Xuan Wu

List of Publications by Year
in descending order

35 papers	3,972 citations	218677 26 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	2438 citing authors

#	Article	IF	Citations
1	A flexible photothermal cotton-CuS nanocage-agarose aerogel towards portable solar steam generation. Nano Energy, 2019, 56, 708-715.	16.0	349
2	Graphene and Rice-Straw-Fiber-Based 3D Photothermal Aerogels for Highly Efficient Solar Evaporation. ACS Applied Materials & Interfaces, 2020, 12, 15279-15287.	8.0	284
3	Photothermal materials: A key platform enabling highly efficient water evaporation driven by solar energy. Materials Today Energy, 2019, 12, 277-296.	4.7	250
4	Same materials, bigger output: A reversibly transformable 2Dâ€"3D photothermal evaporator for highly efficient solar steam generation. Nano Energy, 2021, 79, 105477.	16.0	228
5	Dualâ€Zone Photothermal Evaporator for Antisalt Accumulation and Highly Efficient Solar Steam Generation. Advanced Functional Materials, 2021, 31, 2102618.	14.9	226
6	Allâ€Cold Evaporation under One Sun with Zero Energy Loss by Using a Heatsink Inspired Solar Evaporator. Advanced Science, 2021, 8, 2002501.	11.2	225
7	Reversing heat conduction loss: Extracting energy from bulk water to enhance solar steam generation. Nano Energy, 2020, 78, 105269.	16.0	215
8	Nanoporous Singleâ€Crystalâ€Like Cd_{<i>x</i>}Zn_{1âˆ'<i>x</i>}S Nanosheets Fabricated by the Cationâ€Exchange Reaction of Inorganicâ€"Organic Hybrid ZnSâ€"Amine with Cadmium Ions. Angewandte Chemie - International Edition, 2012, 51, 897-900.	13.8	212
9	A Plantâ€Transpirationâ€Processâ€Inspired Strategy for Highly Efficient Solar Evaporation. Advanced Sustainable Systems, 2017, 1, 1700046.	5.3	208
10	Stackable nickelâ€"cobalt@polydopamine nanosheet based photothermal sponges for highly efficient solar steam generation. Journal of Materials Chemistry A, 2020, 8, 11665-11673.	10.3	184
11	Boosting solar steam generation by structure enhanced energy management. Science Bulletin, 2020, 65, 1380-1388.	9.0	184
12	A photothermal reservoir for highly efficient solar steam generation without bulk water. Science Bulletin, 2019, 64, 1625-1633.	9.0	178
13	Enhancing solar steam generation using a highly thermally conductive evaporator support. Science Bulletin, 2021, 66, 2479-2488.	9.0	159
14	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.	10.3	153
15	A Hollow and Compressible 3D Photothermal Evaporator for Highly Efficient Solar Steam Generation without Energy Loss. Solar Rrl, 2021, 5, 2100053.	5.8	127
16	More from less: improving solar steam generation by selectively removing a portion of evaporation surface. Science Bulletin, 2022, 67, 1572-1580.	9.0	122
17	Towards sustainable saline agriculture: Interfacial solar evaporation for simultaneous seawater desalination and saline soil remediation. Water Research, 2022, 212, 118099.	11.3	110
18	Synthesis of Hollow Cd_{<i>x</i>}Zn_{1âˆ'<i>x</i>}Se Nanoframes through the Selective Cation Exchange of Inorganicâ€"Organic Hybrid ZnSeâ€"Amine Nanoflakes with Cadmium Ions. Angewandte Chemie - International Edition, 2012, 51, 3211-3215.	13.8	109

#	Article	IF	Citations
19	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.	10.3	65
20	Hierarchical CuO Colloidosomes and Their Structure Enhanced Photothermal Catalytic Activity. Journal of Physical Chemistry C, 2016, 120, 12666-12672.	3.1	60
21	Compositionâ€Tunable Ptâ€"Co Alloy Nanoparticle Networks: Facile Roomâ€Temperature Synthesis and Supportless Electrocatalytic Applications. ChemPhysChem, 2012, 13, 2601-2609.	2.1	42
22	A cobalt oxide@polydopamine-reduced graphene oxide-based 3D photothermal evaporator for highly efficient solar steam generation. Tungsten, 2020, 2, 423-432.	4.8	38
23	Interfacial solar evaporation driven lead removal from a contaminated soil. EcoMat, 2021, 3, e12140.	11.9	34
24	A biomimetic interfacial solar evaporator for heavy metal soil remediation. Chemical Engineering Journal, 2022, 435, 134793.	12.7	31
25	Converting 2D inorganicâ€"organic ZnSeâ€"DETA hybrid nanosheets into 3D hierarchical nanosheet-based ZnSe microspheres with enhanced visible-light-driven photocatalytic performances. Nanoscale, 2015, 7, 9752-9759.	5.6	27
26	Ultra-fast Hygrometer based on U-shaped Optical Microfiber with Nanoporous Polyelectrolyte Coating. Scientific Reports, 2017, 7, 7943.	3.3	27
27	Conversion of CuO Nanoplates into Porous Hybrid Cu₂O/Polypyrrole Nanoflakes through a Pyrroleâ€Induced Reductive Transformation Reaction. Chemistry - an Asian Journal, 2013, 8, 1120-1127.	3.3	23
28	Optical hygrometer using light-sheet skew-ray probed multimode fiber with polyelectrolyte coating. Sensors and Actuators B: Chemical, 2019, 296, 126685.	7.8	9
29	Boosting extraction of Pb in contaminated soil via interfacial solar evaporation of multifunctional sponge. Green Energy and Environment, 2023, 8, 1459-1468.	8.7	8
30	Harvesting, sensing and regulating light based on photo-thermal effect of Cu@CuO mesh. Green Energy and Environment, 2017, 2, 387-392.	8.7	6
31	Light-Sheet Skew-Ray Enhanced Pump-Absorption for Sensing. Journal of Lightwave Technology, 2019, 37, 2140-2146.	4.6	5
32	Photodetector based on Vernier-Enhanced Fabry-Perot Interferometers with a Photo-Thermal Coating. Scientific Reports, 2017, 7, 41895.	3.3	4
33	Light-Sheet Skew Ray-Enhanced Localized Surface Plasmon Resonance-Based Chemical Sensing. ACS Sensors, 2020, 5, 127-132.	7.8	3
34	Titelbild: Nanoporous Single-Crystal-Like CdxZn1âˆ'xS Nanosheets Fabricated by the Cation-Exchange Reaction of Inorganic-Organic Hybrid ZnS-Amine with Cadmium Ions (Angew. Chem. 4/2012). Angewandte Chemie, 2012, 124, 849-849.	2.0	0
35	Recent Progress in Advanced Humidity Sensors. Journal of Physics: Conference Series, 2018, 1065, 252008.	0.4	0