

Zhaosheng Li

List of Publications by Year in descending order

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184
papers

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31976

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190
docs citations

190
times ranked

13415
citing authors

#	ARTICLE	IF	CITATIONS
1	An orthophosphate semiconductor with photooxidation properties under visible-light irradiation. <i>Nature Materials</i> , 2010, 9, 559-564.	27.5	1,807
2	Photoelectrochemical cells for solar hydrogen production: current state of promising photoelectrodes, methods to improve their properties, and outlook. <i>Energy and Environmental Science</i> , 2013, 6, 347-370.	30.8	969
3	Solar hydrogen generation from seawater with a modified BiVO ₄ photoanode. <i>Energy and Environmental Science</i> , 2011, 4, 4046.	30.8	564
4	Electronic structure and optical properties of monoclinic clinobisvanite BiVO ₄ . <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4746.	2.8	327
5	Enhanced Incident Photon-to-Electron Conversion Efficiency of Tungsten Trioxide Photoanodes Based on 3D-Photonic Crystal Design. <i>ACS Nano</i> , 2011, 5, 4310-4318.	14.6	267
6	Cathodic shift of onset potential for water oxidation on a Ti ⁴⁺ -doped Fe ₂ O ₃ photoanode by suppressing the back reaction. <i>Energy and Environmental Science</i> , 2014, 7, 752-759.	30.8	228
7	A Co-catalyst-Loaded Ta ₃ N ₅ Photoanode with a High Solar Photocurrent for Water Splitting upon Facile Removal of the Surface Layer. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11016-11020.	13.8	208
8	Co ₃ O ₄ Nanoparticles as Robust Water Oxidation Catalysts Towards Remarkably Enhanced Photostability of a Ta ₃ N ₅ Photoanode. <i>Advanced Functional Materials</i> , 2012, 22, 3066-3074.	14.9	205
9	Three-Dimensional Hierarchical Architectures Derived from Surface-Mounted Metal-Organic Framework Membranes for Enhanced Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13781-13785.	13.8	193
10	Enhanced activity of mesoporous Nb ₂ O ₅ for photocatalytic hydrogen production. <i>Applied Surface Science</i> , 2007, 253, 8500-8506.	6.1	173
11	Effects of Surface Electrochemical Pretreatment on the Photoelectrochemical Performance of Mo-Doped BiVO ₄ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 5076-5081.	3.1	172
12	Increasing the Oxygen Vacancy Density on the TiO ₂ Surface by La-Doping for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 18396-18400.	3.1	166
13	Highly Photo-Responsive LaTiO ₂ N Photoanodes by Improvement of Charge Carrier Transport among Film Particles. <i>Advanced Functional Materials</i> , 2014, 24, 3535-3542.	14.9	166
14	Facile temperature-controlled synthesis of hexagonal Zn ₂ GeO ₄ nanorods with different aspect ratios toward improved photocatalytic activity for overall water splitting and photoreduction of CO ₂ . <i>Chemical Communications</i> , 2011, 47, 5632-5634.	4.1	159
15	Sol-gel hydrothermal synthesis of visible-light-driven Cr-doped SrTiO ₃ for efficient hydrogen production. <i>Journal of Materials Chemistry</i> , 2011, 21, 11347.	6.7	157
16	Two-dimensional nanomaterials for photocatalytic CO ₂ reduction to solar fuels. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1875-1898.	4.9	156
17	Formation of Hierarchical Structure Composed of (Co/Ni)Mn-LDH Nanosheets on MWCNT Backbones for Efficient Electrocatalytic Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 14527-14534.	8.0	155
18	Correlation of Crystal Structures, Electronic Structures, and Photocatalytic Properties in a Series of Ag-based Oxides: AgAlO ₂ , AgCrO ₂ , and Ag ₂ CrO ₄ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 3134-3141.	3.1	152

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19	Formation energy and photoelectrochemical properties of BiVO ₄ after doping at Bi ³⁺ or V ⁵⁺ sites with higher valence metal ions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 1006-1013.	2.8	138
20	Solar fuel production: Strategies and new opportunities with nanostructures. <i>Nano Today</i> , 2015, 10, 468-486.	11.9	126
21	Improvement in photocatalytic H ₂ evolution over g-C ₃ N ₄ prepared from protonated melamine. <i>Applied Surface Science</i> , 2014, 295, 253-259.	6.1	119
22	A facile spray pyrolysis method to prepare Ti-doped ZnFe ₂ O ₄ for boosting photoelectrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7571-7577.	10.3	113
23	Heterogeneous degradation of organic contaminants in the photo-Fenton reaction employing pure cubic β -Fe ₂ O ₃ . <i>Applied Catalysis B: Environmental</i> , 2019, 245, 410-419.	20.2	107
24	Photocatalysis: an overview of recent developments and technological advancements. <i>Science China Chemistry</i> , 2020, 63, 149-181.	8.2	107
25	Improved photoelectrochemical responses of Si and Ti codoped β -Fe ₂ O ₃ photoanode films. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	105
26	Correlation between the band positions of (SrTiO ₃) _{1-x} (LaTiO ₂ N) _x solid solutions and photocatalytic properties under visible light irradiation. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 6717.	2.8	104
27	State-of-the-art advancements of crystal facet-exposed photocatalysts beyond TiO ₂ : Design and dependent performance for solar energy conversion and environment applications. <i>Materials Today</i> , 2020, 33, 75-86.	14.2	97
28	Density functional theory study of doping effects in monoclinic clinobisvanite BiVO ₄ . <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 4919-4927.	2.1	95
29	Cooperative catalysis coupling photo-/photothermal effect to drive Sabatier reaction with unprecedented conversion and selectivity. <i>Joule</i> , 2021, 5, 3235-3251.	24.0	91
30	Efficient visible-light-driven photocatalytic H ₂ production over Cr/N-codoped SrTiO ₃ . <i>International Journal of Hydrogen Energy</i> , 2012, 37, 12120-12127.	7.1	90
31	Zinc Gallogermanate Solid Solution: A Novel Photocatalyst for Efficiently Converting CO ₂ into Solar Fuels. <i>Advanced Functional Materials</i> , 2013, 23, 1839-1845.	14.9	89
32	Quantitative Analysis and Visualized Evidence for High Charge Separation Efficiency in a Solid-Liquid Bulk Heterojunction. <i>Advanced Energy Materials</i> , 2014, 4, 1301785.	19.5	88
33	In situ growth of epitaxial lead iodide films composed of hexagonal single crystals. <i>Journal of Materials Chemistry</i> , 2005, 15, 4555.	6.7	87
34	Enhanced Water-Splitting Performance of Perovskite SrTaO ₂ N Photoanode Film through Ameliorating Interparticle Charge Transport. <i>Advanced Functional Materials</i> , 2016, 26, 7156-7163.	14.9	86
35	Facet-Dependent Enhancement in the Activity of Bismuth Vanadate Microcrystals for the Photocatalytic Conversion of Methane to Methanol. <i>ACS Applied Nano Materials</i> , 2018, 1, 6683-6691.	5.0	79
36	Surface states as electron transfer pathway enhanced charge separation in TiO ₂ nanotube water splitting photoanodes. <i>Applied Catalysis B: Environmental</i> , 2018, 234, 100-108.	20.2	77

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37	Non-oxide semiconductors for artificial photosynthesis: Progress on photoelectrochemical water splitting and carbon dioxide reduction. <i>Nano Today</i> , 2020, 30, 100830.	11.9	76
38	Microwave Hydrothermal Synthesis, Structural Characterization, and Visible-Light Photocatalytic Activities of Single-Crystalline Bismuth Ferric Nanocrystals. <i>Journal of the American Ceramic Society</i> , 2011, 94, 2688-2693.	3.8	75
39	An Ion-Exchange Phase Transformation to ZnGa ₂ O ₄ Nanocube Towards Efficient Solar Fuel Synthesis. <i>Advanced Functional Materials</i> , 2013, 23, 758-763.	14.9	72
40	A Theoretical Study of Water Adsorption and Decomposition on the Low-Index Stoichiometric Anatase TiO ₂ Surfaces. <i>Journal of Physical Chemistry C</i> , 2012, 116, 7430-7441.	3.1	70
41	Improved hydrogen evolution activities under visible light irradiation over NaTaO ₃ codoped with lanthanum and chromium. <i>Materials Chemistry and Physics</i> , 2010, 121, 506-510.	4.0	69
42	Effects of oxygen doping on optical band gap and band edge positions of Ta ₃ N ₅ photocatalyst: A GGA+U calculation. <i>Journal of Catalysis</i> , 2014, 309, 291-299.	6.2	67
43	BiVO ₄ nano-“leaves: Mild synthesis and improved photocatalytic activity for O ₂ production under visible light irradiation. <i>CrystEngComm</i> , 2011, 13, 2500.	2.6	65
44	Structure and Properties of Water on the Anatase TiO ₂ (101) Surface: From Single-Molecule Adsorption to Interface Formation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11054-11061.	3.1	64
45	Photoelectrochemical cell for unassisted overall solar water splitting using a BiVO ₄ photoanode and Si nanoarray photocathode. <i>RSC Advances</i> , 2016, 6, 9905-9910.	3.6	64
46	Enhanced Performance of Photoelectrochemical Water Splitting with ITO@Fe ₂ O ₃ Core-Shell Nanowire Array as Photoanode. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26482-26490.	8.0	60
47	Structure and energetics of low-index stoichiometric monoclinic clinobisvanite BiVO ₄ surfaces. <i>RSC Advances</i> , 2011, 1, 874.	3.6	58
48	Enhancement of photoelectric conversion properties of SrTiO ₃ /Fe ₂ O ₃ heterojunction photoanode. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 3925-3930.	2.8	57
49	Luminescence properties of Sr ₂ ZnWO ₆ :Eu ³⁺ phosphors. <i>Journal of Alloys and Compounds</i> , 2009, 469, L6-L9.	5.5	56
50	Rational design of electrocatalysts for simultaneously promoting bulk charge separation and surface charge transfer in solar water splitting photoelectrodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2568-2576.	10.3	56
51	Defect Engineering in Semiconductors: Manipulating Nonstoichiometric Defects and Understanding Their Impact in Oxynitrides for Solar Energy Conversion. <i>Advanced Functional Materials</i> , 2019, 29, 1808389.	14.9	56
52	Synthesis of a mesoporous single crystal Ga ₂ O ₃ nanoplate with improved photoluminescence and high sensitivity in detecting CO. <i>Chemical Communications</i> , 2010, 46, 6388.	4.1	54
53	Surface properties and electronic structure of low-index stoichiometric anatase TiO ₂ surfaces. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 175008.	1.8	54
54	Facile synthesis of anatase TiO ₂ mesocrystal sheets with dominant {001} facets based on topochemical conversion. <i>CrystEngComm</i> , 2010, 12, 3425.	2.6	54

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55	High Energy Density Asymmetric Supercapacitor Based ZnS/NiCo ₂ S ₄ /Co ₉ S ₈ Nanotube Composites Materials. Advanced Materials Interfaces, 2018, 5, 1800018.	3.7	54
56	Forced Impregnation Approach to Fabrication of Large-Area, Three-Dimensionally Ordered Macroporous Metal Oxides. Chemistry of Materials, 2010, 22, 3583-3585.	6.7	53
57	Photoelectrochemical water oxidation of LaTaON ₂ under visible-light irradiation. International Journal of Hydrogen Energy, 2014, 39, 7697-7704.	7.1	53
58	Polymerizable complex synthesis of BaZr _{1-x} Sn _x O ₃ photocatalysts: Role of Sn ⁴⁺ in the band structure and their photocatalytic water splitting activities. Journal of Materials Chemistry, 2010, 20, 6772.	6.7	52
59	Selective Electrochemical Detection of Dopamine on Polyoxometalate-Based Metal-Organic Framework and Its Composite with Reduced Graphene Oxide. Advanced Materials Interfaces, 2017, 4, 1601241.	3.7	51
60	Stable response to visible light of InGaN photoelectrodes. Applied Physics Letters, 2008, 92, 262110.	3.3	50
61	An efficient charge compensated red phosphor Sr ₃ WO ₆ : K ⁺ , Eu ³⁺ for white LEDs. Journal of Alloys and Compounds, 2013, 553, 221-224.	5.5	50
62	Degradation in photocatalytic activity induced by hydrogen-related defects in nano-LiNbO ₃ material. Applied Physics Letters, 2006, 88, 071917.	3.3	47
63	Promotion effect of metal phosphides towards electrocatalytic and photocatalytic water splitting. EcoMat, 2021, 3, e12097.	11.9	46
64	Facile Method To Synthesize Mesoporous Multimetal Oxides (ATiO ₃ , A = Sr, Ba) with Large Specific Surface Areas and Crystalline Pore walls. Chemistry of Materials, 2010, 22, 1276-1278.	6.7	45
65	Effective electron collection in highly (110)-oriented ZnO porous nanosheet framework photoanode. Nanotechnology, 2010, 21, 065703.	2.6	45
66	Barium zirconate: a new photocatalyst for converting CO ₂ into hydrocarbons under UV irradiation. Catalysis Science and Technology, 2015, 5, 1758-1763.	4.1	44
67	Modulation of Disordered Coordination Degree Based on Surface Defective Metal-Organic Framework Derivatives toward Boosting Oxygen Evolution Electrocatalysis. Small, 2020, 16, e2003630.	10.0	44
68	A facile strategy to passivate surface states on the undoped hematite photoanode for water splitting. Electrochemistry Communications, 2012, 23, 41-43.	4.7	43
69	A transparent Ti ⁴⁺ doped hematite photoanode protectively grown by a facile hydrothermal method. CrystEngComm, 2013, 15, 2386.	2.6	42
70	Layered crystalline ZnIn ₂ S ₄ nanosheets: CVD synthesis and photo-electrochemical properties. Nanoscale, 2016, 8, 18197-18203.	5.6	42
71	Three-Dimensional Hierarchical Architectures Derived from Surface-Mounted Metal-Organic Framework Membranes for Enhanced Electrocatalysis. Angewandte Chemie, 2017, 129, 13969-13973.	2.0	42
72	Synthesis, growth mechanism and photoelectrochemical properties of BiVO ₄ microcrystal electrodes. Journal Physics D: Applied Physics, 2010, 43, 405402.	2.8	41

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73	Reconstruction of the (001) surface of TiO ₂ nanosheets induced by the fluorine-surfactant removal process under UV-irradiation for dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 4763.	2.8	40
74	Interfacial Engineering of Hierarchical Transition Metal Oxide Heterostructures for Highly Sensitive Sensing of Hydrogen Peroxide. <i>Small</i> , 2018, 14, e1703713.	10.0	40
75	Efficient red phosphor double-perovskite Ca ₃ WO ₆ with A-site substitution of Eu ³⁺ . <i>Dalton Transactions</i> , 2013, 42, 13502.	3.3	39
76	Ge-mediated Modification in Ta ₃ N ₅ Photoelectrodes with Enhanced Charge Transport for Solar Water Splitting. <i>Chemistry - A European Journal</i> , 2014, 20, 16384-16390.	3.3	38
77	Bi ₂ Mo ₆ Nanostrip Networks for Enhanced Visible-Light Photocatalytic Reduction of CO ₂ to CH ₄ . <i>ChemPhysChem</i> , 2017, 18, 3240-3244.	2.1	38
78	Paving the road toward the use of ¹²⁵ Fe ₂ O ₃ in solar water splitting: Raman identification, phase transformation and strategies for phase stabilization. <i>National Science Review</i> , 2020, 7, 1059-1067.	9.5	38
79	Role of oxygen impurity on the mechanical stability and atomic cohesion of Ta ₃ N ₅ semiconductor photocatalyst. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 15375-15380.	2.8	37
80	ZnO plates synthesized from the ammonium zinc nitrate hydroxide precursor. <i>CrystEngComm</i> , 2012, 14, 154-159.	2.6	34
81	Unraveling the mechanism of 720 nm sub-band-gap optical absorption of a Ta ₃ N ₅ semiconductor photocatalyst: a hybrid-DFT calculation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8166-8171.	2.8	34
82	Curing the fundamental issue of impurity phases in two-step solution-processed CsPbBr ₃ perovskite films. <i>Science Bulletin</i> , 2020, 65, 726-737.	9.0	34
83	Material Design and Surface/Interface Engineering of Photoelectrodes for Solar Water Splitting. <i>Solar Rrl</i> , 2021, 5, 2100100.	5.8	33
84	Photooxidation of Polycyclic Aromatic Hydrocarbons over NaBiO ₃ under Visible Light Irradiation. <i>Catalysis Letters</i> , 2008, 122, 131-137.	2.6	31
85	Back Electron Transfer at TiO ₂ Nanotube Photoanodes in the Presence of a H ₂ O ₂ Hole Scavenger. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33887-33895.	8.0	31
86	Carrier Mobility Enhancement in (121)-Oriented CsPbBr ₃ Perovskite Films Induced by the Microstructure Tailoring of PbBr ₂ Precursor Films. <i>ACS Applied Electronic Materials</i> , 2021, 3, 373-384.	4.3	30
87	Two-step reactive template route to a mesoporous ZnGaNO solid solution for improved photocatalytic performance. <i>Journal of Materials Chemistry</i> , 2011, 21, 5682.	6.7	29
88	Construction of Visible-Light-Responsive SrTiO ₃ with Enhanced CO ₂ Adsorption Ability: Highly Efficient Photocatalysts for Artificial Photosynthesis. <i>Catalysis Letters</i> , 2015, 145, 640-646.	2.6	29
89	Highly symmetrical, 24-faceted, concave BiVO ₄ polyhedron bounded by multiple high-index facets for prominent photocatalytic O ₂ evolution under visible light. <i>Chemical Communications</i> , 2019, 55, 4777-4780.	4.1	29
90	Theoretical study of water adsorption and dissociation on Ta ₃ N ₅ (100) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 16054.	2.8	28

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91	Remarkable enhancement in photocurrent of In _{0.20} Ga _{0.80} N photoanode by using an electrochemical surface treatment. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	27
92	Understanding the interaction of water with anatase TiO ₂ (101) surface from density functional theory calculations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 2939-2945.	2.1	27
93	Photocatalytic CO ₂ reduction of BaCeO ₃ with 4f configuration electrons. <i>Applied Surface Science</i> , 2015, 358, 463-467.	6.1	27
94	A beta-Fe ₂ O ₃ nanoparticle-assembled film for photoelectrochemical water splitting. <i>Dalton Transactions</i> , 2017, 46, 10673-10677.	3.3	27
95	Evaluating the promotional effects of WO ₃ underlayers in BiVO ₄ water splitting photoanodes. <i>Chemical Engineering Journal</i> , 2021, 417, 128095.	12.7	27
96	2D High-Entropy Hydroxalates. <i>Small</i> , 2021, 17, e2103412.	10.0	27
97	Significant improvements in InGaN/GaN nano-photoelectrodes for hydrogen generation by structure and polarization optimization. <i>Scientific Reports</i> , 2016, 6, 20218.	3.3	27
98	Interfacial modification of photoelectrode in ZnO-based dye-sensitized solar cells and its efficiency improvement mechanism. <i>RSC Advances</i> , 2012, 2, 7708.	3.6	26
99	Improving solar water-splitting performance of LaTaON ₂ by bulk defect control and interface engineering. <i>Applied Catalysis B: Environmental</i> , 2018, 226, 111-116.	20.2	26
100	Solvothermal synthesis of monodisperse iron oxides with various morphologies and their applications in removal of Cr(vi). <i>CrystEngComm</i> , 2011, 13, 2727.	2.6	25
101	Application of binder-free TiO _x N _{1-x} nanogrid film as a high-power supercapacitor electrode. <i>Journal of Power Sources</i> , 2015, 296, 53-63.	7.8	25
102	Tandem photoelectrochemical cells for solar water splitting. <i>Advances in Physics: X</i> , 2018, 3, 1487267.	4.1	25
103	Water Adsorption and Decomposition on N/V-Doped Anatase TiO ₂ (101) Surfaces. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6172-6184.	3.1	24
104	Charge compensation doping to improve the photocatalytic and photoelectrochemical activities of Ta ₃ N ₅ : A theoretical study. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 502-510.	20.2	24
105	Improved water-splitting performances of CuW _{1-x} MoxO ₄ photoanodes synthesized by spray pyrolysis. <i>Science China Materials</i> , 2018, 61, 1297-1304.	6.3	22
106	First-Principles Calculations on Electronic Structures of N/V-Doped and N/V-Doped Anatase TiO ₂ (101) Surfaces. <i>ChemPhysChem</i> , 2012, 13, 3836-3847.	2.1	21
107	A dye-free photoelectrochemical solar cell based on BiVO ₄ with a long lifetime of photogenerated carriers. <i>Electrochemistry Communications</i> , 2012, 22, 49-52.	4.7	21
108	MnO ₂ nanolayers on highly conductive TiO _{0.54} N _{0.46} nanotubes for supercapacitor electrodes with high power density and cyclic stability. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 8521.	2.8	21

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109	Construction of silica-encapsulated gold-silver core-shell nanorod: Atomic facets enrichment and plasmon enhanced catalytic activity with high stability and reusability. <i>Materials and Design</i> , 2019, 177, 107837.	7.0	21
110	Enhanced luminescence intensity of Sr ₃ B ₂ O ₆ :Eu ²⁺ phosphor prepared by sol-gel method. <i>Journal of Alloys and Compounds</i> , 2013, 579, 432-437.	5.5	20
111	Effect of crystal growth on mesoporous Pb ₃ Nb ₄ O ₁₃ formation, and their photocatalytic activity under visible-light irradiation. <i>Journal of Materials Chemistry</i> , 2010, 20, 2865.	6.7	19
112	Highly efficient visible light photocatalytic activity of Cr-La codoped SrTiO ₃ with surface alkalization: An insight from DFT calculation. <i>Computational Materials Science</i> , 2013, 79, 87-94.	3.0	19
113	Basic Molten Salt Route to Prepare Porous SrTiO ₃ Nanocrystals for Efficient Photocatalytic Hydrogen Production. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 3731-3735.	2.0	19
114	Effects of oxygen impurities and nitrogen vacancies on the surface properties of the Ta ₃ N ₅ photocatalyst: a DFT study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23265-23272.	2.8	19
115	Effects of Mg-Zr codoping on the photoelectrochemical properties of a Ta ₃ N ₅ semiconductor: a theoretical insight. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6966-6973.	10.3	19
116	Exploring facile strategies for high-oxidation-state metal nitride synthesis: carbonate-assisted one-step synthesis of Ta ₃ N ₅ films for solar water splitting. <i>Science Bulletin</i> , 2018, 63, 1404-1410.	9.0	19
117	Simultaneous Optimization of Phase and Morphology of CsPbBr ₃ Films via Controllable Ostwald Ripening by Ethylene Glycol Monomethylether/Isopropanol Binary Solvent Engineering. <i>Advanced Engineering Materials</i> , 2020, 22, 2000162.	3.5	19
118	A perspective on perovskite oxide semiconductor catalysts for gas phase photoreduction of carbon dioxide. <i>MRS Communications</i> , 2016, 6, 216-225.	1.8	18
119	A novel wide-spectrum response hexagonal YFeO ₃ photoanode for solar water splitting. <i>RSC Advances</i> , 2017, 7, 18418-18420.	3.6	18
120	BiVO ₄ tubular structures: oxygen defect-rich and largely exposed reactive {010} facets synergistically boost photocatalytic water oxidation and the selective Ni-N coupling reaction of 5-amino-1 <i>H</i> -tetrazole. <i>Chemical Communications</i> , 2019, 55, 5635-5638.	4.1	17
121	Molecular-level understanding of the deactivation pathways during methanol photo-reforming on Pt-decorated TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2020, 272, 118980.	20.2	17
122	Extraterrestrial artificial photosynthetic materials for <i>in-situ</i> resource utilization. <i>National Science Review</i> , 2021, 8, nwab104.	9.5	17
123	Reactive Inorganic Vapor Deposition of Perovskite Oxynitride Films for Solar Energy Conversion. <i>Research</i> , 2019, 2019, 9282674.	5.7	17
124	In situ optical spectroscopic understanding of electrochemical passivation mechanism on sol-gel processed WO ₃ photoanodes. <i>Journal of Energy Chemistry</i> , 2022, 71, 20-28.	12.9	17
125	Modulation of dendrite growth of cuprous oxide by electrodeposition. <i>Journal of Crystal Growth</i> , 2010, 312, 3085-3090.	1.5	16
126	Growth of In-rich and Ga-rich InGaN alloys by MOCVD and fabrication of InGaN-based photoelectrodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 1817-1820.	0.8	16

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127	Photocatalytic and Thermocatalytic Conversion of Methane. Solar Rrl, 2021, 5, 2000596.	5.8	16
128	Metastable-phase $\hat{\Gamma}^2$ -Fe ₂ O ₃ photoanodes for solar water splitting with durability exceeding 100 h. Chinese Journal of Catalysis, 2021, 42, 1992-1998.	14.0	16
129	Deactivation and Stabilization Mechanism of Photothermal CO ₂ Hydrogenation over Black TiO ₂ . ACS Sustainable Chemistry and Engineering, 2022, 10, 6382-6388.	6.7	16
130	Extraterrestrial photosynthesis by Chang TM E-5 lunar soil. Joule, 2022, 6, 1008-1014.	24.0	15
131	Oxygen-Impurity-Induced Direct TM Indirect Band Gap in Perovskite SrTaO ₂ N. Journal of Physical Chemistry C, 2017, 121, 6864-6867.	3.1	14
132	Polaron States as a Massive Electron-Transfer Pathway at Heterojunction Interface. Journal of Physical Chemistry Letters, 2020, 11, 9184-9194.	4.6	14
133	<i>In situ</i> preparation of Bi ₂ S ₃ nanoribbon-anchored BiVO ₄ nanoscroll heterostructures for the catalysis of Cr(^{VI}) photoreduction. Catalysis Science and Technology, 2020, 10, 3843-3847.	4.1	14
134	Design Principles for Construction of Charge Transport Channels in Particle-Assembled Water-Splitting Photoelectrodes. ACS Sustainable Chemistry and Engineering, 2019, 7, 10509-10515.	6.7	13
135	A Water TM Soluble Highly Oxidizing Cobalt Molecular Catalyst Designed for Bioinspired Water Oxidation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	13
136	Homogeneous solution assembled Turing structures with near zero strain semi-coherence interface. Nature Communications, 2022, 13, .	12.8	13
137	Tunable orange red phosphors: S ²⁺ -doped high temperature phase Ca ₃ SiO ₄ Cl ₂ :Eu ²⁺ for solid-state lighting. RSC Advances, 2013, 3, 1965-1969.	3.6	12
138	Sol-gel synthesis of highly reproducible WO ₃ photoanodes for solar water oxidation. Science China Materials, 2020, 63, 2261-2271.	6.3	12
139	FeVO ₄ nanowires for efficient photocatalytic CO ₂ reduction. Catalysis Science and Technology, 2022, 12, 3289-3294.	4.1	12
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