Xiao-Xiang Xu

List of Publications by Citations

109 papers	3,063 citations	32 h-index	51 g-index
111 ext. papers	3,709 ext. citations	9.6 avg, IF	5.93 L-index

#	Paper	IF	Citations
109	A red metallic oxide photocatalyst. *Nature Materials*, **2012**, 11, 595-8	27	370
108	g-C3N4 coated SrTiO3 as an efficient photocatalyst for H2 production in aqueous solution under visible light irradiation. *International Journal of Hydrogen Energy*, **2011**, 36, 13501-13507	6.7	202
107	Mesoporous Monocrystalline TiO2 and Its Solid-State Electrochemical Properties. *Chemistry of Materials*, **2009**, 21, 2540-2546	9.6	107
106	Hollow CaTiO3 cubes modified by La/Cr co-doping for efficient photocatalytic hydrogen production. *Applied Catalysis B: Environmental*, **2018**, 225, 139-147	21.8	83
105	Cu(II) Aliphatic Diamine Complexes for Both Heterogeneous and Homogeneous Water Oxidation Catalysis in Basic and Neutral Solutions. *ACS Catalysis*, **2016**, 6, 77-83	13.1	80
104	Photocatalytic H2 generation from spinels ZnFe2O4, ZnFeGaO4 and ZnGa2O4. *Catalysis Today*, **2013**, 199, 22-26	5.3	77
103	Ultrathin Lanthanum Tantalate Perovskite Nanosheets Modified by Nitrogen Doping for Efficient Photocatalytic Water Splitting. *ACS Nano*, **2017**, 11, 11441-11448	16.7	73
102	Photocatalytic Hydrogen Production over Chromium Doped Layered Perovskite Sr2TiO4. *Inorganic Chemistry*, **2015**, 54, 7445-53	5.1	70
101	On the existence of A-site deficiency in perovskites and its relation to the electrochemical performance. *Advanced Materials*, **2012**, 24, 528-32	24	65
100	Ultrathin 2D type-II p-n heterojunctions La2Ti2O7/In2S3 with efficient charge separations and photocatalytic hydrogen evolution under visible light illumination. *Applied Catalysis B: Environmental*, **2019**, 245, 733-742	21.8	64
99	Role of Oxygen Defects on the Photocatalytic Properties of Mg-Doped Mesoporous Ta3 N5. *ChemSusChem*, **2016**, 9, 1403-12	8.3	63
98	Efficient charge separation based on type-II g-C3N4/TiO2-B nanowire/tube heterostructure photocatalysts. *Dalton Transactions*, **2015**, 44, 13030-9	4.3	62
97	Activating Layered Perovskite Compound Sr2TiO4 via La/N Codoping for Visible Light Photocatalytic Water Splitting. *ACS Catalysis*, **2018**, 8, 3209-3221	13.1	58
96	Efficient photocatalytic hydrogen production over solid solutions Sr1-xBixTi1-xFexO3 (0 x 0.5). *Applied Catalysis B: Environmental*, **2017**, 200, 412-419	21.8	57
95	Bismuth and chromium co-doped strontium titanates and their photocatalytic properties under visible light irradiation. *Physical Chemistry Chemical Physics*, **2015**, 17, 26320-9	3.6	52
94	Donor-acceptor type triazine-based conjugated porous polymer for visible-light-driven photocatalytic hydrogen evolution. *Applied Catalysis B: Environmental*, **2019**, 257, 117935	21.8	49
93	Photocatalytic hydrogen production over solid solutions between BiFeO 3 and SrTiO 3. *Applied Surface Science*, **2017**, 391, 535-541	6.7	46

92	Photocatalytic hydrogen production over Aurivillius compound Bi3TiNbO9 and its modifications by Cr/Nb co-doping. *Applied Catalysis B: Environmental*, **2017**, 217, 342-352	21.8	46
91	Boosting photocatalytic water oxidation reactions over strontium tantalum oxynitride by structural laminations. *Applied Catalysis B: Environmental*, **2018**, 228, 10-18	21.8	46
90	A high performance intermediate temperature fuel cell based on a thick oxide□arbonate electrolyte. *Journal of Power Sources*, **2009**, 194, 967-971	8.9	45
89	Zr-Doped Mesoporous TaN Microspheres for Efficient Photocatalytic Water Oxidation. *ACS Applied Materials & Interfaces*, **2016**, 8, 35407-35418	9.5	45
88	Efficient photocatalytic oxygen production over Ca-modified LaTiO2N. *Journal of Catalysis*, **2017**, 346, 10-20	7.3	41
87	Efficient Photocatalytic Oxygen Production over Nitrogen-Doped Sr4Nb2O9 under Visible-Light Irradiation. *ChemCatChem*, **2016**, 8, 615-623	5.2	41
86	Visible light photocatalysis by in situ growth of plasmonic Ag nanoparticles upon AgTaO3. *International Journal of Hydrogen Energy*, **2015**, 40, 3672-3678	6.7	39
85	Efficient Photocatalytic Hydrogen Production over Rh-Doped Inverse Spinel Zn2TiO4. *ChemCatChem*, **2016**, 8, 2289-2295	5.2	38
84	Role of surface composition upon the photocatalytic hydrogen production of Cr-doped and La/Cr-codoped SrTiO3. *Journal of Materials Science*, **2016**, 51, 6464-6473	4.3	37
83	Efficient photocatalytic hydrogen production over La/Rh co-doped Ruddlesden-Popper compound Sr 2 TiO 4. *Applied Catalysis B: Environmental*, **2017**, 210, 149-159	21.8	36
82	Photocatalytic H2 production from spinels ZnGa2□r O4 (0⊠2) solid solutions. *Journal of Solid State Chemistry*, **2015**, 230, 95-101	3.3	36
81	Activating BaTaO2N by Ca modifications and cobalt oxide for visible light photocatalytic water oxidation reactions. *Applied Catalysis B: Environmental*, **2018**, 237, 373-381	21.8	36
80	Zr doped mesoporous LaTaON2 for efficient photocatalytic water splitting. *Journal of Materials Chemistry A*, **2019**, 7, 5702-5711	13	35
79	A new approach to inducing Ti3+ in anatase TiO2 for efficient photocatalytic hydrogen production. *Chinese Journal of Catalysis*, **2018**, 39, 510-516	11.3	34
78	One-pot photoreforming of cellulosic biomass waste to hydrogen by merging photocatalysis with acid hydrolysis. *Applied Catalysis A: General*, **2018**, 563, 73-79	5.1	34
77	Intermediate temperature stable proton conductors based upon SnP2O7, including additional H3PO4. *Journal of Materials Chemistry*, **2010**, 20, 7827		32
76	One-step synthetic approach for core-shelled black anatase titania with high visible light photocatalytic performance. *Chemical Engineering Journal*, **2016**, 299, 120-125	14.7	32
75	Structural dependence of photocatalytic hydrogen production over La/Cr co-doped perovskite compound ATiO 3 (A = Ca, Sr and Ba). *International Journal of Hydrogen Energy*, **2017**, 42, 23539-23547	6.7	31

74	A stable and thin BaCe0.7Nb0.1Gd0.2O3□membrane prepared by simple all-solid-state process for SOFC. *Journal of Power Sources*, **2009**, 187, 403-406	8.9	31
73	Cation ordering/disordering effects upon photocatalytic activity of CrNbO4, CrTaO4, Sr2CrNbO6 and Sr2CrTaO6. *International Journal of Hydrogen Energy*, **2016**, 41, 1550-1558	6.7	28
72	The chemical stability and conductivity of BaCe0.9□YxNb0.1O3□proton-conductive electrolyte for SOFC. *Materials Research Bulletin*, **2009**, 44, 1474-1480	5.1	28
71	Ruddlesden-Popper compound Sr2TiO4 co-doped with La and Fe for efficient photocatalytic hydrogen production. *Journal of Catalysis*, **2018**, 359, 112-121	7.3	27
70	A Highly Active and Robust Copper-Based Electrocatalyst toward Hydrogen Evolution Reaction with Low Overpotential in Neutral Solution. *ACS Applied Materials & Interfaces*, **2016**, 8, 30205-30211	9.5	27
69	Proton conductivity of potassium doped barium zirconates. *Journal of Solid State Chemistry*, **2010**, 183, 93-98	3.3	27
68	Structural dependence of the photocatalytic properties of double perovskite compounds A2InTaO6 (A = Sr or Ba) doped with nickel. *Physical Chemistry Chemical Physics*, **2016**, 18, 21491-9	3.6	27
67	Defect management and efficient photocatalytic water oxidation reaction over Mg modified SrNbO2N. *Journal of Materials Chemistry A*, **2018**, 6, 10947-10957	13	27
66	Ruddlesden-Popper compounds in the double-perovskite family Sr2FeTaO6(SrO)n (n = 0, 1 and 2) and their photocatalytic properties. *Applied Catalysis B: Environmental*, **2017**, 206, 35-43	21.8	26
65	In situ exsolution of silver nanoparticles on AgTaO3-SrTiO3 solid solutions as efficient plasmonic photocatalysts for water splitting. *Applied Catalysis B: Environmental*, **2019**, 256, 117818	21.8	25
64	Quinary wurtzite Zn-Ga-Ge-N-O solid solutions and their photocatalytic properties under visible light irradiation. *Scientific Reports*, **2016**, 6, 19060	4.9	24
63	Homologous Compounds ZnInO (n = 4, 5, and 7) Containing Laminated Functional Groups as Efficient Photocatalysts for Hydrogen Production. *ACS Applied Materials & Interfaces*, **2016**, 8, 28700-28708	9.5	23
62	Amorphous Semiconductor Nanowires Created by Site-Specific Heteroatom Substitution with Significantly Enhanced Photoelectrochemical Performance. *ACS Nano*, **2016**, 10, 7882-91	16.7	22
61	Enabling efficient visible light photocatalytic water splitting over SrTaO2N by incorporating Sr in its B site. *Journal of Materials Chemistry A*, **2018**, 6, 20760-20768	13	20
60	Preparation of 3D ordered mesoporous anatase TiO2 and their photocatalytic activity. *Rare Metals*, **2019**, 38, 453-458	5.5	19
59	In situ fabrication of two-dimensional g-CN/BaTaO nanosheet heterostructures with efficient charge separations and photocatalytic hydrogen evolution under visible light illumination. *Dalton Transactions*, **2018**, 47, 4360-4367	4.3	19
58	Actualizing efficient photocatalytic water oxidation over SrTaO2N by Na modification. *Catalysis Science and Technology*, **2017**, 7, 4640-4647	5.5	19
57	Ruddlesden-Popper compounds (SrO)(LaFeO3)n (n = 1 and 2) as p-type semiconductors for photocatalytic hydrogen production. *Electrochimica Acta*, **2017**, 252, 138-146	6.7	19

56	Proton conductivity of Al(H2PO4)3–H3PO4 composites at intermediate temperature. *Solid State Ionics*, **2009**, 180, 343-350	3.3	17
55	Au nanocrystals decorated TiO2 nanotubes for photocatalytic nitrogen fixation into ammonia. *Inorganic Chemistry Frontiers*, **2020**, 7, 620-624	6.8	17
54	An investigation of crystal structure, surface area and surface chemistry of strontium niobate and their influence on photocatalytic performance. *Dalton Transactions*, **2013**, 42, 7880-7	4.3	16
53	Double perovskite compounds A2CuWO6 (A = Sr and Ba) with p-type semiconductivity for photocatalytic water oxidation under visible light illumination. *Inorganic Chemistry Frontiers*, **2019**, 6, 2096-2103	6.8	15
52	Mg modified BaTaO2N as an efficient visible-light-active photocatalyst for water oxidation. *Journal of Catalysis*, **2020**, 383, 135-143	7.3	15
51	SrTaO2N-CaTaO2N solid solutions as efficient visible light active photocatalysts for water oxidation and reduction. *Applied Catalysis B: Environmental*, **2020**, 263, 118315	21.8	13
50	Switching on efficient photocatalytic water oxidation reactions over CaNbO2N by Mg modifications under visible light illumination. *Applied Catalysis B: Environmental*, **2019**, 245, 10-19	21.8	13
49	Roadmap on inorganic perovskites for energy applications. *JPhys Energy*, **2021**, 3, 031502	4.9	13
48	In-situ High-Temperature XRD and FTIR for Calcite, Dolomite and Magnesite: Anharmonic Contribution to the Thermodynamic Properties. *Journal of Earth Science (Wuhan, China)*, **2019**, 30, 964-976	2.2	12
47	Layered Perovskite Compound NaLaTiO4 Modified by Nitrogen Doping as a Visible Light Active Photocatalyst for Water Splitting. *ACS Catalysis*, **2020**, 10, 9889-9898	13.1	12
46	The effect of single atom substitution (O, S or Se) on photocatalytic hydrogen evolution for triazine-based conjugated porous polymers. *Journal of Materials Chemistry C*, **2020**, 8, 8887-8895	7.1	11
45	A fuel cell operating between room temperature and 250 °C based on a new phosphoric acid based composite electrolyte. *Journal of Power Sources*, **2010**, 195, 6983-6987	8.9	11
44	Ba-Modified LaTiO2N as an Efficient Visible Light Active Photocatalyst for Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 9641-9649	8.3	10
43	Visible light active titanoniobate nanosheets for efficient photocatalytic H2 production from water. *Journal of Catalysis*, **2019**, 377, 409-418	7.3	10
42	Syntheses and proton conductivity of mesoporous Nd2O3–SiO2 and NdOCl–SiO2 composites. *Journal of Materials Science*, **2012**, 47, 2146-2154	4.3	10
41	Perovskite Oxynitride Solid Solutions of LaTaON-CaTaON with Greatly Enhanced Photogenerated Charge Separation for Solar-Driven Overall Water Splitting. *Advanced Science*, **2021**, 8, 2003343	13.6	10
40	Surface ligand mediated growth of CuPt nanorods. *CrystEngComm*, **2014**, 16, 1714	3.3	9
39	A stable NH4PO3-glass proton conductor for intermediate temperature fuel cells. *Solid State Ionics*, **2011**, 192, 108-112	3.3	9

38	Stability and conductivity study of NH4PO3–PTFE composites at intermediate temperatures. *Journal of Alloys and Compounds*, **2009**, 480, 874-877	5.7	9
37	Fluorination over Cr doped layered perovskite Sr2TiO4 for efficient photocatalytic hydrogen production under visible light illumination. *Journal of Energy Chemistry*, **2020**, 51, 30-38	12	9
36	Selective Cocatalyst Deposition on ZnTiO N Hollow Nanospheres with Efficient Charge Separation for Solar-Driven Overall Water Splitting. *Small*, **2021**, 17, e2100084	11	8
35	Visible-near-infrared-light-driven selective oxidation of alcohols over nanostructured Cu doped SrTiO3 in water under mild condition. *Journal of Catalysis*, **2021**, 399, 142-149	7.3	8
34	Steering accessible oxygen vacancies for alcohol oxidation over defective Nb2O5 under visible light illumination. *Applied Catalysis B: Environmental*, **2021**, 298, 120584	21.8	8
33	Triggering efficient photocatalytic water oxidation reactions over BaNbO2N by incorporating Ca at B site. *Journal of the American Ceramic Society*, **2019**, 102, 6194-6201	3.8	7
32	MgTiO spinel modified by nitrogen doping as a Visible-Light-Active photocatalyst for antibacterial activity. *Chemical Engineering Journal*, **2021**, 410, 128410	14.7	7
31	Switching on wide visible light photocatalytic activity over Mg4Ta2O9 by nitrogen doping for water oxidation and reduction. *Journal of Catalysis*, **2019**, 377, 455-464	7.3	6
30	Enhanced intrinsic white-light emission upon near-UV excitation by crystal engineering of cationic lead bromide layered materials. *Journal of Materials Chemistry C*, **2019**, 7, 7090-7095	7.1	6
29	Zr modified SrNbO2N as an active photocatalyst for water oxidation under visible light illumination. *Inorganic Chemistry Frontiers*, **2020**, 7, 2629-2636	6.8	6
28	Efficient and robust visible light photocatalytic H2 production based on CdSe quantum dots sensitized titania. *International Journal of Hydrogen Energy*, **2017**, 42, 19877-19884	6.7	6
27	LaTaON Mesoporous Single Crystals for Efficient Photocatalytic Water Oxidation and Z-Scheme Overall Water Splitting. *ACS Nano*, **2021**,	16.7	6
26	LaTaON2-SrZrO3 solid solutions with tunable band gap for photocatalytic water oxidation under visible light illumination. *Journal of Catalysis*, **2020**, 390, 57-66	7.3	6
25	Reduced 3d Transition Metal Oxides Work as Solid-State Sources of Solvated Electrons and Directly Inject Electrons into Water for H2 Production under Mild Thermal or IR Excitation. *Advanced Sustainable Systems*, **2018**, 2, 1700139	5.9	4
24	Synthesis of Dendritic Nano-Sized Nickel for use as Anode Material in an Alkaline Membrane Fuel Cell. *Fuel Cells*, **2009**, 10, n/a-n/a	2.9	4
23	Efficient, broadband self-trapped white-light emission from haloplumbate-based metal-organic frameworks. *Chemical Communications*, **2020**, 56, 10078-10081	5.8	4
22	Aurivillius compound Bi5Ti3CrO15 as a visible-light-active photocatalyst for hydrogen production from water. *Journal of Energy Chemistry*, **2021**, 62, 572-580	12	4
21	SrTaO2N co-doped with La/Zr as promising photocatalysts for water reduction under visible light illumination. *Inorganic Chemistry Frontiers*, **2020**, 7, 2343-2351	6.8	3

20	Gold nanocrystal anchored In2O3 hollow nanospheres for N2 photofixation to ammonia. *Inorganic Chemistry Frontiers*, **2020**, 7, 2778-2782	6.8	3
19	Photocatalytic Hydrogen Evolution Based on Nitrogen-Containing Donor–Acceptor (D–A) Organic Conjugated Small Molecules. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 14253-14261	8.3	3
18	Visible light photocatalytic water oxidation over complex perovskites Sr3BNb2O9 (B = Mg, Ca and Sr) doped with nitrogen. *Inorganic Chemistry Frontiers*, **2019**, 6, 3569-3576	6.8	3
17	Layered lithium niobium (III) oxide—LiNbO2 as a visible-light-driven photocatalyst for H2 evolution. *JPhys Energy*, **2019**, 1, 015001	4.9	3
16	Liberating photocarriers in mesoporous single-crystalline SrTaO2N for efficient solar water splitting. *Applied Catalysis B: Environmental*, **2022**, 304, 120934	21.8	2
15	A novel electrochemically enhanced homogeneous PMS-heterogeneous CoFeO synergistic catalysis for the efficient removal of levofloxacin. *Journal of Hazardous Materials*, **2021**, 127651	12.8	2
14	Ge-Modified GaN–ZnO wurtzite solid solutions with high Zn content for efficient photocatalytic H2 evolution from water under visible light illumination. *Inorganic Chemistry Frontiers*, **2020**, 7, 3443-3447	6.8	2
13	Visible-light-driven photocatalytic water oxidation over LaNbON2—La2Mg2/3Nb1/3O3 solid solutions. *Inorganic Chemistry Frontiers*, **2021**, 8, 2365-2372	6.8	2
12	Stable and efficient solar-driven photoelectrochemical water splitting into H and O based on a BaTaON photoanode decorated with CoO microflowers. *Chemical Communications*, **2021**, 57, 4412-4415	5.8	2
11	A bias-free CuBi2O4–CuWO4 tandem cell for solar-driven water splitting. *Inorganic Chemistry Frontiers*, **2021**, 8, 3863-3870	6.8	2
10	Mesoporous single-crystalline SrNbO2N: Expediting charge transportation to advance solar water splitting. *Nano Energy*, **2022**, 95, 107059	17.1	2
9	A wide visible light active photocatalyst Mg5Ta4O15-xNy for water oxidation and reduction. *International Journal of Hydrogen Energy*, **2019**, 44, 28173-28183	6.7	1
8	LaTaON2–BaTaO2N solid solutions for photocatalytic water oxidation. *Inorganic Chemistry Frontiers* , **2021**, 8, 3723-3732	6.8	1
7	(NH4)3PW12O40-H3PO4 composites as efficient proton conductors at intermediate temperatures. *Journal of Materials Science and Technology*, **2020**, 37, 128-134	9.1	0
6	SrTiO3-CaCr0.5Nb0.5O3 solid solutions as p-type photocatalysts for Z-scheme water splitting under visible light illumination. *Journal of Materials Science and Technology*, **2021**, 87, 46-53	9.1	0
5	Expediting H2 Evolution over MAPbI3 with a Nonnoble Metal Cocatalyst Mo2C under Visible Light. *Energy Material Advances*, **2022**, 2022, 1-10	1	0
4	Fuel Cells and the Hydrogen Economy. *World Scientific Series in Current Energy Issues*, **2017**, 215-247	0.2	
3	Nitrogen-doped LaZrTa3O11 as a visible light-active photocatalyst for water-reduction and -oxidation reactions. *Inorganic Chemistry Frontiers*, **2020**, 7, 2669-2675	6.8	

2 Fuel Cells and the Hydrogen Economy. *Materials and Energy*, **2013**, 427-454

1 Fuel Cells and the Hydrogen Economy. *World Scientific Series in Current Energy Issues*, **2017**, 215-247 0.2