Hemin Zhang

List of Publications by Year
in descending order

34 papers	1,680 citations	279701 23 h-index	377752 34 g-index
34 all docs	34 docs citations	34 times ranked	2449 citing authors

#	Article	IF	Citations
1	Photocatalytic degradation of organic pollutants with Ag decorated free-standing TiO₂nanotube arrays and interface electrochemical response. Journal of Materials Chemistry, 2011, 21, 475-480.	6.7	168
2	Defect-Mediated Formation of Ag Cluster-Doped TiO₂ Nanoparticles for Efficient Photodegradation of Pentachlorophenol. Langmuir, 2012, 28, 3938-3944.	1.6	152
3	Gradient tantalum-doped hematite homojunction photoanode improves both photocurrents and turn-on voltage for solar water splitting. Nature Communications, 2020, 11, 4622.	5.8	133
4	The formation of onion-like carbon-encapsulated cobalt carbide core/shell nanoparticles by the laser ablation of metallic cobalt in acetone. Carbon, 2013, 55, 108-115.	5.4	119
5	A Handheld Inertial Pedestrian Navigation System With Accurate Step Modes and Device Poses Recognition. IEEE Sensors Journal, 2015, 15, 1421-1429.	2.4	107
6	A High-Sensitivity Micromechanical Electrometer Based on Mode Localization of Two Degree-of-Freedom Weakly Coupled Resonators. Journal of Microelectromechanical Systems, 2016, 25, 937-946.	1.7	96
7	Three Birds, Oneâ€Stone Strategy for Hybrid Microwave Synthesis of Ta and Sn Codoped Fe₂O₃@FeTaO₄ Nanorods for Photoâ€Electrochemical Water Oxidation. Advanced Functional Materials, 2019, 29, 1805737.	7.8	79
8	General Strategy for Doping Impurities (Ge, Si, Mn, Sn, Ti) in Hematite Nanocrystals. Journal of Physical Chemistry C, 2012, 116, 4986-4992.	1.5	75
9	A general strategy toward transition metal carbide/carbon core/shell nanospheres and their application for supercapacitor electrode. Carbon, 2016, 100, 590-599.	5.4	75
10	Single Phase Mn₃O₄ Nanoparticles Obtained by Pulsed Laser Ablation in Liquid and Their Application in Rapid Removal of Trace Pentachlorophenol. Journal of Physical Chemistry C, 2010, 114, 12524-12528.	1.5	65
11	A Few Atomic FeNbO₄ Overlayers on Hematite Nanorods: Microwave-Induced High Temperature Phase for Efficient Photoelectrochemical Water Splitting. ACS Catalysis, 2019, 9, 1289-1297.	5.5	58
12	Activating the surface and bulk of hematite photoanodes to improve solar water splitting. Chemical Science, 2019, 10, 10436-10444.	3.7	57
13	Zinc stannate nanocubes and nanourchins with high photocatalytic activity for methyl orange and 2,5-DCP degradation. Journal of Materials Chemistry, 2012, 22, 17210.	6.7	54
14	Engineering Highly Ordered Iron Titanate Nanotube Array Photoanodes for Enhanced Solar Water Splitting Activity. Advanced Functional Materials, 2017, 27, 1702428.	7.8	52
15	Reactive and photocatalytic degradation of various water contaminants by laser ablation-derived SnOx nanoparticles in liquid. Journal of Materials Chemistry, 2011, 21, 18242.	6.7	50
16	Ionic organic cage-encapsulating phase-transferable metal clusters. Chemical Science, 2019, 10, 1450-1456.	3.7	42
17	Accelerating Crystallization of Open Organic Materials by Poly(ionic liquid)s. Angewandte Chemie - International Edition, 2020, 59, 22109-22116.	7.2	37
18	Silicon-doped hematite nanosheets with superlattice structure. Chemical Communications, 2011, 47, 8040.	2.2	34

#	Article	IF	Citations
19	Organization of Mn3O4nanoparticles into Î³-MnOOHnanowiresvia hydrothermal treatment of the colloids induced by laser ablation in water. CrystEngComm, 2011, 13, 1063-1066.	1.3	31
20	Coreâ€“shell TaxO@Ta2O5 structured nanoparticles: laser ablation synthesis in liquid, structure and photocatalytic property. CrystEngComm, 2012, 14, 3236.	1.3	27
21	Hybrid Microwave Annealing Synthesizes Highly Crystalline Nanostructures for (Photo)electrocatalytic Water Splitting. Accounts of Chemical Research, 2019, 52, 3132-3142.	7.6	27
22	Photoelectrochemical Nitrate Reduction to Ammonia on Ordered Silicon Nanowire Array Photocathodes. Angewandte Chemie - International Edition, 2022, 61, .	7.2	25
23	Precisely-controlled, a few layers of iron titanate inverse opal structure for enhanced photoelectrochemical water splitting. Nano Energy, 2019, 62, 20-29.	8.2	24
24	Synthesis of Mn-doped Î±-Ni(OH)2 nanosheets assisted by liquid-phase laser ablation and their electrochemical properties. Physical Chemistry Chemical Physics, 2013, 15, 5684.	1.3	23
25	Size-Controlled AgI/Ag Heteronanowires in Highly Ordered Alumina Membranes: Superionic Phase Stabilization and Conductivity. Nano Letters, 2015, 15, 5161-5167.	4.5	22
26	Hydrothermal treatment of colloids induced via liquid-phase laser ablation: a new approach for hierarchical titanate nanostructures with enhanced photodegradation performance. CrystEngComm, 2011, 13, 4676.	1.3	12
27	An in situ fluorine and ex situ titanium two-step co-doping strategy for efficient solar water splitting by hematite photoanodes. Nanoscale Advances, 2022, 4, 1659-1667.	2.2	9
28	Monodispersed carbon nanodots spontaneously separated from combustion soot with excitation-independent photoluminescence. RSC Advances, 2016, 6, 8456-8460.	1.7	8
29	Water Splitting: Engineering Highly Ordered Iron Titanate Nanotube Array Photoanodes for Enhanced Solar Water Splitting Activity (Adv. Funct. Mater. 35/2017). Advanced Functional Materials, 2017, 27, .	7.8	7
30	Study on growth of coarse grains of diamond with high quality under HPHT. Science Bulletin, 2009, 54, 163-167.	1.7	6
31	HPHT Synthesis of Micron Grade Boron-Doped Diamond Single Crystal in Fe-Ni-C-B Systems. Chinese Physics Letters, 2008, 25, 2667-2669.	1.3	2
32	Photoelectrochemical Nitrate Reduction to Ammonia on Ordered Silicon Nanowire Array Photocathodes. Angewandte Chemie, 2022, 134, .	1.6	2
33	HPHT Synthesis of Different Shape Coarse-Grain Diamond Single Crystals. Chinese Physics Letters, 2009, 26, 048102.	1.3	1
34	Healing Ion-Implanted Semiconductors by Hybrid Microwave Annealing: Activation of Nitrogen-Implanted TiO₂. Journal of Physical Chemistry Letters, 2022, 13, 3878-3885.	2.1	1