Hui Zhang

List of Publications by Citations

233 papers	14,446 citations	64 h-index	112 g-index
242 ext. papers	15,547 ext. citations	6.9 avg, IF	6.55 L-index

#	Paper	IF	Citations
233	Shape-controlled synthesis of Pd nanocrystals and their catalytic applications. *Accounts of Chemical Research*, **2013**, 46, 1783-94	24.3	495
232	Low Temperature Synthesis of Flowerlike ZnO Nanostructures by Cetyltrimethylammonium Bromide-Assisted Hydrothermal Process. *Journal of Physical Chemistry B*, **2004**, 108, 3955-3958	3.4	446
231	Enhancing the catalytic and electrocatalytic properties of Pt-based catalysts by forming bimetallic nanocrystals with Pd. *Chemical Society Reviews*, **2012**, 41, 8035-49	58.5	438
230	Platinum concave nanocubes with high-index facets and their enhanced activity for oxygen reduction reaction. *Angewandte Chemie - International Edition*, **2011**, 50, 2773-7	16.4	393
229	Noble-metal nanocrystals with concave surfaces: synthesis and applications. *Angewandte Chemie - International Edition*, **2012**, 51, 7656-73	16.4	380
228	Synthesis of Pd nanocrystals enclosed by {100} facets and with sizes . *Nano Research*, **2011**, 4, 83-91	10	375
227	Synthesis of Pd-Pt bimetallic nanocrystals with a concave structure through a bromide-induced galvanic replacement reaction. *Journal of the American Chemical Society*, **2011**, 133, 6078-89	16.4	364
226	Palladium concave nanocubes with high-index facets and their enhanced catalytic properties. *Angewandte Chemie - International Edition*, **2011**, 50, 7850-4	16.4	356
225	Shape-controlled synthesis of copper nanocrystals in an aqueous solution with glucose as a reducing agent and hexadecylamine as a capping agent. *Angewandte Chemie - International Edition*, **2011**, 50, 10560-4	16.4	352
224	Palladium nanocrystals enclosed by {100} and {111} facets in controlled proportions and their catalytic activities for formic acid oxidation. *Energy and Environmental Science*, **2012**, 5, 6352-6357	35.4	313
223	Controllable Growth of ZnO Microcrystals by a Capping-Molecule-Assisted Hydrothermal Process. *Crystal Growth and Design*, **2005**, 5, 547-550	3.5	307
222	Synthesis of flower-like ZnO nanostructures by an organic-free hydrothermal process. *Nanotechnology*, **2004**, 15, 622-626	3.4	265
221	Intermetallic Nanocrystals: Syntheses and Catalytic Applications. *Advanced Materials*, **2017**, 29, 1605997	24	246
220	Facile synthesis of Pd-Pt alloy nanocages and their enhanced performance for preferential oxidation of CO in excess hydrogen. *ACS Nano*, **2011**, 5, 8212-22	16.7	223
219	Large-Scale Synthesis of SnO2 Nanotube Arrays as High-Performance Anode Materials of Li-Ion Batteries. *Journal of Physical Chemistry C*, **2011**, 115, 11302-11305	3.8	218
218	Controlling the nucleation and growth of silver on palladium nanocubes by manipulating the reaction kinetics. *Angewandte Chemie - International Edition*, **2012**, 51, 2354-8	16.4	193
217	A simple hydrothermal route for synthesizing SnO2quantum dots. *Nanotechnology*, **2006**, 17, 2386-2389	3.4	173

216	Epitaxial Growth of Twinned Au-Pt Core-Shell Star-Shaped Decahedra as Highly Durable Electrocatalysts. *Nano Letters*, **2015**, 15, 7808-15	11.5	168
215	Controlling the morphology of rhodium nanocrystals by manipulating the growth kinetics with a syringe pump. *Nano Letters*, **2011**, 11, 898-903	11.5	168
214	Three-dimensional Dendritic Pt Nanostructures: Sonoelectrochemical Synthesis and Electrochemical Applications. *Journal of Physical Chemistry C*, **2008**, 112, 16385-16392	3.8	166
213	Porous ZnCo2O4 nanowires synthesis via sacrificial templates: high-performance anode materials of Li-ion batteries. *Inorganic Chemistry*, **2011**, 50, 3320-4	5.1	159
212	Multiwalled carbon nanotubes anchored with SnS2 nanosheets as high-performance anode materials of lithium-ion batteries. *ACS Applied Materials & Interfaces*, **2011**, 3, 4067-74	9.5	139
211	CNTs@SnO2@C Coaxial Nanocables with Highly Reversible Lithium Storage. *Journal of Physical Chemistry C*, **2010**, 114, 22535-22538	3.8	132
210	A selective NH3 gas sensor based on Fe2O3–ZnO nanocomposites at room temperature. *Sensors and Actuators B: Chemical*, **2006**, 114, 910-915	8.5	131
209	Carbon-coated SnO2 nanotubes: template-engaged synthesis and their application in lithium-ion batteries. *Nanoscale*, **2011**, 3, 746-50	7.7	130
208	Kinetically controlled synthesis of Pt-Cu alloy concave nanocubes with high-index facets for methanol electro-oxidation. *Chemical Communications*, **2014**, 50, 560-2	5.8	126
207	Copper can still be epitaxially deposited on palladium nanocrystals to generate core-shell nanocubes despite their large lattice mismatch. *ACS Nano*, **2012**, 6, 2566-73	16.7	124
206	Ligand-free Self-Assembly of Ceria Nanocrystals into Nanorods by Oriented Attachment at Low Temperature. *Journal of Physical Chemistry C*, **2007**, 111, 12677-12680	3.8	124
205	Controllable growth of ZnO nanostructures by citric acid assisted hydrothermal process. *Materials Letters*, **2005**, 59, 1696-1700	3.3	124
204	CuO nanodendrites synthesized by a novel hydrothermal route. *Nanotechnology*, **2004**, 15, 1428-1432	3.4	116
203	Arrays of ZnO nanowires fabricated by a simple chemical solution route. *Nanotechnology*, **2003**, 14, 423-426	3.4	107
202	Highly loaded CoO/graphene nanocomposites as lithium-ion anodes with superior reversible capacity. *Journal of Materials Chemistry A*, **2013**, 1, 2337	13	102
201	Nanocrystals composed of alternating shells of Pd and Pt can be obtained by sequentially adding different precursors. *Journal of the American Chemical Society*, **2011**, 133, 10422-5	16.4	102
200	Self-templating synthesis of SnO2-carbon hybrid hollow spheres for superior reversible lithium ion storage. *ACS Applied Materials & Interfaces*, **2011**, 3, 1946-52	9.5	101
199	In situ study of oxidative etching of palladium nanocrystals by liquid cell electron microscopy. *Nano Letters*, **2014**, 14, 3761-5	11.5	100

198	Platinum Concave Nanocubes with High-Index Facets and Their Enhanced Activity for Oxygen Reduction Reaction. *Angewandte Chemie*, **2011**, 123, 2825-2829	3.6	99
197	From cobalt nitrate carbonate hydroxide hydrate nanowires to porous Co(3)O(4) nanorods for high performance lithium-ion battery electrodes. *Nanotechnology*, **2008**, 19, 035711	3.4	99
196	Selective Synthesis of Fe2O3 and Fe3O4 Nanowires Via a Single Precursor: A General Method for Metal Oxide Nanowires. *Nanoscale Research Letters*, **2010**, 5, 1295-300	5	98
195	Shape-Control Fabrication and Characterization of the Airplane-like FeO(OH) and Fe2O3 Nanostructures. *Crystal Growth and Design*, **2006**, 6, 351-353	3.5	98
194	CuGe core□shell nanowire arrays as three-dimensional electrodes for high-rate capability lithium-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 1511-1515		97
193	Single crystalline CdS nanorods fabricated by a novel hydrothermal method. *Chemical Physics Letters*, **2003**, 377, 654-657	2.5	97
192	Carbon Nanocapsules as Nanoreactors for Controllable Synthesis of Encapsulated Iron and Iron Oxides: Magnetic Properties and Reversible Lithium Storage. *Journal of Physical Chemistry C*, **2011**, 115, 3612-3620	3.8	96
191	Facile synthesis of five-fold twinned, starfish-like rhodium nanocrystals by eliminating oxidative etching with a chloride-free precursor. *Angewandte Chemie - International Edition*, **2010**, 49, 5296-300	16.4	92
190	Gas sensing behavior of polyvinylpyrrolidone-modified ZnO nanoparticles for trimethylamine. *Sensors and Actuators B: Chemical*, **2006**, 113, 324-328	8.5	91
189	Aqueous solution synthesis of Pt-M (M = Fe, Co, Ni) bimetallic nanoparticles and their catalysis for the hydrolytic dehydrogenation of ammonia borane. *ACS Applied Materials & Interfaces*, **2014**, 6, 12429-35	9.5	90
188	Hydrothermal synthesis of Zn2SnO4 nanorods in the diameter regime of sub-5 nm and their properties. *Journal of Physical Chemistry B*, **2006**, 110, 7631-4	3.4	90
187	Long Bi2S3nanowires prepared by a simple hydrothermal method. *Nanotechnology*, **2003**, 14, 974-977	3.4	89
186	Selenium Nanotubes Synthesized by a Novel Solution Phase Approach. *Journal of Physical Chemistry B*, **2004**, 108, 1179-1182	3.4	86
185	Epitaxial Growth of Multimetallic Pd@PtM (M = Ni, Rh, Ru) Core-Shell Nanoplates Realized by in Situ-Produced CO from Interfacial Catalytic Reactions. *Nano Letters*, **2016**, 16, 7999-8004	11.5	80
184	In Situ Synthesis of Multilayer Carbon Matrix Decorated with Copper Particles: Enhancing the Performance of Si as Anode for Li-Ion Batteries. *ACS Nano*, **2019**, 13, 3054-3062	16.7	78
183	Tuning Surface Structure and Strain in Pd-Pt Core-Shell Nanocrystals for Enhanced Electrocatalytic Oxygen Reduction. *Small*, **2017**, 13, 1603423	11	76
182	Shape-controlled nanostructured magnetite-type materials as highly efficient Fenton catalysts. *Applied Catalysis B: Environmental*, **2014**, 144, 739-749	21.8	75
181	Metal oxide and sulfide hollow spheres: layer-by-layer synthesis and their application in lithium-ion battery. *Journal of Physical Chemistry B*, **2008**, 112, 14836-42	3.4	74

180	Preparation and characterization of water-soluble CdS nanocrystals by surface modification of ethylene diamine. *Materials Letters*, **2005**, 59, 1024-1027	3.3	72
179	Two-dimensional SnS nanosheets fabricated by a novel hydrothermal method. *Journal of Materials Science*, **2005**, 40, 591-595	4.3	72
178	Effects of complexing agent on CdS thin films prepared by chemical bath deposition. *Materials Letters*, **2004**, 58, 5-9	3.3	71
177	Order-aligned Mn3O4 nanostructures as super high-rate electrodes for rechargeable lithium-ion batteries. *Journal of Power Sources*, **2013**, 222, 32-37	8.9	70
176	Directional CdS nanowires fabricated by chemical bath deposition. *Journal of Crystal Growth*, **2002**, 246, 108-112	1.6	70
175	Lattice-mismatch-induced twinning for seeded growth of anisotropic nanostructures. *ACS Nano*, **2015**, 9, 3307-13	16.7	69
174	Homogeneous coating of Au and SnO2 nanocrystals on carbon nanotubes via layer-by-layer assembly: a new ternary hybrid for a room-temperature CO gas sensor. *Chemical Communications*, **2008**, 6182-4	5.8	67
173	Straight and thin ZnO nanorods: hectogram-scale synthesis at low temperature and cathodoluminescence. *Journal of Physical Chemistry B*, **2006**, 110, 827-30	3.4	67
172	From ZnO nanorods to 3D hollow microhemispheres: solvothermal synthesis, photoluminescence and gas sensor properties. *Nanotechnology*, **2007**, 18, 455604	3.4	66
171	Nanoscale kinetics of asymmetrical corrosion in core-shell nanoparticles. *Nature Communications*, **2018**, 9, 1011	17.4	64
170	Room temperature electrically pumped ultraviolet random lasing from ZnO nanorod arrays on Si. *Optics Express*, **2009**, 17, 14426-33	3.3	64
169	Size-controlled synthesis of Pd nanosheets for tunable plasmonic properties. *CrystEngComm*, **2015**, 17, 1833-1838	3.3	63
168	Synthesis of polycrystalline SnO2 nanotubes on carbon nanotube template for anode material of lithium-ion battery. *Materials Research Bulletin*, **2009**, 44, 211-215	5.1	63
167	Coupling PtNi Ultrathin Nanowires with MXenes for Boosting Electrocatalytic Hydrogen Evolution in Both Acidic and Alkaline Solutions. *Small*, **2019**, 15, e1805474	11	63
166	One-pot, large-scale synthesis of SnO2 nanotubes at room temperature. *Chemical Communications*, **2008**, 3028-30	5.8	62
165	In Situ Observation of Hydrogen-Induced Surface Faceting for Palladium-Copper Nanocrystals at Atmospheric Pressure. *Angewandte Chemie - International Edition*, **2016**, 55, 12427-30	16.4	62
164	Three-dimensionally porous Fe3O4 as high-performance anode materials for lithium-ion batteries. *Journal of Power Sources*, **2014**, 246, 198-203	8.9	61
163	Synthesis of ultrafine lanthanum hydroxide nanorods by a simple hydrothermal process. *Materials Letters*, **2004**, 58, 1180-1182	3.3	59

162	Facile synthesis of PdPt alloy concave nanocubes with high-index facets as electrocatalysts for methanol oxidation. *CrystEngComm*, **2014**, 16, 2411-2416	3.3	58
161	Synthesis of Co2SnO4@C coreshell nanostructures with reversible lithium storage. *Journal of Power Sources*, **2011**, 196, 10234-10239	8.9	58
160	Phase-Selective Synthesis and Self-Assembly of Monodisperse Copper Sulfide Nanocrystals. *Journal of Physical Chemistry C*, **2008**, 112, 13390-13394	3.8	58
159	InOOH hollow spheres synthesized by a simple hydrothermal reaction. *Journal of Physical Chemistry B*, **2005**, 109, 20676-9	3.4	58
158	Novel CuS hollow spheres fabricated by a novel hydrothermal method. *Microporous and Mesoporous Materials*, **2005**, 80, 153-156	5.3	58
157	Synthesis of rhodium concave tetrahedrons by collectively manipulating the reduction kinetics, facet-selective capping, and surface diffusion. *Nano Letters*, **2013**, 13, 6262-8	11.5	57
156	Ultrathin Two-Dimensional Pd-Based Nanorings as Catalysts for Hydrogenation with High Activity and Stability. *Small*, **2015**, 11, 4745-52	11	56
155	Palladium Concave Nanocubes with High-Index Facets and Their Enhanced Catalytic Properties. *Angewandte Chemie*, **2011**, 123, 7996-8000	3.6	55
154	Low-temperature growth of uniform ZnO particles with controllable ellipsoidal morphologies and characteristic luminescence patterns. *Journal of Physical Chemistry B*, **2006**, 110, 19147-53	3.4	55
153	Large-scale synthesis of Si@C three-dimensional porous structures as high-performance anode materials for lithium-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 20494-20499	13	54
152	Layer-stacked tin disulfide nanorods in silica nanoreactors with improved lithium storage capabilities. *Nanoscale*, **2012**, 4, 4002-6	7.7	54
151	Carbon nanotube-based magnetic-fluorescent nanohybrids as highly efficient contrast agents for multimodal cellular imaging. *Journal of Materials Chemistry*, **2010**, 20, 9895		54
150	Hydrothermal synthesis, characterization and properties of SnS nanoflowers. *Materials Letters*, **2006**, 60, 2686-2689	3.3	54
149	Synthesis and field emission characteristics of bilayered ZnO nanorod array prepared by chemical reaction. *Journal of Physical Chemistry B*, **2005**, 109, 17055-9	3.4	54
148	Hydrothermal synthesis of flower-like SrCO3 nanostructures. *Materials Letters*, **2005**, 59, 420-422	3.3	52
147	Facile synthesis of uniform MWCNT@Si nanocomposites as high-performance anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2015**, 622, 966-972	5.7	51
146	Synthesis of CdS nanotubes by chemical bath deposition. *Journal of Crystal Growth*, **2004**, 263, 372-376	1.6	50
145	CuSn Coreshell Nanowire Arrays as Three-Dimensional Electrodes for Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2011**, 115, 23620-23624	3.8	49

144	CoO/NiSi(x) core-shell nanowire arrays as lithium-ion anodes with high rate capabilities. *Nanoscale*, **2012**, 4, 991-6	7.7	48
143	Facile synthesis of Rh-Pd alloy nanodendrites as highly active and durable electrocatalysts for oxygen reduction reaction. *Nanoscale*, **2014**, 6, 7012-8	7.7	47
142	An In situ TEM study of the surface oxidation of palladium nanocrystals assisted by electron irradiation. *Nanoscale*, **2017**, 9, 6327-6333	7.7	45
141	Large-scale synthesis and application of SnS2graphene nanocomposites as anode materials for lithium-ion batteries with enhanced cyclic performance and reversible capacity. *Journal of Alloys and Compounds*, **2013**, 580, 457-464	5.7	45
140	Self-assembly of CdS: from nanoparticles to nanorods and arrayed nanorod bundles. *Materials Chemistry and Physics*, **2005**, 93, 65-69	4.4	45
139	Edelmetall-Nanokristalle mit konkaven Oberflchen: Synthese und Anwendungen. *Angewandte Chemie*, **2012**, 124, 7774-7792	3.6	44
138	Controllable growth of dendrite-like CuO nanostructures by ethylene glycol assisted hydrothermal process. *Materials Research Bulletin*, **2008**, 43, 1291-1296	5.1	44
137	Synthesis of La1xCaxMnO3 nanowires by a solgel process. *Chemical Physics Letters*, **2002**, 363, 579-582	2.5	43
136	Synthesis of cadmium hydroxide nanoflake and nanowisker by hydrothermal method. *Materials Letters*, **2005**, 59, 56-58	3.3	43
135	CuSi1xGex coreshell nanowire arrays as three-dimensional electrodes for high-rate capability lithium-ion batteries. *Journal of Power Sources*, **2012**, 208, 434-439	8.9	42
134	Atomic resolution liquid-cell transmission electron microscopy investigations of the dynamics of nanoparticles in ultrathin liquids. *Chemical Communications*, **2013**, 49, 10944-6	5.8	40
133	Layer-by-layer synthesis of Fe2O3@SnO2@C porous core-shell nanorods with high reversible capacity in lithium-ion batteries. *Nanoscale*, **2013**, 5, 4744-50	7.7	40
132	Assembling CoSn3 nanoparticles on multiwalled carbon nanotubes with enhanced lithium storage properties. *Nanoscale*, **2011**, 3, 1798-801	7.7	39
131	In situ study of the growth of two-dimensional palladium dendritic nanostructures using liquid-cell electron microscopy. *Chemical Communications*, **2014**, 50, 9447-50	5.8	38
130	Low-temperature chemical solution route for ZnO based sulfide coaxial nanocables: general synthesis and gas sensor application. *Nanotechnology*, **2007**, 18, 115619	3.4	38
129	One-Pot Synthesis of Biocompatible CdSe/CdS Quantum Dots and Their Applications as Fluorescent Biological Labels. *Nanoscale Research Letters*, **2011**, 6, 31	5	37
128	Carbon Nanotube-ZnO Nanosphere Heterostructures: Low-Temperature Chemical Reaction Synthesis, Photoluminescence, and Their Application for Room Temperature NH3 Gas Sensor. *Science of Advanced Materials*, **2009**, 1, 13-17	2.3	37
127	Vertically ordered NiSi/Si nanorod arrays as anode materials for high-performance Li-ion batteries. *Nanoscale*, **2012**, 4, 5343-7	7.7	36

126	Sequential occurrence of ZnO nanopaticles, nanorods, and nanotips during hydrothermal process in a dilute aqueous solution. *Materials Letters*, **2005**, 59, 3393-3397	3.3	36
125	Hydrothermal synthesis of flower-like Bi2S3with nanorods in the diameter region of 30 nm. *Nanotechnology*, **2004**, 15, 1122-1125	3.4	36
124	Single-crystalline SnS2nano-belts fabricated by a novel hydrothermal method. *Journal of Physics Condensed Matter*, **2003**, 15, L661-L665	1.8	36
123	Strain-induced Stranski-Krastanov growth of Pd@Pt core-shell hexapods and octapods as electrocatalysts for methanol oxidation. *Nanoscale*, **2017**, 9, 11077-11084	7.7	35
122	Synthesis of Co3O4@SnO2@C core-shell nanorods with superior reversible lithium-ion storage. *RSC Advances*, **2012**, 2, 9511	3.7	35
121	Star-shaped PbS crystals fabricated by a novel hydrothermal method. *Journal of Physics Condensed Matter*, **2003**, 15, 7611-7615	1.8	35
120	Seed-mediated growth of Au nanorings with size control on Pd ultrathin nanosheets and their tunable surface plasmonic properties. *Nanoscale*, **2016**, 8, 3704-10	7.7	34
119	General Layer-By-Layer Approach To Composite Nanotubes and Their Enhanced Lithium-Storage and Gas-Sensing Properties. *Chemistry of Materials*, **2009**, 21, 5264-5271	9.6	34
118	A critical SiO layer on Si porous structures to construct highly-reversible anode materials for lithium-ion batteries. *Chemical Communications*, **2017**, 53, 6101-6104	5.8	33
117	Formation of PtCuCo Trimetallic Nanostructures with Enhanced Catalytic and Enzyme-like Activities for Biodetection. *ACS Applied Nano Materials*, **2018**, 1, 222-231	5.6	33
116	Enhanced activity, durability and anti-poisoning property of Pt/W18O49 for methanol oxidation with a sub-stoichiometric tungsten oxide W18O49 support. *Journal of Materials Chemistry A*, **2014**, 2, 20154-20163	13	33
115	Layer-by-layer assembly synthesis of ZnO/SnO2 composite nanowire arrays as high-performance anode for lithium-ion batteries. *Materials Research Bulletin*, **2011**, 46, 2378-2384	5.1	33
114	Ni3Si2Si nanowires on Ni foam as a high-performance anode of Li-ion batteries. *Electrochemistry Communications*, **2011**, 13, 1443-1446	5.1	33
113	General solution route for nanoplates of hexagonal oxide or hydroxide. *Journal of Physical Chemistry B*, **2006**, 110, 11196-8	3.4	33
112	Facile synthesis of Ru-decorated Pt cubes and icosahedra as highly active electrocatalysts for methanol oxidation. *Nanoscale*, **2016**, 8, 12812-8	7.7	32
111	Synthesis of flower-like CdS nanostructures by organic-free hydrothermal process and their optical properties. *Materials Letters*, **2007**, 61, 3507-3510	3.3	32
110	A Versatile Approach for the Synthesis of ZnO Nanorod-Based Hybrid Nanomaterials via Layer-by-Layer Assembly. *Journal of Physical Chemistry C*, **2009**, 113, 8147-8151	3.8	31
109	Sonochemical synthesis of amorphous long silver sulfide nanowires. *Materials Letters*, **2007**, 61, 235-238	3.3	31

108	Large-scale synthesis of AgSi core shell nanowall arrays as high-performance anode materials of Li-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 13949-13954	13	30
107	Labeling transplanted mice islet with polyvinylpyrrolidone coated superparamagnetic iron oxide nanoparticles for in vivo detection by magnetic resonance imaging. *Nanotechnology*, **2009**, 20, 365101	3.4	29
106	Graphene coupled with Pt cubic nanoparticles for high performance, air-stable graphene-silicon solar cells. *Nano Energy*, **2017**, 32, 225-231	17.1	28
105	Cobalt ferrite nanorings: Ostwald ripening dictated synthesis and magnetic properties. *Chemical Communications*, **2008**, 5648-50	5.8	28
104	Controlling the growth and field emission properties of silicide nanowire arrays by direct silicification of Ni foil. *Nanotechnology*, **2008**, 19, 375602	3.4	28
103	Kinetically-controlled growth of cubic and octahedral Rh-Pd alloy oxygen reduction electrocatalysts with high activity and durability. *Nanoscale*, **2015**, 7, 301-7	7.7	27
102	Tuning Surface Structure of PdPb/Pt Pb Nanocrystals for Boosting the Methanol Oxidation Reaction. *Advanced Science*, **2019**, 6, 1902249	13.6	26
101	Multimetallic AuPd@Pd@Pt core-interlayer-shell icosahedral electrocatalysts for highly efficient oxygen reduction reaction. *Science Bulletin*, **2018**, 63, 494-501	10.6	26
100	Nanostructured hybrid cobalt oxide/copper electrodes of lithium-ion batteries with reversible high-rate capabilities. *Journal of Alloys and Compounds*, **2012**, 521, 83-89	5.7	26
99	Probing the oxidative etching induced dissolution of palladium nanocrystals in solution by liquid cell transmission electron microscopy. *Micron*, **2017**, 97, 22-28	2.3	25
98	Tailoring the Edge Sites of 2D Pd Nanostructures with Different Fractal Dimensions for Enhanced Electrocatalytic Performance. *Advanced Science*, **2018**, 5, 1800430	13.6	25
97	A Mechanistic Study on the Nucleation and Growth of Au on Pd Seeds with a Cubic or Octahedral Shape. *ChemCatChem*, **2012**, 4, 1668-1674	5.2	25
96	Strain-Induced Corrosion Kinetics at Nanoscale Are Revealed in Liquid: Enabling Control of Corrosion Dynamics of Electrocatalysis. *CheM*, **2020**, 6, 2257-2271	16.2	24
95	Large-scale synthesis of silicon arrays of nanowire on titanium substrate as high-performance anode of Li-ion batteries. *Journal of Alloys and Compounds*, **2012**, 526, 53-58	5.7	24
94	Functionalization of carbon nanotubes with magnetic nanoparticles: general nonaqueous synthesis and magnetic properties. *Nanotechnology*, **2008**, 19, 315604	3.4	24
93	Low temperature chemical reaction synthesis of single-crystalline Eu(OH)3nanorods and their thermal conversion to Eu2O3nanorods. *Nanotechnology*, **2007**, 18, 065605	3.4	24
92	Single-crystalline Pd square nanoplates enclosed by {100} facets on reduced graphene oxide for formic acid electro-oxidation. *Chemical Communications*, **2016**, 52, 14204-14207	5.8	23
91	Voltage-controlled synthesis of Cu i2O@Si core shell nanorod arrays as high-performance anodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 20510-20514	13	23

90	A General Approach for Uniform Coating of a Metal Layer on MWCNTs via Layer-by-Layer Assembly. *Journal of Physical Chemistry C*, **2009**, 113, 17387-17391	3.8	23
89	Local epitaxial growth of Au-Rh core-shell star-shaped decahedra: A case for studying electronic and ensemble effects in hydrogen evolution reaction. *Applied Catalysis B: Environmental*, **2020**, 263, 118255	21.8	23
88	Surface reconstruction engineering of twinned Pd2CoAg nanocrystals by atomic vacancy inducement for hydrogen evolution and oxygen reduction reactions. *Applied Catalysis B: Environmental*, **2019**, 241, 424-429	21.8	23
87	SiGe porous nanorod arrays as high-performance anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2013**, 577, 564-568	5.7	22
86	Synthesis of SiGe-based three-dimensional nanoporous electrodes for high performance lithium-ion batteries. *Journal of Power Sources*, **2013**, 229, 185-189	8.9	22
85	Hybrid nanostructures of Au nanocrystals and ZnO nanorods: Layer-by-layer assembly and tunable blue-shift band gap emission. *Materials Research Bulletin*, **2009**, 44, 889-892	5.1	22
84	Carbon-assisted synthesis of aligned ZnO nanowires. *Materials Letters*, **2005**, 59, 2710-2714	3.3	22
83	A versatile solution route for oxide/sulfide core–shell nanostructures and nonlayered sulfide nanotubes. *Nanotechnology*, **2005**, 16, 2721-2725	3.4	22
82	High and Fast Response of a Graphene–Silicon Photodetector Coupled with 2D Fractal Platinum Nanoparticles. *Advanced Optical Materials*, **2018**, 6, 1700793	8.1	22
81	Controlled Growth of LiO by Cocatalysis of Mobile Pd and CoO Nanowire Arrays for High-Performance Li-O Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 31653-31660	9.5	21
80	Magnetic-fluorescent nanohybrids of carbon nanotubes coated with Eu, Gd co-doped LaF3 as a multimodal imaging probe. *Journal of Colloid and Interface Science*, **2012**, 367, 61-6	9.3	21
79	Synthesis of NixSiy–SiGe core–shell nanowire arrays on Ni foam as a high-performance anode for Li-ion batteries. *RSC Advances*, **2013**, 3, 7713	3.7	21
78	Controlling the Nucleation and Growth of Silver on Palladium Nanocubes by Manipulating the Reaction Kinetics. *Angewandte Chemie*, **2012**, 124, 2404-2408	3.6	21
77	Shape-Controlled Synthesis of Copper Nanocrystals in an Aqueous Solution with Glucose as a Reducing Agent and Hexadecylamine as a Capping Agent. *Angewandte Chemie*, **2011**, 123, 10748-10752	3.6	21
76	Functionalization of ZnO nanorods with α-Fe2O3 nanoparticles: Layer-by-layer synthesis, optical and magnetic properties. *Materials Chemistry and Physics*, **2010**, 124, 908-911	4.4	21
75	One-dimensional hybrid nanostructures: synthesis via layer-by-layer assembly and applications. *Nanoscale*, **2012**, 4, 5517-26	7.7	20
74	Improved cyclic stability of Mg2Si by direct carbon coating as anode materials for lithium-ion batteries. *Journal of Alloys and Compounds*, **2014**, 587, 807-811	5.7	19
73	Synthesis and characterization of single crystalline MnOOH and MnO2 nanorods by means of the hydrothermal process assisted with CTAB. *Materials Letters*, **2006**, 60, 3895-3898	3.3	19

72	A simple and novel low-temperature hydrothermal synthesis of ZnO nanorods. *Inorganic Materials*, **2006**, 42, 1210-1214	0.9	19
71	Ultrasmall Palladium Nanoclusters as Effective Catalyst for Oxygen Reduction Reaction. *ChemElectroChem*, **2016**, 3, 1225-1229	4.3	19
70	Embedding Ultrafine and High-Content Pt Nanoparticles at Ceria Surface for Enhanced Thermal Stability. *Advanced Science*, **2017**, 4, 1700056	13.6	18
69	Electrochemical synthesis of SnCo alloy shells on orderly rod-shaped Cu current collectors as anode materials for lithium-ion batteries with enhanced performance. *Journal of Alloys and Compounds*, **2013**, 570, 119-124	5.7	18
68	Some critical factors in the synthesis of CdS nanorods by hydrothermal process. *Materials Letters*, **2005**, 59, 3037-3041	3.3	18
67	Mechanistic insight into the synergetic catalytic effect of Pd and MnO2 for high-performance Li□2 cells. *Energy Storage Materials*, **2018**, 12, 8-16	19.4	18
66	Intermetallic Pd3Pb square nanoplates as highly efficient electrocatalysts for oxygen reduction reaction. *CrystEngComm*, **2019**, 21, 290-296	3.3	17
65	Firmly bonded graphene□silicon nanocomposites as high-performance anode materials for lithium-ion batteries. *RSC Advances*, **2015**, 5, 46173-46180	3.7	17
64	Co/CoO@N-C nanocomposites as high-performance anodes for lithium-ion batteries. *Journal of Alloys and Compounds*, **2019**, 771, 290-296	5.7	17
63	PdCu alloy nanodendrites with tunable composition as highly active electrocatalysts for methanol oxidation. *RSC Advances*, **2017**, 7, 5800-5806	3.7	16
62	Performance Improvement of Graphene/Silicon Photodetectors Using High Work Function Metal Nanoparticles with Plasma Effect. *Advanced Optical Materials*, **2018**, 6, 1701243	8.1	16
61	Growth and photoelectrochemical properties of ordered CuInS2 nanorod arrays. *Chemical Communications*, **2012**, 48, 4746-8	5.8	16
60	Phase-controlled synthesis of nickel silicide nanostructures. *Materials Research Bulletin*, **2012**, 47, 3797-3803	5.1	16
59	Ultra-small Rh nanoparticles supported on WO3□ nanowires as efficient catalysts for visible-light-enhanced hydrogen evolution from ammonia borane. *Nanoscale Advances*, **2019**, 1, 3941-3947	5.1	15
58	Bimetallic Ni Pd/SBA-15 alloy as an effective catalyst for selective hydrogenation of CO2 to methane. *International Journal of Hydrogen Energy*, **2019**, 44, 13354-13363	6.7	15
57	Facile Synthesis of Five-fold Twinned, Starfish-like Rhodium Nanocrystals by Eliminating Oxidative Etching with a Chloride-Free Precursor. *Angewandte Chemie*, **2010**, 122, 5424-5428	3.6	15
56	Sub-2nm SnO2 nanocrystals: A reduction/oxidation chemical reaction synthesis and optical properties. *Materials Research Bulletin*, **2008**, 43, 3164-3170	5.1	15
55	Facile synthesis of Pd@Ru nanoplates with controlled thickness as efficient catalysts for hydrogen evolution reaction. *CrystEngComm*, **2018**, 20, 4230-4236	3.3	15

54	Detection of viability of transplanted beta cells labeled with a novel contrast agent - polyvinylpyrrolidone-coated superparamagnetic iron oxide nanoparticles by magnetic resonance imaging. *Contrast Media and Molecular Imaging*, **2012**, 7, 35-44	3.2	14
53	Cathodoluminescence and its mapping of flower-like ZnO, ZnO/ZnS core–shell and tube-like ZnS nanostructures. *Materials Research Bulletin*, **2007**, 42, 1286-1292	5.1	14
52	Porous Si@C coaxial nanotubes: layer-by-layer assembly on ZnO nanorod templates and application to lithium-ion batteries. *CrystEngComm*, **2017**, 19, 1220-1229	3.3	13
51	Facile synthesis of PtCu3 alloy hexapods and hollow nanoframes as highly active electrocatalysts for methanol oxidation. *CrystEngComm*, **2016**, 18, 7823-7830	3.3	13
50	Ion-templated fabrication of Pt-Cu alloy octahedra with controlled compositions for electrochemical detection of H2O2. *Journal of Alloys and Compounds*, **2019**, 788, 1334-1340	5.7	13
49	Silver–nickel oxide core–shell nanoflower arrays as high-performance anode for lithium-ion batteries. *Journal of Power Sources*, **2015**, 285, 131-136	8.9	12
48	Facile synthesis of high-quality Pt nanostructures with a controlled aspect ratio for methanol electro-oxidation. *CrystEngComm*, **2014**, 16, 8340-8343	3.3	11
47	Cobalt–iron cyanide hollow cubes: Three-dimensional self-assembly and magnetic properties. *Journal of Alloys and Compounds*, **2011**, 509, 8382-8386	5.7	11
46	Magnesium catalyzed growth of SiO(2) hierarchical nanostructures by a thermal evaporation process. *Nanotechnology*, **2008**, 19, 165601	3.4	10
45	A novel low-temperature chemical solution route for straight and dendrite-like ZnO nanostructures. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2007**, 141, 76-81	3.1	10
44	Transformation mechanism of Te particles into Te nanotubes and nanowires during solvothermal process. *Journal of Crystal Growth*, **2006**, 289, 568-573	1.6	10
43	Synthesis of nanoporous three-dimensional current collector for high-performance lithium-ion batteries. *RSC Advances*, **2013**, 3, 7543	3.7	9
42	Solvothermal synthesis of carbon-coated tin nanorods for superior reversible lithium ion storage. *Materials Research Bulletin*, **2011**, 46, 2278-2282	5.1	9
41	Unexpected Kirkendall effect in twinned icosahedral nanocrystals driven by strain gradient. *Nano Research*, **2020**, 13, 2641-2649	10	9
40	Designed Synthesis of CoO/CuO/rGO Ternary Nanocomposites as High-Performance Anodes for Lithium-Ion Batteries. *Jom*, **2018**, 70, 1793-1799	2.1	8
39	Intermetallic PdPb ultrathin nanoplate-constructed flowers with low-coordinated edge sites boost oxygen reduction performance. *Nanoscale*, **2019**, 11, 17301-17307	7.7	8
38	Controllable chemical reaction synthesis of Tb(OH)3 nanorods and their photoluminescence property. *Materials Letters*, **2009**, 63, 1180-1182	3.3	8
37	A novel Co-Li2O@Si core-shell nanowire array composite as a high-performance lithium-ion battery anode material. *Nanoscale*, **2016**, 8, 4511-9	7.7	7

36	Monitoring the shape evolution of Pd nanocubes to octahedra by PdS frame markers. *Nanoscale*, **2014**, 6, 3518-21	7.7	7
35	Core□shell and alloy integrating PdAu bimetallic nanoplates on reduced graphene oxide for efficient and stable hydrogen evolution catalysts. *RSC Advances*, **2017**, 7, 43373-43379	3.7	7
34	Controllable growth of Se nanotubes and nanowires from different solvent during the sonochemical process. *Materials Letters*, **2009**, 63, 1-4	3.3	7
33	Seed-mediated synthesis of Au@PtCu nanostars with rich twin defects as efficient and stable electrocatalysts for methanol oxidation reaction.. *RSC Advances*, **2019**, 9, 35887-35894	3.7	7
32	Revealing the elemental-specific growth dynamics of Pt□u multipods by scanning transmission electron microscopy and chemical mapping. *Journal of Materials Chemistry A*, **2015**, 3, 21284-21289	13	6
31	Facile synthesis of ternary PtPdCu alloy hexapods as highly efficient electrocatalysts for methanol oxidation.. *RSC Advances*, **2020**, 10, 12689-12694	3.7	6
30	Large-scale synthesis of water-soluble nanowires as versatile templates for nanotubes. *Chemical Communications*, **2011**, 47, 1006-8	5.8	6
29	Surface faceting and compositional evolution of Pd@Au core-shell nanocrystals during in situ annealing. *Physical Chemistry Chemical Physics*, **2019**, 21, 3134-3139	3.6	5
28	Silver-nickel oxide core-shell nanoparticle array electrode with enhanced lithium-storage performance. *Electrochimica Acta*, **2015**, 174, 893-899	6.7	5
27	Developing an aqueous approach for synthesizing Au and M@Au (M = Pd, CuPt) hybrid nanostars with plasmonic properties. *Physical Chemistry Chemical Physics*, **2015**, 17, 1265-72	3.6	5
26	Twinned silicon and germanium nanocrystals: Formation, stability and quantum confinement. *AIP Advances*, **2015**, 5, 037140	1.5	5
25	Large-scale synthesis of water-soluble Na2SiF6 nanotubes with polyacrylic acid as a surfactant. *Materials Research Bulletin*, **2012**, 47, 3923-3926	5.1	5
24	Flower-like silicon nanostructures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2007**, 38, 27-30	3	5
23	Facile synthesis of Au@PNIPAM-b-PPy nanocomposites with thermosensitive and photothermal effects. *Journal of Polymer Science Part A*, **2016**, 54, 3079-3085	2.5	5
22	Morphology and phase selective synthesis of EuF3 nanostructures by polyelectrolyte assisted chemical reaction and their optical properties. *Materials Chemistry and Physics*, **2009**, 115, 562-566	4.4	4
21	Tailor of ZnO morphology by heterogeneous nucleation in the aqueous solution. *Materials Research Bulletin*, **2007**, 42, 1316-1322	5.1	4
20	Size-controlled synthesis of Au nanorings on Pd ultrathin nanoplates as efficient catalysts for hydrogenation. *CrystEngComm*, **2017**, 19, 6588-6593	3.3	3
19	Synthesis and characterization of CdS based sulfide coaxial cable and nanotubes by sacrificial approach. *Materials Letters*, **2006**, 60, 2004-2008	3.3	3

18	Garnet Electrolytes with Ultralow Interfacial Resistance by SnS2 Coating for Dendrite-Free all-Solid-State Batteries. *ACS Applied Energy Materials*, **2021**, 4, 2873-2880	6.1	3
17	Design of Highly Durable Core-Shell Catalysts by Controlling Shell Distribution Guided by In-Situ Corrosion Study. *Advanced Materials*, **2021**, 33, e2101511	24	3
16	Controlled oxidative etching of gold nanorods revealed through in-situ liquid cell electron microscopy. *Science China Materials*, **2020**, 63, 2599-2605	7.1	2
15	Ga-Doped Intermetallic Pd3Pb Nanocubes as a Highly Efficient and Durable Oxygen Reduction Reaction Electrocatalyst. *ChemistrySelect*, **2021**, 6, 3891-3896	1.8	2
14	Facile Synthesis of PdCuRu Porous Nanoplates as Highly Efficient Electrocatalysts for Hydrogen Evolution Reaction in Alkaline Medium. *Metals*, **2021**, 11, 1451	2.3	2
13	Surface Reconstruction on Uniform Cu Nanodisks Boosted Electrochemical Nitrate Reduction to Ammonia **2022**, 4, 650-656		2
12	Spherical to truncated octahedral shape transformation of palladium nanocrystals driven by e-beam in aqueous solution. *Nano Research*, **2019**, 12, 2623-2627	10	1
11	Synthesis of One-Dimensional Chalcogenides by a Novel Hydrothermal Process. *Solid State Phenomena*, **2004**, 99-100, 203-208	0.4	1
10	Morphology Control of PbS Nanocrystals by a Novel Hydrothermal Process. *Solid State Phenomena*, **2004**, 99-100, 197-202	0.4	1
9	PdPtRu nanocages with tunable compositions for boosting the methanol oxidation reaction. *Nanoscale Advances*,	5.1	1
8	Sn-Doped BiO nanosheets for highly efficient electrochemical CO reduction toward formate production. *Nanoscale*, **2021**, 13, 19610-19616	7.7	1
7	Strain effect in Pd@PdAg twinned nanocrystals towards ethanol oxidation electrocatalysis. *Nanoscale Advances*,	5.1	1
6	Au-Doped intermetallic Pd3Pb wavy nanowires as highly efficient electrocatalysts toward the oxygen reduction reaction. *CrystEngComm*, **2020**, 22, 6478-6484	3.3	1
5	A unique ligand effect in Pt-based core‐shell nanocubes to boost oxygen reduction electrocatalysis. *Journal of Materials Chemistry A*,	13	1
4	Enhanced oxygen reduction activity of Pt shells on PdCu truncated octahedra with different compositions.. *RSC Advances*, **2018**, 8, 34853-34859	3.7	1
3	Facile Synthesis of Pd@PtM (= Rh, Ni, Pd, Cu) Multimetallic Nanorings as Efficient Catalysts for Ethanol Oxidation Reaction. *Frontiers in Chemistry*, **2021**, 9, 683450	5	0
2	Hydrofluoric acid free synthesis of macropores on silicon by chemical vapor deposition and their photoluminescence. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 494-498	3	
1	Low temperature synthesis of SnSr(OH)6 nanoflowers and photocatalytic performance for organic pollutants. *International Journal of Materials Research*, **2022**, 113, 80-90	0.5	