeO₂: Crystal Facet-Based Homojunction Promoting Efficient Solar Fuel Synthesis. Journal of the American Chemical Society, 2015, 137, 9547-9550.	6.6	294
10	Cathodic shift of onset potential for water oxidation on a Ti⁴⁺doped Fe₂O₃photoanode by suppressing the back reaction. Energy and Environmental Science, 2014, 7, 752-759.	15.6	228
11	Construction and Nanoscale Detection of Interfacial Charge Transfer of Elegant Z-Scheme WO₃/Au/In₂S₃ Nanowire Arrays. Nano Letters, 2016, 16, 5547-5552.	4.5	217
12	Co₃O₄ Nanoparticles as Robust Water Oxidation Catalysts Towards Remarkably Enhanced Photostability of a Ta₃N₅ Photoanode. Advanced Functional Materials, 2012, 22, 3066-3074.	7.8	205
13	Convincing Synthesis of Atomically Thin, Single-Crystalline InVO₄ Sheets toward Promoting Highly Selective and Efficient Solar Conversion of CO₂ into CO. Journal of the American Chemical Society, 2019, 141, 4209-4213.	6.6	199
14	Threeâ€Dimensional Hierarchical Architectures Derived from Surfaceâ€Mounted Metalâ€“Organic Framework Membranes for Enhanced Electrocatalysis. Angewandte Chemie - International Edition, 2017, 56, 13781-13785.	7.2	193
15	A Facetâ€Dependent Schottkyâ€Junction Electron Shuttle in a BiVO₄{010}â€“Auâ€“Cu₂O Zâ€Scheme Photocatalyst for Efficient Charge Separation. Advanced Functional Materials, 2018, 28, 1801214.	7.8	193
16	Effects of Surface Electrochemical Pretreatment on the Photoelectrochemical Performance of Mo-Doped BiVO₄. Journal of Physical Chemistry C, 2012, 116, 5076-5081.	1.5	172
17	Increasing the Oxygen Vacancy Density on the TiO₂ Surface by La-Doping for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 18396-18400.	1.5	166
18	Highly Photoâ€Responsive LaTiO₂N Photoanodes by Improvement of Charge Carrier Transport among Film Particles. Advanced Functional Materials, 2014, 24, 3535-3542.	7.8	166

#	Article	IF	Citations
19	Solâ€“gel hydrothermal synthesis of visible-light-driven Cr-doped SrTiO3 for efficient hydrogen production. Journal of Materials Chemistry, 2011, 21, 11347.	6.7	157
20	Two-dimensional nanomaterials for photocatalytic CO₂reduction to solar fuels. Sustainable Energy and Fuels, 2017, 1, 1875-1898.	2.5	156
21	Polyhedral 30â€Faceted BiVO₄ Microcrystals Predominantly Enclosed by Highâ€Index Planes Promoting Photocatalytic Waterâ€Splitting Activity. Advanced Materials, 2018, 30, 1703119.	11.1	155
22	Correlation of Crystal Structures, Electronic Structures, and Photocatalytic Properties in a Series of Ag-based Oxides:â€‰ AgAlO₂, AgCrO₂, and Ag₂CrO₄. Journal of Physical Chemistry C, 2008, 112, 3134-3141.	1.5	152
23	Zn₂GeO₄crystal splitting toward sheaf-like, hyperbranched nanostructures and photocatalytic reduction of CO₂into CH₄under visible light after nitridation. Journal of Materials Chemistry, 2012, 22, 2033-2038.	6.7	145
24	Photocatalytic reduction of CO₂over Ag/TiO₂nanocomposites prepared with a simple and rapid silver mirror method. Nanoscale, 2016, 8, 11870-11874.	2.8	139
25	Facile green synthesis of crystalline polyimide photocatalyst for hydrogen generation from water. Journal of Materials Chemistry, 2012, 22, 15519.	6.7	134
26	Vacancy-defect modulated pathway of photoreduction of CO2 on single atomically thin AgInP2S6 sheets into olefiant gas. Nature Communications, 2021, 12, 4747.	5.8	128
27	Oxygen-Vacancy-Activated CO₂ Splitting over Amorphous Oxide Semiconductor Photocatalyst. ACS Catalysis, 2018, 8, 516-525.	5.5	126
28	Coâ€“P Bonds as Atomic-Level Charge Transfer Channel To Boost Photocatalytic H₂ Production of Co₂P/Black Phosphorus Nanosheets Photocatalyst. ACS Catalysis, 2019, 9, 7801-7807.	5.5	124
29	Photoreduction of Carbon Dioxide Over NaNbO3 Nanostructured Photocatalysts. Catalysis Letters, 2011, 141, 525-530.	1.4	118
30	Beyond C₃N₄ Ï€-conjugated metal-free polymeric semiconductors for photocatalytic chemical transformations. Chemical Society Reviews, 2021, 50, 2147-2172.	18.7	118
31	Elegant Construction of ZnIn₂S₄/BiVO₄ Hierarchical Heterostructures as Direct Z-Scheme Photocatalysts for Efficient CO₂ Photoreduction. ACS Applied Materials & Interfaces, 2021, 13, 15092-15100.	4.0	115
32	A facile spray pyrolysis method to prepare Ti-doped ZnFe₂O₄ for boosting photoelectrochemical water splitting. Journal of Materials Chemistry A, 2017, 5, 7571-7577.	5.2	113
33	Heterogeneous degradation of organic contaminants in the photo-Fenton reaction employing pure cubic Î²-Fe2O3. Applied Catalysis B: Environmental, 2019, 245, 410-419.	10.8	107
34	Improved photoelectrochemical responses of Si and Ti codoped Î±-Fe2O3 photoanode films. Applied Physics Letters, 2010, 97, .	1.5	105
35	Unconventional Route to Oxygenâ€Vacancyâ€Enabled Highly Efficient Electron Extraction and Transport in Perovskite Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 1611-1618.	7.2	104
36	Frustrated Lewis Pairs Accelerating CO₂ Reduction on Oxyhydroxide Photocatalysts with Surface Lattice Hydroxyls as a Solidâ€State Proton Donor. Advanced Functional Materials, 2018, 28, 1804191.	7.8	102

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37	Constructing a High-Efficiency MoO₃/Polyimide Hybrid Photocatalyst Based on Strong Interfacial Interaction. ACS Applied Materials & Interfaces, 2015, 7, 14628-14637.	4.0	97
38	NaNbO3 Nanostructures: Facile Synthesis, Characterization, and Their Photocatalytic Properties. Catalysis Letters, 2009, 132, 205-212.	1.4	96
39	Highly Flexible Self-Powered Organolead Trihalide Perovskite Photodetectors with Gold Nanowire Networks as Transparent Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 23868-23875.	4.0	95
40	General synthesis of high-entropy alloy and ceramic nanoparticles in nanoseconds. , 2022, 1, 138-146.		91
41	Zinc Gallogermanate Solid Solution: A Novel Photocatalyst for Efficiently Converting CO₂ into Solar Fuels. Advanced Functional Materials, 2013, 23, 1839-1845.	7.8	89
42	High-performance photocatalytic nonoxidative conversion of methane to ethane and hydrogen by heteroatoms-engineered TiO2. Nature Communications, 2022, 13, 2806.	5.8	89
43	Quantitative Analysis and Visualized Evidence for High Charge Separation Efficiency in a Solidâ€Liquid Bulk Heterojunction. Advanced Energy Materials, 2014, 4, 1301785.	10.2	88
44	La₂O₃â€Modified LaTiO₂N Photocatalyst with Spatially Separated Active Sites Achieving Enhanced CO₂ Reduction. Advanced Functional Materials, 2017, 27, 1702447.	7.8	87
45	Enhanced Waterâ€Splitting Performance of Perovskite SrTaO₂N Photoanode Film through Ameliorating Interparticle Charge Transport. Advanced Functional Materials, 2016, 26, 7156-7163.	7.8	86
46	Facet-Dependent Enhancement in the Activity of Bismuth Vanadate Microcrystals for the Photocatalytic Conversion of Methane to Methanol. ACS Applied Nano Materials, 2018, 1, 6683-6691.	2.4	79
47	Boosting O₂ Reduction and H₂O Dehydrogenation Kinetics: Surface Nâ€Hydroxymethylation of gâ€C₃N₄ Photocatalysts for the Efficient Production of H₂O₂. Advanced Functional Materials, 2022, 32, .	7.8	76
48	Microwave Hydrothermal Synthesis, Structural Characterization, and Visible-Light Photocatalytic Activities of Single-Crystalline Bismuth Ferric Nanocrystals. Journal of the American Ceramic Society, 2011, 94, 2688-2693.	1.9	75
49	CoS₂@N-doped carbon coreâ€“shell nanorod array grown on Ni foam for enhanced electrocatalytic water oxidation. Journal of Materials Chemistry A, 2020, 8, 6795-6803.	5.2	75
50	Few-Layer Black Phosphorus Nanosheets: A Metal-Free Cocatalyst for Photocatalytic Nitrogen Fixation. ACS Applied Materials & Interfaces, 2020, 12, 17343-17352.	4.0	74
51	Bismuth Vacancy-Induced Efficient CO₂ Photoreduction in BiOCl Directly from Natural Air: A Progressive Step toward Photosynthesis in Nature. Nano Letters, 2021, 21, 10260-10266.	4.5	74
52	An Ionâ€Exchange Phase Transformation to ZnGa₂O₄ Nanocube Towards Efficient Solar Fuel Synthesis. Advanced Functional Materials, 2013, 23, 758-763.	7.8	72
53	Confinement effect of monolayer MoS₂ quantum dots on conjugated polyimide and promotion of solar-driven photocatalytic hydrogen generation. Dalton Transactions, 2017, 46, 3877-3886.	1.6	72
54	Rational construction of a CdS/reduced graphene oxide/TiO₂coreâ€“shell nanostructure as an all-solid-state Z-scheme system for CO₂photoreduction into solar fuels. RSC Advances, 2015, 5, 88409-88413.	1.7	71

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55	A Theoretical Study of Water Adsorption and Decomposition on the Low-Index Stoichiometric Anatase TiO₂ Surfaces. Journal of Physical Chemistry C, 2012, 116, 7430-7441.	1.5	70
56	Carbon Nanotube@RuO₂ as a High Performance Catalyst for Liâ€“CO₂ Batteries. ACS Applied Materials & Interfaces, 2019, 11, 5146-5151.	4.0	70
57	Robust Molecular Dipoleâ€Enabled Defect Passivation and Control of Energyâ€Level Alignment for Highâ€Efficiency Perovskite Solar Cells. Angewandte Chemie - International Edition, 2021, 60, 17664-17670.	7.2	69
58	Artificial Trees for Artificial Photosynthesis: Construction of Dendrite-Structured Î±-Fe₂O₃/g-C₃N₄ Z-Scheme System for Efficient CO₂ Reduction into Solar Fuels. ACS Applied Energy Materials, 2020, 3, 6561-6572.	2.5	67
59	BiVO4 nanoâ€“leaves: Mild synthesis and improved photocatalytic activity for O2 production under visible light irradiation. CrystEngComm, 2011, 13, 2500.	1.3	65
60	In Situ Fabrication of Highly Conductive Metal Nanowire Networks with High Transmittance from Deep-Ultraviolet to Near-Infrared. ACS Nano, 2015, 9, 2502-2509.	7.3	65
61	Unique Zn-doped SnO2 nano-echinus with excellent electron transport and light harvesting properties as photoanode materials for high performance dye-sensitized solar cell. CrystEngComm, 2012, 14, 6462.	1.3	64
62	Structure and Properties of Water on the Anatase TiO₂(101) Surface: From Single-Molecule Adsorption to Interface Formation. Journal of Physical Chemistry C, 2012, 116, 11054-11061.	1.5	64
63	Photoelectrochemical cell for unassisted overall solar water splitting using a BiVO₄photoanode and Si nanoarray photocathode. RSC Advances, 2016, 6, 9905-9910.	1.7	64
64	Facile grafting strategy synthesis of single-atom electrocatalyst with enhanced ORR performance. Nano Research, 2020, 13, 1519-1526.	5.8	60
65	Double-shelled plasmonic Ag-TiO2 hollow spheres toward visible light-active photocatalytic conversion of CO2 into solar fuel. APL Materials, 2015, 3, .	2.2	59
66	Ultrathin Z-scheme 2D/2D N-doped HTiNbO5 nanosheets/g-C3N4 porous composites for efficient photocatalytic degradation and H2 generation under visible light. Journal of Colloid and Interface Science, 2021, 583, 58-70.	5.0	59
67	Structure and energetics of low-index stoichiometric monoclinic clinobisvanite BiVO4 surfaces. RSC Advances, 2011, 1, 874.	1.7	58
68	Silicon Photoanodes Partially Covered by Ni@Ni(OH)₂ Coreâ€“Shell Particles for Photoelectrochemical Water Oxidation. ChemSusChem, 2017, 10, 2897-2903.	3.6	58
69	Fabrication of hierarchically assembled microspheres consisting of nanoporous ZnO nanosheets for high-efficiency dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 14341.	6.7	57
70	Anchoring of black phosphorus quantum dots onto WO₃ nanowires to boost photocatalytic CO₂ conversion into solar fuels. Chemical Communications, 2020, 56, 7777-7780.	2.2	57
71	Rational design of electrocatalysts for simultaneously promoting bulk charge separation and surface charge transfer in solar water splitting photoelectrodes. Journal of Materials Chemistry A, 2018, 6, 2568-2576.	5.2	56
72	Defect Engineering in Semiconductors: Manipulating Nonstoichiometric Defects and Understanding Their Impact in Oxynitrides for Solar Energy Conversion. Advanced Functional Materials, 2019, 29, 1808389.	7.8	56

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73	Super stable CsPbBr3@SiO2 tumor imaging reagent by stress-response encapsulation. Nano Research, 2020, 13, 795-801.	5.8	55
74	Ultrafast Fenton-like reaction route to FeOOH/NiFe-LDH heterojunction electrode for efficient oxygen evolution reaction. Journal of Materials Chemistry A, 2021, 9, 21785-21791.	5.2	55
75	Facile synthesis of anatase TiO2 mesocrystal sheets with dominant {001} facets based on topochemical conversion. CrystEngComm, 2010, 12, 3425.	1.3	54
76	Tuning the ion permeability of an Al₂O₃ coating layer on Fe₂O₃ photoanodes for improved photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2017, 5, 8402-8407.	5.2	54
77	In-Situ Formed Hydroxide Accelerating Water Dissociation Kinetics on Co₃N for Hydrogen Production in Alkaline Solution. ACS Applied Materials & Interfaces, 2018, 10, 22102-22109.	4.0	54
78	Coarsening of one-step deposited organolead triiodide perovskite films via Ostwald ripening for high efficiency planar-heterojunction solar cells. Dalton Transactions, 2016, 45, 7856-7865.	1.6	53
79	Polymerizable complex synthesis of BaZr1â^'xSnxO3 photocatalysts: Role of Sn4+ in the band structure and their photocatalytic water splitting activities. Journal of Materials Chemistry, 2010, 20, 6772.	6.7	52
80	Unlocking the potential of graphene for water oxidation using an orbital hybridization strategy. Energy and Environmental Science, 2018, 11, 407-416.	15.6	52
81	Schottky junction effect enhanced plasmonic photocatalysis by TaON@Ni NP heterostructures. Chemical Communications, 2019, 55, 11754-11757.	2.2	52
82	In Situ-Grown Island-Shaped Hollow Graphene on TaON with Spatially Separated Active Sites Achieving Enhanced Visible-Light CO₂ Reduction. ACS Catalysis, 2020, 10, 15083-15091.	5.5	51
83	Stable response to visible light of InGaN photoelectrodes. Applied Physics Letters, 2008, 92, 262110.	1.5	50
84	Photocurrent improvement in nanocrystalline Cu2ZnSnS4 photocathodes by introducing porous structures. Journal of Materials Chemistry A, 2013, 1, 15479.	5.2	50
85	One-step growth of 3D CoNi₂S₄ nanorods and cross-linked NiCo₂S₄ nanosheet arrays on carbon paper as anodes for high-performance lithium ion batteries. Chemical Communications, 2016, 52, 5258-5261.	2.2	49
86	Laser-assisted crystallization of CH₃NH₃PbI₃ films for efficient perovskite solar cells with a high open-circuit voltage. Chemical Communications, 2016, 52, 5394-5397.	2.2	49
87	Mg-doped Ta₃N₅nanorods coated with a conformal CoOOH layer for water oxidation: bulk and surface dual modification of photoanodes. Journal of Materials Chemistry A, 2017, 5, 20439-20447.	5.2	49
88	Inhibiting Hydrogen Evolution using a Chloride Adlayer for Efficient Electrochemical CO₂ Reduction on Zn Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 4565-4571.	4.0	49
89	Passivation Strategy of Reducing Both Electron and Hole Trap States for Achieving High-Efficiency PbS Quantum-Dot Solar Cells with Power Conversion Efficiency over 12%. ACS Energy Letters, 2020, 5, 3224-3236.	8.8	49
90	Symbiotic Algaeâ€"Bacteria Dressing for Producing Hydrogen to Accelerate Diabetic Wound Healing. Nano Letters, 2022, 22, 229-237.	4.5	48

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91	Oriented Growth of Sc-Doped Ta₃N₅ Nanorod Photoanode Achieving Low-Onset-Potential for Photoelectrochemical Water Oxidation. ACS Applied Energy Materials, 2018, 1, 4150-4157.	2.5	46
92	Promotion effect of metal phosphides towards electrocatalytic and photocatalytic water splitting. EcoMat, 2021, 3, e12097.	6.8	46
93	Barium zirconate: a new photocatalyst for converting CO₂ into hydrocarbons under UV irradiation. Catalysis Science and Technology, 2015, 5, 1758-1763.	2.1	44
94	Polymerizable ionic liquid as a precursor for N, P co-doped carbon toward the oxygen reduction reaction. Catalysis Science and Technology, 2018, 8, 1142-1150.	2.1	44
95	Direct storage of holes in ultrathin Ni(OH)₂ on Fe₂O₃ photoelectrodes for integrated solar charging battery-type supercapacitors. Journal of Materials Chemistry A, 2018, 6, 21360-21367.	5.2	44
96	Modulation of Disordered Coordination Degree Based on Surface Defective Metalâ€“Organic Framework Derivatives toward Boosting Oxygen Evolution Electrocatalysis. Small, 2020, 16, e2003630.	5.2	44
97	Interfaceâ€Engineered Ni(OH)₂/Î²â€like FeOOH Electrocatalysts for Highly Efficient and Stable Oxygen Evolution Reaction. Chemistry - an Asian Journal, 2017, 12, 2720-2726.	1.7	43
98	Understanding the enhanced catalytic activity of high entropy alloys: from theory to experiment. Journal of Materials Chemistry A, 2021, 9, 19410-19438.	5.2	43
99	A transparent Ti4+ doped hematite photoanode protectively grown by a facile hydrothermal method. CrystEngComm, 2013, 15, 2386.	1.3	42
100	Threeâ€Dimensional Hierarchical Architectures Derived from Surfaceâ€Mounted Metalâ€“Organic Framework Membranes for Enhanced Electrocatalysis. Angewandte Chemie, 2017, 129, 13969-13973.	1.6	42
101	Multilayer structure with gradual increasing porosity for dye-sensitized solar cells. Applied Physics Letters, 2009, 94, 031905.	1.5	41
102	Direct Growth of Fe₂V₄O₁₃ Nanoribbons on a Stainlessâ€Steel Mesh for Visibleâ€Light Photoreduction of CO₂ into Renewable Hydrocarbon Fuel and Degradation of Gaseous Isopropyl Alcohol. ChemPlusChem, 2013, 78, 274-278.	1.3	41
103	Formation mechanism of ZnS impurities and their effect on photoelectrochemical properties on a Cu2ZnSnS4 photocathode. CrystEngComm, 2014, 16, 2929.	1.3	41
104	Flux synthesis of regular Bi₄TaO₈Cl square nanoplates exhibiting dominant exposure surfaces of {001} crystal facets for photocatalytic reduction of CO₂ to methane. Nanoscale, 2018, 10, 1905-1911.	2.8	41
105	Stateâ€ofâ€theâ€Art Progress in Diverse Black Phosphorusâ€Based Structures: Basic Properties, Synthesis, Stability, Photoâ€and Electrocatalysisâ€Driven Energy Conversion. Advanced Functional Materials, 2021, 31, 2005197.	7.8	40
106	Fiber dye-sensitized solar cells consisting of TiO2 nanowires arrays on Ti thread as photoanodes through a low-cost, scalable route. Journal of Materials Chemistry A, 2013, 1, 11790.	5.2	38
107	Ultralong metahewettite CaV 6 O 16 Â·3H 2 O nanoribbons as novel host materials for lithium storage: Towards high-rate and excellent long-term cyclability. Nano Energy, 2016, 22, 38-47.	8.2	38
108	Bi₂MoO₆ Nanostrip Networks for Enhanced Visibleâ€Light Photocatalytic Reduction of CO₂ to CH₄. ChemPhysChem, 2017, 18, 3240-3244.	1.0	38

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109	Interface Manipulation to Improve Plasmonâ€Coupled Photoelectrochemical Water Splitting on Î±â€Fe₂O₃ Photoanodes. ChemSusChem, 2018, 11, 237-244.	3.6	38
110	Lead Selenide Colloidal Quantum Dot Solar Cells Achieving High Open-Circuit Voltage with One-Step Deposition Strategy. Journal of Physical Chemistry Letters, 2018, 9, 3598-3603.	2.1	38
111	Paving the road toward the use of Î²-Fe2O3 in solar water splitting: Raman identification, phase transformation and strategies for phase stabilization. National Science Review, 2020, 7, 1059-1067.	4.6	38
112	Polyimide-based photocatalysts: rational design for energy and environmental applications. Journal of Materials Chemistry A, 2020, 8, 14441-14462.	5.2	38
113	Hollow InVO₄ Nanocuboid Assemblies toward Promoting Photocatalytic N₂ Conversion Performance. Advanced Materials, 2021, 33, e2006780.	11.1	38
114	Boosting the hydrogen evolution performance of a ternary Mo_xCo_{1â^'x}P nanowire array by tuning the Mo/Co ratio. Journal of Materials Chemistry A, 2019, 7, 14842-14848.	5.2	36
115	Molecule-induced gradient electronic potential distribution on a polymeric photocatalyst surface and improved photocatalytic performance. Journal of Materials Chemistry A, 2013, 1, 5142.	5.2	35
116	Vitamin E assisted polymer electrolyte fuel cells. Energy and Environmental Science, 2014, 7, 3362-3370.	15.6	35
117	Enhanced photoelectrolysis of water with photoanode Nb:SrTiO3. Applied Physics Letters, 2004, 85, 689-691.	1.5	34
118	ZnO plates synthesized from the ammonium zinc nitrate hydroxide precursor. CrystEngComm, 2012, 14, 154-159.	1.3	34
119	Aging Precursor Solution in High Humidity Remarkably Promoted Grain Growth in Cu₂ZnSnS₄ Films. ACS Applied Materials & Interfaces, 2016, 8, 5432-5438.	4.0	34
120	Surface chemistry imposes selective reduction of CO₂ to CO over Ta₃N₅/LaTiO₂N photocatalyst. Journal of Materials Chemistry A, 2018, 6, 14838-14846.	5.2	34
121	Unconventional Route to Oxygenâ€Vacancyâ€Enabled Highly Efficient Electron Extraction and Transport in Perovskite Solar Cells. Angewandte Chemie, 2020, 132, 1628-1635.	1.6	34
122	Curing the fundamental issue of impurity phases in two-step solution-processed CsPbBr3 perovskite films. Science Bulletin, 2020, 65, 726-737.	4.3	34
123	2D Titanium/Niobium Metal Oxideâ€Based Materials for Photocatalytic Application. Solar Rrl, 2020, 4, 2000070.	3.1	34
124	Selective etching of metastable phase induced an efficient CuIn_{0.7}Ga_{0.3}S₂ nano-photocathode for solar water splitting. Journal of Materials Chemistry A, 2015, 3, 7840-7848.	5.2	33
125	Electrocatalytic fixation of N₂ into NO₃^{â^'}: electron transfer between oxygen vacancies and loaded Au in Nb₂O_{5â^'x} nanobelts to promote ambient nitrogen oxidation. Journal of Materials Chemistry A, 2021, 9, 17442-17450.	5.2	33
126	Material Design and Surface/Interface Engineering of Photoelectrodes for Solar Water Splitting. Solar Rrl, 2021, 5, 2100100.	3.1	33

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127	Photooxidation of Polycyclic Aromatic Hydrocarbons over NaBiO3 under Visible Light Irradiation. Catalysis Letters, 2008, 122, 131-137.	1.4	31
128	Generalized synthesis of a family of multishelled metal oxide hollow microspheres. Journal of Materials Chemistry A, 2013, 1, 3575.	5.2	31
129	Back Electron Transfer at TiO₂ Nanotube Photoanodes in the Presence of a H₂O₂ Hole Scavenger. ACS Applied Materials & Interfaces, 2017, 9, 33887-33895.	4.0	31
130	Host/Guest Nanostructured Photoanodes Integrated with Targeted Enhancement Strategies for Photoelectrochemical Water Splitting. Advanced Science, 2022, 9, e2103744.	5.6	31
131	Highly selective electrochemical CO₂ reduction to CO using a redox-active couple on low-crystallinity mesoporous ZnGa₂O₄ catalyst. Journal of Materials Chemistry A, 2019, 7, 9316-9323.	5.2	30
132	In situ construction of a 2D/2D heterostructured ZnIn₂S₄/Bi₂MoO₆Z-scheme system for boosting the photoreduction activity of Cr(<scp>vi</scp>). Catalysis Science and Technology, 2021, 11, 3885-3893.	2.1	30
133	Carrier Mobility Enhancement in (121)-Oriented CsPbBr₃ Perovskite Films Induced by the Microstructure Tailoring of PbBr₂ Precursor Films. ACS Applied Electronic Materials, 2021, 3, 373-384.	2.0	30
134	Two-step reactive template route to a mesoporous ZnGaNO solid solution for improved photocatalytic performance. Journal of Materials Chemistry, 2011, 21, 5682.	6.7	29
135	Construction of Visible-Light-Responsive SrTiO3 with Enhanced CO2 Adsorption Ability: Highly Efficient Photocatalysts for Artifical Photosynthesis. Catalysis Letters, 2015, 145, 640-646.	1.4	29
136	In-situ synthesis of nickel/palladium bimetal/ZnIn2S4 Schottky heterojunction for efficient photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2022, 623, 205-215.	5.0	29
137	Developing high-efficiency ï€ conjugated polymer semiconductor for photocatalytic degradation of dyes under visible light irradiation. RSC Advances, 2014, 4, 57153-57158.	1.7	28
138	In situ direct growth of single crystalline metal (Co, Ni) selenium nanosheets on metal fibers as counter electrodes toward low-cost, high-performance fiber-shaped dye-sensitized solar cells. Nanoscale, 2016, 8, 2304-2308.	2.8	28
139	Single Pdâ€“S_x Sites In Situ Coordinated on CdS Surface as Efficient Hydrogen Autotransfer Shuttles for Highly Selective Visible-Light-Driven Câ€“N Coupling. ACS Catalysis, 2022, 12, 4481-4490.	5.5	28
140	Remarkable enhancement in photocurrent of In0.20Ga0.80N photoanode by using an electrochemical surface treatment. Applied Physics Letters, 2011, 99, .	1.5	27
141	Photocatalytic CO2 reduction of BaCeO3 with 4f configuration electrons. Applied Surface Science, 2015, 358, 463-467.	3.1	27
142	Series of ZnSn(OH)₆ Polyhedra: Enhanced CO₂ Dissociation Activation and Crystal Facet-Based Homojunction Boosting Solar Fuel Synthesis. Inorganic Chemistry, 2017, 56, 5704-5709.	1.9	27
143	Ta₃N₅nanorods encapsulated into 3D hydrangea-like MoS₂for enhanced photocatalytic hydrogen evolution under visible light irradiation. Dalton Transactions, 2019, 48, 13176-13183.	1.6	27
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