Jian Cao

List of Publications by Year in descending order

43 papers	587 citations	623734 14 h-index	642732 23 g-index
43 all docs	43 docs citations	43 times ranked	766 citing authors

#	Article	IF	Citations
1	Fabrication and optical properties of Ce-doped ZnO nanorods. Journal of Applied Physics, 2010, 107, .	2.5	89
2	One-pot synthesis of ZnS nanowires/Cu₇S₄ nanoparticles/reduced graphene oxide nanocomposites for supercapacitor and photocatalysis applications. Dalton Transactions, 2019, 48, 2442-2454.	3.3	46
3	2D MOF-derived porous NiCoSe nanosheet arrays on Ni foam for overall water splitting. CrystEngComm, 2021, 23, 69-81.	2.6	37
4	Highly enhanced photocatalytic properties of ZnS nanowiresâ€“graphene nanocomposites. RSC Advances, 2014, 4, 30798-30806.	3.6	36
5	The direct Z-scheme CdxZn1-xS nanorods-Fe2O3 quantum dots heterojunction/reduced graphene oxide nanocomposites for photocatalytic degradation and photocatalytic hydrogen evolution. Applied Surface Science, 2021, 570, 151085.	6.1	35
6	Effects of (P, N) dual acceptor doping on band gap and p-type conduction behavior of ZnO films. Journal of Applied Physics, 2013, 113, .	2.5	32
7	ZnSe nanoparticles of different sizes: Optical and photocatalytic properties. Materials Science in Semiconductor Processing, 2014, 27, 865-872.	4.0	24
8	Ultrasound-assisted synthesis of hyper-dispersed type-II tubular Fe3O4@SiO2@ZnO/ZnS core/shell heterostructure for improved visible-light photocatalysis. Journal of Alloys and Compounds, 2020, 838, 155689.	5.5	24
9	The effects of doping and shell thickness on the optical and magnetic properties of Mn/Cu/Fe-doped and Co-doped ZnS nanowires/ZnO quantum dots/SiO2 heterostructures. Journal of Applied Physics, 2012, 112, .	2.5	21
10	Rapid and efficient isolation and detection of circulating tumor cells based on ZnS:Mn2+ quantum dots and magnetic nanocomposites. Talanta, 2019, 202, 230-236.	5.5	20
11	Study on growth mechanism and optical properties of ZnSe nanoparticles. Journal of Materials Science: Materials in Electronics, 2015, 26, 3206-3214.	2.2	18
12	Tailoring Blue-Green Double Emissions in Carbon Quantum Dots via Co-Doping Engineering by Competition Mechanism between Chlorine-Related States and Conjugated Ï€-Domains. Nanomaterials, 2018, 8, 635.	4.1	16
13	Effect of annealing temperature on the energy transfer in Eu-doped ZnO nanoparticles by chemical precipitation method. Journal of Materials Science: Materials in Electronics, 2013, 24, 4542-4548.	2.2	15
14	Fabrication and photoluminescence of ZnS:Mn2+ nanowires/ZnO quantum dots/SiO2 heterostructure. Journal of Applied Physics, 2010, 108, 044304.	2.5	14
15	Study on the synthesis and excitation-powerdependent photoluminescence spectrum of ZnSe nanoparticles. Applied Physics A: Materials Science and Processing, 2015, 118, 563-568.	2.3	14
16	Fabrication of P(NIPAAm-co-AAm) coated optical-magnetic quantum dots/silica core-shell nanocomposites for temperature triggered drug release, bioimaging and in vivo tumor inhibition. Journal of Materials Science: Materials in Medicine, 2018, 29, 169.	3.6	12
17	Effects of surface modification and SiO2 thickness on the optical and superparamagnetic properties of the water-soluble ZnS:Mn2+ nanowires/Fe3O4 quantum dots/SiO2 heterostructures. CrystEngComm, 2013, 15, 6971.	2.6	11
18	Fabrication of ZnO nanorods/Fe3O4 quantum dots nanocomposites and their solar light photocatalytic performance. Journal of Materials Science: Materials in Electronics, 2015, 26, 7415-7420.	2.2	10

#	Article	IF	Citations
19	Effects of different sintering atmosphere on the structure and properties of Cu-doped ZnO powders prepared by solâ€“gel method. Journal of Materials Science: Materials in Electronics, 2012, 23, 832-836.	2.2	9
20	Influence of annealing temperature on structural, optical and magnetic properties of Zn0.97Cu0.01V0.02O nanoparticles. Journal of Materials Science: Materials in Electronics, 2013, 24, 317-323.	2.2	9
21	One-step hydrothermal synthesis of shape-controlled ZnSâ€“graphene oxide nanocomposites. Journal of Materials Science: Materials in Electronics, 2015, 26, 646-650.	2.2	8
22	Biocompatible ZnS:Mn2+ quantum dots/SiO2 nanocomposites as fluorescent probe for imaging HeLa cell. Journal of Materials Science: Materials in Medicine, 2015, 26, 236.	3.6	8
23	Facile one-step hydrothermal method to fabricate Fe3O4 quantum dotsâ€“graphene nanocomposites for extraction of dye from aqueous solution. Journal of Materials Science: Materials in Electronics, 2017, 28, 2267-2271.	2.2	8
24	Regulation of the morphology and electrochemical properties of Ni_{0.85}Se via Fe doping for overall water splitting and supercapacitors. CrystEngComm, 2022, 24, 1704-1718.	2.6	8
25	Fabrication and adsorption properties of multiwall carbon nanotubes-coated/filled by various Fe3O4 nanoparticles. Journal of Materials Science: Materials in Electronics, 2019, 30, 18802-18810.	2.2	7
26	Rapid synthesis and photoluminescence properties of Eu-doped ZnO nanoneedles via facile hydrothermal method. Chemical Research in Chinese Universities, 2014, 30, 538-542.	2.6	6
27	Advanced research into the growth mechanism and optical properties of wurtzite ZnSe quantum dots. Journal of Materials Science: Materials in Electronics, 2014, 25, 3639-3644.	2.2	5
28	Controllable synthesis, growth mechanism, structure and optical properties of ZnOâ€“SiO2 nanocomposites. Journal of Materials Science: Materials in Electronics, 2016, 27, 14-22.	2.2	5
29	Oxygen vacancy induced electron traps in tungsten doped Bi₂MoO₆ for enhanced photocatalytic performance. CrystEngComm, 2021, 23, 7270-7277.	2.6	5
30	Tailoring the d-band center by borophene subunits in chromic diboride toward the hydrogen evolution reaction. Inorganic Chemistry Frontiers, 2021, 8, 5130-5138.	6.0	5
31	Constructing 1D Boron Chains in the Structure of Transition Metal Monoborides for Hydrogen Evolution Reactions. Catalysts, 2021, 11, 1265.	3.5	5
32	Phase transition and corresponding influence on the yellow-orange Mn2+ emission of ZnS:Mn2+ quantum dots. Journal of Materials Science: Materials in Electronics, 2016, 27, 10504-10509.	2.2	4
33	Fabrication and optical properties of ZnS:Mn2+ quantum dots/SiO2 nanocomposites. Journal of Materials Science: Materials in Electronics, 2014, 25, 4512-4516.	2.2	3
34	Structure and optical properties of Zn0.99â^'xCdxMn0.01S quantum dots. Journal of Materials Science: Materials in Electronics, 2015, 26, 2205-2209.	2.2	3
35	Blocking the Formation of Zn2+/Dye Complexes in Dye-Sensitized Solar Cells by Inserting CdS Quantum Dots into Sandwich Layer. Russian Journal of Physical Chemistry A, 2018, 92, 1224-1228.	0.6	3
36	Fabrication, optical and magnetic properties of the Fe doped Zn0.99Mn0.01S nanowires. Journal of Materials Science: Materials in Electronics, 2013, 24, 1955-1960.	2.2	2

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37	Facile synthesis of magnetic-fluorescent and water-soluble ZnS:Mn2+(â€“SH)/Fe3O4(â€“SH)/SiO2 core/shell/shell nanocomposites with pure dopant emission. Journal of Materials Science: Materials in Electronics, 2015, 26, 9955-9961.	2.2	2
38	General strategy for embedding high quality Fe3O4 quantum dots and ZnS:Mn2+ quantum dots in a silica matrix. Journal of Materials Science: Materials in Electronics, 2018, 29, 876-880.	2.2	2
39	Influence of Mn2+ ions on optical and magnetic property of wurtzite Zn0.98â^'xFe0.01Cu0.01MnxS nanowires. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	2
40	The influence of ZnO loading amount on the photocatalytic performance of Fe₃O₄@SiO₂@ZnOâ€“Ag composites toward the degradation of organic pollutants and hydrogen evolution. New Journal of Chemistry, 2021, 45, 19283-19293.	2.8	2
41	Fabrication and optical property of ZnS:Mn2+ Nanowires/SiO2 Core/Shell Nanocomposites. Journal of Materials Science: Materials in Electronics, 2017, 28, 14293-14297.	2.2	1
42	Detection of DNA Hybridization Using ZnS:Mn2+ Nanowires/SiO2 Core/Shell Nanocomposites and Au Nanoparticles. Journal of Applied Spectroscopy, 2019, 86, 416-421.	0.7	1
43	Growth mechanism and room temperature ferromagnetism property of the Zn1â^'xCrxS nanobelts. Journal of Materials Science: Materials in Electronics, 2014, 25, 2574-2577.	2.2	0