Shaohua Shen

List of Publications by Year
in descending order

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156	18,306	26567 56	12233 133
papers	citations	h-index	g-index

161	161	161	19115
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Semiconductor-based Photocatalytic Hydrogen Generation. Chemical Reviews, 2010, 110, 6503-6570.	23.0	6,836
2	Filling the oxygen vacancies in Co₃O₄with phosphorus: an ultra-efficient electrocatalyst for overall water splitting. Energy and Environmental Science, 2017, 10, 2563-2569.	15.6	859
3	Boron-doped nitrogen-deficient carbon nitride-based Z-scheme heterostructures for photocatalytic overall water splitting. Nature Energy, 2021, 6, 388-397.	19.8	764
4	Synergy of Dopants and Defects in Graphitic Carbon Nitride with Exceptionally Modulated Band Structures for Efficient Photocatalytic Oxygen Evolution. Advanced Materials, 2019, 31, e1903545.	11.1	604
5	Hematite heterostructures for photoelectrochemical water splitting: rational materials design and charge carrier dynamics. Energy and Environmental Science, 2016, 9, 2744-2775.	15.6	450
6	Enabling Silicon for Solar-Fuel Production. Chemical Reviews, 2014, 114, 8662-8719.	23.0	329
7	Atomicâ€Scale CoO_x Species in Metalâ€“Organic Frameworks for Oxygen Evolution Reaction. Advanced Functional Materials, 2017, 27, 1702546.	7.8	327
8	In-situ reduction synthesis of nano-sized Cu2O particles modifying g-C3N4 for enhanced photocatalytic hydrogen production. Applied Catalysis B: Environmental, 2014, 152-153, 335-341.	10.8	321
9	Enhanced Photocatalytic Hydrogen Evolution over Cu-Doped ZnIn₂S₄ under Visible Light Irradiation. Journal of Physical Chemistry C, 2008, 112, 16148-16155.	1.5	286
10	Vapor-Phase Epitaxial Growth of Aligned Nanowire Networks of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). Nano Letters, 2017, 17, 460-466.	4.5	255
11	A perspective on solar-driven water splitting with all-oxide hetero-nanostructures. Energy and Environmental Science, 2011, 4, 3889.	15.6	219
12	Single-Crystal Thin Films of Cesium Lead Bromide Perovskite Epitaxially Grown on Metal Oxide Perovskite (SrTiO₃). Journal of the American Chemical Society, 2017, 139, 13525-13532.	6.6	209
13	Titanium dioxide nanostructures for photoelectrochemical applications. Progress in Materials Science, 2018, 98, 299-385.	16.0	205
14	Molecular Design of Polymer Heterojunctions for Efficient Solarâ€“Hydrogen Conversion. Advanced Materials, 2017, 29, 1606198.	11.1	203
15	N Doping to ZnO Nanorods for Photoelectrochemical Water Splitting under Visible Light: Engineered Impurity Distribution and Terraced Band Structure. Scientific Reports, 2015, 5, 12925.	1.6	176
16	Defectâ€Induced Ptâ€“Coâ€“Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygenâ€Involving Electrocatalysis. Advanced Materials, 2019, 31, e1805581.	11.1	168
17	Nickel oxide functionalized silicon for efficient photo-oxidation of water. Energy and Environmental Science, 2012, 5, 7872.	15.6	167
18	A [001]â€Oriented Hittorf's Phosphorus Nanorods/Polymeric Carbon Nitride Heterostructure for Boosting Wideâ€Spectrumâ€Responsive Photocatalytic Hydrogen Evolution from Pure Water. Angewandte Chemie - International Edition, 2020, 59, 868-873.	7.2	164

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19	Surface Engineered Doping of Hematite Nanorod Arrays for Improved Photoelectrochemical Water Splitting. Scientific Reports, 2014, 4, 6627.	1.6	160
20	Reversible Structural Evolution of NiCoO_xH_y during the Oxygen Evolution Reaction and Identification of the Catalytically Active Phase. ACS Catalysis, 2018, 8, 1238-1247.	5.5	153
21	Hybrid Photoelectrochemical Water Splitting Systems: From Interface Design to System Assembly. Advanced Energy Materials, 2020, 10, 1900399.	10.2	152
22	Red phosphorus decorated and doped TiO2 nanofibers for efficient photocatalytic hydrogen evolution from pure water. Applied Catalysis B: Environmental, 2019, 255, 117764.	10.8	151
23	Single Metal Atom Photocatalysis. Small Methods, 2019, 3, 1800447.	4.6	140
24	In situ evolution of highly dispersed amorphous CoO_xclusters for oxygen evolution reaction. Nanoscale, 2017, 9, 11969-11975.	2.8	138
25	Spatial charge separation of one-dimensional Ni2P-Cd0.9Zn0.1S/g-C3N4 heterostructure for high-quantum-yield photocatalytic hydrogen production. Applied Catalysis B: Environmental, 2017, 217, 551-559.	10.8	126
26	Effect of Cr doping on the photoelectrochemical performance of hematite nanorod photoanodes. Nano Energy, 2012, 1, 732-741.	8.2	125
27	Spatial engineering of photo-active sites on g-C3N4 for efficient solar hydrogen generation. Journal of Materials Chemistry A, 2014, 2, 4605.	5.2	115
28	Nitrogen-doped CeO_x nanoparticles modified graphitic carbon nitride for enhanced photocatalytic hydrogen production. Green Chemistry, 2015, 17, 509-517.	4.6	115
29	Operando Spectral and Electrochemical Investigation into the Heterophase Stimulated Active Species Transformation in Transition-Metal Sulfides for Efficient Electrocatalytic Oxygen Evolution. ACS Catalysis, 2020, 10, 1855-1864.	5.5	113
30	Physical and photoelectrochemical properties of Zr-doped hematite nanorod arrays. Nanoscale, 2013, 5, 9867.	2.8	106
31	Enhanced photocatalytic hydrogen evolution by partially replaced corner-site C atom with P in g-C3N4. Applied Catalysis B: Environmental, 2019, 244, 486-493.	10.8	103
32	Phaseâ€Modulated Band Alignment in CdS Nanorod/SnS_x Nanosheet Hierarchical Heterojunctions toward Efficient Water Splitting. Advanced Functional Materials, 2018, 28, 1706785.	7.8	102
33	Ferrites boosting photocatalytic hydrogen evolution over graphitic carbon nitride: a case study of (Co, Ni)Fe2O4 modification. Science Bulletin, 2016, 61, 292-301.	4.3	100
34	Metal Oxide Composite Enabled Nanotextured Si Photoanode for Efficient Solar Driven Water Oxidation. Nano Letters, 2013, 13, 2064-2072.	4.5	92
35	Interlayer interaction in ultrathin nanosheets of graphitic carbon nitride for efficient photocatalytic hydrogen evolution. Journal of Catalysis, 2017, 352, 491-497.	3.1	92
36	Artificial Photosynthesis with Polymeric Carbon Nitride: When Meeting Metal Nanoparticles, Single Atoms, and Molecular Complexes. Small, 2019, 15, e1900772.	5.2	84

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37	Tin(IV)-Tolerant Vapor-Phase Growth and Photophysical Properties of Aligned Cesium Tin Halide Perovskite (CsSnX₃; X = Br, I) Nanowires. ACS Energy Letters, 2019, 4, 1045-1052.	8.8	84
38	Physical and photoelectrochemical characterization of Ti-doped hematite photoanodes prepared by solution growth. Journal of Materials Chemistry A, 2013, 1, 14498.	5.2	83
39	Disordered nitrogen-defect-rich porous carbon nitride photocatalyst for highly efficient H2 evolution under visible-light irradiation. Carbon, 2021, 181, 193-203.	5.4	81
40	Surface tuning for promoted charge transfer in hematite nanorod arrays as water-splitting photoanodes. Nano Research, 2012, 5, 327-336.	5.8	80
41	Activating ZnO nanorod photoanodes in visible light by Cu ion implantation. Nano Research, 2014, 7, 353-364.	5.8	80
42	Rapid high-temperature treatment on graphitic carbon nitride for excellent photocatalytic H2-evolution performance. Applied Catalysis B: Environmental, 2018, 233, 80-87.	10.8	79
43	V ions implanted ZnO nanorod arrays for photoelectrochemical water splitting under visible light. International Journal of Hydrogen Energy, 2015, 40, 1394-1401.	3.8	77
44	Ion Irradiation Inducing Oxygen Vacancyâ€Rich NiO/NiFe₂O₄ Heterostructure for Enhanced Electrocatalytic Water Splitting. Small, 2021, 17, e2103501.	5.2	76
45	Synergistic effect of nitrogen vacancy on ultrathin graphitic carbon nitride porous nanosheets for highly efficient photocatalytic H2 evolution. Chemical Engineering Journal, 2022, 431, 134101.	6.6	74
46	Constructing Fe₂O₃/TiO₂ coreâ€“shell photoelectrodes for efficient photoelectrochemical water splitting. Nanoscale, 2015, 7, 10094-10100.	2.8	72
47	A ternary nanostructured Î±-Fe2O3/Au/TiO2 photoanode with reconstructed interfaces for efficient photoelectrocatalytic water splitting. Applied Catalysis B: Environmental, 2020, 260, 118206.	10.8	72
48	Engineering the coordination geometry of metalâ€“organic complex electrocatalysts for highly enhanced oxygen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 805-810.	5.2	69
49	Electronic Structure Evolution in Tricomponent Metal Phosphides with Reduced Activation Energy for Efficient Electrocatalytic Oxygen Evolution. Small, 2018, 14, e1801756.	5.2	69
50	Single-atom nickel terminating sp² and sp³ nitride in polymeric carbon nitride for visible-light photocatalytic overall water splitting. Chemical Science, 2021, 12, 3633-3643.	3.7	68
51	Graphitic Carbon Nitrideâ€Based Lowâ€Dimensional Heterostructures for Photocatalytic Applications. Solar Rrl, 2020, 4, 1900435.	3.1	65
52	Bifunctional Modification of Graphitic Carbon Nitride with MgFe₂O₄ for Enhanced Photocatalytic Hydrogen Generation. ACS Applied Materials & Interfaces, 2015, 7, 18843-18848.	4.0	64
53	Progress and Prospects of Non-Metal Doped Graphitic Carbon Nitride for Improved Photocatalytic Performances. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2020, 36, 1905080-0.	2.2	63
54	Toward efficient solar water splitting over hematite photoelectrodes. Journal of Materials Research, 2014, 29, 29-46.	1.2	61

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55	Plasma-Assisted Photocatalysis of CH₄ and CO₂ into Ethylene. ACS Sustainable Chemistry and Engineering, 2019, 7, 11455-11463.	3.2	59
56	Solution growth of Ta-doped hematite nanorods for efficient photoelectrochemical water splitting: a tradeoff between electronic structure and nanostructure evolution. Physical Chemistry Chemical Physics, 2016, 18, 3846-3853.	1.3	58
57	Catalysing artificial photosynthesis. Nature Photonics, 2013, 7, 944-946.	15.6	56
58	Si photoanode protected by a metal modified ITO layer with ultrathin NiOx for solar water oxidation. Physical Chemistry Chemical Physics, 2014, 16, 4612-4625.	1.3	55
59	Nanogap Engineered Plasmonâ€Enhancement in Photocatalytic Solar Hydrogen Conversion. Advanced Materials Interfaces, 2015, 2, 1500280.	1.9	55
60	Towards efficient solar-to-hydrogen conversion: Fundamentals and recent progress in copper-based chalcogenide photocathodes. Nanophotonics, 2016, 5, 524-547.	2.9	54
61	Solar light-driven photocatalytic hydrogen evolution over ZnIn2S4 loaded with transition-metal sulfides. Nanoscale Research Letters, 2011, 6, 290.	3.1	52
62	Nanostructure designs for effective solar-to-hydrogen conversion. Nanophotonics, 2012, 1, 31-50.	2.9	51
63	Nbâ€Doped Hematite Nanorods for Efficient Solar Water Splitting: Electronic Structure Evolution versus Morphology Alteration. ChemNanoMat, 2016, 2, 704-711.	1.5	51
64	Photoelectrochemical activity of ZnFe₂O₄modified Î±-Fe₂O₃nanorod array films. RSC Advances, 2014, 4, 36967.	1.7	48
65	Function-switchable metal/semiconductor junction enables efficient photocatalytic overall water splitting with selective water oxidation products. Science Bulletin, 2020, 65, 1389-1395.	4.3	48
66	Selective Molecular Sieving through a Large Graphene Nanopore with Surface Charges. Journal of Physical Chemistry Letters, 2019, 10, 7188-7194.	2.1	46
67	Bifunctional cobalt phosphide nanoparticles with convertible surface structure for efficient electrocatalytic water splitting in alkaline solution. Journal of Catalysis, 2019, 371, 262-269.	3.1	45
68	Regulation on polymerization degree and surface feature in graphitic carbon nitride towards efficient photocatalytic H2 evolution under visible-light irradiation. Journal of Materials Science and Technology, 2022, 98, 160-168.	5.6	45
69	Atomically Dispersed Janus Nickel Sites on Red Phosphorus for Photocatalytic Overall Water Splitting. Angewandte Chemie - International Edition, 2022, 61, .	7.2	43
70	A transparent CdS@TiO₂ nanotextile photoanode with boosted photoelectrocatalytic efficiency and stability. Nanoscale, 2017, 9, 15650-15657.	2.8	40
71	A [001]â€Oriented Hittorf's Phosphorus Nanorods/Polymeric Carbon Nitride Heterostructure for Boosting Wideâ€Spectrumâ€Responsive Photocatalytic Hydrogen Evolution from Pure Water. Angewandte Chemie, 2020, 132, 878-883.	1.6	40
72	Singleâ€Metal Atoms and Ultraâ€Small Clusters Manipulating Charge Carrier Migration in Polymeric Perylene Diimide for Efficient Photocatalytic Oxygen Production. Advanced Energy Materials, 2022, 12, .	10.2	40

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73	Efficient enhancement of hydrogen production by Ag/Cu2O/ZnO tandem triple-junction photoelectrochemical cell. Applied Physics Letters, 2015, 106, .	1.5	39
74	Triggering superior sodium ion adsorption on (2â€¯0â€¯0) facet of mesoporous WO3 nanosheet arrays for enhanced supercapacitance. Chemical Engineering Journal, 2018, 345, 165-173.	6.6	39
75	Plasmonic Ag@SiO2 core/shell structure modified g-C3N4 with enhanced visible light photocatalytic activity. Journal of Materials Research, 2014, 29, 64-70.	1.2	38
76	Transition-metal alloy electrocatalysts with active sites modulated by metal-carbide heterophases for efficient oxygen evolution. Nano Energy, 2021, 88, 106216.	8.2	38
77	Surface sulfurization activating hematite nanorods for efficient photoelectrochemical water splitting. Science Bulletin, 2019, 64, 1262-1271.	4.3	36
78	Surface Reconstruction of Facetâ€Functionalized SrTiO₃ Nanocrystals for Photocatalytic Hydrogen Evolution. ChemCatChem, 2016, 8, 798-804.	1.8	34
79	Electron-transfer dependent photocatalytic hydrogen generation over cross-linked CdSe/TiO₂type-II heterostructure. Nanotechnology, 2017, 28, 084002.	1.3	33
80	Activating KlÃui-Type Organometallic Precursors at Metal Oxide Surfaces for Enhanced Solar Water Oxidation. ACS Energy Letters, 2018, 3, 1613-1619.	8.8	33
81	Probing the Active Sites of Carbonâ€Encapsulated Cobalt Nanoparticles for Oxygen Reduction. Small Methods, 2019, 3, 1800439.	4.6	33
82	Effect of Noble Metal in CdS/M/TiO₂ for Photocatalytic Degradation of Methylene Blue under Visible Light. International Journal of Green Nanotechnology: Materials Science and Engineering, 2010, 1, M94-M104.	0.5	32
83	Solar fuel production at high temperatures using ceria as a dense membrane. Energy, 2016, 104, 53-63.	4.5	32
84	A stable dye-sensitized photoelectrosynthesis cell mediated by a NiO overlayer for water oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12564-12571.	3.3	32
85	Application of ion beam technology in (photo)electrocatalytic materials for renewable energy. Applied Physics Reviews, 2020, 7, .	5.5	31
86	A novel hybrid artificial photosynthesis system using MoS2 embedded in carbon nanofibers as electron relay and hydrogen evolution catalyst. Journal of Catalysis, 2017, 352, 35-41.	3.1	30
87	Surface Electronic Structure Reconfiguration of Hematite Nanorods for Efficient Photoanodic Water Oxidation. Solar Rrl, 2020, 4, 1900349.	3.1	30
88	Strategies to improve the photoelectrochemical performance of hematite nanorod-based photoanodes. APL Materials, 2020, 8, .	2.2	29
89	Boosting photocatalytic hydrogen production by creating isotype heterojunctions and single-atom active sites in highly-crystallized carbon nitride. Science Bulletin, 2022, 67, 520-528.	4.3	29
90	Surface passivation of undoped hematite nanorod arrays via aqueous solution growth for improved photoelectrochemical water splitting. Journal of Colloid and Interface Science, 2014, 427, 20-24.	5.0	27

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91	Single Photogenerated Bubble at Gas-Evolving TiO 2 Nanorod-Array Electrode. Electrochimica Acta, 2016, 202, 175-185.	2.6	27
92	CdS nanocrystallites sensitized ZnO nanorods with plasmon enhanced photoelectrochemical performance. Chinese Chemical Letters, 2019, 30, 2363-2367.	4.8	27
93	Interfacial and Dimensional Effects of Pd Co-Catalyst for Efficient Photocatalytic Hydrogen Generation. Journal of Physical Chemistry C, 2018, 122, 25165-25173.	1.5	26
94	Pulsed laser-deposited n-Si/NiO_xphotoanodes for stable and efficient photoelectrochemical water splitting. Catalysis Science and Technology, 2017, 7, 2632-2638.	2.1	24
95	Cobalt oxide and carbon modified hematite nanorod arrays for improved photoelectrochemical water splitting. Chinese Chemical Letters, 2017, 28, 2207-2211.	4.8	23
96	A novel Sn2Sb2O7 nanophotocatalyst for visible-light-driven H2 evolution. Nano Research, 2012, 5, 576-583.	5.8	22
97	Functionalized nanostructures for enhanced photocatalytic performance under solar light. Beilstein Journal of Nanotechnology, 2014, 5, 994-1004.	1.5	22
98	A noble-metal-free artificial photosynthesis system with TiO2 as electron relay for efficient photocatalytic hydrogen evolution. Journal of Catalysis, 2016, 344, 141-147.	3.1	22
99	Nickel complex engineered interface energetics for efficient photoelectrochemical hydrogen evolution over p-Si. Applied Catalysis B: Environmental, 2018, 220, 362-366.	10.8	22
100	Design of polymeric carbon nitride-based heterojunctions for photocatalytic water splitting: a review. Environmental Chemistry Letters, 2022, 20, 3505-3523.	8.3	22
101	Irradiation-induced TiO2 nanorods for photoelectrochemical hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 5034-5041.	3.8	21
102	Visible light-induced electronic structure modulation of Nb- and Ta-doped Î±-Fe2O3 nanorods for effective photoelectrochemical water splitting. Nanotechnology, 2018, 29, 064002.	1.3	21
103	Fabrication of porous TiO₂nanorod array photoelectrodes with enhanced photoelectrochemical water splitting by helium ion implantation. Nanoscale, 2016, 8, 10642-10648.	2.8	20
104	Protected Hematite Nanorod Arrays with Molecular Complex Coâ€Catalyst for Efficient and Stable Photoelectrochemical Water Oxidation. European Journal of Inorganic Chemistry, 2019, 2019, 2078-2085.	1.0	20
105	Vacancy-doped homojunction structural TiO2 nanorod photoelectrodes with greatly enhanced photoelectrochemical activity. International Journal of Hydrogen Energy, 2018, 43, 2057-2063.	3.8	19
106	A simple green approach to synthesis of sub-100 nm carbon spheres as template for TiO2 hollow nanospheres with enhanced photocatalytic activities. Science China Materials, 2018, 61, 869-877.	3.5	19
107	Cobaloxime coenzyme catalyzing artificial photosynthesis for hydrogen generation over CdS nanocrystals. Applied Catalysis B: Environmental, 2016, 199, 134-141.	10.8	18
108	Steering plasmonic hot electrons to realize enhanced full-spectrum photocatalytic hydrogen evolution. Chinese Journal of Catalysis, 2018, 39, 453-462.	6.9	18

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109	Stable CdTe Photoanodes with Energetics Matching Those of a Coating Intermediate Band. ACS Energy Letters, 2020, 5, 1865-1871.	8.8	18
110	Efficient enhancement of solar-water-splitting by modified â€œZ-schemeâ€•structural WO3-W-Si photoelectrodes. Applied Physics Letters, 2014, 105, 143902.	1.5	17
111	Coupling Photothermal Effect into Efficient Photocatalytic H₂ Production by Using a Plateâ€like Cu@Ni Coreâ€shell Cocatalyst. ChemCatChem, 2020, 12, 2745-2751.	1.8	17
112	CdSe-sensitized branched CdS hierarchical nanostructures for efficient photoelectrochemical solar hydrogen generation. Physical Chemistry Chemical Physics, 2016, 18, 11460-11466.	1.3	16
113	Enhanced photocatalytic hydrogen evolution over graphitic carbon nitride modified with Ti-activated mesoporous silica. Applied Catalysis A: General, 2016, 521, 111-117.	2.2	16
114	Surface- and interface-engineered heterostructures for solar hydrogen generation. Journal Physics D: Applied Physics, 2018, 51, 163002.	1.3	16
115	Cascading Interfaces Enable n-Si Photoanodes for Efficient and Stable Solar Water Oxidation. Journal of Physical Chemistry Letters, 2019, 10, 2278-2285.	2.1	16
116	Photocatalytic water oxidation over BiVO4 with interface energetics engineered by Co and Ni-metallated dicyanamides. Chinese Journal of Catalysis, 2018, 39, 502-509.	6.9	15
117	Regulating Crystal Structure and Atomic Arrangement in Single-Component Metal Oxides through Electrochemical Conversion for Efficient Overall Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 57038-57046.	4.0	15
118	Identifying the crystal and electronic structure evolution in triâ€component transition metal oxide nanosheets for efficient electrocatalytic oxygen evolution. EcoMat, 2019, 1, e12005.	6.8	14
119	Manipulating metal-oxygen local atomic structures in single-junctional p-Si/WO3 photocathodes for efficient solar hydrogen generation. Nano Research, 2021, 14, 2285.	5.8	14
120	Recent Progress on Photocatalytic CO 2 Reduction with Earthâ€abundant Singleâ€atom Reactive Sites. ChemNanoMat, 2021, 7, 873-880.	1.5	14
121	Enhanced photoelectrochemical performance of an Î±-Fe2O3 nanorods photoanode with embedded nanocavities formed by helium ions implantation. International Journal of Hydrogen Energy, 2020, 45, 9408-9415.	3.8	13
122	Theoretical Insights into the Limitation of Photocatalytic Overall Water Splitting Performance of VIA Group Elements Doped Polymeric Carbon Nitride: A Density Functional Theory Calculation Predicting Solarâ€toâ€Hydrogen Efficiency. Solar Rrl, 2021, 5, 2000630.	3.1	13
123	Nanosized BaSnO₃ as Electron Transport Promoter Coupled with gâ€C₃N₄ toward Enhanced Photocatalytic H₂ Production. Advanced Sustainable Systems, 2021, 5, 2100138.	2.7	13
124	Au@SiO2 core/shell nanoparticle-decorated TiO2 nanorod arrays for enhanced photoelectrochemical water splitting. Science Bulletin, 2014, 59, 2191-2198.	1.7	12
125	Engineering Interfacial Energetics: A Novel Hybrid System of Metal Oxide Quantum Dots and Cobalt Complex for Photocatalytic Water Oxidation. Electrochimica Acta, 2016, 212, 905-911.	2.6	12
126	Synthesis and characterization of nanoporous Bi3NbO7films: application to photoelectrochemical water splitting. RSC Advances, 2014, 4, 10542-10548.	1.7	11

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127	Learning from nature: Understanding hydrogenase enzyme using computational approach. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2020, 10, e1422.	6.2	10
128	BiFeO3 bandgap engineering by dopants and defects control for efficient photocatalytic water oxidation. Applied Catalysis A: General, 2022, 643, 118737.	2.2	10
129	Effects of N implantation on defect formation in ZnO nanowires. Thin Solid Films, 2019, 687, 137449.	0.8	9
130	Building Directional Charge Transport Channel in CdTe-Based Multilayered Photocathode for Efficient Photoelectrochemical Hydrogen Evolution. , 2022, 4, 1381-1388.		9
131	Oriented thermal etching of hollow carbon spheres with delicate heat management for efficient solar steam generation. International Journal of Heat and Mass Transfer, 2021, 178, 121579.	2.5	8
132	Interface and surface engineering of hematite photoanode for efficient solar water oxidation. Journal of Chemical Physics, 2020, 152, 244707.	1.2	7
133	Electronic structures associated with enhanced photocatalytic activity in nanogap-engineered g-C3N4/Ag@SiO2 hybrid nanostructures. Applied Surface Science, 2020, 514, 145907.	3.1	7
134	Instability Issues and Stabilization Strategies of Lead Halide Perovskites for Photo(electro)catalytic Solar Fuel Production. Journal of Physical Chemistry Letters, 2022, 13, 1806-1824.	2.1	7
135	LaTiO2Nâ€“LaCrO3: continuous solid solutions towards enhanced photocatalytic H2 evolution under visible-light irradiation. Dalton Transactions, 2017, 46, 10685-10693.	1.6	6
136	W ion implantation boosting visible-light photoelectrochemical water splitting over ZnO nanorod arrays. Journal of Photonics for Energy, 2017, 7, 016501.	0.8	5
137	Enhancing Solarâ€Driven Water Splitting with Surfaceâ€Engineered Nanostructures. Solar Rrl, 2018, 3, 1800285.	3.1	5
138	Identification of a Nitrogen-related acceptor in ZnO nanowires. Nanoscale, 2019, 11, 10921-10926.	2.8	5
139	Revealing Active Function of Multicomponent Electrocatalysts from In Situ Nickel Redox for Oxygen Evolution. Journal of Physical Chemistry C, 2021, 125, 16420-16427.	1.5	5
140	Enhanced photocatalytic water splitting of TiO2 by decorating with facet-controlled Au nanocrystals. Applied Physics Letters, 2021, 119, 143901.	1.5	5
141	Dicyanovinyl-unit-induced absorption enhancement of iridium(III) complexes in long-wavelength range and potential application in dye-sensitized solar cells. Science China Chemistry, 2015, 58, 658-665.	4.2	4
142	Ultrafine polycrystalline titania nanofibers for superior sodium storage. Journal of Energy Chemistry, 2019, 38, 153-161.	7.1	4
143	A Semiconductorâ€Mediatorâ€Catalyst Artificial Photosynthetic System for Photoelectrochemical Water Oxidation. Chemistry - A European Journal, 2022, 28, e202102630.	1.7	4
144	A Facile Approach for Pt Single Atoms Deposition on Two-Dimensional Calcium Niobate Nanosheets for Photocatalytic Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2022, 10, 9096-9104.	3.2	4

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145	Facile Growth of Porous Hematite Films for Photoelectrochemical Water Splitting. International Journal of Photoenergy, 2013, 2013, 1-8.	1.4	3
146	Kinetic and thermodynamic synergy of spongiform nanostructure and alien dopants enables promoted sodium-ion transfer for high-performance sodium storage. Chemical Engineering Journal, 2022, 433, 133555.	6.6	3
147	Atomically Dispersed Janus Nickel Sites on Red Phosphorus for Photocatalytic Overall Water Splitting. Angewandte Chemie, 0, , .	1.6	2
148	Shear-Induced Aggregation and Distribution in Photocatalysis Suspension System for Hydrogen Production. Industrial & Engineering Chemistry Research, 2022, 61, 6722-6732.	1.8	2
149	Heat Transfer around and through Multiple Porous Particles. Industrial & Engineering Chemistry Research, 0, , .	1.8	2
150	Surface Modification of Î±-Fe2O3 Nanorod Array Photoanodes for Improved Light-Induced Water Splitting. Materials Research Society Symposia Proceedings, 2011, 1326, 1.	0.1	1
151	Progress and Perspectives in Visible-Light-Driven Photocatalysis. International Journal of Photoenergy, 2013, 2013, 1-3.	1.4	1
152	Electrophoretic deposition of nanostructured hematite photoanodes for solar hydrogen generation. Journal of Materials Research, 2016, 31, 1547-1553.	1.2	1
153	Sodium-doped oriented zinc oxide nanorod arrays: insights into their aqueous growth design, crystal structure, and optical properties. MRS Communications, 2018, 8, 570-576.	0.8	1
154	Trace Amount of Platinum Supported on Carbonized Biomorphic Wood for Efficient Electrochemical Hydrogen Evolution in Alkaline Condition. ChemistrySelect, 2018, 3, 2140-2143.	0.7	1
155	Modification of Ti-doped hematite nanowires with a NiOx buffer layer for improved photoelectrochemical performance. Applied Physics Letters, 2021, 119, 083901.	1.5	1
156	SEMICONDUCTING PHOTOCATALYSIS FOR SOLAR HYDROGEN CONVERSION. , 2018, , 63-108.		0