

Qingzhong Xue

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236
papers

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citations

50
h-index

81
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241
ext. papers

10,398
ext. citations

6.9
avg, IF

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L-index

#	Paper	IF	Citations
236	Fabrication and characterization of an ultrasensitive humidity sensor based on metal oxide/graphene hybrid nanocomposite. <i>Sensors and Actuators B: Chemical</i> , 2016 , 225, 233-240	8.5	286
235	Graphene oxide/polyacrylonitrile fiber hierarchical-structured membrane for ultra-fast microfiltration of oil-water emulsion. <i>Chemical Engineering Journal</i> , 2017 , 307, 643-649	14.7	229
234	Ultrahigh performance humidity sensor based on layer-by-layer self-assembly of graphene oxide/polyelectrolyte nanocomposite film. <i>Sensors and Actuators B: Chemical</i> , 2014 , 203, 263-270	8.5	203
233	Layered double hydroxides toward high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 15460-15485	13	188
232	Critical role of small micropores in high CO ₂ uptake. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 2523-9.6	9.6	184
231	Influence of chemical functionalization on the CO ₂ /N ₂ separation performance of porous graphene membranes. <i>Nanoscale</i> , 2012 , 4, 5477-82	7.7	172
230	Stable CoSe ₂ /carbon nanodice@reduced graphene oxide composites for high-performance rechargeable aluminum-ion batteries. <i>Energy and Environmental Science</i> , 2018 , 11, 2341-2347	35.4	169
229	Investigation of Molecular Interactions between SWNT and Polyethylene/Polypropylene/Polystyrene/Polyaniline Molecules. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 4628-4635	3.8	163
228	Tunable hydrogen separation in porous graphene membrane: first-principle and molecular dynamic simulation. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 8048-58	9.5	144
227	Iron-doping-enhanced photoelectrochemical water splitting performance of nanostructured WO ₃ : a combined experimental and theoretical study. <i>Nanoscale</i> , 2015 , 7, 2933-40	7.7	143
226	Flexible self-powered high-performance ammonia sensor based on Au-decorated MoSe ₂ nanoflowers driven by single layer MoS ₂ -flake piezoelectric nanogenerator. <i>Nano Energy</i> , 2019 , 65, 103974	17.1	136
225	Superior capacitive performance of active carbons derived from <i>Enteromorpha prolifera</i> . <i>Electrochimica Acta</i> , 2014 , 133, 459-466	6.7	133
224	Model for the effective thermal conductivity of carbon nanotube composites. <i>Nanotechnology</i> , 2006 , 17, 1655-60	3.4	131
223	Understanding the relationship between ion migration and the anomalous hysteresis in high-efficiency perovskite solar cells: A fresh perspective from halide substitution. <i>Nano Energy</i> , 2016 , 26, 620-630	17.1	127
222	Effect of Chemisorption on the Interfacial Bonding Characteristics of Graphene-Polymer Composites. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 6588-6594	3.8	127
221	High-rate capacitive performance of graphene aerogel with a superhigh C/O molar ratio. <i>Journal of Materials Chemistry</i> , 2012 , 22, 23186		125
220	Antifouling hydrolyzed polyacrylonitrile/graphene oxide membrane with spindle-knotted structure for highly effective separation of oil-water emulsion. <i>Journal of Membrane Science</i> , 2017 , 532, 38-46	9.6	122

219	Effect of defects on Young's modulus of graphene sheets: a molecular dynamics simulation. <i>RSC Advances</i> , 2012 , 2, 9124	3.7	121
218	C2N: an excellent two-dimensional monolayer membrane for He separation. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 21351-21356	13	117
217	Fabrication of carbon nanoscrolls from monolayer graphene. <i>Small</i> , 2010 , 6, 2010-9	11	113
216	Electrical and photovoltaic characteristics of MoS ₂ /Si p-n junctions. <i>Journal of Applied Physics</i> , 2015 , 117, 114502	2.5	112
215	Computational analysis of effect of modification on the interfacial characteristics of a carbon nanotube/polyethylene composite system. <i>Applied Surface Science</i> , 2009 , 255, 3534-3543	6.7	111
214	Theoretical approaches to graphene and graphene-based materials. <i>Nano Today</i> , 2012 , 7, 180-200	17.9	109
213	Fluorine-Modified Porous Graphene as Membrane for CO ₂ /N ₂ Separation: Molecular Dynamic and First-Principles Simulations. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 7369-7376	3.8	102
212	The influence of particle shape and size on electric conductivity of metal/polymer composites. <i>European Polymer Journal</i> , 2004 , 40, 323-327	5.2	102
211	Ultra-sensitive NH ₃ sensor based on flower-shaped SnS nanostructures with sub-ppm detection ability. <i>Journal of Hazardous Materials</i> , 2018 , 341, 159-167	12.8	94
210	Adsorption and Catalytic Activation of O ₂ Molecule on the Surface of Au-Doped Graphene under an External Electric Field. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 19918-19924	3.8	88
209	Charge-modulated CO ₂ capture of C ₃ N nanosheet: Insights from DFT calculations. <i>Chemical Engineering Journal</i> , 2018 , 338, 92-98	14.7	87
208	Effect of chemisorption on the interfacial bonding characteristics of carbon nanotube/polymer composites. <i>Polymer</i> , 2008 , 49, 800-808	3.9	87
207	Electrostatic Self-Assembly of Sandwich-Like CoAl-LDH/Polypyrrole/Graphene Nanocomposites with Enhanced Capacitive Performance. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 31699-31709	9.5	81
206	High-performance n-MoS ₂ /i-SiO ₂ /p-Si heterojunction solar cells. <i>Nanoscale</i> , 2015 , 7, 8304-8	7.7	76
205	ZIF-derived porous ZnO-Co ₃ O ₄ hollow polyhedrons heterostructure with highly enhanced ethanol detection performance. <i>Sensors and Actuators B: Chemical</i> , 2017 , 253, 523-532	8.5	76
204	Pore-scale characterization of tight sandstone in Yanchang Formation Ordos Basin China using micro-CT and SEM imaging from nm- to cm-scale. <i>Fuel</i> , 2017 , 209, 254-264	7.1	75
203	Synthesis of nanowire bundle-like WO ₃ /WO ₃ heterostructures for highly sensitive NH ₃ sensor application. <i>Journal of Hazardous Materials</i> , 2018 , 353, 290-299	12.8	74
202	Large dielectric constant of the chemically purified carbon nanotube/polymer composites. <i>Materials Letters</i> , 2008 , 62, 4229-4231	3.3	73

201	Porous graphene sandwich/poly(vinylidene fluoride) composites with high dielectric properties. <i>Composites Science and Technology</i> , 2013 , 86, 70-75	8.6	72
200	The core/shell composite nanowires produced by self-scrolling carbon nanotubes onto copper nanowires. <i>ACS Nano</i> , 2009 , 3, 2235-40	16.7	72
199	The interface effect of the effective electrical conductivity of carbon nanotube composites. <i>Nanotechnology</i> , 2007 , 18, 255705	3.4	72
198	High-efficiency separation performance of oil-water emulsions of polyacrylonitrile nanofibrous membrane decorated with metal-organic frameworks. <i>Applied Surface Science</i> , 2019 , 476, 61-69	6.7	71
197	Temperature dependence of the electrical properties of the carbon nanotube/polymer composites. <i>EXPRESS Polymer Letters</i> , 2009 , 3, 769-777	3.4	70
196	A hierarchical structured steel mesh decorated with metal organic framework/graphene oxide for high-efficient oil/water separation. <i>Journal of Hazardous Materials</i> , 2019 , 373, 725-732	12.8	65
195	Gigantic enhancement in the dielectric properties of polymer-based composites using core/shell MWCNT/amorphous carbon nanohybrids. <i>Nanoscale</i> , 2015 , 7, 3660-7	7.7	65
194	Carbon-encapsulated CoSe nanoparticles derived from metal-organic frameworks as advanced cathode material for Al-ion battery. <i>Journal of Power Sources</i> , 2018 , 401, 6-12	8.9	65
193	Superior Selective CO Adsorption of CN Pores: GCMC and DFT Simulations. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 31161-31169	9.5	60
192	Superhigh-rate capacitive performance of heteroatoms-doped double shell hollow carbon spheres. <i>Carbon</i> , 2015 , 86, 235-244	10.4	60
191	On the origin of the high capacitance of carbon derived from seaweed with an apparently low surface area. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 18998-19004	13	55
190	Sandwich-like graphene/polypyrrole/layered double hydroxide nanowires for high-performance supercapacitors. <i>Journal of Power Sources</i> , 2016 , 331, 67-75	8.9	54
189	Insight of synergistic effect of different active metal ions in layered double hydroxides on their electrochemical behaviors. <i>Electrochimica Acta</i> , 2017 , 253, 302-310	6.7	54
188	Keys to linking GCMC simulations and shale gas adsorption experiments. <i>Fuel</i> , 2017 , 199, 14-21	7.1	53
187	Glass transition temperature of functionalized graphene-polymer composites. <i>Computational Materials Science</i> , 2013 , 71, 66-71	3.2	50
186	Chemically functionalized 3D reticular graphene oxide frameworks decorated with MOF-derived Co ₃ O ₄ : Towards highly sensitive and selective detection to acetone. <i>Sensors and Actuators B: Chemical</i> , 2018 , 259, 289-298	8.5	50
185	Multi-shelled ZnCo ₂ O ₄ yolk-shell spheres for high-performance acetone gas sensor. <i>Applied Surface Science</i> , 2018 , 443, 114-121	6.7	49
184	Sandwich-like nitrogen-doped porous carbon/graphene nanoflakes with high-rate capacitive performance. <i>Nanoscale</i> , 2016 , 8, 7889-98	7.7	48

183	Effective CO ₂ detection based on LaOCl-doped SnO ₂ nanofibers: Insight into the role of oxygen in carrier gas. <i>Sensors and Actuators B: Chemical</i> , 2017 , 241, 725-734	8.5	48
182	Theoretical study of a tunable and strain-controlled nanoporous graphenylene membrane for multifunctional gas separation. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 15015-15021	13	47
181	Room-temperature high-sensitivity detection of ammonia gas using the capacitance of carbon/silicon heterojunctions. <i>Energy and Environmental Science</i> , 2010 , 3, 288	35.4	46
180	Great enhancement of CH ₄ sensitivity of SnO ₂ based nanofibers by heterogeneous sensitization and catalytic effect. <i>Sensors and Actuators B: Chemical</i> , 2018 , 254, 393-401	8.5	46
179	Insight into high areal capacitances of low apparent surface area carbons derived from nitrogen-rich polymers. <i>Carbon</i> , 2015 , 94, 560-567	10.4	44
178	Pinning Down the Anomalous Light Soaking Effect toward High-Performance and Fast-Response Perovskite Solar Cells: The Ion-Migration-Induced Charge Accumulation. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 5069-5076	6.4	43
177	UV assisted ppb-level acetone detection based on hollow ZnO/MoS ₂ nanosheets core/shell heterostructures at low temperature. <i>Sensors and Actuators B: Chemical</i> , 2020 , 317, 128208	8.5	43
176	Excellent dielectric properties of Polyvinylidene fluoride composites based on sandwich structured MnO ₂ /graphene nanosheets/MnO ₂ . <i>Composites Part A: Applied Science and Manufacturing</i> , 2014 , 67, 252-258	8.4	43
175	Dual-functional membrane decorated with flower-like metal-organic frameworks for highly efficient removal of insoluble emulsified oils and soluble dyes. <i>Journal of Hazardous Materials</i> , 2021 , 408, 124444	12.8	43
174	Remarkable supercapacitor performance of petal-like LDHs vertically grown on graphene/polypyrrole nanoflakes. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 8964-8971	13	41
173	Electrical characterization and ammonia sensing properties of MoS ₂ /Si p-n junction. <i>Journal of Alloys and Compounds</i> , 2015 , 631, 105-110	5.7	41
172	Influence of Nanotube Chirality, Temperature, and Chemical Modification on the Interfacial Bonding between Carbon Nanotubes and Polyphenylacetylene. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 16514-16520	3.8	41
171	Co-MOF-74 derived Co ₃ O ₄ /graphene heterojunction nanoscrolls for ppb-level acetone detection. <i>Sensors and Actuators B: Chemical</i> , 2019 , 300, 127011	8.5	38
170	Effect of chemisorption structure on the interfacial bonding characteristics of graphene/polymer composites. <i>Applied Surface Science</i> , 2012 , 258, 2077-2082	6.7	38
169	A durable mesh decorated with polydopamine/graphene oxide for highly efficient oil/water mixture separation. <i>Applied Surface Science</i> , 2019 , 479, 351-359	6.7	38
168	Self-powered broadband, high-detectivity and ultrafast photodetectors based on Pd-MoS ₂ /Si heterojunctions. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 1131-9	3.6	37
167	GCMC simulations on the adsorption mechanisms of CH ₄ and CO ₂ in K-illite and their implications for shale gas exploration and development. <i>Fuel</i> , 2018 , 224, 521-528	7.1	36
166	Fabrication of Carbon Nanoscrolls From Monolayer Graphene Controlled by P-Doped Silicon Nanowires: A MD Simulation Study. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 15217-15224	3.8	36

165	Extraction of kerogen from oil shale with supercritical carbon dioxide: Molecular dynamics simulations. <i>Journal of Supercritical Fluids</i> , 2016 , 107, 499-506	4.2	35
164	SnO ₂ nanoparticles-modified 3D-multilayer MoS ₂ nanosheets for ammonia gas sensing at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2020 , 321, 128471	8.5	35
163	Carbon Doping of Hexagonal Boron Nitride by Using CO Molecules. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 9332-9339	3.8	35
162	Ammonia sensitivity of amorphous carbon film/silicon heterojunctions. <i>Applied Physics Letters</i> , 2007 , 91, 122110	3.4	35
161	Effects of Sulfur Doping and Humidity on CO Capture by Graphite Split Pore: A Theoretical Study. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8336-8343	9.5	34
160	Self-assembly of double helical nanostructures inside carbon nanotubes. <i>Nanoscale</i> , 2013 , 5, 4191-9	7.7	34
159	Metal-organic frameworks derived ZnO@MoS nanosheets core/shell heterojunctions for ppb-level acetone detection: Ultra-fast response and recovery. <i>Sensors and Actuators B: Chemical</i> , 2020 , 304, 127430	8.5	34
158	How to select an optimal surfactant molecule to speed up the oil-detachment from solid surface: A computational simulation. <i>Chemical Engineering Science</i> , 2016 , 147, 47-53	4.4	33
157	Flexible SnSe Photodetectors with Ultrabroad Spectral Response up to 10.6 μm Enabled by Photobolometric Effect. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 35250-35258	9.5	33
156	High hydrogen sensitivity of vertically standing layered MoS ₂ /Si heterojunctions. <i>Journal of Alloys and Compounds</i> , 2016 , 682, 29-34	5.7	32
155	Reusable membrane with multifunctional skin layer for effective removal of insoluble emulsified oils and soluble dyes. <i>Journal of Hazardous Materials</i> , 2021 , 415, 125677	12.8	32
154	Enhanced Room Temperature Oxygen Sensing Properties of LaOCl-SnO Hollow Spheres by UV Light Illumination. <i>ACS Sensors</i> , 2017 , 2, 679-686	9.2	31
153	Effective enhancement of gas separation performance in mixed matrix membranes using core/shell structured multi-walled carbon nanotube/graphene oxide nanoribbons. <i>Nanotechnology</i> , 2017 , 28, 065702	3.4	31
152	Room temperature hydrogen sensor with ultrahigh-responsive characteristics based on Pd/SnO ₂ /SiO ₂ /Si heterojunctions. <i>Sensors and Actuators B: Chemical</i> , 2016 , 227, 438-447	8.5	31
151	Structure control of ultra-large graphene oxide sheets by the Langmuir-Blodgett method. <i>RSC Advances</i> , 2013 , 3, 4680	3.7	31
150	Current-voltage characteristics and ethanol gas sensing properties of ZnO thin film/Si heterojunction at room temperature. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010 , 42, 2021-2025	3	31
149	Outstanding capacitive performance of ordered mesoporous carbon modified by anthraquinone. <i>Electrochimica Acta</i> , 2018 , 259, 110-121	6.7	29
148	Hydrogen storage and release by bending carbon nanotubes. <i>Computational Materials Science</i> , 2013 , 68, 121-126	3.2	29

147	Oil detachment from silica surface modified by carboxy groups in aqueous cetyltriethylammonium bromide solution. <i>Applied Surface Science</i> , 2015 , 353, 1103-1111	6.7	28
146	Inherent wettability of different rock surfaces at nanoscale: a theoretical study. <i>Applied Surface Science</i> , 2018 , 434, 73-81	6.7	28
145	Highly enhanced sensitivity of hydrogen sensors using novel palladium-decorated graphene nanoribbon film/SiO ₂ /Si structures. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 15931-15937	13	28
144	Theoretical Prediction of Hydrogen Separation Performance of Two-Dimensional Carbon Network of Fused Pentagon. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 28502-7	9.5	28
143	Investigation of pore size effects on adsorption behavior of shale gas. <i>Marine and Petroleum Geology</i> , 2019 , 109, 1-8	4.7	27
142	Wafer-size growth of 2D layered SnSe films for UV-Visible-NIR photodetector arrays with high responsivity. <i>Nanoscale</i> , 2020 , 12, 7358-7365	7.7	27
141	Outstanding capacitive performance of reticular porous carbon/graphene sheets with superhigh surface area. <i>Electrochimica Acta</i> , 2016 , 190, 923-931	6.7	27
140	585 divacancy-defective germanene as a hydrogen separation membrane: A DFT study. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 24189-24196	6.7	27
139	Influence of Solid Surface and Functional Group on the Collapse of Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 2100-2107	3.8	27
138	Radial Collapse of Single-Walled Carbon Nanotubes Induced by the Cu ₂ O Surface. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 3120-3126	3.8	27
137	Graphitic carbon nitride catalyzes selective oxidative dehydrogenation of propane. <i>Applied Catalysis B: Environmental</i> , 2020 , 262, 118277	21.8	27
136	Ultrahigh broadband photoresponse of SnO nanoparticle thin film/SiO/p-Si heterojunction. <i>Nanoscale</i> , 2017 , 9, 8848-8857	7.7	26
135	Ultrafast breathing humidity sensing properties of low-dimensional Fe-doped SnO ₂ flower-like spheres. <i>RSC Advances</i> , 2016 , 6, 27008-27015	3.7	26
134	Self-assembly of C ₄ H-type hydrogenated graphene. <i>Nanoscale</i> , 2013 , 5, 11132-8	7.7	26
133	Molecular insights into carbon dioxide enhanced multi-component shale gas recovery and its sequestration in realistic kerogen. <i>Chemical Engineering Journal</i> , 2021 , 425, 130292	14.7	25
132	Bifunctional petaloid nickel manganese layered double hydroxides decorated on a freestanding carbon foam for flexible asymmetric supercapacitor and oxygen evolution. <i>Electrochimica Acta</i> , 2017 , 252, 275-285	6.7	24
131	Effect of ethanol gas on the electrical properties of ZnO nanorods. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011 , 43, 1056-1060	3	24
130	Growth and humidity-dependent electrical properties of bulk-like MoS ₂ thin films on Si. <i>RSC Advances</i> , 2015 , 5, 74329-74335	3.7	23

129	High-performance WO ₃ /WSe ₂ /SiO ₂ /n-Si heterojunction near-infrared photodetector via a homo-doping strategy. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 5821-5829	7.1	23
128	Humidity sensitive properties of amorphous (K,Na)NbO ₃ lead free thin films. <i>Ceramics International</i> , 2014 , 40, 10263-10267	5.1	23
127	Anomalous positive magnetoresistance in Co _x Fe _{1-x} granular films on Si substrates. <i>Journal of Applied Physics</i> , 2004 , 95, 1906-1910	2.5	23
126	Enhancing oil-in-water emulsion separation performance of polyvinyl alcohol hydrogel nanofibrous membrane by squeezing coalescence demulsification. <i>Journal of Membrane Science</i> , 2021 , 630, 119324	9.6	23
125	Enhanced gas separation performance of Pebax mixed matrix membranes by incorporating ZIF-8 in situ inserted by multiwalled carbon nanotubes. <i>Separation and Purification Technology</i> , 2020 , 248, 117080	8.3	22
124	Hydrogen gas sensing properties of Pd/a-C:Pd/SiO ₂ /Si structure at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2013 , 186, 796-801	8.5	22
123	Silicon/graphene core/shell nanowires produced by self-scrolling. <i>Computational Materials Science</i> , 2010 , 49, 588-592	3.2	22
122	Excellent dielectric properties of PVDF-based composites filled with carbonized PAN/PEG copolymer fibers. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016 , 87, 46-53	8.4	22
121	High hydrogen response of Pd/TiO ₂ /SiO ₂ /Si multilayers at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2014 , 205, 255-260	8.5	21
120	Different factors effect on the SWNT-fluorocarbon resin interaction: A MD simulation study. <i>Computational Materials Science</i> , 2010 , 49, 148-157	3.2	21
119	Multifunctional charged hydrogel nanofibrous membranes for metal ions contained emulsified oily wastewater purification. <i>Journal of Membrane Science</i> , 2021 , 621, 118950	9.6	21
118	MeNi ₂ (Me = Fe, Cu, and Co) nanosheet as a promising charge-controlled CO ₂ capture material. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 12404-12410	13	21
117	Facile synthesis of La ₂ O ₂ CO ₃ nanoparticle films and Its CO ₂ sensing properties and mechanisms. <i>Applied Surface Science</i> , 2017 , 426, 725-733	6.7	20
116	Diverse nanowires activated self-scrolling of graphene nanoribbons. <i>Applied Surface Science</i> , 2012 , 258, 1964-1970	6.7	20
115	The preparation, load and photocatalytic performance of N-doped and CdS-coupled TiO ₂ . <i>RSC Advances</i> , 2013 , 3, 9483	3.7	20
114	One-step synthesis of a robust and anti-oil-fouling biomimetic cactus-like hierarchical architecture for highly efficient oil/water separation. <i>Environmental Science: Nano</i> , 2020 , 7, 903-911	7.1	20
113	Mechanism of oil molecules transportation in nano-sized shale channel: MD simulation. <i>RSC Advances</i> , 2015 , 5, 25684-25692	3.7	19
112	Chemical Modification: an Effective Way of Avoiding the Collapse of SWNTs on Al Surface Revealed by Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 14747-14752	3.8	19

111	A percolation model of metal-insulator composites. <i>Physica B: Condensed Matter</i> , 2003 , 325, 195-198	2.8	19
110	Metal-organic frameworks derived hierarchical flower-like ZnO/ Co3O4 heterojunctions for ppb-level acetone detection. <i>Sensors and Actuators B: Chemical</i> , 2020 , 325, 128814	8.5	19
109	Preparation of spherical and dendritic CdS@TiO2 hollow double-shelled nanoparticles for photocatalysis. <i>Materials Letters</i> , 2016 , 166, 113-115	3.3	18
108	Two-dimensional graphene oxide membrane for H2/CH4 separation: Insights from molecular dynamics simulations. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 30653-30660	6.7	18
107	Release of encapsulated molecules from carbon nanotubes using a displacing method: a MD simulation study. <i>RSC Advances</i> , 2012 , 2, 6913	3.7	18
106	Charge-controlled switchable H2 storage on conductive borophene nanosheet. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 20150-20157	6.7	17
105	Revealing the impacting factors of cathodic carbon catalysts for Li-CO2 batteries in the pore-structure point of view. <i>Electrochimica Acta</i> , 2019 , 311, 41-49	6.7	17
104	Self-Assembly of Helical Polyacetylene Nanostructures on Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 16248-16255	3.8	17
103	Sulfur-Nitrogen Codoped Graphite Slit-Pore for Enhancing Selective Carbon Dioxide Adsorption: Insights from Molecular Simulations. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 8815-8823	8.3	17
102	Effective dielectric constant of composite with interfacial shells. <i>Physica B: Condensed Matter</i> , 2004 , 344, 129-132	2.8	17
101	Oxygen vacancies enhanced photoresponsive performance of ZnO nanoparticles thin film/Si heterojunctions for ultraviolet/infrared photodetector. <i>Journal of Alloys and Compounds</i> , 2019 , 797, 1224-1231 ¹⁶	5.7	16
100	Microphone-like Cu-CAT-1 hierarchical structures with ultra-low oil adhesion for highly efficient oil/water separation. <i>Separation and Purification Technology</i> , 2020 , 241, 116688	8.3	16
99	Layered double hydroxides derived NiCo-sulfide as a cathode material for aluminum ion batteries. <i>Electrochimica Acta</i> , 2020 , 344, 136174	6.7	15
98	Self-Assembly of Hydrofluorinated Janus Graphene Monolayer: A Versatile Route for Designing Novel Janus Nanoscrolls. <i>Scientific Reports</i> , 2016 , 6, 26914	4.9	15
97	Super flexibility and stability of graphene nanoribbons under severe twist. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 18406-13	3.6	15
96	Anomalous current-voltage characteristics and colossal electroresistance of amorphous carbon film on Si substrate. <i>Applied Physics Letters</i> , 2004 , 85, 4397	3.4	15
95	ZIF-8 derived ZnO polyhedrons decorated with biomass derived nitrogen-doped porous carbon for enhanced acetone sensing. <i>Sensors and Actuators B: Chemical</i> , 2021 , 330, 129366	8.5	15
94	Layer-by-layer self-assembly of polyaniline nanofibers/TiO nanotubes heterojunction thin film for ammonia detection at room temperature. <i>Nanotechnology</i> , 2019 , 30, 135501	3.4	15

93	3D radial Co ₃ O ₄ nanorod cluster derived from cobalt-based layered hydroxide metal salt for enhanced trace acetone detection. <i>Sensors and Actuators B: Chemical</i> , 2021 , 327, 128926	8.5	15
92	Theoretical study of H ₂ separation performance of two-dimensional graphitic carbon oxide membrane. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 13120-13126	6.7	14
91	Enhanced energy storage density and discharge efficiency in potassium sodium niobite-based ceramics prepared using a new scheme. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 2357-2365	6	14
90	Ultrahigh photosensitivity and detectivity of hydrogen-treated TiO ₂ nanorod array/SiO ₂ /Si heterojunction broadband photodetectors and its mechanism. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2319-2328	7.1	14
89	Critical factors controlling shale gas adsorption mechanisms on Different Minerals Investigated Using GCMC simulations. <i>Marine and Petroleum Geology</i> , 2019 , 100, 31-42	4.7	14
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