Zhaosheng Li

List of Publications by Citations

176 papers	9,666 citations	48 h-index	95 g-index
190 ext. papers	10,828 ext. citations	7.9 avg, IF	6.21 L-index

#	Paper	IF	Citations
176	An orthophosphate semiconductor with photooxidation properties under visible-light irradiation. *Nature Materials*, **2010**, 9, 559-64	27	1648
175	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	35.4	833
174	Solar hydrogen generation from seawater with a modified BiVO4 photoanode. *Energy and Environmental Science*, **2011**, 4, 4046	35.4	486
173	Electronic structure and optical properties of monoclinic clinobisvanite BiVO4. *Physical Chemistry Chemical Physics*, **2011**, 13, 4746-53	3.6	277
172	Enhanced incident photon-to-electron conversion efficiency of tungsten trioxide photoanodes based on 3D-photonic crystal design. *ACS Nano*, **2011**, 5, 4310-8	16.7	236
171	Cathodic shift of onset potential for water oxidation on a Ti4+ doped Fe2O3 photoanode by suppressing the back reaction. *Energy and Environmental Science*, **2014**, 7, 752-759	35.4	201
170	A co-catalyst-loaded Ta(3)N(5) photoanode with a high solar photocurrent for water splitting upon facile removal of the surface layer. *Angewandte Chemie - International Edition*, **2013**, 52, 11016-20	16.4	189
169	Co3O4 Nanoparticles as Robust Water Oxidation Catalysts Towards Remarkably Enhanced Photostability of a Ta3N5 Photoanode. *Advanced Functional Materials*, **2012**, 22, 3066-3074	15.6	188
168	Enhanced activity of mesoporous Nb2O5 for photocatalytic hydrogen production. *Applied Surface Science*, **2007**, 253, 8500-8506	6.7	155
167	Highly Photo-Responsive LaTiO2N Photoanodes by Improvement of Charge Carrier Transport among Film Particles. *Advanced Functional Materials*, **2014**, 24, 3535-3542	15.6	153
166	Effects of Surface Electrochemical Pretreatment on the Photoelectrochemical Performance of Mo-Doped BiVO4. *Journal of Physical Chemistry C*, **2012**, 116, 5076-5081	3.8	152
165	Three-Dimensional Hierarchical Architectures Derived from Surface-Mounted Metal-Organic Framework Membranes for Enhanced Electrocatalysis. *Angewandte Chemie - International Edition*, **2017**, 56, 13781-13785	16.4	144
164	Correlation of Crystal Structures, Electronic Structures, and Photocatalytic Properties in a Series of Ag-based Oxides: AgAlO2, AgCrO2, and Ag2CrO4. *Journal of Physical Chemistry C*, **2008**, 112, 3134-3141	3.8	141
163	Sol–gel hydrothermal synthesis of visible-light-driven Cr-doped SrTiO3 for efficient hydrogen production. *Journal of Materials Chemistry*, **2011**, 21, 11347		138
162	Facile temperature-controlled synthesis of hexagonal Zn2GeO4 nanorods with different aspect ratios toward improved photocatalytic activity for overall water splitting and photoreduction of CO2. *Chemical Communications*, **2011**, 47, 5632-4	5.8	138
161	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	3.8	131
160	Formation of Hierarchical Structure Composed of (Co/Ni)Mn-LDH Nanosheets on MWCNT Backbones for Efficient Electrocatalytic Water Oxidation. *ACS Applied Materials & Interfaces*, **2016**, 8, 14527-34	9.5	123

159	Two-dimensional nanomaterials for photocatalytic CO2 reduction to solar fuels. *Sustainable Energy and Fuels*, **2017**, 1, 1875-1898	5.8	115
158	Solar fuel production: Strategies and new opportunities with nanostructures. *Nano Today*, **2015**, 10, 468-486	17.9	112
157	Formation energy and photoelectrochemical properties of BiVO4 after doping at Bi3+ or V5+ sites with higher valence metal ions. *Physical Chemistry Chemical Physics*, **2013**, 15, 1006-13	3.6	111
156	Improvement in photocatalytic H2 evolution over g-C3N4 prepared from protonated melamine. *Applied Surface Science*, **2014**, 295, 253-259	6.7	100
155	Improved photoelectrochemical responses of Si and Ti codoped □Fe2O3 photoanode films. *Applied Physics Letters*, **2010**, 97, 042105	3.4	96
154	Correlation between the band positions of (SrTiO3)1-x.(LaTiO2N)x solid solutions and photocatalytic properties under visible light irradiation. *Physical Chemistry Chemical Physics*, **2008**, 10, 6717-23	3.6	95
153	Density functional theory study of doping effects in monoclinic clinobisvanite BiVO4. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2010**, 374, 4919-4927	2.3	85
152	A facile spray pyrolysis method to prepare Ti-doped ZnFe2O4 for boosting photoelectrochemical water splitting. *Journal of Materials Chemistry A*, **2017**, 5, 7571-7577	13	84
151	Efficient visible-light-driven photocatalytic H2 production over Cr/N-codoped SrTiO3. *International Journal of Hydrogen Energy*, **2012**, 37, 12120-12127	6.7	82
150	Zinc Gallogermanate Solid Solution: A Novel Photocatalyst for Efficiently Converting CO2 into Solar Fuels. *Advanced Functional Materials*, **2013**, 23, 1839-1845	15.6	79
149	In situ growth of epitaxial lead iodide films composed of hexagonal single crystals. *Journal of Materials Chemistry*, **2005**, 15, 4555		76
148	Quantitative Analysis and Visualized Evidence for High Charge Separation Efficiency in a Solid-Liquid Bulk Heterojunction. *Advanced Energy Materials*, **2014**, 4, 1301785	21.8	75
147	Heterogeneous degradation of organic contaminants in the photo-Fenton reaction employing pure cubic □Fe2O3. *Applied Catalysis B: Environmental*, **2019**, 245, 410-419	21.8	66
146	An Ion-Exchange Phase Transformation to ZnGa2O4 Nanocube Towards Efficient Solar Fuel Synthesis. *Advanced Functional Materials*, **2013**, 23, 758-763	15.6	63
145	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	3.8	63
144	Improved hydrogen evolution activities under visible light irradiation over NaTaO3 codoped with lanthanum and chromium. *Materials Chemistry and Physics*, **2010**, 121, 506-510	4.4	63
143	Photocatalysis: an overview of recent developments and technological advancements. *Science China Chemistry*, **2020**, 63, 149-181	7.9	63
142	Enhanced Water-Splitting Performance of Perovskite SrTaO2N Photoanode Film through Ameliorating Interparticle Charge Transport. *Advanced Functional Materials*, **2016**, 26, 7156-7163	15.6	63

141	Effects of oxygen doping on optical band gap and band edge positions of Ta3N5 photocatalyst: A GGA+U calculation. *Journal of Catalysis*, **2014**, 309, 291-299	7.3	61
140	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	3.8	60
139	BiVO4 nanoleaves: Mild synthesis and improved photocatalytic activity for O2 production under visible light irradiation. *CrystEngComm*, **2011**, 13, 2500	3.3	57
138	Surface states as electron transfer pathway enhanced charge separation in TiO2 nanotube water splitting photoanodes. *Applied Catalysis B: Environmental*, **2018**, 234, 100-108	21.8	54
137	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	3.8	54
136	Facile synthesis of anatase TiO2 mesocrystal sheets with dominant {001} facets based on topochemical conversion. *CrystEngComm*, **2010**, 12, 3425	3.3	54
135	Enhanced Performance of Photoelectrochemical Water Splitting with ITO@Fe2O3 Core-Shell Nanowire Array as Photoanode. *ACS Applied Materials & Interfaces*, **2015**, 7, 26482-90	9.5	53
134	Photoelectrochemical cell for unassisted overall solar water splitting using a BiVO4 photoanode and Si nanoarray photocathode. *RSC Advances*, **2016**, 6, 9905-9910	3.7	51
133	Forced Impregnation Approach to Fabrication of Large-Area, Three-Dimensionally Ordered Macroporous Metal Oxides. *Chemistry of Materials*, **2010**, 22, 3583-3585	9.6	51
132	Stable response to visible light of InGaN photoelectrodes. *Applied Physics Letters*, **2008**, 92, 262110	3.4	50
131	Enhancement of photoelectric conversion properties of SrTiO3/Fe2O3heterojunction photoanode. *Journal Physics D: Applied Physics*, **2007**, 40, 3925-3930	3	50
130	State-of-the-art advancements of crystal facet-exposed photocatalysts beyond TiO2: Design and dependent performance for solar energy conversion and environment applications. *Materials Today* , **2020**, 33, 75-86	21.8	50
129	Photoelectrochemical water oxidation of LaTaON2 under visible-light irradiation. *International Journal of Hydrogen Energy*, **2014**, 39, 7697-7704	6.7	48
128	Polymerizable complex synthesis of BaZr1SnxO3 photocatalysts: Role of Sn4+ in the band structure and their photocatalytic water splitting activities. *Journal of Materials Chemistry*, **2010**, 20, 6772		46
127	Structure and energetics of low-index stoichiometric monoclinic clinobisvanite BiVO4 surfaces. *RSC Advances*, **2011**, 1, 874	3.7	45
126	Degradation in photocatalytic activity induced by hydrogen-related defects in nano-LiNbO3 material. *Applied Physics Letters*, **2006**, 88, 071917	3.4	45
125	High Energy Density Asymmetric Supercapacitor Based ZnS/NiCo2S4/Co9S8 Nanotube Composites Materials. *Advanced Materials Interfaces*, **2018**, 5, 1800018	4.6	44
124	Synthesis of a mesoporous single crystal Ga2O3 nanoplate with improved photoluminescence and high sensitivity in detecting CO. *Chemical Communications*, **2010**, 46, 6388-90	5.8	44

123	Effective electron collection in highly (110)-oriented ZnO porous nanosheet framework photoanode. *Nanotechnology*, **2010**, 21, 065703	3.4	43
122	Luminescence properties of Sr2ZnWO6:Eu3+ phosphors. *Journal of Alloys and Compounds*, **2009**, 469, L6-L9	5.7	43
121	A facile strategy to passivate surface states on the undoped hematite photoanode for water splitting. *Electrochemistry Communications*, **2012**, 23, 41-43	5.1	42
120	Surface properties and electronic structure of low-index stoichiometric anatase TiO(2) surfaces. *Journal of Physics Condensed Matter*, **2010**, 22, 175008	1.8	42
119	Facile Method To Synthesize Mesoporous Multimetal Oxides (ATiO3, A = Sr, Ba) with Large Specific Surface Areas and Crystalline Pore walls. *Chemistry of Materials*, **2010**, 22, 1276-1278	9.6	42
118	Non-oxide semiconductors for artificial photosynthesis: Progress on photoelectrochemical water splitting and carbon dioxide reduction. *Nano Today*, **2020**, 30, 100830	17.9	42
117	An efficient charge compensated red phosphor Sr3WO6: K+, Eu3+ For white LEDs. *Journal of Alloys and Compounds*, **2013**, 553, 221-224	5.7	41
116	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	5.6	41
115	A transparent Ti4+ doped hematite photoanode protectively grown by a facile hydrothermal method. *CrystEngComm*, **2013**, 15, 2386	3.3	39
114	Selective Electrochemical Detection of Dopamine on Polyoxometalate-Based Metal Organic Framework and Its Composite with Reduced Graphene Oxide. *Advanced Materials Interfaces*, **2017**, 4, 1601241	4.6	38
113	Defect Engineering in Semiconductors: Manipulating Nonstoichiometric Defects and Understanding Their Impact in Oxynitrides for Solar Energy Conversion. *Advanced Functional Materials*, **2019**, 29, 1808389	15.6	37
112	Reconstruction of the (001) surface of TiO2 nanosheets induced by the fluorine-surfactant removal process under UV-irradiation for dye-sensitized solar cells. *Physical Chemistry Chemical Physics*, **2012**, 14, 4763-9	3.6	37
111	Synthesis, growth mechanism and photoelectrochemical properties of BiVO4microcrystal electrodes. *Journal Physics D: Applied Physics*, **2010**, 43, 405402	3	37
110	Barium zirconate: a new photocatalyst for converting CO2 into hydrocarbons under UV irradiation. *Catalysis Science and Technology*, **2015**, 5, 1758-1763	5.5	36
109	Ge-mediated modification in Ta3N5 photoelectrodes with enhanced charge transport for solar water splitting. *Chemistry - A European Journal*, **2014**, 20, 16384-90	4.8	36
108	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	13	35
107	Role of oxygen impurity on the mechanical stability and atomic cohesion of TaN3 semiconductor photocatalyst. *Physical Chemistry Chemical Physics*, **2014**, 16, 15375-80	3.6	35
106	Efficient red phosphor double-perovskite Ca3WO6 with A-site substitution of Eu3+. *Dalton Transactions*, **2013**, 42, 13502-8	4.3	32

105	Unraveling the mechanism of 720 nm sub-band-gap optical absorption of a Ta3N5 semiconductor photocatalyst: a hybrid-DFT calculation. *Physical Chemistry Chemical Physics*, **2015**, 17, 8166-71	3.6	32
104	Three-Dimensional Hierarchical Architectures Derived from Surface-Mounted Metal□Organic Framework Membranes for Enhanced Electrocatalysis. *Angewandte Chemie*, **2017**, 129, 13969-13973	3.6	31
103	ZnO plates synthesized from the ammonium zinc nitrate hydroxide precursor. *CrystEngComm*, **2012**, 14, 154-159	3.3	29
102	Photooxidation of Polycyclic Aromatic Hydrocarbons over NaBiO3 under Visible Light Irradiation. *Catalysis Letters*, **2008**, 122, 131-137	2.8	29
101	Bi MoO Nanostrip Networks for Enhanced Visible-Light Photocatalytic Reduction of CO to CH. *ChemPhysChem*, **2017**, 18, 3240-3244	3.2	28
100	Two-step reactive template route to a mesoporous ZnGaNO solid solution for improved photocatalytic performance. *Journal of Materials Chemistry*, **2011**, 21, 5682		28
99	Interfacial Engineering of Hierarchical Transition Metal Oxide Heterostructures for Highly Sensitive Sensing of Hydrogen Peroxide. *Small*, **2018**, 14, e1703713	11	26
98	Remarkable enhancement in photocurrent of In0.20Ga0.80N photoanode by using an electrochemical surface treatment. *Applied Physics Letters*, **2011**, 99, 112108	3.4	26
97	Construction of Visible-Light-Responsive SrTiO3 with Enhanced CO2 Adsorption Ability: Highly Efficient Photocatalysts for Artifical Photosynthesis. *Catalysis Letters*, **2015**, 145, 640-646	2.8	25
96	Layered crystalline ZnInS nanosheets: CVD synthesis and photo-electrochemical properties. *Nanoscale*, **2016**, 8, 18197-18203	7.7	25
95	Theoretical study of water adsorption and dissociation on Ta3N5(100) surfaces. *Physical Chemistry Chemical Physics*, **2013**, 15, 16054-64	3.6	24
94	Back Electron Transfer at TiO Nanotube Photoanodes in the Presence of a HO Hole Scavenger. *ACS Applied Materials & Interfaces*, **2017**, 9, 33887-33895	9.5	24
93	Interfacial modification of photoelectrode in ZnO-based dye-sensitized solar cells and its efficiency improvement mechanism. *RSC Advances*, **2012**, 2, 7708	3.7	24
92	Solvothermal synthesis of monodisperse iron oxides with various morphologies and their applications in removal of Cr(VI). *CrystEngComm*, **2011**, 13, 2727	3.3	24
91	Significant improvements in InGaN/GaN nano-photoelectrodes for hydrogen generation by structure and polarization optimization. *Scientific Reports*, **2016**, 6, 20218	4.9	24
90	Photocatalytic CO2 reduction of BaCeO3 with 4f configuration electrons. *Applied Surface Science*, **2015**, 358, 463-467	6.7	23
89	Understanding the interaction of water with anatase TiO2 (101) surface from density functional theory calculations. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2011**, 375, 2939-2945	2.3	23
88	Water Adsorption and Decomposition on N/V-Doped Anatase TiO2 (101) Surfaces. *Journal of Physical Chemistry C*, **2013**, 117, 6172-6184	3.8	22

87	First-principles calculations on electronic structures of N/V-doped and N-V-dodoped anatase TiO2 (101) surfaces. *ChemPhysChem*, **2012**, 13, 3836-47	3.2	21
86	Improving solar water-splitting performance of LaTaON2 by bulk defect control and interface engineering. *Applied Catalysis B: Environmental*, **2018**, 226, 111-116	21.8	21
85	Application of binder-free TiOxN1 nanogrid film as a high-power supercapacitor electrode. *Journal of Power Sources*, **2015**, 296, 53-63	8.9	20
84	A dye-free photoelectrochemical solar cell based on BiVO4 with a long lifetime of photogenerated carriers. *Electrochemistry Communications*, **2012**, 22, 49-52	5.1	19
83	Effect of crystal growth on mesoporous Pb3Nb4O13 formation, and their photocatalytic activity under visible-light irradiation. *Journal of Materials Chemistry*, **2010**, 20, 2865		19
82	Curing the fundamental issue of impurity phases in two-step solution-processed CsPbBr3 perovskite films. *Science Bulletin*, **2020**, 65, 726-737	10.6	19
81	Construction of silica-encapsulated gold-silver core-shell nanorod: Atomic facets enrichment and plasmon enhanced catalytic activity with high stability and reusability. *Materials and Design*, **2019**, 177, 107837	8.1	17
80	Highly symmetrical, 24-faceted, concave BiVO polyhedron bounded by multiple high-index facets for prominent photocatalytic O evolution under visible light. *Chemical Communications*, **2019**, 55, 4777-4780	5.8	17
79	Paving the road toward the use of FeO in solar water splitting: Raman identification, phase transformation and strategies for phase stabilization. *National Science Review*, **2020**, 7, 1059-1067	10.8	17
78	MnO2 nanolayers on highly conductive TiO(0.54)N(0.46) nanotubes for supercapacitor electrodes with high power density and cyclic stability. *Physical Chemistry Chemical Physics*, **2014**, 16, 8521-8	3.6	17
77	Enhanced luminescence intensity of Sr3B2O6:Eu2+ phosphor prepared by sol gel method. *Journal of Alloys and Compounds*, **2013**, 579, 432-437	5.7	17
76	Effects of oxygen impurities and nitrogen vacancies on the surface properties of the Ta3N5 photocatalyst: a DFT study. *Physical Chemistry Chemical Physics*, **2015**, 17, 23265-72	3.6	17
75	Effects of Mg Zr codoping on the photoelectrochemical properties of a Ta3N5 semiconductor: a theoretical insight. *Journal of Materials Chemistry A*, **2017**, 5, 6966-6973	13	16
74	A beta-FeO nanoparticle-assembled film for photoelectrochemical water splitting. *Dalton Transactions*, **2017**, 46, 10673-10677	4.3	16
73	Modulation of dendrite growth of cuprous oxide by electrodeposition. *Journal of Crystal Growth*, **2010**, 312, 3085-3090	1.6	16
72	Charge compensation doping to improve the photocatalytic and photoelectrochemical activities of Ta3N5: A theoretical study. *Applied Catalysis B: Environmental*, **2019**, 244, 502-510	21.8	16
71	Modulation of Disordered Coordination Degree Based on Surface Defective Metal-Organic Framework Derivatives toward Boosting Oxygen Evolution Electrocatalysis. *Small*, **2020**, 16, e2003630	11	15
70	Highly efficient visible light photocatalytic activity of Cr a codoped SrTiO3 with surface alkalinization: An insight from DFT calculation. *Computational Materials Science*, **2013**, 79, 87-94	3.2	14

69	A Co-catalyst-Loaded Ta3N5 Photoanode with a High Solar Photocurrent for Water Splitting upon Facile Removal of the Surface Layer. *Angewandte Chemie*, **2013**, 125, 11222-11226	3.6	14
68	Growth of In-rich and Ga-rich InGaN alloys by MOCVD and fabrication of InGaN-based photoelectrodes. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 1817-1820		14
67	A perspective on perovskite oxide semiconductor catalysts for gas phase photoreduction of carbon dioxide. *MRS Communications*, **2016**, 6, 216-225	2.7	14
66	Tandem photoelectrochemical cells for solar water splitting. *Advances in Physics: X*, **2018**, 3, 1487267	5.1	14
65	Exploring facile strategies for high-oxidation-state metal nitride synthesis: carbonate-assisted one-step synthesis of Ta3N5 films for solar water splitting. *Science Bulletin*, **2018**, 63, 1404-1410	10.6	14
64	Improved water-splitting performances of CuW1□MoxO4 photoanodes synthesized by spray pyrolysis. *Science China Materials*, **2018**, 61, 1297-1304	7.1	14
63	Basic Molten Salt Route to Prepare Porous SrTiO3 Nanocrystals for Efficient Photocatalytic Hydrogen Production. *European Journal of Inorganic Chemistry*, **2014**, 2014, 3731-3735	2.3	13
62	Promotion effect of metal phosphides towards electrocatalytic and photocatalytic water splitting. *EcoMat*, **2021**, 3, e12097	9.4	13
61	A novel wide-spectrum response hexagonal YFeO3 photoanode for solar water splitting. *RSC Advances*, **2017**, 7, 18418-18420	3.7	12
60	BiVO tubular structures: oxygen defect-rich and largely exposed reactive {010} facets synergistically boost photocatalytic water oxidation and the selective N[double bond, length as m-dash]N coupling reaction of 5-amino-1H-tetrazole. *Chemical Communications*, **2019**, 55, 5635-5638	5.8	12
59	Reactive Inorganic Vapor Deposition of Perovskite Oxynitride Films for Solar Energy Conversion. *Research*, **2019**, 2019, 9282674	7.8	12
58	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	4	12
57	Oxygen-Impurity-Induced Direct□Indirect Band Gap in Perovskite SrTaO2N. *Journal of Physical Chemistry C*, **2017**, 121, 6864-6867	3.8	11
56	A hybrid density functional theory study of the anion distribution and applied electronic properties of the LaTiO2N semiconductor photocatalyst. *Physical Chemistry Chemical Physics*, **2015**, 17, 19631-6	3.6	11
55	Cooperative catalysis coupling photo-/photothermal effect to drive Sabatier reaction with unprecedented conversion and selectivity. *Joule*, **2021**, 5, 3235-3251	27.8	11
54	Design Principles for Construction of Charge Transport Channels in Particle-Assembled Water-Splitting Photoelectrodes. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10509-10515	8.3	10
53	Interfacial Effects on the Band Edges of TaN Photoanodes in an Aqueous Environment: A Theoretical View. *IScience*, **2019**, 13, 432-439	6.1	10
52	Simultaneous Optimization of Phase and Morphology of CsPbBr3 Films via Controllable Ostwald Ripening by Ethylene Glycol Monomethylether/Isopropanol Bi-Solvent Engineering. *Advanced Engineering Materials*, **2020**, 22, 2000162	3.5	10

51	Enhancement of Photoelectrochemical Performance in Water Oxidation over Bismuth Vanadate Photoanodes by Incorporation with Reduced Graphene Oxide. *ChemCatChem*, **2015**, 7, 2979-2985	5.2	10
50	Compensation of band-edge positions in titanium-doped Ta3N5 photoanode for enhanced water splitting performance: A first-principles insight. *Physical Review Materials*, **2017**, 1,	3.2	10
49	Molecular-level understanding of the deactivation pathways during methanol photo-reforming on Pt-decorated TiO2. *Applied Catalysis B: Environmental*, **2020**, 272, 118980	21.8	10
48	Current advances in MoS2/semiconductor heterojunction with enhanced photocatalytic activity. *Current Opinion in Green and Sustainable Chemistry*, **2017**, 6, 42-47	7.9	9
47	Tuning spontaneous polarization to alter water oxidation/reduction activities of LiNbO3. *Applied Physics Letters*, **2018**, 112, 073901	3.4	9
46	Effects of Ba□ codoping on the photocatalytic activities of Ta3N5 photocatalyst: a DFT study. *RSC Advances*, **2014**, 4, 55615-55621	3.7	9
45	Nearly Monodispersed LiNbO3 Nanocrystals Synthesized by a Nonaqueous Sol□Gel Process and Their Photocatalytic H2 Evolution Activities. *European Journal of Inorganic Chemistry*, **2013**, 2013, 4142-4145	2.3	9
44	Design and theoretical analysis of resonant cavity for second-harmonic generation with high efficiency. *Applied Physics Letters*, **2011**, 98, 031102	3.4	9
43	Evaluating the promotional effects of WO3 underlayers in BiVO4 water splitting photoanodes. *Chemical Engineering Journal*, **2021**, 417, 128095	14.7	9
42	Promoted photoelectrochemical activity of BiVO4 coupled with LaFeO3 and LaCoO3. *Research on Chemical Intermediates*, **2018**, 44, 1013-1024	2.8	8
41	Tunable orange red phosphors: S2□doped high temperature phase Ca3SiO4Cl2:Eu2+ for solid-state lighting. *RSC Advances*, **2013**, 3, 1965-1969	3.7	8
40	Material Design and Surface/Interface Engineering of Photoelectrodes for Solar Water Splitting. *Solar Rrl*, **2021**, 5, 2100100	7.1	8
39	Theoretical Insight into Charge-Recombination Center in Ta3N5 Photocatalyst: Interstitial Hydrogen. *Journal of Physical Chemistry C*, **2018**, 122, 489-494	3.8	8
38	Theoretical study on the surface stabilities, electronic structures and water adsorption behavior of the Ta3N5(110) surface. *Physical Chemistry Chemical Physics*, **2016**, 18, 7938-45	3.6	7
37	Improved charge separation efficiency of hematite photoanodes by coating an ultrathin p-type LaFeO overlayer. *Nanotechnology*, **2017**, 28, 394003	3.4	7
36	In situ preparation of Bi2S3 nanoribbon-anchored BiVO4 nanoscroll heterostructures for the catalysis of Cr(VI) photoreduction. *Catalysis Science and Technology*, **2020**, 10, 3843-3847	5.5	6
35	Suppression of Point Defects for Band Edge Engineering in a Semiconducting Photocatalyst. *Journal of Physical Chemistry Letters*, **2020**, 11, 1708-1713	6.4	5
34	Na adsorption on SrTiO3 (0 0 1) surface and its interaction with water: A DFT calculation. *Applied Surface Science*, **2013**, 270, 359-363	6.7	5

33	Photocatalytic properties of MIn(WO4)2 (M = Li, Na, and K). *Journal of Materials Research*, **2007**, 22, 958-964	2.5	5
32	Polaron States as a Massive Electron-Transfer Pathway at Heterojunction Interface. *Journal of Physical Chemistry Letters*, **2020**, 11, 9184-9194	6.4	5
31	Phase degradation of all-inorganic perovskite CsPbI2Br films induced by a p-type CuI granular capping layer. *Science China Materials*, **2020**, 63, 2487-2496	7.1	5
30	Extraterrestrial artificial photosynthetic materials for resource utilization. *National Science Review*, **2021**, 8, nwab104	10.8	5
29	Insight into the influence of high temperature annealing on the onset potential of Ti-doped hematite photoanodes for solar water splitting. *Chinese Chemical Letters*, **2018**, 29, 791-794	8.1	4
28	Surface modification of hematite photoanode films with rhodium. *Rare Metals*, **2011**, 30, 38-41	5.5	4
27	Sol-gel synthesis of highly reproducible WO3 photoanodes for solar water oxidation. *Science China Materials*, **2020**, 63, 2261-2271	7.1	4
26	2D High-Entropy Hydrotalcites. *Small*, **2021**, 17, e2103412	11	4
25	Effect of Bulk Hydrogen on the Photocatalytic Activity of Semiconducting Ta3N5: A Hybrid-DFT Viewpoint. *Journal of Physical Chemistry C*, **2019**, 123, 28763-28768	3.8	3
24	Urea-Assisted Synthesis and Tailoring Cobalt Cores for Synergetic Promotion of Hydrogen Evolution Reaction in Acid and Alkaline Media. *Advanced Energy and Sustainability Research*, **2021**, 2, 2000091	1.6	3
23	Hydrogen Evolution Reaction of □Mo0.5W0.5 C Achieved by High Pressure High Temperature Synthesis. *Catalysts*, **2016**, 6, 208	4	3
22	Extraterrestrial photosynthesis by Chang□-5 lunar soil. *Joule*, **2022**,	27.8	3
21	Elegant Molecular Iodine/Antisolvent Solution Engineering To Tune the Fermi Level of Perovskite CH3NH3PbI3. *ACS Applied Energy Materials*, **2019**, 2, 5753-5758	6.1	2
20	Enhancement in Luminescence of NaIn(WO[sub 4])[sub 2] via Bismuth Doping. *Journal of the Electrochemical Society*, **2010**, 157, P63	3.9	2
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