Guohua Liu

List of Publications by Citations

56 papers	1,641 citations	20 h-index	40 g-index
64 ext. papers	2,002 ext. citations	8 avg, IF	5.29 L-index

#	Paper	IF	Citations
56	Solar water evaporation by black photothermal sheets. *Nano Energy*, **2017**, 41, 269-284	17.1	283
55	Engineering TiO2 nanomaterials for CO2 conversion/solar fuels. *Solar Energy Materials and Solar Cells*, **2012**, 105, 53-68	6.4	165
54	Progress on free-standing and flow-through TiO2 nanotube membranes. *Solar Energy Materials and Solar Cells*, **2012**, 98, 24-38	6.4	119
53	Electrochemical engineering of hollow nanoarchitectures: pulse/step anodization (Si, Al, Ti) and their applications. *Chemical Society Reviews*, **2014**, 43, 1476-500	58.5	94
52	Pool boiling heat transfer of ultra-light copper foam with open cells. *International Journal of Multiphase Flow*, **2008**, 34, 1008-1022	3.6	93
51	Recent advance on engineering titanium dioxide nanotubes for photochemical and photoelectrochemical water splitting. *Nano Energy*, **2016**, 30, 728-744	17.1	83
50	Surface wettability of TiO2 nanotube arrays prepared by electrochemical anodization. *Applied Surface Science*, **2016**, 388, 313-320	6.7	72
49	Solar evaporation for simultaneous steam and power generation. *Journal of Materials Chemistry A*, **2020**, 8, 513-531	13	65
48	Seed bubbles stabilize flow and heat transfer in parallel microchannels. *International Journal of Multiphase Flow*, **2009**, 35, 773-790	3.6	58
47	Plasmon-dominated photoelectrodes for solar water splitting. *Journal of Materials Chemistry A*, **2017**, 5, 4233-4253	13	49
46	Photoconductive, free-standing crystallized TiO2 nanotube membranes. *Electrochimica Acta*, **2013**, 93, 80-86	6.7	47
45	Small diameter TiO2 nanotubes with enhanced photoresponsivity. *Electrochemistry Communications*, **2013**, 28, 107-110	5.1	44
44	Blue energy harvesting on nanostructured carbon materials. *Journal of Materials Chemistry A*, **2018**, 6, 18357-18377	13	43
43	Charge Transport in Two-Photon Semiconducting Structures for Solar Fuels. *ChemSusChem*, **2016**, 9, 2878-2904	7.5	33
42	An air-cushion triboelectric nanogenerator integrated with stretchable electrode for human-motion energy harvesting and monitoring. *Nano Energy*, **2018**, 53, 108-115	17.1	31
41	A voltage-dependent investigation on detachment process for free-standing crystalline TiO2 nanotube membranes. *Journal of Materials Science*, **2011**, 46, 7931-7935	4.3	29
40	Active control of flow and heat transfer in silicon microchannels. *Journal of Micromechanics and Microengineering*, **2010**, 20, 045006	2	27

39	Graphene-bridged WO3/MoS2 Z-scheme photocatalyst for enhanced photodegradation under visible light irradiation. *Materials Chemistry and Physics*, **2020**, 246, 122827	4.4	25
38	Black silicon with order-disordered structures for enhanced light trapping and photothermic conversion. *Nano Energy*, **2019**, 65, 103992	17.1	21
37	PbS Quantum Dots Sensitized TiO2Nanotubes for Photocurrent Enhancement. *Journal of the Electrochemical Society*, **2015**, 162, E251-E257	3.9	20
36	Electrochemical reduction and capacitance of hybrid titanium dioxides□anotube arrays and □anograss□*Electrochimica Acta*, **2016**, 210, 367-374	6.7	20
35	Solar evaporation of a hanging plasmonic droplet. *Solar Energy*, **2018**, 170, 184-191	6.8	17
34	Electrochemically Reduced Graphene Oxide on Well-Aligned Titanium Dioxide Nanotube Arrays for Betavoltaic Enhancement. *ACS Applied Materials & Interfaces*, **2016**, 8, 24638-44	9.5	16
33	Fast charge separation and photocurrent enhancement on black TiO2 nanotubes co-sensitized with Au nanoparticles and PbS quantum dots. *Electrochimica Acta*, **2018**, 277, 244-254	6.7	16
32	Enhanced visible light catalytic activity of MoS2/TiO2/Ti photocathode by hybrid-junction. *Applied Catalysis B: Environmental*, **2018**, 237, 416-423	21.8	16
31	The critical nanofluid concentration as the crossover between changed and unchanged solar-driven droplet evaporation rates. *Nano Energy*, **2019**, 57, 791-803	17.1	16
30	Seed bubbles trigger boiling heat transfer in silicon microchannels. *Microfluidics and Nanofluidics*, **2010**, 8, 341-359	2.8	14
29	Multi-channel effect of condensation flow in a micro triple-channel condenser. *International Journal of Multiphase Flow*, **2008**, 34, 1175-1184	3.6	14
28	Plasmon heating of one-dimensional gold nanoparticle chains. *Solar Energy*, **2018**, 173, 665-674	6.8	12
27	Solar water sterilization enabled by photothermal nanomaterials. *Nano Energy*, **2021**, 87, 106158	17.1	11
26	Solar steam generation enabled by bubbly flow nanofluids. *Solar Energy Materials and Solar Cells*, **2020**, 206, 110292	6.4	9
25	Transferable, conductive TiO2 nanotube membranes for optoelectronics. *Applied Surface Science*, **2014**, 311, 529-533	6.7	8
24	Seed Bubble Guided Heat Transfer in a Single Microchannel. *Heat Transfer Engineering*, **2011**, 32, 1031-1036	1.7	7
23	Betavoltaic effect in titanium dioxide nanotube arrays under build-in potential difference. *Journal of Power Sources*, **2015**, 282, 529-533	8.9	6
22	Enhanced visible light photochemical activity and stability of MoS2/Cu2O nanocomposites by tunable heterojunction. *Materials Today Communications*, **2020**, 23, 100933	2.5	5

21	A betavoltaic microbattery using zinc oxide nanowires under build in potential difference **2016**,		5
20	Concept design of supercritical CO2 cycle driven by pressurized fluidized bed combustion (PFBC) boiler. *Applied Thermal Engineering*, **2020**, 166, 114756	5.8	5
19	Fabrication and formation mechanisms of ultra-thick porous anodic oxides film with controllable morphology on type-304 stainless steel. *Applied Surface Science*, **2020**, 505, 144497	6.7	5
18	Solar vapor generation using bubbly flow nanofluids with collaborative light-harvesting nanoparticles. *Solar Energy*, **2020**, 207, 1214-1221	6.8	5
17	Study of plasmonics induced optical absorption enhancement of Au embedded in titanium dioxide nanohole arrays. *Optical Materials Express*, **2017**, 7, 2871	2.6	4
16	Advances in engineering perovskite oxides for photochemical and photoelectrochemical water splitting. *Applied Physics Reviews*, **2021**, 8, 021320	17.3	4
15	Phase separation evaporator using pin-fin-porous wall microchannels: Comprehensive upgrading of thermal-hydraulic operating performance. *International Journal of Heat and Mass Transfer*, **2021**, 164, 120460	4.9	4
14	Dopamine-Mediated Bacterial Cellulose/Hexagonal Boron Nitride Composite Films with Enhanced Thermal and Mechanical Performance. *Industrial & Engineering Chemistry Research*, **2022**, 61, 4601-4611	3.9	3
13	Multiscale Characteristic in Symmetric/Asymmetric Solar-Driven Nanofluid Droplet Evaporation. *Langmuir*, **2020**, 36, 1680-1690	4	2
12	Study of electrical field distribution and growth of gradient-arrayed TiO2 nanotubes by electrochemical anodization **2013**,		2
11	Effect of Running Parameters on Flow Boiling Instabilities in Microchannels. *Journal of Nanoscience and Nanotechnology*, **2015**, 15, 2976-83	1.3	2
10	Effect of channel surface wettability and temperature gradients on the boiling flow pattern in a single microchannel. *Journal of Micromechanics and Microengineering*, **2009**, 19, 055012	2	2
9	Enhanced photoelectric response of plasmon-active ZnO nanorods by spatial modulation of dielectric environment. *Journal of Alloys and Compounds*, **2019**, 776, 149-155	5.7	2
8	Nanoscale thermoplasmonic welding. *IScience*, **2022**, 104422	6.1	2
7	Photoconductivity of Au-coated TiO2 nanotube arrays **2014**,		1
6	Effects of Polyacrylamide and Particle Size on Combustion of Al/H2O-Based Propellants. *Journal of Chemical Engineering of Japan*, **2014**, 47, 730-736	0.8	1
5	Solar thermal evaporation using bubbly nanofluids with recyclable magnetic particles. *Materials Today Communications*, **2021**, 26, 102084	2.5	1
4	All-in-one photosynthetic assemblies for solar fuels. *Materials Today Energy*, **2018**, 10, 368-379	7	1

3	Solar-driven interfacial evaporation of a hanging liquid marble. *Solar Energy Materials and Solar Cells*, **2022**, 234, 111430	6.4	0
2	Reducing solvent evaporation rates for the detachment of anodic TiO2 nanotubular membranes. *Materials Research Society Symposia Proceedings*, **2012**, 1442, 1		
1	In Situ Oil Separation and Collection from Water under Surface Wave Condition. *Langmuir*, **2021**, 37, 6257-6267	4	