Huaqiang Cao

List of Publications by Year in Descending Order

93 papers	6,283 citations	45 h-index	79 g-index
96 ext. papers	6,746 ext. citations	6.4 avg, IF	5.88 L-index

#	Paper	IF	Citations
93	Engineering VO-Ti ensemble to boost the activity of Ru towards water dissociation for catalytic hydrogen generation. *Applied Catalysis B: Environmental*, **2022**, 306, 121100	21.8	4
92	Atomic-bridge structure in B-Co-P dual-active sites on boron nitride nanosheets for catalytic hydrogen generation. *Applied Catalysis B: Environmental*, **2022**, 121495	21.8	2
91	LiMnO@rGO nanocomposites for high-performance lithium-ion battery cathodes. *Nanotechnology*, **2021**, 32, 015402	3.4	2
90	Advances and Prospects in Metal-Organic Frameworks as Key Nexus for Chemocatalytic Hydrogen Production. *Small*, **2021**, e2102201	11	1
89	Engineering Bimodal Oxygen Vacancies and Pt to Boost the Activity Toward Water Dissociation. *Small*, **2021**, e2105588	11	2
88	Thickness-dependent Young's modulus of polycrystalline □PbO nanosheets. *Nanotechnology*, **2020**, 31, 395712	3.4	0
87	Synthesis of Sub-nanometer Porous Carbon Film for Energy Storage. *Chemistry - an Asian Journal*, **2020**, 15, 2992-2995	4.5	
86	Unzipping of black phosphorus to form zigzag-phosphorene nanobelts. *Nature Communications*, **2020**, 11, 3917	17.4	21
85	Synthesis of two-dimensional porous aromatic frameworks via triple condensation reaction. *Materials Today Advances*, **2019**, 2, 100013	7.4	1
84	Efficient carbon-based catalyst derived from natural cattail fiber for hydrogen evolution reaction. *Journal of Solid State Chemistry*, **2019**, 274, 207-214	3.3	15
83	Synthesis and superior cathode performance of sandwiched LiMn2O4@rGO nanocomposites for lithium-ion batteries. *Materials Today Advances*, **2019**, 1, 100001	7.4	12
82	Local Plant-Derived Carbon Sheets as Sustainable Catalysts for Efficient Oxygen Reduction Reaction. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 2107-2115	8.3	20
81	Defect-rich (Co□oS2)x@Co9S8 nanosheets derived from monomolecular precursor pyrolysis with excellent catalytic activity for hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2018**, 6, 7977-7987	13	32
80	Pt nanoparticles decorated rose-like BiOCO configurations for efficient photocatalytic removal of water organic pollutants.. *RSC Advances*, **2018**, 8, 914-920	3.7	7
79	Functionalized polyimide separators enable high performance lithium sulfur batteries at elevated temperature. *Journal of Power Sources*, **2018**, 396, 542-550	8.9	29
78	Solvothermal synthesis of magnetic CoFe2O4/rGO nanocomposites for highly efficient dye removal in wastewater. *RSC Advances*, **2017**, 7, 4062-4069	3.7	46
77	3D dendritic-Fe2O3@C nanoparticles as an anode material for lithium ion batteries. *RSC Advances*, **2017**, 7, 18508-18511	3.7	7

76	Co-Co3O4@carbon core–shells derived from metal–organic framework nanocrystals as efficient hydrogen evolution catalysts. *Nano Research*, **2017**, 10, 3035-3048	10	76
75	Synthesis, Characterization, and Applications of Zero-Dimensional (0D) Nanostructures **2017**, 21-146		3
74	Synthesis, Characterization, and Application of One-Dimensional (1D) Nanostructures **2017**, 147-219		
73	Synthesis, Characterization, and Applications of Two-Dimensional (2D) Graphene-Related Nanostructures **2017**, 221-361		
72	Synthesis, Characterization, and Applications of Three-Dimensional (3D) Nanostructures **2017**, 363-520		2
71	Structural Evolution of Co-Based Metal Organic Frameworks in Pyrolysis for Synthesis of Core-Shells on Nanosheets: Co@CoOx@Carbon-rGO Composites for Enhanced Hydrogen Generation Activity. *ACS Applied Materials & Interfaces*, **2016**, 8, 15430-8	9.5	40
70	Magnetic catalysts as nanoactuators to achieve simultaneous momentum-transfer and continuous-flow hydrogen production. *Journal of Materials Chemistry A*, **2016**, 4, 4280-4287	13	30
69	One-step synthesis of SnO2-reduced graphene oxide (SOG) composites for efficient removal of organic dyes from wastewater. *RSC Advances*, **2016**, 6, 100636-100642	3.7	8
68	Space-confined creation of nanoframes in situ on reduced graphene oxide. *Small*, **2015**, 11, 1512-8	11	6
67	Anchoring superparamagnetic core–shells onto reduced graphene oxide: fabrication of Ni–carbon–rGO nanocomposite for effective adsorption and separation. *RSC Advances*, **2015**, 5, 10033-10039	3.7	10
66	Hydrothermal fabrication of MnCO3@rGO composite as an anode material for high-performance lithium ion batteries. *Inorganic Chemistry*, **2014**, 53, 9228-34	5.1	78
65	Graphene Covalently Modified by DNA G-Base. *Journal of Physical Chemistry C*, **2013**, 117, 3513-3519	3.8	10
64	Synthesis and Applications of Tungsten Oxide Hierarchical Nanostructures. *Crystal Growth and Design*, **2013**, 13, 759-769	3.5	64
63	Graphite/graphene oxide composite as high capacity and binder-free anode material for lithium ion batteries. *Journal of Power Sources*, **2013**, 241, 619-626	8.9	46
62	Synthesis of adenine-modified reduced graphene oxide nanosheets. *Inorganic Chemistry*, **2012**, 51, 2954-60	5.1	47
61	SnS2@reduced graphene oxide nanocomposites as anode materials with high capacity for rechargeable lithium ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 23963		87
60	SnO2–carbon–RGO heterogeneous electrode materials with enhanced anode performances in lithium ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 2851		61
59	Enhanced anode performances of polyaniline-TiO2-reduced graphene oxide nanocomposites for lithium ion batteries. *Inorganic Chemistry*, **2012**, 51, 9544-51	5.1	77

58	Synthesis and separation of dyes via Ni@reduced graphene oxide nanostructures. *Journal of Materials Chemistry*, **2012**, 22, 1876-1883		76
57	Synthesis and superior anode performance of TiO2@reduced graphene oxide nanocomposites for lithium ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 9759		121
56	Biomineralization Strategy to Mn2O3 Hierarchical Nanostructures. *Journal of Physical Chemistry C* , **2012**, 116, 21109-21115	3.8	33
55	Self-assembly into magnetic Co3O4 complex nanostructures as peroxidase. *Journal of Materials Chemistry*, **2012**, 22, 527-534		107
54	Synthesis and photocatalytic activity of single-crystalline hollow rh-In2O3 nanocrystals. *Inorganic Chemistry*, **2012**, 51, 6529-36	5.1	52
53	Ferromagnetic hematite@graphene nanocomposites for removal of rhodamine B dye molecules from water. *CrystEngComm*, **2012**, 14, 5140	3.3	40
52	Co3O4@graphene composites as anode materials for high-performance lithium ion batteries. *Inorganic Chemistry*, **2011**, 50, 1628-32	5.1	324
51	Improved performances of Ni(OH)2@reduced-graphene-oxide in Ni-MH and Li-ion batteries. *Chemical Communications*, **2011**, 47, 3159-61	5.8	113
50	Shape controlled synthesis of superhydrophobic zinc coordination polymers particles and their calcination to superhydrophobic ZnO. *Journal of Materials Chemistry*, **2011**, 21, 8633		31
49	Superparamagnetic Fe3O4 nanocrystals@graphene composites for energy storage devices. *Journal of Materials Chemistry*, **2011**, 21, 5069		316
48	Cu2O@reduced graphene oxide composite for removal of contaminants from water and supercapacitors. *Journal of Materials Chemistry*, **2011**, 21, 10645		183
47	The synthesis and photocatalytic activity of ZnSe microspheres. *Nanotechnology*, **2011**, 22, 015604	3.4	34
46	MoO3 nanowires as electrochemical pseudocapacitor materials. *Chemical Communications*, **2011**, 47, 10305-7	5.8	123
45	Designed synthesis of SnO2-polyaniline-reduced graphene oxide nanocomposites as an anode material for lithium-ion batteries. *Journal of Materials Chemistry*, **2011**, 21, 17654		110
44	Enhanced anode performances of the Fe3O4-carbon-rGO three dimensional composite in lithium ion batteries. *Chemical Communications*, **2011**, 47, 10374-6	5.8	172
43	ZnO@graphene composite with enhanced performance for the removal of dye from water. *Journal of Materials Chemistry*, **2011**, 21, 3346-3349		525
42	Mg(OH)2@reduced graphene oxide composite for removal of dyes from water. *Journal of Materials Chemistry*, **2011**, 21, 13765		119
41	The synthesis and fluorescence quenching properties of well soluble hybrid graphene material covalently functionalized with indolizine. *Nanotechnology*, **2011**, 22, 075202	3.4	20

40	Generation and photocatalytic activities of Bi@Bi2O3 microspheres. *Nano Research*, **2011**, 4, 470-482	10	170
39	Glucosan controlled biomineralization of SrCO3 complex nanostructures with superhydrophobicity and adsorption properties. *Journal of Materials Chemistry*, **2011**, 21, 8734		29
38	Generation and superhydrophobicity of complex PbSe crystalline nanodendrites. *CrystEngComm*, **2011**, 13, 5688	3.3	14
37	MgCO3□H2O and MgO complex nanostructures: controllable biomimetic fabrication and physical chemical properties. *Physical Chemistry Chemical Physics*, **2011**, 13, 5047-52	3.6	38
36	l-Serine-Assisted Synthesis of Superparamagnetic Fe3O4 Nanocubes for Lithuium Ion Batteries. *Journal of Physical Chemistry C*, **2011**, 115, 24688-24695	3.8	60
35	Hydroxyapatite Nanocrystals for Biomedical Applications. *Journal of Physical Chemistry C*, **2010**, 114, 18352-18357	3.8	92
34	Single-Crystalline Semiconductor In(OH)3 Nanocubes with Bifunctions: Superhydrophobicity and Photocatalytic Activity. *Crystal Growth and Design*, **2010**, 10, 597-601	3.5	38
33	The synthesis of superhydrophobic Bi(2)S(3) complex nanostructures. *Nanotechnology*, **2010**, 21, 145601	3.4	54
32	Mg(OH)2 Complex Nanostructures with Superhydrophobicity and Flame Retardant Effects. *Journal of Physical Chemistry C*, **2010**, 114, 17362-17368	3.8	74
31	Ag2Se complex nanostructures with photocatalytic activity and superhydrophobicity. *Nano Research*, **2010**, 3, 863-873	10	46
30	Bioinspired peony-like beta-Ni(OH)2 nanostructures with enhanced electrochemical activity and superhydrophobicity. *ChemPhysChem*, **2010**, 11, 489-94	3.2	43
29	Biomineralization and superhydrophobicity of BaCO3 complex nanostructures. *Inorganic Chemistry*, **2009**, 48, 10326-9	5.1	29
28	l-Lysine-Assisted Synthesis of ZrO2 Nanocrystals and Their Application in Photocatalysis. *Journal of Physical Chemistry C*, **2009**, 113, 18259-18263	3.8	66
27	Amino Acid-Assisted Hydrothermal Synthesis and Photocatalysis of SnO2 Nanocrystals. *Journal of Physical Chemistry C*, **2009**, 113, 17893-17898	3.8	225
26	Biomolecule-assisted synthesis of water-soluble silver nanoparticles and their biomedical applications. *Inorganic Chemistry*, **2008**, 47, 5882-8	5.1	108
25	l-Cysteine-Assisted Synthesis and Optical Properties of Ag2S Nanospheres. *Journal of Physical Chemistry C*, **2008**, 112, 3580-3584	3.8	130
24	Amino-acid-assisted synthesis and size-dependent magnetic behaviors of hematite nanocubes. *Applied Physics Letters*, **2008**, 92, 013110	3.4	39
23	Crystallization and Self-Assembly of Calcium Carbonate Architectures. *Crystal Growth and Design*, **2008**, 8, 4583-4588	3.5	40

22	Shape control of PbS nanocrystals using multiple surfactants. *Nanotechnology*, **2008**, 19, 305605	3.4	34
21	l-Cysteine-Assisted Self-Assembly of Complex PbS Structures. *Crystal Growth and Design*, **2008**, 8, 3935-3940	3.9	33
20	Catalytic chemiluminescence properties of boehmite nanococoons. *Applied Physics Letters*, **2007**, 90, 193105	3.4	12
19	Sol-gel template synthesis and photoluminescence of n- and p-type semiconductor oxide nanowires. *ChemPhysChem*, **2006**, 7, 497-501	3.2	47
18	Generation and growth mechanism of metal (Fe, Co, Ni) nanotube arrays. *ChemPhysChem*, **2006**, 7, 1500-4	3.2	122
17	Shape and magnetic properties of single-crystalline hematite (alpha-Fe2O3) nanocrystals. *ChemPhysChem*, **2006**, 7, 1897-901	3.2	106
16	Synthesis and I-V properties of aligned copper nanowires. *Nanotechnology*, **2006**, 17, 1736-9	3.4	43
15	Growth and photoluminescence properties of PbS nanocubes. *Nanotechnology*, **2006**, 17, 3280-3287	3.4	106
14	Sol-gel synthesis and photoluminescence of p-type semiconductor Cr2O3 nanowires. *Applied Physics Letters*, **2006**, 88, 241112	3.4	53
13	Growth and optical properties of wurtzite-type CdS nanocrystals. *Inorganic Chemistry*, **2006**, 45, 5103-8	5.1	118
12	Poly(ethylene glycol)-assisted two-dimensional self-assembly of zinc sulfide microspheres. *Inorganic Chemistry*, **2006**, 45, 4586-8	5.1	15
11	Generation and optical properties of monodisperse wurtzite-type ZnS microspheres. *Inorganic Chemistry*, **2006**, 45, 7316-22	5.1	82
10	Synthesis and Room-Temperature Ultraviolet Photoluminescence Properties of Zirconia Nanowires. *Advanced Functional Materials*, **2004**, 14, 243-246	15.6	149
9	Room-temperature ultraviolet-emitting In2O3 nanowires. *Applied Physics Letters*, **2003**, 83, 761-763	3.4	153
8	Synthesis and structure of a novel infinite triple helices coordination polymer {[Mn(bipy)(azpy)2(NCS)2]·H2O}n(bipy=4,4?-bipyridine, azpy = 4,4?-azobispyridine). *Inorganic Chemistry Communication*, **2001**, 4, 451-453	3.1	29
7	Template Synthesis and Magnetic Behavior of an Array of Cobalt Nanowires Encapsulated in Polyaniline Nanotubules. *Advanced Materials*, **2001**, 13, 121-123	24	200
6	Sol–Gel Template Synthesis of an Array of Single Crystal CdS Nanowires on a Porous Alumina Template. *Advanced Materials*, **2001**, 13, 1393-1394	24	167
5	Array of nickel nanowires enveloped in polyaniline nanotubules and its magnetic behavior. *Applied Physics Letters*, **2001**, 78, 1592-1594	3.4	51

4	An array of iron nanowires encapsulated inpolyaniline nanotubules and its magnetic behavior. *Journal of Materials Chemistry*, **2001**, 11, 958-960		34
3	Sol–gel synthesis of an array of C70 single crystal nanowires in a porous alumina template. *Chemical Communications*, **2001**, 541-542	5.8	15
2	Sol–gel synthesis of yttria stabilized zirconia membranes through controlled hydrolysis of zirconium alkoxide. *Journal of Membrane Science*, **1999**, 162, 181-188	9.6	72
1	Successive Free-Radical C(sp 2)–C(sp 2) Coupling Reactions to Form Graphene. *CCS Chemistry*,2735-2748	7.2	1