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	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
2	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
3	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
4	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
5	Upcycling to Sustainably Reuse Plastics. Advanced Materials, 2022, 34, e2100843.	11.1	91
6	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
7	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
8	Enhanced Waterâ€Splitting Performance of Perovskite SrTaO₂N Photoanode Film through Ameliorating Interparticle Charge Transport. Advanced Functional Materials, 2016, 26, 7156-7163.	7.8	86
9	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
10	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
11	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
12	A Cobaltâ€Based Metalâ€"Organic Framework as Cocatalyst on BiVO₄ Photoanode for Enhanced Photoelectrochemical Water Oxidation. ChemSusChem, 2018, 11, 2710-2716.	3.6	70
13	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
14	Photoelectrochemical cell for unassisted overall solar water splitting using a BiVO₄photoanode and Si nanoarray photocathode. RSC Advances, 2016, 6, 9905-9910.	1.7	64
15	Design and durability study of environmental-friendly room-temperature processable icephobic coatings. Chemical Engineering Journal, 2019, 355, 901-909.	6.6	64
16	Photocatalytic Conversion of Plastic Waste: From Photodegradation to Photosynthesis. Advanced Energy Materials, 2022, 12, .	10.2	64
17	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
18	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

#	Article	IF	Citations
19	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
20	Scaleâ€Up of BiVO₄ Photoanode for Water Splitting in a Photoelectrochemical Cell: Issues and Challenges. Energy Technology, 2018, 6, 100-109.	1.8	49
21	The Self-Passivation Mechanism in Degradation of BiVO4 Photoanode. IScience, 2019, 19, 976-985.	1.9	40
22	Efficient red phosphor double-perovskite Ca3WO6 with A-site substitution of Eu3+. Dalton Transactions, 2013, 42, 13502.	1.6	39
23	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
24	Colorful superhydrophobic pigments with superior anti-fouling performance and environmental durability. Chemical Engineering Journal, 2020, 384, 123292.	6.6	37
25	Improved Charge Separation in WO3/CuWO4 Composite Photoanodes for Photoelectrochemical Water Oxidation. Materials, 2016, 9, 348.	1.3	36
26	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
27	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
28	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
29	Remarkable enhancement in photocurrent of In0.20Ga0.80N photoanode by using an electrochemical surface treatment. Applied Physics Letters, 2011, 99, .	1.5	27
30	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
31	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
32	Enhanced luminescence intensity of Sr3B2O6:Eu2+ phosphor prepared by solâ€"gel method. Journal of Alloys and Compounds, 2013, 579, 432-437.	2.8	20
33	Enhanced photoelectrochemical water splitting performance using morphology-controlled BiVO₄ with W doping. Beilstein Journal of Nanotechnology, 2017, 8, 2640-2647.	1.5	19
34	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
35	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
36	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

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37	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
38	Catalytically Active Sites on Ni5P4 for Efficient Hydrogen Evolution Reaction From Atomic Scale Calculation. Frontiers in Chemistry, 2019, 7, 444.	1.8	15
39	Strategies of Anode Materials Design towards Improved Photoelectrochemical Water Splitting Efficiency. Coatings, 2019, 9, 309.	1.2	13
40	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
41	Sol-gel synthesis of highly reproducible WO3 photoanodes for solar water oxidation. Science China Materials, 2020, 63, 2261-2271.	3.5	12
42	Insights into Improving Photoelectrochemical Waterâ€Splitting Performance Using Hematite Anode. Energy Technology, 2022, 10, 2100457.	1.8	10
43	Mechanistic Study of Monolayer NiP₂ (100) toward Solar Hydrogen Production. Solar Rrl, 2020, 4, 1900360.	3.1	8
44	Stable Active Sites on Ni 12 P 5 Surfaces for the Hydrogen Evolution Reaction. Energy Technology, 2019, 7, 1900013.	1.8	7
45	Charge Carrier Transfer in Ta3N5 Photoanodes Prepared by Different Methods for Solar Water Splitting. Australian Journal of Chemistry, 2016, 69, 631.	0.5	2
46	A Source of Error in Photoanode Evaluation. Joule, 2019, 3, 305-310.	11.7	1
47	The Self-Passivation Mechanism in Degradation of BiVO ₄ Photoanode. SSRN Electronic Journal, 0, , .	0.4	0