Xin Zhao

List of Publications by Year
in descending order

47 papers	2,354 citations	201385 27 h-index	214527 47 g-index
51 all docs	51 docs citations	51 times ranked	3391 citing authors

#	Article	IF	Citations
1	Upcycling to Sustainably Reuse Plastics. Advanced Materials, 2022, 34, e2100843.	11.1	91
2	Insights into Improving Photoelectrochemical Waterâ€Splitting Performance Using Hematite Anode. Energy Technology, 2022, 10, 2100457.	1.8	10
3	In situ optical spectroscopic understanding of electrochemical passivation mechanism on solâ€“gel processed WO3 photoanodes. Journal of Energy Chemistry, 2022, 71, 20-28.	7.1	17
4	Photocatalytic Conversion of Plastic Waste: From Photodegradation to Photosynthesis. Advanced Energy Materials, 2022, 12, .	10.2	64
5	Elucidating the sources of activity and stability of FeP electrocatalyst for hydrogen evolution reactions in acidic and alkaline media. Applied Catalysis B: Environmental, 2020, 260, 118156.	10.8	74
6	Mechanistic Study of Monolayer NiP₂ (100) toward Solar Hydrogen Production. Solar Rrl, 2020, 4, 1900360.	3.1	8
7	Colorful superhydrophobic pigments with superior anti-fouling performance and environmental durability. Chemical Engineering Journal, 2020, 384, 123292.	6.6	37
8	First-principles investigation of the electronic properties of the Bi₂O₄(101)/BiVO₄(010) heterojunction towards more efficient solar water splitting. Physical Chemistry Chemical Physics, 2020, 22, 2449-2456.	1.3	18
9	Sol-gel synthesis of highly reproducible WO3 photoanodes for solar water oxidation. Science China Materials, 2020, 63, 2261-2271.	3.5	12
10	Design and durability study of environmental-friendly room-temperature processable icephobic coatings. Chemical Engineering Journal, 2019, 355, 901-909.	6.6	64
11	Catalytically Active Sites on Ni5P4 for Efficient Hydrogen Evolution Reaction From Atomic Scale Calculation. Frontiers in Chemistry, 2019, 7, 444.	1.8	15
12	The Self-Passivation Mechanism in Degradation of BiVO4 Photoanode. IScience, 2019, 19, 976-985.	1.9	40
13	Completely Solvent-free Protocols to Access Phase-Pure, Metastable Metal Halide Perovskites and Functional Photodetectors from the Precursor Salts. IScience, 2019, 16, 312-325.	1.9	80
14	Strategies of Anode Materials Design towards Improved Photoelectrochemical Water Splitting Efficiency. Coatings, 2019, 9, 309.	1.2	13
15	Stable Active Sites on Ni 12 P 5 Surfaces for the Hydrogen Evolution Reaction. Energy Technology, 2019, 7, 1900013.	1.8	7
16	Mesoporous SiO2/BiVO4/CuO nanospheres for Z-scheme, visible light aerobic Câ€“N coupling and dehydrogenation. Applied Materials Today, 2019, 15, 192-202.	2.3	30
17	A Source of Error in Photoanode Evaluation. Joule, 2019, 3, 305-310.	11.7	1
18	Probing the Performance Limitations in Thin-Film FeVO₄ Photoanodes for Solar Water Splitting. Journal of Physical Chemistry C, 2018, 122, 9773-9782.	1.5	32

#	Article	IF	Citations
19	An investigation on the role of W doping in BiVO₄ photoanodes used for solar water splitting. Physical Chemistry Chemical Physics, 2018, 20, 13637-13645.	1.3	38
20	Anisotropic Electronic Characteristics, Adsorption, and Stability of Low-Index BiVO₄ Surfaces for Photoelectrochemical Applications. ACS Applied Materials & Interfaces, 2018, 10, 5475-5484.	4.0	93
21	A theoretical study on the surface and interfacial properties of Ni₃P for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 7827-7834.	5.2	50
22	Scaleâ€Up of BiVO₄ Photoanode for Water Splitting in a Photoelectrochemical Cell: Issues and Challenges. Energy Technology, 2018, 6, 100-109.	1.8	49
23	Enhanced Charge Transport and Increased Active Sites on Î±-Fe₂O₃ (110) Nanorod Surface Containing Oxygen Vacancies for Improved Solar Water Oxidation Performance. ACS Omega, 2018, 3, 14973-14980.	1.6	36
24	A Cobaltâ€Based Metalâ€“Organic Framework as Cocatalyst on BiVO₄ Photoanode for Enhanced Photoelectrochemical Water Oxidation. ChemSusChem, 2018, 11, 2710-2716.	3.6	70
25	Clarifying the Roles of Oxygen Vacancy in W-Doped BiVO₄ for Solar Water Splitting. ACS Applied Energy Materials, 2018, 1, 3410-3419.	2.5	77
26	Simultaneous enhancement in charge separation and onset potential for water oxidation in a BiVO₄ photoanode by Wâ€“Ti codoping. Journal of Materials Chemistry A, 2018, 6, 16965-16974.	5.2	27
27	The Influence of Ti Doping on Morphology and Photoelectrochemical Properties of Hematite Grown from Aqueous Solution for Water Splitting. Energy Technology, 2018, 6, 2188-2199.	1.8	18
28	Theoretical Insight into the Mechanism of Photoelectrochemical Oxygen Evolution Reaction on BiVO₄ Anode with Oxygen Vacancy. Journal of Physical Chemistry C, 2017, 121, 18702-18709.	1.5	89
29	New insight into the roles of oxygen vacancies in hematite for solar water splitting. Physical Chemistry Chemical Physics, 2017, 19, 1074-1082.	1.3	69
30	Enhanced photoelectrochemical water splitting performance using morphology-controlled BiVO₄ with W doping. Beilstein Journal of Nanotechnology, 2017, 8, 2640-2647.	1.5	19
31	Improved Charge Separation in WO3/CuWO4 Composite Photoanodes for Photoelectrochemical Water Oxidation. Materials, 2016, 9, 348.	1.3	36
32	Fast and Simple Construction of Efficient Solarâ€Waterâ€Splitting Electrodes with Micrometerâ€Sized Lightâ€Absorbing Precursor Particles. Advanced Materials Technologies, 2016, 1, 1600119.	3.0	16
33	Enhanced Waterâ€Splitting Performance of Perovskite SrTaO₂N Photoanode Film through Ameliorating Interparticle Charge Transport. Advanced Functional Materials, 2016, 26, 7156-7163.	7.8	86
34	Enhanced visible light hydrogen production via a multiple heterojunction structure with defect-engineered g-C3N4 and two-phase anatase/brookite TiO2. Journal of Catalysis, 2016, 342, 55-62.	3.1	57
35	Photoelectrochemical cell for unassisted overall solar water splitting using a BiVO₄photoanode and Si nanoarray photocathode. RSC Advances, 2016, 6, 9905-9910.	1.7	64
36	Charge Carrier Transfer in Ta3N5 Photoanodes Prepared by Different Methods for Solar Water Splitting. Australian Journal of Chemistry, 2016, 69, 631.	0.5	2

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37	Quantitative Analysis and Visualized Evidence for High Charge Separation Efficiency in a Solidâ€Liquid Bulk Heterojunction. Advanced Energy Materials, 2014, 4, 1301785.	10.2	88
38	Cathodic shift of onset potential for water oxidation on a Ti⁴⁺doped Fe₂O₃photoanode by suppressing the back reaction. Energy and Environmental Science, 2014, 7, 752-759.	15.6	228
39	Enhanced luminescence intensity of Sr3B2O6:Eu2+ phosphor prepared by solâ€“gel method. Journal of Alloys and Compounds, 2013, 579, 432-437.	2.8	20
40	A Coâ€catalystâ€Loaded Ta₃N₅ Photoanode with a High Solar Photocurrent for Water Splitting upon Facile Removal of the Surface Layer. Angewandte Chemie - International Edition, 2013, 52, 11016-11020.	7.2	208
41	Efficient red phosphor double-perovskite Ca3WO6 with A-site substitution of Eu3+. Dalton Transactions, 2013, 42, 13502.	1.6	39
42	Formation energy and photoelectrochemical properties of BiVO₄after doping at Bi³⁺or V⁵⁺sites with higher valence metal ions. Physical Chemistry Chemical Physics, 2013, 15, 1006-1013.	1.3	138
43	Tunable orange red phosphors: S^{2â^'}-doped high temperature phase Ca₃SiO₄Cl₂:Eu²⁺for solid-state lighting. RSC Advances, 2013, 3, 1965-1969.	1.7	12
44	An efficient charge compensated red phosphor Sr3WO6: K+, Eu3+ â€“ For white LEDs. Journal of Alloys and Compounds, 2013, 553, 221-224.	2.8	50
45	A dye-free photoelectrochemical solar cell based on BiVO4 with a long lifetime of photogenerated carriers. Electrochemistry Communications, 2012, 22, 49-52.	2.3	21
46	Remarkable enhancement in photocurrent of In0.20Ga0.80N photoanode by using an electrochemical surface treatment. Applied Physics Letters, 2011, 99, .	1.5	27
47	The Self-Passivation Mechanism in Degradation of BiVO ₄ Photoanode. SSRN Electronic Journal, 0, , .	0.4	0