Haolan Xu

List of Publications by Year in Descending Order

103 papers	7,745 citations	46 h-index	87 g-index
113 ext. papers	9,527 ext. citations	7.8 avg, IF	6.6 L-index

#	Paper	IF	Citations
103	Design and performance boost of a MOF-functionalized-wood solar evaporator through tuning the hydrogen-bonding interactions. *Nano Energy*, **2022**, 95, 107016	17.1	19
102	Towards sustainable saline agriculture: Interfacial solar evaporation for simultaneous seawater desalination and saline soil remediation.. *Water Research*, **2022**, 212, 118099	12.5	16
101	A biomimetic interfacial solar evaporator for heavy metal soil remediation. *Chemical Engineering Journal*, **2022**, 435, 134793	14.7	3
100	Highly Transparent and Self-Healable Solar Thermal Anti-/De-Icing Surfaces: When Ultrathin MXene Multilayers Marry Solid Slippery Self-Cleaning Coating.. *Advanced Materials*, **2021**, e2108232	24	11
99	Electrostatic Interaction-Controlled Formation of Pickering Emulsion for Continuous Flow Catalysis. *ACS Applied Materials & Interfaces*, **2021**, 13, 1872-1882	9.5	5
98	A Hollow and Compressible 3D Photothermal Evaporator for Highly Efficient Solar Steam Generation without Energy Loss. *Solar Rrl*, **2021**, 5, 2100053	7.1	37
97	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. *Angewandte Chemie - International Edition*, **2021**, 60, 14131-14137	16.4	56
96	Tailoring Acidic Oxygen Reduction Selectivity on Single-Atom Catalysts via Modification of First and Second Coordination Spheres. *Journal of the American Chemical Society*, **2021**, 143, 7819-7827	16.4	126
95	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. *Angewandte Chemie*, **2021**, 133, 14250-14256	3.6	15
94	Surface Patterning of Two-Dimensional Nanostructure-Embedded Photothermal Hydrogels for High-Yield Solar Steam Generation. *ACS Nano*, **2021**, 15, 10366-10376	16.7	66
93	Dual-Zone Photothermal Evaporator for Antisalt Accumulation and Highly Efficient Solar Steam Generation. *Advanced Functional Materials*, **2021**, 31, 2102618	15.6	69
92	Same materials, bigger output: A reversibly transformable 2D–3D photothermal evaporator for highly efficient solar steam generation. *Nano Energy*, **2021**, 79, 105477	17.1	87
91	All-Cold Evaporation under One Sun with Zero Energy Loss by Using a Heatsink Inspired Solar Evaporator. *Advanced Science*, **2021**, 8, 2002501	13.6	97
90	Enhancing solar steam generation using a highly thermally conductive evaporator support. *Science Bulletin*, **2021**, 66, 2479-2479	10.6	41
89	Synergy of photocatalysis and photothermal effect in integrated 0D perovskite oxide/2D MXene heterostructures for simultaneous water purification and solar steam generation. *Applied Catalysis B: Environmental*, **2021**, 295, 120285	21.8	45
88	Stackable nickel–cobalt@polydopamine nanosheet based photothermal sponges for highly efficient solar steam generation. *Journal of Materials Chemistry A*, **2020**, 8, 11665-11673	13	91
87	Implementing Hybrid Energy Harvesting in 3D Spherical Evaporator for Solar Steam Generation and Synergic Water Purification. *Solar Rrl*, **2020**, 4, 2000232	7.1	49

86	A bioinspired microreactor with interfacial regulation for maximizing selectivity in a catalytic reaction. *Chemical Communications*, **2020**, 56, 8059-8062	5.8	2
85	Graphene and Rice-Straw-Fiber-Based 3D Photothermal Aerogels for Highly Efficient Solar Evaporation. *ACS Applied Materials & Interfaces*, **2020**, 12, 15279-15287	9.5	146
84	Biomass derived Janus solar evaporator for synergic water evaporation and purification. *Sustainable Materials and Technologies*, **2020**, 25, e00180	5.3	29
83	Boosting solar steam generation by structure enhanced energy management. *Science Bulletin*, **2020**, 65, 1380-1388	10.6	109
82	Mechanically Strong and Highly Stiff Supramolecular Polymer Composites Repairable at Ambient Conditions. *CCS Chemistry*, **2020**, 2, 280-292	7.2	23
81	Light-Sheet Skew Ray-Enhanced Localized Surface Plasmon Resonance-Based Chemical Sensing. *ACS Sensors*, **2020**, 5, 127-132	9.2	1
80	A general method for selectively coating photothermal materials on 3D porous substrate surfaces towards cost-effective and highly efficient solar steam generation. *Journal of Materials Chemistry A*, **2020**, 8, 24703-24709	13	30
79	Reversing heat conduction loss: Extracting energy from bulk water to enhance solar steam generation. *Nano Energy*, **2020**, 78, 105269	17.1	101
78	Graphene-encapsulated nickel-copper bimetallic nanoparticle catalysts for electrochemical reduction of CO to CO. *Chemical Communications*, **2020**, 56, 11275-11278	5.8	13
77	Tailoring Selectivity of Electrochemical Hydrogen Peroxide Generation by Tunable Pyrrolic-Nitrogen-Carbon. *Advanced Energy Materials*, **2020**, 10, 2000789	21.8	108
76	A photothermal reservoir for highly efficient solar steam generation without bulk water. *Science Bulletin*, **2019**, 64, 1625-1633	10.6	114
75	Catalytic decomposition of hydrous hydrazine for hydrogen production. *Sustainable Energy and Fuels*, **2019**, 3, 343-365	5.8	40
74	Optical hygrometer using light-sheet skew-ray probed multimode fiber with polyelectrolyte coating. *Sensors and Actuators B: Chemical*, **2019**, 296, 126685	8.5	4
73	Photothermal materials: A key platform enabling highly efficient water evaporation driven by solar energy. *Materials Today Energy*, **2019**, 12, 277-296	7	131
72	Short-Range Non-Bending Fully Distributed Water/Humidity Sensors. *Journal of Lightwave Technology*, **2019**, 37, 2014-2022	4	3
71	Light-Sheet Skew-Ray Enhanced Pump-Absorption for Sensing. *Journal of Lightwave Technology*, **2019**, 37, 2140-2146	4	3
70	Unraveling the molecular interaction mechanism between graphene oxide and aromatic organic compounds with implications on wastewater treatment. *Chemical Engineering Journal*, **2019**, 358, 842-849	14.7	27
69	A flexible photothermal cotton-CuS nanocage-agarose aerogel towards portable solar steam generation. *Nano Energy*, **2019**, 56, 708-715	17.1	210

68	Recent Progress in Lithium Lanthanum Titanate Electrolyte towards All Solid-State Lithium Ion Secondary Battery. *Critical Reviews in Solid State and Materials Sciences*, **2019**, 44, 265-282	10.1	39
67	Thinking outside the box: placing hydrophilic particles in an oil phase for the formation and stabilization of Pickering emulsions. *Chemical Science*, **2018**, 9, 4821-4829	9.4	15
66	Bio-template assisted synthesis of porous glutaraldehyde-polyethyleneimine particulate resin for selective copper ion binding and recovery.. *RSC Advances*, **2018**, 8, 12043-12052	3.7	7
65	Recent Developments in Oxide-Based Ionic Conductors: Bulk Materials, Nanoionics, and Their Memory Applications. *Critical Reviews in Solid State and Materials Sciences*, **2018**, 43, 47-82	10.1	14
64	Self-Assembly of Monomeric Hydrophobic Photosensitizers with Short Peptides Forming Photodynamic Nanoparticles with Real-Time Tracking Property and without the Need of Release in Vivo. *ACS Applied Materials & Interfaces*, **2018**, 10, 28420-28427	9.5	34
63	Evaporation above a bulk water surface using an oil lamp inspired highly efficient solar-steam generation strategy. *Journal of Materials Chemistry A*, **2018**, 6, 12267-12274	13	125
62	Recent Progress in Advanced Humidity Sensors. *Journal of Physics: Conference Series*, **2018**, 1065, 252008	0.3	
61	Formation of Aluminum Hydroxide-Doped Surface Passivating Layers on Pyrite for Acid Rock Drainage Control. *Environmental Science & Technology*, **2018**, 52, 11786-11795	10.3	4
60	Understanding the surface properties and rheology of a silica suspension mediated by a comb-type poly(acrylic acid)/poly(ethylene oxide) (PAA/PEO) copolymer: effect of salinity. *Soft Matter*, **2018**, 14, 4810-4819	3.6	3
59	Robust polymer nanofilms with bioengineering and environmental applications via facile and highly efficient covalent layer-by-layer assembly. *Journal of Materials Chemistry B*, **2018**, 6, 3742-3750	7.3	14
58	Photodetector based on Vernier-Enhanced Fabry-Perot Interferometers with a Photo-Thermal Coating. *Scientific Reports*, **2017**, 7, 41895	4.9	4
57	Photodetector with photothermal cascaded Fabry-Perot etalons **2017**,		1
56	A Plant-Transpiration-Process-Inspired Strategy for Highly Efficient Solar Evaporation. *Advanced Sustainable Systems*, **2017**, 1, 1700046	5.9	138
55	Harvesting, sensing and regulating light based on photo-thermal effect of Cu@CuO mesh. *Green Energy and Environment*, **2017**, 2, 387-392	5.7	5
54	Ultra-fast Hygrometer based on U-shaped Optical Microfiber with Nanoporous Polyelectrolyte Coating. *Scientific Reports*, **2017**, 7, 7943	4.9	23
53	Ultrafast colorimetric humidity-sensitive polyelectrolyte coating for touchless control. *Materials Horizons*, **2017**, 4, 72-82	14.4	45
52	Hierarchical CuO Colloidosomes and Their Structure Enhanced Photothermal Catalytic Activity. *Journal of Physical Chemistry C*, **2016**, 120, 12666-12672	3.8	47
51	Substrate-Independent, Transparent Oil-Repellent Coatings with Self-Healing and Persistent Easy-Sliding Oil Repellency. *ACS Nano*, **2016**, 10, 1076-85	16.7	81

50	Room temperature ionic liquid assisted synthesis of ultra-stable Au nanoparticles via a modified Brust□Schiffrin method. *RSC Advances*, **2016**, 6, 82394-82400	3.7	1
49	Molecular and Surface Interactions between Polymer Flocculant Chitosan-g-polyacrylamide and Kaolinite Particles: Impact of Salinity. *Journal of Physical Chemistry C*, **2015**, 119, 7327-7339	3.8	52
48	Formation, characterization and stability of oil nanodroplets on immersed substrates. *Advances in Colloid and Interface Science*, **2015**, 224, 17-32	14.3	5
47	Solvent Effects on the Formation of Surface Nanodroplets by Solvent Exchange. *Langmuir*, **2015**, 31, 12120-5	4	24
46	The significant impact of polydopamine on the catalytic performance of the carried Au nanoparticles. *Chemical Communications*, **2015**, 51, 1469-71	5.8	67
45	Synthesis of Au and Pt Hollow Capsules with Single Holes via Pickering Emulsion Strategy. *Journal of Physical Chemistry C*, **2015**, 119, 28055-28060	3.8	29
44	Interfacial nanodroplets guided construction of hierarchical Au, Au-Pt, and Au-Pd particles as excellent catalysts. *Scientific Reports*, **2014**, 4, 4849	4.9	37
43	Understanding nanorheology and surface forces of confined thin films **2014**, 26, 3-14		17
42	In-situ photo-reducing graphene oxide to create Zn0.5Cd0.5S porous nanosheets/RGO composites as highly stable and efficient photoelectrocatalysts for visible-light-driven water splitting. *International Journal of Hydrogen Energy*, **2014**, 39, 702-710	6.7	26
41	Improved super-capacitive performance of carbon foam supported CeOx nanoflowers by selective doping and UV irradiation. *RSC Advances*, **2014**, 4, 35067-35071	3.7	4
40	Impact of Spontaneously Adsorbed Hydroxide Ions on Emulsification via Solvent Shifting. *Journal of Physical Chemistry C*, **2014**, 118, 23175-23180	3.8	20
39	Highly regenerable mussel-inspired Fe□□@polydopamine-Ag core-shell microspheres as catalyst and adsorbent for methylene blue removal. *ACS Applied Materials & Interfaces*, **2014**, 6, 8845-52	9.5	329
38	NiO Nanofibers as a Candidate for a Nanophotocathode. *Nanomaterials*, **2014**, 4, 256-266	5.4	44
37	Electrodeposition of Mesoporous Co3O4Nanosheets on Carbon Foam for High Performance Supercapacitors. *Journal of Nanomaterials*, **2014**, 2014, 1-5	3.2	4
36	Porous single-crystalline CdS nanosheets as efficient visible light catalysts for aerobic oxidative coupling of amines to imines. *RSC Advances*, **2013**, 3, 22944	3.7	52
35	Selective C4□ bond cleavage/C□ bond formation of polyfluoroarenes with phenols and benzyl alcohols. *Journal of Fluorine Chemistry*, **2013**, 156, 51-60	2.1	19
34	On the Synthesis of Au Nanoparticles Using EDTA as a Reducing Agent. *Journal of Physical Chemistry C*, **2013**, 117, 20958-20966	3.8	27
33	Adsorbed emulsion droplets: capping agents for in situ heterogeneous engineering of particle surfaces. *Chemical Communications*, **2013**, 49, 11563-5	5.8	12

32	Janus-like Pickering emulsions and their controllable coalescence. *Chemical Communications*, **2013**, 49, 10871-3	5.8	33
31	Electrostatic repulsion-controlled formation of polydopamine-gold Janus particles. *Langmuir*, **2012**, 28, 13060-5	4	51
30	Rapid seeded growth of monodisperse, quasi-spherical, citrate-stabilized gold nanoparticles via H2O2 reduction. *Langmuir*, **2012**, 28, 13720-6	4	99
29	Interfacial Basicity-Guided Formation of Polydopamine Hollow Capsules in Pristine O/W Emulsions Toward Understanding of Emulsion Template Roles. *Chemistry of Materials*, **2011**, 23, 5105-5110	9.6	77
28	Bi2WO6 with significantly enhanced photocatalytic activities by nitrogen doping. *Materials Chemistry and Physics*, **2010**, 120, 155-159	4.4	76
27	Molecular Mimetic Self-Assembly of Colloidal Particles. *Advanced Functional Materials*, **2010**, 20, 1053-1074	7.5	120
26	Bi2O3 hierarchical nanostructures: controllable synthesis, growth mechanism, and their application in photocatalysis. *Chemistry - A European Journal*, **2009**, 15, 1776-82	4.8	370
25	New Bi2WO6 Nanocages with High Visible-Light-Driven Photocatalytic Activities Prepared in Refluxing EG. *Crystal Growth and Design*, **2009**, 9, 991-996	3.5	191
24	Efficient Methylene Blue Removal over Hydrothermally Synthesized Starlike BiVO4. *Industrial & Engineering Chemistry Research*, **2009**, 48, 1735-1739	3.9	111
23	Template-Free Fabrication of CdMoO4 Hollow Spheres and Their Morphology-Dependent Photocatalytic Property. *Crystal Growth and Design*, **2008**, 8, 3595-3601	3.5	56
22	Bi5FeTi3O15 Hierarchical Microflowers: Hydrothermal Synthesis, Growth Mechanism, and Associated Visible-Light-Driven Photocatalysis. *Journal of Physical Chemistry C*, **2008**, 112, 17835-17843	3.8	77
21	A Growth Model of Single Crystalline Hollow Spheres: Oriented Attachment of Cu2O Nanoparticles to the Single Crystalline Shell Wall. *Crystal Growth and Design*, **2008**, 8, 3486-3489	3.5	40
20	Controllable Synthesis of Three-Dimensional Well-Defined BiVO4 Mesocrystals via a Facile Additive-Free Aqueous Strategy. *Crystal Growth and Design*, **2008**, 8, 728-733	3.5	105
19	Monodisperse, Mesoporous ZnxCd1S Nanoparticles as Stable Visible-Light-Driven Photocatalysts. *Journal of Physical Chemistry C*, **2008**, 112, 16754-16758	3.8	101
18	A micro-interface route to CuS superstructure composed of intersectional nanoplates. *Journal of Crystal Growth*, **2008**, 310, 2640-2643	1.6	25
17	Fabrication of flower-like Bi2WO6 superstructures as high performance visible-light driven photocatalysts. *Journal of Materials Chemistry*, **2007**, 17, 2526		412
16	Hierarchical-Oriented Attachment: From One-Dimensional Cu(OH)2 Nanowires to Two-Dimensional CuO Nanoleaves. *Crystal Growth and Design*, **2007**, 7, 2720-2724	3.5	113
15	Template synthesis of multishelled Cu2O hollow spheres with a single-crystalline shell wall. *Angewandte Chemie - International Edition*, **2007**, 46, 1489-92	16.4	445

14	Template Synthesis of Multishelled Cu2O Hollow Spheres with a Single-Crystalline Shell Wall. *Angewandte Chemie*, **2007**, 119, 1511-1514	3.6	62
13	Bi2WO6 nano- and microstructures: shape control and associated visible-light-driven photocatalytic activities. *Small*, **2007**, 3, 1618-25	11	525
12	Single-Crystalline BiVO4 Microtubes with Square Cross-Sections: Microstructure, Growth Mechanism, and Photocatalytic Property. *Journal of Physical Chemistry C*, **2007**, 111, 13659-13664	3.8	232
11	Fabrication of ordered SnO2 nanotube arrays via a template route. *Materials Chemistry and Physics*, **2006**, 99, 127-130	4.4	60
10	Sonochemical synthesis of crystalline CuS nanoplates via an in situ template route. *Materials Letters* , **2006**, 60, 2203-2206	3.3	78
9	Synthesis of octahedral CuS nanocages via a solid□quid reaction. *Nanotechnology*, **2006**, 17, 3649-3654	3.4	84
8	Shape evolution and size-controllable synthesis of Cu2O octahedra and their morphology-dependent photocatalytic properties. *Journal of Physical Chemistry B*, **2006**, 110, 13829-34	3.4	489
7	Controllable, Surfactant-Free Growth of 2D, Scroll-Like Tellurium Nanocrystals via a Modified Polyol Process. *Crystal Growth and Design*, **2006**, 6, 2804-2808	3.5	20
6	Oriented Attachment of Crystalline CuS Nanorods. *Chemistry Letters*, **2006**, 35, 264-265	1.7	12
5	A sonochemical route to visible-light-driven high-activity BiVO4 photocatalyst. *Journal of Molecular Catalysis A*, **2006**, 252, 120-124		309
4	Ultrasonic-induced growth of crystalline tellurium nanorods and related branched structures. *Journal of Crystal Growth*, **2006**, 295, 69-74	1.6	11
3	A facile strategy to porous materials: Coordination-assisted heterogeneous dissolution route to the spherical Cu2O single crystallites with hierarchical pores. *Microporous and Mesoporous Materials*, **2006**, 95, 321-328	5.3	24
2	Controlled synthesis of trigonal selenium nanowires via a facile solution route. *Applied Physics A: Materials Science and Processing*, **2006**, 83, 281-284	2.6	14
1	Interfacial solar evaporation driven lead removal from a contaminated soil. *EcoMat*,e12140	9.4	6