

# Shaohua Shen

## List of Publications by Citations

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148  
papers

13,890  
citations

49  
h-index

117  
g-index

161  
ext. papers

16,199  
ext. citations

11.3  
avg, IF

6.95  
L-index

#	Paper	IF	Citations
148	Semiconductor-based photocatalytic hydrogen generation. <i>Chemical Reviews</i> , <b>2010</b> , 110, 6503-70	68.1	6015
147	Filling the oxygen vacancies in Co <sub>3</sub> O <sub>4</sub> with phosphorus: an ultra-efficient electrocatalyst for overall water splitting. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 2563-2569	35.4	616
146	Hematite heterostructures for photoelectrochemical water splitting: rational materials design and charge carrier dynamics. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 2744-2775	35.4	352
145	Synergy of Dopants and Defects in Graphitic Carbon Nitride with Exceptionally Modulated Band Structures for Efficient Photocatalytic Oxygen Evolution. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903545	24	282
144	Atomic-Scale Co <sub>x</sub> Species in Metal-Organic Frameworks for Oxygen Evolution Reaction. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1702546	15.6	279
143	Enabling silicon for solar-fuel production. <i>Chemical Reviews</i> , <b>2014</b> , 114, 8662-719	68.1	274
142	In-situ reduction synthesis of nano-sized Cu <sub>2</sub> O particles modifying g-C <sub>3</sub> N <sub>4</sub> for enhanced photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , <b>2014</b> , 152-153, 335-341	21.8	259
141	Enhanced Photocatalytic Hydrogen Evolution over Cu-Doped ZnIn <sub>2</sub> S <sub>4</sub> under Visible Light Irradiation. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 16148-16155	3.8	254
140	Boron-doped nitrogen-deficient carbon nitride-based Z-scheme heterostructures for photocatalytic overall water splitting. <i>Nature Energy</i> , <b>2021</b> , 6, 388-397	62.3	219
139	A perspective on solar-driven water splitting with all-oxide hetero-nanostructures. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 3889	35.4	201
138	Vapor-Phase Epitaxial Growth of Aligned Nanowire Networks of Cesium Lead Halide Perovskites (CsPbX <sub>3</sub> , X = Cl, Br, I). <i>Nano Letters</i> , <b>2017</b> , 17, 460-466	11.5	199
137	Nickel oxide functionalized silicon for efficient photo-oxidation of water. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 7872	35.4	154
136	Molecular Design of Polymer Heterojunctions for Efficient Solar-Hydrogen Conversion. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606198	24	149
135	Titanium dioxide nanostructures for photoelectrochemical applications. <i>Progress in Materials Science</i> , <b>2018</b> , 98, 299-385	42.2	148
134	Single-Crystal Thin Films of Cesium Lead Bromide Perovskite Epitaxially Grown on Metal Oxide Perovskite (SrTiO <sub>3</sub> ). <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 13525-13532	16.4	147
133	N Doping to ZnO Nanorods for Photoelectrochemical Water Splitting under Visible Light: Engineered Impurity Distribution and Terraced Band Structure. <i>Scientific Reports</i> , <b>2015</b> , 5, 12925	4.9	143
132	Surface engineered doping of hematite nanorod arrays for improved photoelectrochemical water splitting. <i>Scientific Reports</i> , <b>2014</b> , 4, 6627	4.9	130

131	Defect-Induced Pt-Co-Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygen-Involving Electrocatalysis. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805581	24	118
130	In situ evolution of highly dispersed amorphous CoO clusters for oxygen evolution reaction. <i>Nanoscale</i> , <b>2017</b> , 9, 11969-11975	7.7	110
129	Effect of Cr doping on the photoelectrochemical performance of hematite nanorod photoanodes. <i>Nano Energy</i> , <b>2012</b> , 1, 732-741	17.1	109
128	Reversible Structural Evolution of NiCoO <sub>x</sub> H <sub>y</sub> during the Oxygen Evolution Reaction and Identification of the Catalytically Active Phase. <i>ACS Catalysis</i> , <b>2018</b> , 8, 1238-1247	13.1	107
127	Spatial engineering of photo-active sites on g-C <sub>3</sub> N <sub>4</sub> for efficient solar hydrogen generation. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 4605	13	106
126	Red phosphorus decorated and doped TiO <sub>2</sub> nanofibers for efficient photocatalytic hydrogen evolution from pure water. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 255, 117764	21.8	102
125	A [001]-Oriented Hittorf's Phosphorus Nanorods/Polymeric Carbon Nitride Heterostructure for Boosting Wide-Spectrum-Responsive Photocatalytic Hydrogen Evolution from Pure Water. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 868-873	16.4	100
124	Spatial charge separation of one-dimensional Ni <sub>2</sub> P-Cd <sub>0.9</sub> Zn <sub>0.1</sub> S/g-C <sub>3</sub> N <sub>4</sub> heterostructure for high-quantum-yield photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 217, 551-559	21.8	93
123	Ferrites boosting photocatalytic hydrogen evolution over graphitic carbon nitride: a case study of (Co, Ni)Fe <sub>2</sub> O <sub>4</sub> modification. <i>Science Bulletin</i> , <b>2016</b> , 61, 292-301	10.6	86
122	Metal oxide composite enabled nanotextured Si photoanode for efficient solar driven water oxidation. <i>Nano Letters</i> , <b>2013</b> , 13, 2064-72	11.5	85
121	Physical and photoelectrochemical properties of Zr-doped hematite nanorod arrays. <i>Nanoscale</i> , <b>2013</b> , 5, 9867-74	7.7	83
120	Phase-Modulated Band Alignment in CdS Nanorod/SnS <sub>x</sub> Nanosheet Hierarchical Heterojunctions toward Efficient Water Splitting. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1706785	15.6	82
119	Nitrogen-doped CeO <sub>x</sub> nanoparticles modified graphitic carbon nitride for enhanced photocatalytic hydrogen production. <i>Green Chemistry</i> , <b>2015</b> , 17, 509-517	10	81
118	Physical and photoelectrochemical characterization of Ti-doped hematite photoanodes prepared by solution growth. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 14498	13	79
117	Hybrid Photoelectrochemical Water Splitting Systems: From Interface Design to System Assembly. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1900399	21.8	78
116	Single Metal Atom Photocatalysis. <i>Small Methods</i> , <b>2019</b> , 3, 1800447	12.8	74
115	Surface tuning for promoted charge transfer in hematite nanorod arrays as water-splitting photoanodes. <i>Nano Research</i> , <b>2012</b> , 5, 327-336	10	71
114	Activating ZnO nanorod photoanodes in visible light by Cu ion implantation. <i>Nano Research</i> , <b>2014</b> , 7, 353-364	10	69

113	V ions implanted ZnO nanorod arrays for photoelectrochemical water splitting under visible light. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 1394-1401	6.7	68
112	Enhanced photocatalytic hydrogen evolution by partially replaced corner-site C atom with P in g-C <sub>3</sub> N <sub>4</sub> . <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 244, 486-493	21.8	67
111	Constructing Fe <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> core-shell photoelectrodes for efficient photoelectrochemical water splitting. <i>Nanoscale</i> , <b>2015</b> , 7, 10094-100	7.7	65
110	Operando Spectral and Electrochemical Investigation into the Heterophase Stimulated Active Species Transformation in Transition-Metal Sulfides for Efficient Electrocatalytic Oxygen Evolution. <i>ACS Catalysis</i> , <b>2020</b> , 10, 1855-1864	13.1	65
109	Artificial Photosynthesis with Polymeric Carbon Nitride: When Meeting Metal Nanoparticles, Single Atoms, and Molecular Complexes. <i>Small</i> , <b>2019</b> , 15, e1900772	11	59
108	Toward efficient solar water splitting over hematite photoelectrodes. <i>Journal of Materials Research</i> , <b>2014</b> , 29, 29-46	2.5	58
107	Interlayer interaction in ultrathin nanosheets of graphitic carbon nitride for efficient photocatalytic hydrogen evolution. <i>Journal of Catalysis</i> , <b>2017</b> , 352, 491-497	7.3	57
106	Engineering the coordination geometry of metal-organic complex electrocatalysts for highly enhanced oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 805-810	13	57
105	Rapid high-temperature treatment on graphitic carbon nitride for excellent photocatalytic H <sub>2</sub> -evolution performance. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 233, 80-87	21.8	52
104	Electronic Structure Evolution in Tricomponent Metal Phosphides with Reduced Activation Energy for Efficient Electrocatalytic Oxygen Evolution. <i>Small</i> , <b>2018</b> , 14, e1801756	11	52
103	Tin(IV)-Tolerant Vapor-Phase Growth and Photophysical Properties of Aligned Cesium Tin Halide Perovskite (CsSnX <sub>3</sub> ; X = Br, I) Nanowires. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1045-1052	20.1	51
102	Bifunctional Modification of Graphitic Carbon Nitride with MgFe <sub>2</sub> O <sub>4</sub> for Enhanced Photocatalytic Hydrogen Generation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 18843-8	9.5	51
101	Si photoanode protected by a metal modified ITO layer with ultrathin NiO(x) for solar water oxidation. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 4612-25	3.6	51
100	Solution growth of Ta-doped hematite nanorods for efficient photoelectrochemical water splitting: a tradeoff between electronic structure and nanostructure evolution. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 3846-53	3.6	49
99	Nanogap Engineered Plasmon-Enhancement in Photocatalytic Solar Hydrogen Conversion. <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1500280	4.6	47
98	Solar light-driven photocatalytic hydrogen evolution over ZnIn <sub>2</sub> S <sub>4</sub> loaded with transition-metal sulfides. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 290	5	45
97	Photoelectrochemical activity of ZnFe <sub>2</sub> O <sub>4</sub> modified Fe <sub>2</sub> O <sub>3</sub> nanorod array films. <i>RSC Advances</i> , <b>2014</b> , 4, 36967	3.7	44
96	Nanostructure designs for effective solar-to-hydrogen conversion. <i>Nanophotonics</i> , <b>2012</b> , 1, 31-50	6.3	44

95	Progress and Prospects of Non-Metal Doped Graphitic Carbon Nitride for Improved Photocatalytic Performances. <i>Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica</i> , <b>2020</b> , 36, 1905080-0	3.8	44
94	Towards efficient solar-to-hydrogen conversion: Fundamentals and recent progress in copper-based chalcogenide photocathodes. <i>Nanophotonics</i> , <b>2016</b> , 5, 524-547	6.3	41
93	A ternary nanostructured Fe <sub>2</sub> O <sub>3</sub> /Au/TiO <sub>2</sub> photoanode with reconstructed interfaces for efficient photoelectrocatalytic water splitting. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 260, 118206	21.8	41
92	Graphitic Carbon Nitride-Based Low-Dimensional Heterostructures for Photocatalytic Applications. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900435	7.1	40
91	A transparent CdS@TiO nanotextile photoanode with boosted photoelectrocatalytic efficiency and stability. <i>Nanoscale</i> , <b>2017</b> , 9, 15650-15657	7.7	37
90	Plasmonic Ag@SiO <sub>2</sub> core/shell structure modified g-C <sub>3</sub> N <sub>4</sub> with enhanced visible light photocatalytic activity. <i>Journal of Materials Research</i> , <b>2014</b> , 29, 64-70	2.5	36
89	Nb-Doped Hematite Nanorods for Efficient Solar Water Splitting: Electronic Structure Evolution versus Morphology Alteration. <i>ChemNanoMat</i> , <b>2016</b> , 2, 704-711	3.5	35
88	Efficient enhancement of hydrogen production by Ag/Cu <sub>2</sub> O/ZnO tandem triple-junction photoelectrochemical cell. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 123901	3.4	33
87	Plasma-Assisted Photocatalysis of CH <sub>4</sub> and CO <sub>2</sub> into Ethylene. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 11455-11463	8.3	32
86	Bifunctional cobalt phosphide nanoparticles with convertible surface structure for efficient electrocatalytic water splitting in alkaline solution. <i>Journal of Catalysis</i> , <b>2019</b> , 371, 262-269	7.3	31
85	Selective Molecular Sieving through a Large Graphene Nanopore with Surface Charges. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 7188-7194	6.4	29
84	Disordered nitrogen-defect-rich porous carbon nitride photocatalyst for highly efficient H <sub>2</sub> evolution under visible-light irradiation. <i>Carbon</i> , <b>2021</b> , 181, 193-203	10.4	29
83	Triggering superior sodium ion adsorption on (2 0 0) facet of mesoporous WO <sub>3</sub> nanosheet arrays for enhanced supercapacitance. <i>Chemical Engineering Journal</i> , <b>2018</b> , 345, 165-173	14.7	28
82	Effect of Noble Metal in CdS/M/TiO <sub>2</sub> for Photocatalytic Degradation of Methylene Blue under Visible Light. <i>International Journal of Green Nanotechnology: Materials Science and Engineering</i> , <b>2010</b> , 1, M94-M104		28
81	Surface Reconstruction of Facet-Functionalized SrTiO <sub>3</sub> Nanocrystals for Photocatalytic Hydrogen Evolution. <i>ChemCatChem</i> , <b>2016</b> , 8, 798-804	5.2	28
80	Electron-transfer dependent photocatalytic hydrogen generation over cross-linked CdSe/TiO type-II heterostructure. <i>Nanotechnology</i> , <b>2017</b> , 28, 084002	3.4	27
79	A novel hybrid artificial photosynthesis system using MoS <sub>2</sub> embedded in carbon nanofibers as electron relay and hydrogen evolution catalyst. <i>Journal of Catalysis</i> , <b>2017</b> , 352, 35-41	7.3	27
78	Solar fuel production at high temperatures using ceria as a dense membrane. <i>Energy</i> , <b>2016</b> , 104, 53-63	7.9	26

77	A [001]-Oriented Hittorf's Phosphorus Nanorods/Polymeric Carbon Nitride Heterostructure for Boosting Wide-Spectrum-Responsive Photocatalytic Hydrogen Evolution from Pure Water. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 878-883	3.6	26
76	Surface passivation of undoped hematite nanorod arrays via aqueous solution growth for improved photoelectrochemical water splitting. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 427, 20-4	9.3	25
75	Activating K <sub>2</sub> FeO <sub>4</sub> -Type Organometallic Precursors at Metal Oxide Surfaces for Enhanced Solar Water Oxidation. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1613-1619	20.1	24
74	Surface sulfurization activating hematite nanorods for efficient photoelectrochemical water splitting. <i>Science Bulletin</i> , <b>2019</b> , 64, 1262-1271	10.6	24
73	Single-atom nickel terminating sp and sp nitride in polymeric carbon nitride for visible-light photocatalytic overall water splitting. <i>Chemical Science</i> , <b>2021</b> , 12, 3633-3643	9.4	23
72	Probing the Active Sites of Carbon-Encapsulated Cobalt Nanoparticles for Oxygen Reduction. <i>Small Methods</i> , <b>2019</b> , 3, 1800439	12.8	21
71	Nickel complex engineered interface energetics for efficient photoelectrochemical hydrogen evolution over p-Si. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 220, 362-366	21.8	21
70	A stable dye-sensitized photoelectrosynthesis cell mediated by a NiO overlayer for water oxidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 12564-12571	11.5	21
69	A noble-metal-free artificial photosynthesis system with TiO <sub>2</sub> as electron relay for efficient photocatalytic hydrogen evolution. <i>Journal of Catalysis</i> , <b>2016</b> , 344, 141-147	7.3	21
68	Interfacial and Dimensional Effects of Pd Co-Catalyst for Efficient Photocatalytic Hydrogen Generation. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 25165-25173	3.8	21
67	Function-switchable metal/semiconductor junction enables efficient photocatalytic overall water splitting with selective water oxidation products. <i>Science Bulletin</i> , <b>2020</b> , 65, 1389-1395	10.6	20
66	CdS nanocrystallites sensitized ZnO nanorods with plasmon enhanced photoelectrochemical performance. <i>Chinese Chemical Letters</i> , <b>2019</b> , 30, 2363-2367	8.1	20
65	Cobalt oxide and carbon modified hematite nanorod arrays for improved photoelectrochemical water splitting. <i>Chinese Chemical Letters</i> , <b>2017</b> , 28, 2207-2211	8.1	19
64	Irradiation-induced TiO <sub>2</sub> nanorods for photoelectrochemical hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 5034-5041	6.7	18
63	A novel Sn <sub>2</sub> Sb <sub>2</sub> O <sub>7</sub> nanophotocatalyst for visible-light-driven H <sub>2</sub> evolution. <i>Nano Research</i> , <b>2012</b> , 5, 576-583	5.8	18
62	Strategies to improve the photoelectrochemical performance of hematite nanorod-based photoanodes. <i>APL Materials</i> , <b>2020</b> , 8, 040905	5.7	18
61	Efficient enhancement of solar-water-splitting by modified Z-scheme structural WO <sub>3</sub> -W-Si photoelectrodes. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 143902	3.4	17
60	Functionalized nanostructures for enhanced photocatalytic performance under solar light. <i>Beilstein Journal of Nanotechnology</i> , <b>2014</b> , 5, 994-1004	3	17

59	Steering plasmonic hot electrons to realize enhanced full-spectrum photocatalytic hydrogen evolution. <i>Chinese Journal of Catalysis</i> , <b>2018</b> , 39, 453-462	11.3	16
58	A simple green approach to synthesis of sub-100 nm carbon spheres as template for TiO <sub>2</sub> hollow nanospheres with enhanced photocatalytic activities. <i>Science China Materials</i> , <b>2018</b> , 61, 869-877	7.1	16
57	Cobaloxime coenzyme catalyzing artificial photosynthesis for hydrogen generation over CdS nanocrystals. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 199, 134-141	21.8	16
56	Fabrication of porous TiO <sub>2</sub> nanorod array photoelectrodes with enhanced photoelectrochemical water splitting by helium ion implantation. <i>Nanoscale</i> , <b>2016</b> , 8, 10642-8	7.7	16
55	Regulation on polymerization degree and surface feature in graphitic carbon nitride towards efficient photocatalytic H <sub>2</sub> evolution under visible-light irradiation. <i>Journal of Materials Science and Technology</i> , <b>2022</b> , 98, 160-168	9.1	16
54	Pulsed laser-deposited n-Si/NiO <sub>x</sub> photoanodes for stable and efficient photoelectrochemical water splitting. <i>Catalysis Science and Technology</i> , <b>2017</b> , 7, 2632-2638	5.5	15
53	Vacancy-doped homojunction structural TiO <sub>2</sub> nanorod photoelectrodes with greatly enhanced photoelectrochemical activity. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 2057-2063	6.7	15
52	Enhanced photocatalytic hydrogen evolution over graphitic carbon nitride modified with Ti-activated mesoporous silica. <i>Applied Catalysis A: General</i> , <b>2016</b> , 521, 111-117	5.1	15
51	Photocatalytic water oxidation over BiVO <sub>4</sub> with interface energetics engineered by Co and Ni-metallated dicyanamides. <i>Chinese Journal of Catalysis</i> , <b>2018</b> , 39, 502-509	11.3	14
50	Synergistic effect of nitrogen vacancy on ultrathin graphitic carbon nitride porous nanosheets for highly efficient photocatalytic H <sub>2</sub> evolution. <i>Chemical Engineering Journal</i> , <b>2022</b> , 431, 134101	14.7	14
49	Single Photogenerated Bubble at Gas-Evolving TiO <sub>2</sub> Nanorod-Array Electrode. <i>Electrochimica Acta</i> , <b>2016</b> , 202, 175-185	6.7	13
48	CdSe-sensitized branched CdS hierarchical nanostructures for efficient photoelectrochemical solar hydrogen generation. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 11460-6	3.6	13
47	Visible light-induced electronic structure modulation of Nb- and Ta-doped FeO nanorods for effective photoelectrochemical water splitting. <i>Nanotechnology</i> , <b>2018</b> , 29, 064002	3.4	13
46	Ion Irradiation Inducing Oxygen Vacancy-Rich NiO/NiFe O Heterostructure for Enhanced Electrocatalytic Water Splitting. <i>Small</i> , <b>2021</b> , 17, e2103501	11	13
45	Surface- and interface-engineered heterostructures for solar hydrogen generation. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 163002	3	12
44	Au@SiO <sub>2</sub> core/shell nanoparticle-decorated TiO <sub>2</sub> nanorod arrays for enhanced photoelectrochemical water splitting. <i>Science Bulletin</i> , <b>2014</b> , 59, 2191-2198		12
43	Protected Hematite Nanorod Arrays with Molecular Complex Co-Catalyst for Efficient and Stable Photoelectrochemical Water Oxidation. <i>European Journal of Inorganic Chemistry</i> , <b>2019</b> , 2019, 2078-2085 <sup>2.3</sup>		12
42	Surface Electronic Structure Reconfiguration of Hematite Nanorods for Efficient Photoanodic Water Oxidation. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900349	7.1	12

41	Engineering Interfacial Energetics: A Novel Hybrid System of Metal Oxide Quantum Dots and Cobalt Complex for Photocatalytic Water Oxidation. <i>Electrochimica Acta</i> , <b>2016</b> , 212, 905-911	6.7	11
40	Application of ion beam technology in (photo)electrocatalytic materials for renewable energy. <i>Applied Physics Reviews</i> , <b>2020</b> , 7, 041303	17.3	10
39	Identifying the crystal and electronic structure evolution in tri-component transition metal oxide nanosheets for efficient electrocatalytic oxygen evolution. <i>EcoMat</i> , <b>2019</b> , 1, e12005	9.4	10
38	Transition-metal alloy electrocatalysts with active sites modulated by metal-carbide heterophases for efficient oxygen evolution. <i>Nano Energy</i> , <b>2021</b> , 88, 106216	17.1	10
37	Cascading Interfaces Enable n-Si Photoanodes for Efficient and Stable Solar Water Oxidation. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 2278-2285	6.4	9
36	Regulating Crystal Structure and Atomic Arrangement in Single-Component Metal Oxides through Electrochemical Conversion for Efficient Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 57038-57046	9.5	9
35	Enhanced photoelectrochemical performance of an Fe <sub>2</sub> O <sub>3</sub> nanorods photoanode with embedded nanocavities formed by helium ions implantation. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 9408-9415	6.7	9
34	Synthesis and characterization of nanoporous Bi <sub>3</sub> NbO <sub>7</sub> films: application to photoelectrochemical water splitting. <i>RSC Advances</i> , <b>2014</b> , 4, 10542-10548	3.7	9
33	Stable CdTe Photoanodes with Energetics Matching Those of a Coating Intermediate Band. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 1865-1871	20.1	8
32	Effects of N implantation on defect formation in ZnO nanowires. <i>Thin Solid Films</i> , <b>2019</b> , 687, 137449	2.2	8
31	Coupling Photothermal Effect into Efficient Photocatalytic H <sub>2</sub> Production by Using a Plate-like Cu@Ni Core-shell Cocatalyst. <i>ChemCatChem</i> , <b>2020</b> , 12, 2745-2751	5.2	7
30	W ion implantation boosting visible-light photoelectrochemical water splitting over ZnO nanorod arrays. <i>Journal of Photonics for Energy</i> , <b>2017</b> , 7, 016501	1.2	4
29	Identification of a Nitrogen-related acceptor in ZnO nanowires. <i>Nanoscale</i> , <b>2019</b> , 11, 10921-10926	7.7	4
28	Manipulating metal-oxygen local atomic structures in single-junctional p-Si/WO <sub>3</sub> photocathodes for efficient solar hydrogen generation. <i>Nano Research</i> , <b>2020</b> , 14, 2285	10	4
27	Electronic structures associated with enhanced photocatalytic activity in nanogap-engineered g-C <sub>3</sub> N <sub>4</sub> /Ag@SiO <sub>2</sub> hybrid nanostructures. <i>Applied Surface Science</i> , <b>2020</b> , 514, 145907	6.7	4
26	Ultrafine polycrystalline titania nanofibers for superior sodium storage. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 38, 153-161	12	4
25	Enhancing Solar-Driven Water Splitting with Surface-Engineered Nanostructures. <i>Solar Rrl</i> , <b>2018</b> , 3, 1800285	28.5	4
24	Single-Metal Atoms and Ultra-Small Clusters Manipulating Charge Carrier Migration in Polymeric Perylene Diimide for Efficient Photocatalytic Oxygen Production. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 200716	21.8	4



23	LaTiON-LaCrO: continuous solid solutions towards enhanced photocatalytic H evolution under visible-light irradiation. <i>Dalton Transactions</i> , <b>2017</b> , 46, 10685-10693	4.3	3
22	Facile Growth of Porous Hematite Films for Photoelectrochemical Water Splitting. <i>International Journal of Photoenergy</i> , <b>2013</b> , 2013, 1-8	2.1	3
21	Enhanced photocatalytic water splitting of TiO <sub>2</sub> by decorating with facet-controlled Au nanocrystals. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 143901	3.4	3
20	Recent Progress on Photocatalytic CO <sub>2</sub> Reduction with Earth-abundant Single-atom Reactive Sites. <i>ChemNanoMat</i> , <b>2021</b> , 7, 873-880	3.5	3
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10	Sodium-doped oriented zinc oxide nanorod arrays: insights into their aqueous growth design, crystal structure, and optical properties. <i>MRS Communications</i> , <b>2018</b> , 8, 570-576	2.7	1
9	Trace Amount of Platinum Supported on Carbonized Biomorphic Wood for Efficient Electrochemical Hydrogen Evolution in Alkaline Condition. <i>ChemistrySelect</i> , <b>2018</b> , 3, 2140-2143	1.8	1
8	Progress and Perspectives in Visible-Light-Driven Photocatalysis. <i>International Journal of Photoenergy</i> , <b>2013</b> , 2013, 1-3	2.1	1
7	Surface Modification of Fe <sub>2</sub> O <sub>3</sub> Nanorod Array Photoanodes for Improved Light-Induced Water Splitting. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1326, 1		1
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4	Rational Heterostructure Design for Photoelectrochemical Water Splitting <b>2018</b> , 467-526		0
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