Qing Jiang

List of Publications by Citations

799 papers	29,135 citations	85 h-index	132 g-index
827 ext. papers	33,504 ext. citations	6.2 avg, IF	7.73 L-index

#	Paper	IF	Citations
799	Electrochemical Reduction of N under Ambient Conditions for Artificial N Fixation and Renewable Energy Storage Using N /NH Cycle. *Advanced Materials*, **2017**, 29, 1604799	24	762
798	Au Sub-Nanoclusters on TiO toward Highly Efficient and Selective Electrocatalyst for N Conversion to NH at Ambient Conditions. *Advanced Materials*, **2017**, 29, 1606550	24	619
797	Amorphizing of Au Nanoparticles by CeO -RGO Hybrid Support towards Highly Efficient Electrocatalyst for N Reduction under Ambient Conditions. *Advanced Materials*, **2017**, 29, 1700001	24	414
796	Enhancement of CO detection in Al doped graphene. *Chemical Physics Letters*, **2008**, 461, 276-279	2.5	365
795	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	21.8	312
794	An efficient CoAuPd/C catalyst for hydrogen generation from formic acid at room temperature. *Angewandte Chemie - International Edition*, **2013**, 52, 4406-9	16.4	304
793	CO Catalytic Oxidation on Copper-Embedded Graphene. *Journal of Physical Chemistry C*, **2011**, 115, 3678-3683	3.6	302
792	Noble-metal-free cobalt phosphide modified carbon nitride: An efficient photocatalyst for hydrogen generation. *Applied Catalysis B: Environmental*, **2017**, 200, 477-483	21.8	301
791	Formation Mechanism of Phase in PVDF/CNT Composite Prepared by the Sonication Method. *Macromolecules*, **2009**, 42, 8870-8874	5.5	266
790	Size dependent interface energy and its applications. *Surface Science Reports*, **2008**, 63, 427-464	12.9	263
789	Melting thermodynamics of organic nanocrystals. *Journal of Chemical Physics*, **1999**, 111, 2176-2180	3.9	238
788	Adsorption capability for Congo red on nanocrystalline MFe2O4 (M=Mn, Fe, Co, Ni) spinel ferrites. *Chemical Engineering Journal*, **2012**, 181-182, 72-79	14.7	232
787	Allele-defined genome of the autopolyploid sugarcane Saccharum spontaneum L. *Nature Genetics*, **2018**, 50, 1565-1573	36.3	229
786	Nanoporous gold supported cobalt oxide microelectrodes as high-performance electrochemical biosensors. *Nature Communications*, **2013**, 4, 2169	17.4	227
785	Effect of alloying elements on microstructure and properties of multiprincipal elements high-entropy alloys. *Journal of Alloys and Compounds*, **2009**, 475, 752-757	5.7	213
784	Lattice Contraction and Surface Stress of fcc Nanocrystals. *Journal of Physical Chemistry B*, **2001**, 105, 6275-6277	3.4	207
783	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,	3.3	198

782	Prevention of dendrite growth and volume expansion to give high-performance aprotic bimetallic Li-Na alloy-O batteries. *Nature Chemistry*, **2019**, 11, 64-70	17.6	198
781	Lamella-nanostructured eutectic zinc-aluminum alloys as reversible and dendrite-free anodes for aqueous rechargeable batteries. *Nature Communications*, **2020**, 11, 1634	17.4	195
780	Al doped graphene: A promising material for hydrogen storage at room temperature. *Journal of Applied Physics*, **2009**, 105, 074307	2.5	183
779	Modelling of surface energies of elemental crystals. *Journal of Physics Condensed Matter*, **2004**, 16, 521-530	1.8	180
778	Generating Defect-Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. *Angewandte Chemie - International Edition*, **2019**, 58, 9464-9469	16.4	178
777	Au@Pd core–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	13	175
776	AuPd–MnOx/MOF-Graphene: An Efficient Catalyst for Hydrogen Production from Formic Acid at Room Temperature. *Advanced Energy Materials*, **2015**, 5, 1500107	21.8	175
775	Density functional theory calculations for two-dimensional silicene with halogen functionalization. *Physical Chemistry Chemical Physics*, **2012**, 14, 257-61	3.6	175
774	Enhanced Hydrogen Storage on Li-Dispersed Carbon Nanotubes. *Journal of Physical Chemistry C*, **2009**, 113, 2028-2033	3.8	175
773	First principle calculations of the electronic properties of nitrogen-doped carbon nanoribbons with zigzag edges. *Carbon*, **2008**, 46, 537-543	10.4	170
772	Amorphizing of Cu Nanoparticles toward Highly Efficient and Robust Electrocatalyst for CO Reduction to Liquid Fuels with High Faradaic Efficiencies. *Advanced Materials*, **2018**, 30, e1706194	24	164
771	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	42.2	161
770	Atomic (single, double, and triple atoms) catalysis: frontiers, opportunities, and challenges. *Journal of Materials Chemistry A*, **2019**, 7, 3492-3515	13	160
769	Size-dependent cohesive energy of nanocrystals. *Chemical Physics Letters*, **2002**, 366, 551-554	2.5	160
768	High-Energy-Density Flexible Potassium-Ion Battery Based on Patterned Electrodes. *Joule*, **2018**, 2, 736-746	27.8	158
767	Synthesis and optical properties of flower-like ZnO nanorods by thermal evaporation method. *Applied Surface Science*, **2011**, 257, 5083-5087	6.7	158
766	High corrosion-resistance nanocrystalline Ni coating on AZ91D magnesium alloy. *Surface and Coatings Technology*, **2006**, 200, 5413-5418	4.4	156
765	Effect of aluminum contents on microstructure and properties of AlxCoCrFeNi alloys. *Journal of Alloys and Compounds*, **2010**, 504, S515-S518	5.7	155

764	Size-dependent melting point of noble metals. *Materials Chemistry and Physics*, **2003**, 82, 225-227	4.4	152
763	Pd/C synthesized with citric acid: an efficient catalyst for hydrogen generation from formic acid/sodium formate. *Scientific Reports*, **2012**, 2, 598	4.9	150
762	Saturation magnetization of ferromagnetic and ferrimagnetic nanocrystals at room temperature. *Journal Physics D: Applied Physics*, **2007**, 40, 320-325	3	148
761	Water-soluble Fe3O4 nanoparticles with high solubility for removal of heavy-metal ions from waste water. *Dalton Transactions*, **2012**, 41, 4544-51	4.3	145
760	Size-Dependent Surface Energies of Nanocrystals. *Journal of Physical Chemistry B*, **2004**, 108, 5617-5619	3.4	137
759	Single or Double: Which Is the Altar of Atomic Catalysts for Nitrogen Reduction Reaction?. *Small Methods*, **2019**, 3, 1800291	12.8	137
758	Fe3C-Co Nanoparticles Encapsulated in a Hierarchical Structure of N-Doped Carbon as a Multifunctional Electrocatalyst for ORR, OER, and HER. *Advanced Functional Materials*, **2019**, 29, 1901949	15.6	136
757	Synthesis of potassium-modified graphitic carbon nitride with high photocatalytic activity for hydrogen evolution. *ChemSusChem*, **2014**, 7, 2654-8	8.3	136
756	Modelling for size-dependent and dimension-dependent melting of nanocrystals. *Journal Physics D: Applied Physics*, **2000**, 33, 2653-2656	3	133
755	Rapid and energy-efficient synthesis of a graphene□CuCo hybrid as a high performance catalyst. *Journal of Materials Chemistry*, **2012**, 22, 10990		125
754	Reconstructed Orthorhombic V2O5 Polyhedra for Fast Ion Diffusion in K-Ion Batteries. *CheM*, **2019**, 5, 168-179	16.2	123
753	Growth of zinc phosphate coatings on AZ91D magnesium alloy. *Surface and Coatings Technology*, **2006**, 201, 1814-1820	4.4	122
752	Highly Efficient Photoelectrochemical Water Splitting: Surface Modification of Cobalt-Phosphate-Loaded Co3O4/Fe2O3 p□ Heterojunction Nanorod Arrays. *Advanced Functional Materials*, **2019**, 29, 1801902	15.6	119
751	Anchoring and Upgrading Ultrafine NiPd on Room-Temperature-Synthesized Bifunctional NH -N-rGO toward Low-Cost and Highly Efficient Catalysts for Selective Formic Acid Dehydrogenation. *Advanced Materials*, **2018**, 30, e1703038	24	119
750	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	3.8	116
749	Recent Advances toward the Rational Design of Efficient Bifunctional Air Electrodes for Rechargeable Zn-Air Batteries. *Small*, **2018**, 14, e1703843	11	115
748	Surface tension and its temperature coefficient for liquid metals. *Journal of Physical Chemistry B*, **2005**, 109, 15463-8	3.4	114
747	Mesostructured Intermetallic Compounds of Platinum and Non-Transition Metals for Enhanced Electrocatalysis of Oxygen Reduction Reaction. *Advanced Functional Materials*, **2015**, 25, 230-237	15.6	113

746	Tunable band gaps in silicene-MoS2 heterobilayers. *Physical Chemistry Chemical Physics*, **2014**, 16, 11673-86	3	113
745	Grain size-dependent diffusion activation energy in nanomaterials. *Solid State Communications*, **2004**, 130, 581-584	1.6	113
744	N/O Dual-Doped Environment-Friendly Hard Carbon as Advanced Anode for Potassium-Ion Batteries. *Advanced Science*, **2020**, 7, 1902547	13.6	113
743	Enhancing photocatalytic activity of disorder-engineered C/TiO2 and TiO2 nanoparticles. *Journal of Materials Chemistry A*, **2014**, 2, 7439-7445	13	111
742	Size effects on Debye temperature, Einstein temperature, and volume thermal expansion coefficient of nanocrystals. *Solid State Communications*, **2006**, 139, 148-152	1.6	110
741	Effect of a rippling mode on resonances of carbon nanotubes. *Physical Review Letters*, **2001**, 86, 4843-6	7.4	110
740	Ag0.1-Pd0.9/rGO: an efficient catalyst for hydrogen generation from formic acid/sodium formate. *Journal of Materials Chemistry A*, **2013**, 1, 12188	13	109
739	Size-dependent surface tension and Tolman's length of droplets. *Langmuir*, **2005**, 21, 779-81	4	106
738	Decorating Waste Cloth via Industrial Wastewater for Tube-Type Flexible and Wearable Sodium-Ion Batteries. *Advanced Materials*, **2017**, 29, 1603719	24	105
737	Thermal stability of crystalline thin films. *Thin Solid Films*, **1998**, 312, 357-361	2.2	104
736	Enhanced tensile ductility in an electrodeposited nanocrystalline Ni. *Scripta Materialia*, **2006**, 54, 579-584	3.6	104
735	Size-dependent interface energy and related interface stress. *Acta Materialia*, **2001**, 49, 3143-3147	8.4	103
734	Visible-light photocatalysis in nitrogen□carbon-doped TiO2 films obtained by heating TiO2 gel□film in an ionized N2 gas. *Thin Solid Films*, **2008**, 516, 1736-1742	2.2	102
733	Hydrogen generation from formic acid decomposition at room temperature using a NiAuPd alloy nanocatalyst. *International Journal of Hydrogen Energy*, **2014**, 39, 4850-4856	6.7	101
732	Experimental and modelling investigations on strain rate sensitivity of an electrodeposited 20 nm grain sized Ni. *Journal Physics D: Applied Physics*, **2007**, 40, 7440-7446	3	99
731	Hall□Petch relationship in nanometer size range. *Journal of Alloys and Compounds*, **2003**, 361, 160-164	5.7	99
730	Microstructure and the properties of FeCoCuNiSnx high entropy alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 548, 64-68	5.3	98
729	Design of Dual-Modified MoS2 with Nanoporous Ni and Graphene as Efficient Catalysts for the Hydrogen Evolution Reaction. *ACS Catalysis*, **2018**, 8, 8107-8114	13.1	97

728	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	13	97
727	Remarkable Improvements in Volumetric Energy and Power of 3D MnO2 Microsupercapacitors by Tuning Crystallographic Structures. *Advanced Functional Materials*, **2016**, 26, 1830-1839	15.6	96
726	Electroless Ni–P deposition plus zinc phosphate coating on AZ91D magnesium alloy. *Surface and Coatings Technology*, **2006**, 200, 5956-5962	4.4	96
725	Structure and photocatalytic property of Mo-doped TiO2 nanoparticles. *Powder Technology*, **2013**, 244, 9-15	5.2	94
724	Recent advances in metal–nitrogen–carbon catalysts for electrochemical water splitting. *Materials Chemistry Frontiers*, **2017**, 1, 2155-2173	7.8	92
723	Ag2O modified g-C3N4 for highly efficient photocatalytic hydrogen generation under visible light irradiation. *Journal of Materials Chemistry A*, **2015**, 3, 15710-15714	13	92
722	Layered SiC sheets: a potential catalyst for oxygen reduction reaction. *Scientific Reports*, **2014**, 4, 3821	4.9	92
721	NiAl(110)/Cr(110) interface: A density functional theory study. *Physical Review B*, **2006**, 73,	3.3	91
720	Effect of grain size on corrosion behavior of electrodeposited bulk nanocrystalline Ni. *Transactions of Nonferrous Metals Society of China*, **2010**, 20, 82-89	3.3	90
719	Facile synthesis of nitrogen-doped graphene supported AuPd-CeO2 nanocomposites with high-performance for hydrogen generation from formic acid at room temperature. *Nanoscale*, **2014**, 6, 3073-7	7.7	89
718	Size and interface effects on ferromagnetic and antiferromagnetic transition temperatures. *Physical Review B*, **2006**, 73,	3.3	89
717	Size and interface effects on critical temperatures of ferromagnetic, ferroelectric and superconductive nanocrystals. *Acta Materialia*, **2005**, 53, 3305-3311	8.4	88
716	Electric field induced reversible switch in hydrogen storage based on single-layer and bilayer graphenes. *Carbon*, **2009**, 47, 3452-3460	10.4	87
715	Photocatalytic property of Fe doped anatase and rutile TiO2 nanocrystal particles prepared by sol–gel technique. *Applied Surface Science*, **2012**, 263, 260-265	6.7	86
714	Bandgap opening in silicene: Effect of substrates. *Chemical Physics Letters*, **2014**, 592, 222-226	2.5	85
713	Size Effect on the Phase Stability of Nanostructures. *Current Nanoscience*, **2008**, 4, 179-200	1.4	85
712	Non-noble metals applied to solar water splitting. *Energy and Environmental Science*, **2018**, 11, 3128-3156	35.4	85
711	Facile synthesis of AgAuPd/graphene with high performance for hydrogen generation from formic acid. *Journal of Materials Chemistry A*, **2015**, 3, 14535-14538	13	83

710	Optical and electrical properties of Sn-doped CdO thin films obtained by pulse laser deposition. *Vacuum*, **2011**, 85, 861-865	3.7	83
709	Melting temperatures of semiconductor nanocrystals in the mesoscopic size range. *Semiconductor Science and Technology*, **2001**, 16, L33-L35	1.8	82
708	One-step synthesis of Cu@FeNi core–shell nanoparticles: Highly active catalyst for hydrolytic dehydrogenation of ammonia borane. *International Journal of Hydrogen Energy*, **2012**, 37, 10229-10235	6.7	79
707	B2 structure of high-entropy alloys with addition of Al. *Journal of Applied Physics*, **2008**, 104, 113504	2.5	79
706	Electroless Ni–P layer with a chromium-free pretreatment on AZ91D magnesium alloy. *Surface and Coatings Technology*, **2007**, 201, 4594-4600	4.4	79
705	Size-dependent continuous binary solution phase diagram. *Nanotechnology*, **2003**, 14, 438-442	3.4	79
704	Superheating of nanocrystals embedded in matrix. *Chemical Physics Letters*, **2000**, 322, 549-552	2.5	79
703	Nitrogen/boron doping position dependence of the electronic properties of a triangular graphene. *ACS Nano*, **2010**, 4, 7619-29	16.7	78
702	Visible-light photocatalytic activity of nitrogen-doped TiO2 thin film prepared by pulsed laser deposition. *Applied Surface Science*, **2008**, 254, 4620-4625	6.7	78
701	Extraordinary pseudocapacitive energy storage triggered by phase transformation in hierarchical vanadium oxides. *Nature Communications*, **2018**, 9, 1375	17.4	77
700	Carbon quantum dot sensitized integrated Fe2O3@g-C3N4 core–shell nanoarray photoanode towards highly efficient water oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 9839-9845	13	77
699	Free energy of crystal–liquid interface. *Acta Materialia*, **1999**, 47, 2109-2112	8.4	77
698	Spontaneously separated intermetallic CoMo from nanoporous copper as versatile electrocatalysts for highly efficient water splitting. *Nature Communications*, **2020**, 11, 2940	17.4	76
697	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	6.7	76
696	Lithium Ion Breathable Electrodes with 3D Hierarchical Architecture for Ultrastable and High-Capacity Lithium Storage. *Advanced Functional Materials*, **2017**, 27, 1700447	15.6	74
695	Controlling phase transition for single-layer MTe2 (M = Mo and W): modulation of the potential barrier under strain. *Physical Chemistry Chemical Physics*, **2016**, 18, 4086-94	3.6	74
694	Adipose-specific knockout of SEIPIN/BSCL2 results in progressive lipodystrophy. *Diabetes*, **2014**, 63, 2320-31	7.9	74
693	Electroless Ni–Sn–P coating on AZ91D magnesium alloy and its corrosion resistance. *Surface and Coatings Technology*, **2008**, 202, 2570-2576	4.4	74

692	Strain rate sensitivity of a nanocrystalline Cu synthesized by electric brush plating. *Applied Physics Letters*, **2006**, 88, 143115	3.4	74
691	Optical and electrical properties of In-doped CdO thin films fabricated by pulse laser deposition. *Applied Surface Science*, **2010**, 256, 2910-2914	6.7	73
690	Nanotube size-dependent melting of single crystals in carbon nanotubes. *Applied Physics A: Materials Science and Processing*, **1997**, 64, 627-629	2.6	73
689	First-principles study of the surface energy and work function of III-V semiconductor compounds. *Physical Review B*, **2007**, 75,	3.3	73
688	Structural and optical properties of ZnO thin films deposited on quartz glass by pulsed laser deposition. *Applied Surface Science*, **2006**, 252, 8451-8455	6.7	73
687	Dual Superlyophobic Copper Foam with Good Durability and Recyclability for High Flux, High Efficiency, and Continuous Oil-Water Separation. *ACS Applied Materials & Interfaces*, **2018**, 10, 9841-9848	8.5	72
686	Electroless deposition of NiWP coating on AZ91D magnesium alloy. *Applied Surface Science*, **2007**, 253, 5116-5121	6.7	72
685	Field emission properties of N-doped capped single-walled carbon nanotubes: a first-principles density-functional study. *Journal of Chemical Physics*, **2007**, 126, 164702	3.9	71
684	Correlation of the applied electrical field and CO adsorption/desorption behavior on Al-doped graphene. *Solid State Communications*, **2010**, 150, 680-683	1.6	70
683	Comparison of different models for melting point change of metallic nanocrystals. *Journal of Materials Research*, **2001**, 16, 3304-3308	2.5	70
682	DNA-directed growth of ultrafine CoAuPd nanoparticles on graphene as efficient catalysts for formic acid dehydrogenation. *Chemical Communications*, **2014**, 50, 2732-4	5.8	69
681	Photothermo-chemotherapy of cancer employing drug leakage-free gold nanoshells. *Biomaterials*, **2016**, 78, 40-9	15.6	68
680	Study of the formation and growth of tannic acid based conversion coating on AZ91D magnesium alloy. *Surface and Coatings Technology*, **2009**, 204, 736-747	4.4	68
679	Noble-metal-free NiFeMo nanocatalyst for hydrogen generation from the decomposition of hydrous hydrazine. *Journal of Materials Chemistry A*, **2015**, 3, 121-124	13	66
678	Bandgap Opening of Bilayer Graphene by Dual Doping from Organic Molecule and Substrate. *Journal of Physical Chemistry C*, **2013**, 117, 12873-12881	3.8	66
677	Fe7Se8 nanoparticles anchored on N-doped carbon nanofibers as high-rate anode for sodium-ion batteries. *Energy Storage Materials*, **2020**, 24, 439-449	19.4	66
676	Enhanced UV emission of Y-doped ZnO nanoparticles. *Applied Surface Science*, **2012**, 258, 6735-6738	6.7	65
675	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	5.3	65

674	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	3.4	65
673	Amorphous nickel pyrophosphate modified graphitic carbon nitride: an efficient photocatalyst for hydrogen generation from water splitting. *Applied Catalysis B: Environmental*, **2018**, 231, 43-50	21.8	64
672	Advances in Cathode Materials for High-Performance Lithium-Sulfur Batteries. *IScience*, **2018**, 6, 151-198	6.1	64
671	Robust superhydrophobic surface on Al substrate with durability, corrosion resistance and ice-phobicity. *Scientific Reports*, **2016**, 6, 20933	4.9	63
670	Carbon-Encapsulated Co3O4 Nanoparticles as Anode Materials with Super Lithium Storage Performance. *Scientific Reports*, **2015**, 5, 16629	4.9	63
669	A Mini Review on the Functional Biomaterials Based on Poly(lactic acid) Stereocomplex. *Polymer Reviews*, **2016**, 56, 262-286	14	63
668	Ultrasound-Triggered Phase-Transition Cationic Nanodroplets for Enhanced Gene Delivery. *ACS Applied Materials & Interfaces*, **2015**, 7, 13524-37	9.5	62
667	Tailoring Oxygen Vacancies of BiVO4 toward Highly Efficient Noble-Metal-Free Electrocatalyst for Artificial N2 Fixation under Ambient Conditions. *Small Methods*, **2019**, 3, 1800333	12.8	61
666	Design of Pt/t-ZrO2/g-C3N4 efficient photocatalyst for the hydrogen evolution reaction. *Applied Catalysis B: Environmental*, **2019**, 251, 305-312	21.8	60
665	Discovery of cobweb-like MoC6 and its application for nitrogen fixation. *Journal of Materials Chemistry A*, **2018**, 6, 9623-9628	13	60
664	Al13@Pt42 core-shell cluster for oxygen reduction reaction. *Scientific Reports*, **2014**, 4, 5205	4.9	58
663	Determining the adsorption energies of small molecules with the intrinsic properties of adsorbates and substrates. *Nature Communications*, **2020**, 11, 1196	17.4	58
662	Dense and smooth amorphous films of multicomponent FeCoNiCuVZrAl high-entropy alloy deposited by direct current magnetron sputtering. *Materials & Design*, **2013**, 46, 675-679		58
661	Flexible Co-Mo-N/Au Electrodes with a Hierarchical Nanoporous Architecture as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. *Advanced Materials*, **2020**, 32, e1907214	24	57
660	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	13	57
659	Controlling growth of ZnO rods by polyvinylpyrrolidone (PVP) and their optical properties. *Applied Surface Science*, **2009**, 255, 6978-6984	6.7	57
658	Density functional theory study of oxygen reduction reaction on Pt/Pd3Al(111) alloy electrocatalyst. *Physical Chemistry Chemical Physics*, **2016**, 18, 14234-43	3.6	57
657	Review of Carbon Materials for Lithium-Sulfur Batteries. *ChemistrySelect*, **2018**, 3, 2245-2260	1.8	56

656	Prediction of Silicon Nanowires as Photocatalysts for Water Splitting: Band Structures Calculated Using Density Functional Theory. *Journal of Physical Chemistry C*, **2011**, 115, 3425-3428	3.8	56
655	Melting thermodynamics of nanocrystals embedded in a matrix. *Acta Materialia*, **2000**, 48, 4791-4795	8.4	56
654	High Efficient Photo-Fenton Catalyst of Fe2O3/MoS2 Hierarchical Nanoheterostructures: Reutilization for Supercapacitors. *Scientific Reports*, **2016**, 6, 31591	4.9	55
653	Finite size effect on melting enthalpy and melting entropy of nanocrystals. *Physica B: Condensed Matter*, **1999**, 270, 249-254	2.8	55
652	The performance of surfactant on the surface characteristics of electroless nickel coating on magnesium alloy. *Progress in Organic Coatings*, **2012**, 74, 788-793	4.8	54
651	An organic chromium-free conversion coating on AZ91D magnesium alloy. *Applied Surface Science*, **2008**, 255, 2322-2328	6.7	54
650	A Simple and Effective Principle for a Rational Design of Heterogeneous Catalysts for Dehydrogenation of Formic Acid. *Advanced Materials*, **2019**, 31, e1806781	24	53
649	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	13	53
648	Low-temperature hydrothermal synthesis of Fe/Fe3O4 nanocomposite for fast Congo red removal. *Dalton Transactions*, **2013**, 42, 2572-9	4.3	53
647	Efficient visible-light-driven hydrogen generation from water splitting catalyzed by highly stable CdS@Mo2C core shell nanorods. *Journal of Materials Chemistry A*, **2017**, 5, 15862-15868	13	53
646	Adsorption of CO on Surfaces of 4d and 5d Elements in Group VIII. *Journal of Physical Chemistry C*, **2007**, 111, 1005-1009	3.8	53
645	A Water-/Fireproof Flexible Lithium-Oxygen Battery Achieved by Synergy of Novel Architecture and Multifunctional Separator. *Advanced Materials*, **2018**, 30, 1703791	24	53
644	Simultaneous Achieving of High Faradaic Efficiency and CO Partial Current Density for CO2 Reduction via Robust, Noble-Metal-Free Zn Nanosheets with Favorable Adsorption Energy. *Advanced Energy Materials*, **2019**, 9, 1900276	21.8	51
643	Nonprecious Intermetallic Al7Cu4Ni Nanocrystals Seamlessly Integrated in Freestanding Bimodal Nanoporous Copper for Efficient Hydrogen Evolution Catalysis. *Advanced Functional Materials*, **2018**, 28, 1706127	15.6	51
642	In situ prepared reduced graphene oxide/CoO nanowires mutually-supporting porous structure with enhanced lithium storage performance. *Electrochimica Acta*, **2016**, 190, 276-284	6.7	51
641	Mechanochemistry for ammonia synthesis under mild conditions. *Nature Nanotechnology*, **2021**, 16, 325-330	38.7	51
640	Integrated solid/nanoporous copper/oxide hybrid bulk electrodes for high-performance lithium-ion batteries. *Scientific Reports*, **2013**, 3, 2878	4.9	50
639	High Density Arrayed Ni/NiO Core-shell Nanospheres Evenly Distributed on Graphene for Ultrahigh Performance Supercapacitor. *Scientific Reports*, **2017**, 7, 17709	4.9	50

638	Optical and magnetic properties of Nd-doped ZnO nanoparticles. *Crystal Research and Technology*, **2012**, 47, 713-718	1.3	50
637	Thermodynamic phase stabilities of nanocarbon. *Carbon*, **2006**, 44, 79-83	10.4	50
636	Superhydrophilic Cu-doped TiO2 thin film for solar-driven photocatalysis. *Ceramics International*, **2014**, 40, 5107-5110	5.1	49
635	Structural Selectivity of CO Oxidation on Fe/N/C Catalysts. *Journal of Physical Chemistry C*, **2012**, 116, 17572-17579	3.8	49
634	An elevated temperature MgDyZn alloy with long period stacking ordered phase by extrusion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2011**, 528, 3609-3614	5.3	49
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632	Surface energies of several ceramics with NaCl structure. *Surface Science*, **2006**, 600, 257-264	1.8	49
631	A new approach to detect congestive heart failure using short-term heart rate variability measures. *PLoS ONE*, **2014**, 9, e93399	3.7	49
630	Dual-phase nanostructuring of layered metal oxides for high-performance aqueous rechargeable potassium ion microbatteries. *Nature Communications*, **2019**, 10, 4292	17.4	48
629	Potential dependent and structural selectivity of the oxygen reduction reaction on nitrogen-doped carbon nanotubes: a density functional theory study. *Physical Chemistry Chemical Physics*, **2012**, 14, 11715-23	3.6	48
628	Stability of Ni in nitinol oxide surfaces. *Acta Biomaterialia*, **2011**, 7, 892-9	10.8	48
627	Synthesis of Ti2Nb10O29/C composite as an anode material for lithium-ion batteries. *International Journal of Hydrogen Energy*, **2016**, 41, 14807-14812	6.7	48
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