Qing Jiang

List of Publications by Year in descending order

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818 papers	37,817 citations	2538 96 h-index	7333 152 g-index
827 all docs	827 docs citations	827 times ranked	33711 citing authors

#	Article	IF	Citations
1	Electrochemical Reduction of N₂ under Ambient Conditions for Artificial N₂ Fixation and Renewable Energy Storage Using N₂/NH₃ Cycle. Advanced Materials, 2017, 29, 1604799.	11.1	969
2	Au Subâ€Nanoclusters on TiO₂ toward Highly Efficient and Selective Electrocatalyst for N₂ Conversion to NH₃ at Ambient Conditions. Advanced Materials, 2017, 29, 1606550.	11.1	785
3	Amorphizing of Au Nanoparticles by CeO_xâ€“RGO Hybrid Support towards Highly Efficient Electrocatalyst for N₂ Reduction under Ambient Conditions. Advanced Materials, 2017, 29, 1700001.	11.1	518
4	Allele-defined genome of the autopolyploid sugarcane Saccharum spontaneum L.. Nature Genetics, 2018, 50, 1565-1573.	9.4	463
5	Anchoring PdCu Amorphous Nanocluster on Graphene for Electrochemical Reduction of N₂ to NH₃ under Ambient Conditions in Aqueous Solution. Advanced Energy Materials, 2018, 8, 1800124.	10.2	454
6	Lamella-nanostructured eutectic zincâ€“aluminum alloys as reversible and dendrite-free anodes for aqueous rechargeable batteries. Nature Communications, 2020, 11, 1634.	5.8	426
7	Enhancement of CO detection in Al doped graphene. Chemical Physics Letters, 2008, 461, 276-279.	1.2	415
8	Noble-metal-free cobalt phosphide modified carbon nitride: An efficient photocatalyst for hydrogen generation. Applied Catalysis B: Environmental, 2017, 200, 477-483.	10.8	364
9	CO Catalytic Oxidation on Copper-Embedded Graphene. Journal of Physical Chemistry C, 2011, 115, 3678-3683.	1.5	337
10	An Efficient CoAuPd/C Catalyst for Hydrogen Generation from Formic Acid at Room Temperature. Angewandte Chemie - International Edition, 2013, 52, 4406-4409.	7.2	337
11	Size dependent interface energy and its applications. Surface Science Reports, 2008, 63, 427-464.	3.8	308
12	Formation Mechanism of Î²-Phase in PVDF/CNT Composite Prepared by the Sonication Method. Macromolecules, 2009, 42, 8870-8874.	2.2	300
13	Fe₃Câ€Co Nanoparticles Encapsulated in a Hierarchical Structure of Nâ€Doped Carbon as a Multifunctional Electrocatalyst for ORR, OER, and HER. Advanced Functional Materials, 2019, 29, 1901949.	7.8	297
14	Effect of alloying elements on microstructure and properties of multiprincipal elements high-entropy alloys. Journal of Alloys and Compounds, 2009, 475, 752-757.	2.8	281
15	Adsorption capability for Congo red on nanocrystalline MFe2O4 (M = Mn, Fe, Co, Ni) spinel ferrites. Chemical Engineering Journal, 2012, 181-182, 72-79.	6.6	276
16	Prevention of dendrite growth and volume expansion to give high-performance aprotic bimetallic Li-Na alloyâ€“O2 batteries. Nature Chemistry, 2019, 11, 64-70.	6.6	265
17	Melting thermodynamics of organic nanocrystals. Journal of Chemical Physics, 1999, 111, 2176-2180.	1.2	264
18	Nanoporous gold supported cobalt oxide microelectrodes as high-performance electrochemical biosensors. Nature Communications, 2013, 4, 2169.	5.8	261

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19	Atomic (single, double, and triple atoms) catalysis: frontiers, opportunities, and challenges. Journal of Materials Chemistry A, 2019, 7, 3492-3515.	5.2	252
20	Amorphizing of Cu Nanoparticles toward Highly Efficient and Robust Electrocatalyst for CO₂ Reduction to Liquid Fuels with High Faradaic Efficiencies. Advanced Materials, 2018, 30, e1706194.	11.1	242
21	Lattice Contraction and Surface Stress of fcc Nanocrystals. Journal of Physical Chemistry B, 2001, 105, 6275-6277.	1.2	237
22	Effect of aluminum contents on microstructure and properties of AlxCoCrFeNi alloys. Journal of Alloys and Compounds, 2010, 504, S515-S518.	2.8	228
23	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie - International Edition, 2019, 58, 9464-9469.	7.2	226
24	Excess van der Waals interaction energy of a multiwalled carbon nanotube with an extruded core and the induced core oscillation. Physical Review B, 2002, 65, .	1.1	220
25	Highly Efficient Photoelectrochemical Water Splitting: Surface Modification of Cobaltâ€Phosphateâ€Loaded Co₃O₄/Fe₂O₃ pâ€“n Heterojunction Nanorod Arrays. Advanced Functional Materials, 2019, 29, 1801902.	7.8	220
26	Al doped graphene: A promising material for hydrogen storage at room temperature. Journal of Applied Physics, 2009, 105, .	1.1	212
27	Single or Double: Which Is the Altar of Atomic Catalysts for Nitrogen Reduction Reaction?. Small Methods, 2019, 3, 1800291.	4.6	210
28	N/O Dualâ€Doped Environmentâ€Friendly Hard Carbon as Advanced Anode for Potassiumâ€Ion Batteries. Advanced Science, 2020, 7, 1902547.	5.6	208
29	AuPdâ€“MnO_x/MOFâ€“Graphene: An Efficient Catalyst for Hydrogen Production from Formic Acid at Room Temperature. Advanced Energy Materials, 2015, 5, 1500107.	10.2	203
30	High-Energy-Density Flexible Potassium-Ion Battery Based on Patterned Electrodes. Joule, 2018, 2, 736-746.	11.7	199
31	Enhanced Hydrogen Storage on Li-Dispersed Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 2028-2033.	1.5	196
32	Synthesis and optical properties of flower-like ZnO nanorods by thermal evaporation method. Applied Surface Science, 2011, 257, 5083-5087.	3.1	196
33	Au@Pd coreâ€“shell nanoclusters growing on nitrogen-doped mildly reduced graphene oxide with enhanced catalytic performance for hydrogen generation from formic acid. Journal of Materials Chemistry A, 2013, 1, 12721.	5.2	196
34	Advanced catalysts for sustainable hydrogen generation and storage via hydrogen evolution and carbon dioxide/nitrogen reduction reactions. Progress in Materials Science, 2018, 92, 64-111.	16.0	195
35	Density functional theory calculations for two-dimensional silicene with halogen functionalization. Physical Chemistry Chemical Physics, 2012, 14, 257-261.	1.3	191
36	Modelling of surface energies of elemental crystals. Journal of Physics Condensed Matter, 2004, 16, 521-530.	0.7	190

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37	First principle calculations of the electronic properties of nitrogen-doped carbon nanoribbons with zigzag edges. Carbon, 2008, 46, 537-543.	5.4	189
38	High corrosion-resistance nanocrystalline Ni coating on AZ91D magnesium alloy. Surface and Coatings Technology, 2006, 200, 5413-5418.	2.2	187
39	Size-dependent cohesive energy of nanocrystals. Chemical Physics Letters, 2002, 366, 551-554.	1.2	178
40	Reconstructed Orthorhombic V2O5 Polyhedra for Fast Ion Diffusion in K-Ion Batteries. CheM, 2019, 5, 168-179.	5.8	174
41	Pd/C Synthesized with Citric Acid: An Efficient Catalyst for Hydrogen Generation from Formic Acid/Sodium Formate. Scientific Reports, 2012, 2, 598.	1.6	173
42	Size-dependent melting point of noble metals. Materials Chemistry and Physics, 2003, 82, 225-227.	2.0	172
43	Synthesis of Potassiumâ€Modified Graphitic Carbon Nitride with High Photocatalytic Activity for Hydrogen Evolution. ChemSusChem, 2014, 7, 2654-2658.	3.6	166
44	Water-soluble Fe3O4 nanoparticles with high solubility for removal of heavy-metal ions from waste water. Dalton Transactions, 2012, 41, 4544.	1.6	165
45	Saturation magnetization of ferromagnetic and ferrimagnetic nanocrystals at room temperature. Journal Physics D: Applied Physics, 2007, 40, 320-325.	1.3	164
46	Recent Advances toward the Rational Design of Efficient Bifunctional Air Electrodes for Rechargeable Znâ€“Air Batteries. Small, 2018, 14, e1703843.	5.2	163
47	Anchoring and Upgrading Ultrafine NiPd on Roomâ€Temperatureâ€Synthesized Bifunctional NH₂â€Nâ€rGO toward Lowâ€Cost and Highly Efficient Catalysts for Selective Formic Acid Dehydrogenation. Advanced Materials, 2018, 30, e1703038.	11.1	156
48	Modelling for size-dependent and dimension-dependent melting of nanocrystals. Journal Physics D: Applied Physics, 2000, 33, 2653-2656.	1.3	154
49	Size-Dependent Surface Energies of Nanocrystals. Journal of Physical Chemistry B, 2004, 108, 5617-5619.	1.2	151
50	Spontaneously separated intermetallic Co3Mo from nanoporous copper as versatile electrocatalysts for highly efficient water splitting. Nature Communications, 2020, 11, 2940.	5.8	146
51	Nanoporous Surface Highâ€Entropy Alloys as Highly Efficient Multisite Electrocatalysts for Nonacidic Hydrogen Evolution Reaction. Advanced Functional Materials, 2021, 31, 2009613.	7.8	145
52	Mechanochemistry for ammonia synthesis under mild conditions. Nature Nanotechnology, 2021, 16, 325-330.	15.6	141
53	Design of Dual-Modified MoS₂ with Nanoporous Ni and Graphene as Efficient Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2018, 8, 8107-8114.	5.5	140
54	Determining the adsorption energies of small molecules with the intrinsic properties of adsorbates and substrates. Nature Communications, 2020, 11, 1196.	5.8	140

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55	Growth of zinc phosphate coatings on AZ91D magnesium alloy. Surface and Coatings Technology, 2006, 201, 1814-1820.	2.2	139
56	Modeling of the Melting Point, Debye Temperature, Thermal Expansion Coefficient, and the Specific Heat of Nanostructured Materials. Journal of Physical Chemistry C, 2009, 113, 16896-16900.	1.5	139
57	Rapid and energy-efficient synthesis of a grapheneâ€“CuCo hybrid as a high performance catalyst. Journal of Materials Chemistry, 2012, 22, 10990.	6.7	136
58	Size effects on Debye temperature, Einstein temperature, and volume thermal expansion coefficient of nanocrystals. Solid State Communications, 2006, 139, 148-152.	0.9	135
59	Non-noble metals applied to solar water splitting. Energy and Environmental Science, 2018, 11, 3128-3156.	15.6	134
60	Grain size-dependent diffusion activation energy in nanomaterials. Solid State Communications, 2004, 130, 581-584.	0.9	132
61	Decorating Waste Cloth via Industrial Wastewater for Tubeâ€Type Flexible and Wearable Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1603719.	11.1	131
62	Surface Tension and Its Temperature Coefficient for Liquid Metals. Journal of Physical Chemistry B, 2005, 109, 15463-15468.	1.2	130
63	Enhancing photocatalytic activity of disorder-engineered C/TiO₂and TiO₂nanoparticles. Journal of Materials Chemistry A, 2014, 2, 7439-7445.	5.2	130
64	Boosting Production of HCOOH from CO₂ Electroreduction via Bi/CeO_x. Angewandte Chemie - International Edition, 2021, 60, 8798-8802.	7.2	130
65	Mesostructured Intermetallic Compounds of Platinum and Nonâ€Transition Metals for Enhanced Electrocatalysis of Oxygen Reduction Reaction. Advanced Functional Materials, 2015, 25, 230-237.	7.8	127
66	Microstructure and the properties of FeCoCuNiSnx high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 548, 64-68.	2.6	126
67	Tunable band gaps in siliceneâ€“MoS₂heterobilayers. Physical Chemistry Chemical Physics, 2014, 16, 11673-11678.	1.3	123
68	Ag0.1-Pd0.9/rGO: an efficient catalyst for hydrogen generation from formic acid/sodium formate. Journal of Materials Chemistry A, 2013, 1, 12188.	5.2	121
69	Hydrogen generation from formic acid decomposition at room temperature using a NiAuPd alloy nanocatalyst. International Journal of Hydrogen Energy, 2014, 39, 4850-4856.	3.8	121
70	Fe7Se8 nanoparticles anchored on N-doped carbon nanofibers as high-rate anode for sodium-ion batteries. Energy Storage Materials, 2020, 24, 439-449.	9.5	121
71	Effect of a Rippling Mode on Resonances of Carbon Nanotubes. Physical Review Letters, 2001, 86, 4843-4846.	2.9	120
72	Size-Dependent Surface Tension and Tolman's Length of Droplets. Langmuir, 2005, 21, 779-781.	1.6	118

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73	Structure and photocatalytic property of Mo-doped TiO2 nanoparticles. Powder Technology, 2013, 244, 9-15.	2.1	118
74	Design of Pt/t-ZrO2/g-C3N4 efficient photocatalyst for the hydrogen evolution reaction. Applied Catalysis B: Environmental, 2019, 251, 305-312.	10.8	118
75	Size-dependent interface energy and related interface stress. Acta Materialia, 2001, 49, 3143-3147.	3.8	117
76	Hallâ€“Petch relationship in nanometer size range. Journal of Alloys and Compounds, 2003, 361, 160-164.	2.8	117
77	Highly efficient hydrogen generation from hydrous hydrazine over amorphous Ni0.9Pt0.1/Ce2O3 nanocatalyst at room temperature. Journal of Materials Chemistry A, 2013, 1, 14957.	5.2	116
78	Thermal stability of crystalline thin films. Thin Solid Films, 1998, 312, 357-361.	0.8	114
79	Flexible Coâ€“Moâ€“N/Au Electrodes with a Hierarchical Nanoporous Architecture as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. Advanced Materials, 2020, 32, e1907214.	11.1	114
80	Enhanced tensile ductility in an electrodeposited nanocrystalline Ni. Scripta Materialia, 2006, 54, 579-584.	2.6	113
81	NiAl(110)âˆ•Cr(110)interface: A density functional theory study. Physical Review B, 2006, 73, .	1.1	112
82	Effect of grain size on corrosion behavior of electrodeposited bulk nanocrystalline Ni. Transactions of Nonferrous Metals Society of China, 2010, 20, 82-89.	1.7	112
83	Remarkable Improvements in Volumetric Energy and Power of 3D MnO₂ Microsupercapacitors by Tuning Crystallographic Structures. Advanced Functional Materials, 2016, 26, 1830-1839.	7.8	112
84	Experimental and modelling investigations on strain rate sensitivity of an electrodeposited 20â€‰nm grain sized Ni. Journal Physics D: Applied Physics, 2007, 40, 7440-7446.	1.3	110
85	Carbon quantum dot sensitized integrated Fe₂O₃@g-C₃N₄ coreâ€“shell nanoarray photoanode towards highly efficient water oxidation. Journal of Materials Chemistry A, 2018, 6, 9839-9845.	5.2	110
86	Electroless Niâ€“P deposition plus zinc phosphate coating on AZ91D magnesium alloy. Surface and Coatings Technology, 2006, 200, 5956-5962.	2.2	109
87	Recent advances in metalâ€“nitrogenâ€“carbon catalysts for electrochemical water splitting. Materials Chemistry Frontiers, 2017, 1, 2155-2173.	3.2	109
88	Visible-light photocatalysis in nitrogenâ€“carbon-doped TiO2 films obtained by heating TiO2 gelâ€“film in an ionized N2 gas. Thin Solid Films, 2008, 516, 1736-1742.	0.8	108
89	Controlling phase transition for single-layer MTe₂ (M = Mo and W): modulation of the potential barrier under strain. Physical Chemistry Chemical Physics, 2016, 18, 4086-4094.	1.3	105
90	Layered SiC Sheets: A Potential Catalyst for Oxygen Reduction Reaction. Scientific Reports, 2014, 4, 3821.	1.6	104

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91	Ag₂O modified g-C₃N₄ for highly efficient photocatalytic hydrogen generation under visible light irradiation. Journal of Materials Chemistry A, 2015, 3, 15710-15714.	5.2	103
92	Size and interface effects on critical temperatures of ferromagnetic, ferroelectric and superconductive nanocrystals. Acta Materialia, 2005, 53, 3305-3311.	3.8	102
93	Size and interface effects on ferromagnetic and antiferromagnetic transition temperatures. Physical Review B, 2006, 73, .	1.1	102
94	Optical and electrical properties of Sn-doped CdO thin films obtained by pulse laser deposition. Vacuum, 2011, 85, 861-865.	1.6	100
95	Facile synthesis of nitrogen-doped graphene supported AuPdâ€“CeO2 nanocomposites with high-performance for hydrogen generation from formic acid at room temperature. Nanoscale, 2014, 6, 3073.	2.8	99
96	Size Effect on the Phase Stability of Nanostructures. Current Nanoscience, 2008, 4, 179-200.	0.7	98
97	Extraordinary pseudocapacitive energy storage triggered by phase transformation in hierarchical vanadium oxides. Nature Communications, 2018, 9, 1375.	5.8	98
98	B 2 structure of high-entropy alloys with addition of Al. Journal of Applied Physics, 2008, 104, .	1.1	96
99	Photocatalytic property of Fe doped anatase and rutile TiO2 nanocrystal particles prepared by solâ€“gel technique. Applied Surface Science, 2012, 263, 260-265.	3.1	95
100	Simultaneous Achieving of High Faradaic Efficiency and CO Partial Current Density for CO₂ Reduction via Robust, Nobleâ€Metalâ€Free Zn Nanosheets with Favorable Adsorption Energy. Advanced Energy Materials, 2019, 9, 1900276.	10.2	95
101	A Simple and Effective Principle for a Rational Design of Heterogeneous Catalysts for Dehydrogenation of Formic Acid. Advanced Materials, 2019, 31, e1806781.	11.1	95
102	Free energy of crystalâ€“liquid interface. Acta Materialia, 1999, 47, 2109-2112.	3.8	94
103	Electroless Ni-P/Ni-B duplex coatings for improving the hardness and the corrosion resistance of AZ91D magnesium alloy. Applied Surface Science, 2008, 254, 4949-4955.	3.1	94
104	Facile synthesis of AgAuPd/graphene with high performance for hydrogen generation from formic acid. Journal of Materials Chemistry A, 2015, 3, 14535-14538.	5.2	94
105	Electric field induced reversible switch in hydrogen storage based on single-layer and bilayer graphenes. Carbon, 2009, 47, 3452-3460.	5.4	93
106	Bandgap opening in silicene: Effect of substrates. Chemical Physics Letters, 2014, 592, 222-226.	1.2	93
107	Review of Carbon Materials for Lithiumâ€Sulfur Batteries. ChemistrySelect, 2018, 3, 2245-2260.	0.7	92
108	Dual Superlyophobic Copper Foam with Good Durability and Recyclability for High Flux, High Efficiency, and Continuous Oilâ€“Water Separation. ACS Applied Materials & Interfaces, 2018, 10, 9841-9848.	4.0	92

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109	Structural and optical properties of ZnO thin films deposited on quartz glass by pulsed laser deposition. Applied Surface Science, 2006, 252, 8451-8455.	3.1	91
110	Lithium Ion Breathable Electrodes with 3D Hierarchical Architecture for Ultrastable and Highâ€Capacity Lithium Storage. Advanced Functional Materials, 2017, 27, 1700447.	7.8	91
111	Recent progress on metallic Sn- and Sb-based anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 2913-2933.	5.2	91
112	Electroless Niâ€“P layer with a chromium-free pretreatment on AZ91D magnesium alloy. Surface and Coatings Technology, 2007, 201, 4594-4600.	2.2	90
113	One-step synthesis of Cu@FeNi coreâ€“shell nanoparticles: Highly active catalyst for hydrolytic dehydrogenation of ammonia borane. International Journal of Hydrogen Energy, 2012, 37, 10229-10235.	3.8	90
114	Interface Engineering of Co/CoMoN/NF Heterostructures for Highâ€Performance Electrochemical Overall Water Splitting. Advanced Science, 2022, 9, e2105313.	5.6	90
115	Superheating of nanocrystals embedded in matrix. Chemical Physics Letters, 2000, 322, 549-552.	1.2	88
116	Melting temperatures of semiconductor nanocrystals in the mesoscopic size range. Semiconductor Science and Technology, 2001, 16, L33-L35.	1.0	88
117	Electroless Niâ€“Snâ€“P coating on AZ91D magnesium alloy and its corrosion resistance. Surface and Coatings Technology, 2008, 202, 2570-2576.	2.2	87
118	Study of the formation and growth of tannic acid based conversion coating on AZ91D magnesium alloy. Surface and Coatings Technology, 2009, 204, 736-747.	2.2	87
119	DNA-directed growth of ultrafine CoAuPd nanoparticles on graphene as efficient catalysts for formic acid dehydrogenation. Chemical Communications, 2014, 50, 2732.	2.2	87
120	Nitrogen/Boron Doping Position Dependence of the Electronic Properties of a Triangular Graphene. ACS Nano, 2010, 4, 7619-7629.	7.3	86
121	Advances in Cathode Materials for High-Performance Lithium-Sulfur Batteries. IScience, 2018, 6, 151-198.	1.9	85
122	Visible-light photocatalytic activity of nitrogen-doped TiO2 thin film prepared by pulsed laser deposition. Applied Surface Science, 2008, 254, 4620-4625.	3.1	84
123	Adipose-Specific Knockout of Seipin/Bscl2 Results in Progressive Lipodystrophy. Diabetes, 2014, 63, 2320-2331.	0.3	84
124	Tailoring Oxygen Vacancies of BiVO₄ toward Highly Efficient Nobleâ€Metalâ€Free Electrocatalyst for Artificial N₂ Fixation under Ambient Conditions. Small Methods, 2019, 3, 1800333.	4.6	84
125	Size-dependent continuous binary solution phase diagram. Nanotechnology, 2003, 14, 438-442.	1.3	83
126	Strain rate sensitivity of a nanocrystalline Cu synthesized by electric brush plating. Applied Physics Letters, 2006, 88, 143115.	1.5	83

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127	Discovery of cobweb-like MoC₆ and its application for nitrogen fixation. Journal of Materials Chemistry A, 2018, 6, 9623-9628.	5.2	83
128	Ceâ€Modified Ni(OH)₂ Nanoflowers Supported on NiSe₂ Octahedra Nanoparticles as Highâ€Efficient Oxygen Evolution Electrocatalyst. Advanced Energy Materials, 2021, 11, 2101266.	10.2	83
129	Nanotube size-dependent melting of single crystals in carbon nanotubes. Applied Physics A: Materials Science and Processing, 1997, 64, 627-629.	1.1	82
130	First-principles study of the surface energy and work function of III-V semiconductor compounds. Physical Review B, 2007, 75, .	1.1	82
131	A Mini Review on the Functional Biomaterials Based on Poly(lactic acid) Stereocomplex. Polymer Reviews, 2016, 56, 262-286.	5.3	81
132	Electroless deposition of Niâ€“Wâ€“P coating on AZ91D magnesium alloy. Applied Surface Science, 2007, 253, 5116-5121.	3.1	80
133	Optical and electrical properties of In-doped CdO thin films fabricated by pulse laser deposition. Applied Surface Science, 2010, 256, 2910-2914.	3.1	80
134	Dense and smooth amorphous films of multicomponent FeCoNiCuVZrAl high-entropy alloy deposited by direct current magnetron sputtering. Materials & Design, 2013, 46, 675-679.	5.1	80
135	Ultrasound-Triggered Phase-Transition Cationic Nanodroplets for Enhanced Gene Delivery. ACS Applied Materials & Interfaces, 2015, 7, 13524-13537.	4.0	80
136	Noble-metal-free NiFeMo nanocatalyst for hydrogen generation from the decomposition of hydrous hydrazine. Journal of Materials Chemistry A, 2015, 3, 121-124.	5.2	80
137	Correlation of the applied electrical field and CO adsorption/desorption behavior on Al-doped graphene. Solid State Communications, 2010, 150, 680-683.	0.9	79
138	Robust superhydrophobic surface on Al substrate with durability, corrosion resistance and ice-phobicity. Scientific Reports, 2016, 6, 20933.	1.6	79
139	Comparison of different models for melting point change of metallic nanocrystals. Journal of Materials Research, 2001, 16, 3304-3308.	1.2	78
140	Enhanced UV emission of Y-doped ZnO nanoparticles. Applied Surface Science, 2012, 258, 6735-6738.	3.1	76
141	N-Doped Carbon Nanonecklaces with Encapsulated Sb as a Sodium-Ion Battery Anode. Matter, 2019, 1, 720-733.	5.0	76
142	Photothermo-chemotherapy of cancer employing drug leakage-free gold nanoshells. Biomaterials, 2016, 78, 40-49.	5.7	75
143	Amorphous nickel pyrophosphate modified graphitic carbon nitride: an efficient photocatalyst for hydrogen generation from water splitting. Applied Catalysis B: Environmental, 2018, 231, 43-50.	10.8	75
144	Field emission properties of N-doped capped single-walled carbon nanotubes: A first-principles density-functional study. Journal of Chemical Physics, 2007, 126, 164702.	1.2	74

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145	A novel open architecture built by ultra-fine single-crystal Co₂(CO₃)(OH)₂ nanowires and reduced graphene oxide for asymmetric supercapacitors. Journal of Materials Chemistry A, 2016, 4, 17171-17179.	5.2	74
146	Carbon-Encapsulated Co3O4 Nanoparticles as Anode Materials with Super Lithium Storage Performance. Scientific Reports, 2015, 5, 16629.	1.6	73
147	Effects of doping nitrogen atoms on the structure and electronic properties of zigzag single-walled carbon nanotubes through first-principles calculations. Nanotechnology, 2007, 18, 165702.	1.3	72
148	A unique porous architecture built by ultrathin wrinkled NiCoO₂/rGO/NiCoO₂ sandwich nanosheets for pseudocapacitance and Li ion storage. Journal of Materials Chemistry A, 2016, 4, 10304-10313.	5.2	72
149	Nanoporous Palladiumâ€“Silver Surface Alloys as Efficient and pH-Universal Catalysts for the Hydrogen Evolution Reaction. ACS Energy Letters, 2019, 4, 1379-1386.	8.8	72
150	Bandgap Opening of Bilayer Graphene by Dual Doping from Organic Molecule and Substrate. Journal of Physical Chemistry C, 2013, 117, 12873-12881.	1.5	71
151	Density functional theory study of oxygen reduction reaction on Pt/Pd₃Al(111) alloy electrocatalyst. Physical Chemistry Chemical Physics, 2016, 18, 14234-14243.	1.3	71
152	Efficient CO₂ Reduction to HCOOH with High Selectivity and Energy Efficiency over Bi/rGO Catalyst. Small Methods, 2020, 4, 1900846.	4.6	70
153	High strength and high ductility of electrodeposited nanocrystalline Ni with a broad grain size distribution. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 487, 410-416.	2.6	69
154	An organic chromium-free conversion coating on AZ91D magnesium alloy. Applied Surface Science, 2008, 255, 2322-2328.	3.1	68
155	High Efficient Photo-Fenton Catalyst of Î±-Fe2O3/MoS2 Hierarchical Nanoheterostructures: Reutilization for Supercapacitors. Scientific Reports, 2016, 6, 31591.	1.6	68
156	Low-temperature hydrothermal synthesis of Î±-Fe/Fe₃O₄nanocomposite for fast Congo red removal. Dalton Transactions, 2013, 42, 2572-2579.	1.6	67
157	Efficient visible-light-driven hydrogen generation from water splitting catalyzed by highly stable CdS@Mo₂Câ€“C coreâ€“shell nanorods. Journal of Materials Chemistry A, 2017, 5, 15862-15868.	5.2	67
158	Controlling growth of ZnO rods by polyvinylpyrrolidone (PVP) and their optical properties. Applied Surface Science, 2009, 255, 6978-6984.	3.1	66
159	Al13@Pt42 Core-Shell Cluster for Oxygen Reduction Reaction. Scientific Reports, 2014, 4, 5205.	1.6	66
160	Dual-phase nanostructuring of layered metal oxides for high-performance aqueous rechargeable potassium ion microbatteries. Nature Communications, 2019, 10, 4292.	5.8	66
161	Microstructure and tensile properties of FeMnNiCuCoSnx high entropy alloys. Materials & Design, 2013, 44, 223-227.	5.1	65
162	Hydrogen-bond memory and water-skin supersolidity resolving the Mpemba paradox. Physical Chemistry Chemical Physics, 2014, 16, 22995-23002.	1.3	65

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163	A Waterâ€‐Fireproof Flexible Lithiumâ€“Oxygen Battery Achieved by Synergy of Novel Architecture and Multifunctional Separator. Advanced Materials, 2018, 30, 1703791.	11.1	65
164	Surface-Alloyed Nanoporous Zinc as Reversible and Stable Anodes for High-Performance Aqueous Zinc-Ion Battery. Nano-Micro Letters, 2022, 14, .	14.4	65
165	Melting thermodynamics of nanocrystals embedded in a matrix. Acta Materialia, 2000, 48, 4791-4795.	3.8	64
166	High Density Arrayed Ni/NiO Core-shell Nanospheres Evenly Distributed on Graphene for Ultrahigh Performance Supercapacitor. Scientific Reports, 2017, 7, 17709.	1.6	64
167	Nonprecious Intermetallic Al₇Cu₄Ni Nanocrystals Seamlessly Integrated in Freestanding Bimodal Nanoporous Copper for Efficient Hydrogen Evolution Catalysis. Advanced Functional Materials, 2018, 28, 1706127.	7.8	64
168	In Situ CVD Derived Coâ€“Nâ€“C Composite as Highly Efficient Cathode for Flexible Liâ€“O₂ Batteries. Small, 2018, 14, e1800590.	5.2	64
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