Qingzhong Xue

List of Publications by Year in Descending Order

236 papers	8,681 citations	50 h-index	81 g-index
241 ext. papers	10,398 ext. citations	6.9 avg, IF	6.51 L-index

#	Paper	IF	Citations
236	A tin oxide/silicon heterojunction with a nano litchi shell structure for ultrafast, high-detectivity, self-powered broadband photodetectors. *Journal of Materials Chemistry C*, **2022**, 10, 2049-2059	7.1	2
235	Self-powered multifunctional monitoring and analysis system based on dual-triboelectric nanogenerator and chitosan/activated carbon film humidity sensor. *Nano Energy*, **2022**, 94, 106881	17.1	7
234	Sensing mechanism of acetone adsorption on charged ZnO and ZnSe surfaces: Insights from DFT calculations. *Materials Today Communications*, **2022**, 31, 103238	2.5	1
233	Plate-barrier architecture of rGO-TiO2 derived from MXene for constructing well-aligned polymer nanocomposites with excellent dielectric performance. *Composites Science and Technology*, **2022**, 218, 109191	8.6	0
232	The miscible behaviors of C3H8/C8H18(C7H17N) system in nanoslits: Effects of pore size and rock surface wettability. *Chemical Engineering Journal*, **2022**, 431, 133988	14.7	
231	Multifunctional superwetting positively charged foams for continuous oil/water emulsion separation and removal of hazardous pollutants from water. *Separation and Purification Technology*, **2022**, 289, 120683	8.3	2
230	The effect of gas injection velocity and pore morphology on displacement mechanisms in porous media based on CFD approach. *Journal of Natural Gas Science and Engineering*, **2022**, 101, 104558	4.6	0
229	Trace nitrogen-incorporation stimulates dual active sites of nickel catalysts for efficient hydrogen oxidation electrocatalysis. *Chemical Engineering Journal*, **2022**, 445, 136700	14.7	2
228	Robust modified nylon mesh for the separation of crude-oil/water emulsion based on the coupling of squeezing coalescence demulsification and sieving separation. *Separation and Purification Technology*, **2022**, 295, 121319	8.3	2
227	Polycyclic Aromatic Hydrocarbons as a New Class of Promising Cathode Materials for Aluminum-Ion Batteries. *Angewandte Chemie - International Edition*, **2021**, 61, e202114681	16.4	7
226	End Group Modification for Black Phosphorus: Simultaneous Improvement of Chemical Stability and Gas Sensing Performance. *ACS Applied Materials & Interfaces*, **2021**, 13, 50270-50280	9.5	3
225	ZIF-8 derived ZnO polyhedrons decorated with biomass derived nitrogen-doped porous carbon for enhanced acetone sensing. *Sensors and Actuators B: Chemical*, **2021**, 330, 129366	8.5	15
224	Critical factors controlling adsorption capacity of shale gas in Wufeng-Longmaxi formation, Sichuan Basin: Evidences from both experiments and molecular simulations. *Journal of Natural Gas Science and Engineering*, **2021**, 88, 103774	4.6	9
223	Dual-functional membrane decorated with flower-like metal-organic frameworks for highly efficient removal of insoluble emulsified oils and soluble dyes. *Journal of Hazardous Materials*, **2021**, 408, 124444	12.8	43
222	Dynamics and miscible behaviors of hydrocarbon gas and crude oil in nanoslits: Effects of light gas type and crude oil components. *Chemical Engineering Journal*, **2021**, 405, 127012	14.7	8
221	High-performance aluminum-polyaniline battery based on the interaction between aluminum ion and -NH groups. *Science China Materials*, **2021**, 64, 318-328	7.1	12
220	3D radial Co3O4 nanorod cluster derived from cobalt-based layered hydroxide metal salt for enhanced trace acetone detection. *Sensors and Actuators B: Chemical*, **2021**, 327, 128926	8.5	15

219	Multifunctional charged hydrogel nanofibrous membranes for metal ions contained emulsified oily wastewater purification. *Journal of Membrane Science*, **2021**, 621, 118950	9.6	21
218	Ni-doped brochantite@copper hydroxide hierarchical structures on copper mesh with ultrahigh oil-resistance for high-efficiency oil/water separation. *Surface and Coatings Technology*, **2021**, 406, 126642	4.4	6
217	CH□and CO□Adsorption Mechanism in Kaolinite Slit Nanopores as Studied by the Grand Canonical Monte Carlo Method. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 108-119	1.3	1
216	Improving the performance of lithium ion capacitor by stabilizing anode working potential using CoSe2 nanoparticles embedded nitrogen-doped hard carbon microspheres. *Electrochimica Acta*, **2021**, 370, 137717	6.7	2
215	Water-Soluble Salt Template-Assisted Anchor of Hollow FeS2 Nanoparticle Inside 3D Carbon Skeleton to Achieve Fast Potassium-Ion Storage. *Advanced Energy Materials*, **2021**, 11, 2101343	21.8	12
214	Enhancing oil-in-water emulsion separation performance of polyvinyl alcohol hydrogel nanofibrous membrane by squeezing coalescence demulsification. *Journal of Membrane Science*, **2021**, 630, 119324	9.6	23
213	Stimulation of surface terminating group by carbon quantum dots for improving pseudocapacitance of Ti3C2Tx MXene based electrode. *Carbon*, **2021**, 180, 118-126	10.4	6
212	Reusable membrane with multifunctional skin layer for effective removal of insoluble emulsified oils and soluble dyes. *Journal of Hazardous Materials*, **2021**, 415, 125677	12.8	32
211	Hierarchical superhydrophobic polydimethylsiloxane/copper terephthalate/polyurethane sponge for highly efficient oil/water separation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 630, 127635	5.1	7
210	Amorphous Se species anchored into enclosed carbon skeleton bridged by chemical bonding toward advanced K-Se batteries. *Journal of Energy Chemistry*, **2021**, 61, 319-326	12	4
209	Bimetallic metal□rganic frameworks derived hierarchical flower-like Zn-doped Co3O4 for enhanced acetone sensing properties. *Applied Surface Science*, **2021**, 565, 150520	6.7	6
208	The miscible behaviors and mechanism of CO2/CH4/C3H8/N2 and crude oil in nanoslits: A molecular dynamics simulation study. *Fuel*, **2021**, 304, 121461	7.1	3
207	Molecular insights into carbon dioxide enhanced multi-component shale gas recovery and its sequestration in realistic kerogen. *Chemical Engineering Journal*, **2021**, 425, 130292	14.7	25
206	Bioinspired Anti-Oil-Fouling Hierarchical Structured Membranes Decorated with Urchin-Like □FeOOH Particles for Efficient Oil/Water Mixture and Crude Oil-in-Water Emulsion Separation. *ACS Applied Materials & Interfaces*, **2020**, 12, 50962-50970	9.5	11
205	UV assisted ppb-level acetone detection based on hollow ZnO/MoS2 nanosheets core/shell heterostructures at low temperature. *Sensors and Actuators B: Chemical*, **2020**, 317, 128208	8.5	43
204	Enhanced gas separation performance of Pebax mixed matrix membranes by incorporating ZIF-8 in situ inserted by multiwalled carbon nanotubes. *Separation and Purification Technology*, **2020**, 248, 117080	8.3	22
203	Wafer-size growth of 2D layered SnSe films for UV-Visible-NIR photodetector arrays with high responsitivity. *Nanoscale*, **2020**, 12, 7358-7365	7.7	27
202	Folding 2D Graphene Nanoribbons into 3D Nanocages Induced by Platinum Nanoclusters. *Journal of Physical Chemistry C*, **2020**, 124, 10495-10501	3.8	1

201	The miscible behaviors of C10H22(C7H17N)/C3H8 system: Insights from molecular dynamics simulations. *Fuel*, **2020**, 279, 118445	7.1	9
200	SnO2 nanoparticles-modified 3D-multilayer MoS2 nanosheets for ammonia gas sensing at room temperature. *Sensors and Actuators B: Chemical*, **2020**, 321, 128471	8.5	35
199	High-performance aqueous sodium-ion battery using a hybrid electrolyte with a wide electrochemical stability window.. *RSC Advances*, **2020**, 10, 25496-25499	3.7	5
198	Autonomous Drug Release Systems with Disease Symptom-Associated Triggers. *Advanced Intelligent Systems*, **2020**, 2, 1900124	6	6
197	Microphone-like Cu-CAT-1 hierarchical structures with ultra-low oil adhesion for highly efficient oil/water separation. *Separation and Purification Technology*, **2020**, 241, 116688	8.3	16
196	Enhanced energy storage density and discharge efficiency in potassium sodium niobite-based ceramics prepared using a new scheme. *Journal of the European Ceramic Society*, **2020**, 40, 2357-2365	6	14
195	Layered double hydroxides derived NiCo-sulfide as a cathode material for aluminum ion batteries. *Electrochimica Acta*, **2020**, 344, 136174	6.7	15
194	Review□Open-Framework Structure Based Cathode Materials Coupled with Metallic Anodes for Rechargeable Multivalent Ion Batteries. *Journal of the Electrochemical Society*, **2020**, 167, 160530	3.9	3
193	One-step synthesis of a robust and anti-oil-fouling biomimetic cactus-like hierarchical architecture for highly efficient oil/water separation. *Environmental Science: Nano*, **2020**, 7, 903-911	7.1	20
192	Doping-induced enhancement of CO2 adsorption on negatively charged C3N nanosheet: Insights from DFT calculations. *Chemical Engineering Journal*, **2020**, 387, 123403	14.7	10
191	Metal-organic frameworks derived ZnO@MoS nanosheets core/shell heterojunctions for ppb-level acetone detection: Ultra-fast response and recovery. *Sensors and Actuators B: Chemical*, **2020**, 304, 127430	8.5	34
190	Small graphite nanoflakes as an advanced cathode material for aluminum ion batteries. *Chemical Communications*, **2020**, 56, 1593-1596	5.8	13
189	Metal-organic frameworks derived hierarchical flower-like ZnO/ Co3O4 heterojunctions for ppb-level acetone detection. *Sensors and Actuators B: Chemical*, **2020**, 325, 128814	8.5	19
188	High performance aluminum ion battery using polyaniline/ordered mesoporous carbon composite. *Journal of Power Sources*, **2020**, 477, 228702	8.9	13
187	Flexible SnSe Photodetectors with Ultrabroad Spectral Response up to 10.6 □m Enabled by Photobolometric Effect. *ACS Applied Materials & Interfaces*, **2020**, 12, 35250-35258	9.5	33
186	Great Enhancement of Self-Powered Photoresponse Performance of C3H8NSi-TiO2 NRAs/n-Si Heterojunction by Build-In and Build-Out Electric Field Jointly Promoting Carrier Separation. *Advanced Electronic Materials*, **2020**, 6, 2000501	6.4	6
185	Theoretical study of strain-controlled C2X (X□=□N, O) membrane for CO2/C2H2 separation. *Applied Surface Science*, **2020**, 530, 147250	6.7	6
184	Surface lattice reconstruction enhanced the photoresponse performance of a self-powered ZnO nanorod arrays/Si heterojunction photodetector. *Journal of Materials Chemistry C*, **2020**, 8, 17440-17449	7.1	5

183	Adsorption and absorption of supercritical methane within shale kerogen slit. *Journal of Molecular Liquids*, **2020**, 320, 114364	6	9
182	Hydrogen of Polythiophene Induced Aluminum Ion Storage for High-Performance Al-Polythiophene Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 46065-46072	9.5	11
181	Embedded SnO2/Diatomaceous earth composites for fast humidity sensing and controlling properties. *Sensors and Actuators B: Chemical*, **2020**, 303, 127137	8.5	9
180	Graphitic carbon nitride catalyzes selective oxidative dehydrogenation of propane. *Applied Catalysis B: Environmental*, **2020**, 262, 118277	21.8	27
179	Co-MOF-74 derived Co3O4/graphene heterojunction nanoscrolls for ppb-level acetone detection. *Sensors and Actuators B: Chemical*, **2019**, 300, 127011	8.5	38
178	Solution quenched in-situ growth of hierarchical flower-like NiFe2O4/Fe2O3 heterojunction for wide-range light absorption. *Journal of Power Sources*, **2019**, 440, 227120	8.9	9
177	Charge-controlled switchable H2 storage on conductive borophene nanosheet. *International Journal of Hydrogen Energy*, **2019**, 44, 20150-20157	6.7	17
176	Investigation of pore size effects on adsorption behavior of shale gas. *Marine and Petroleum Geology*, **2019**, 109, 1-8	4.7	27
175	Oxygen vacancies enhanced photoresponsive performance of ZnO nanoparticles thin film/Si heterojunctions for ultraviolet/infrared photodetector. *Journal of Alloys and Compounds*, **2019**, 797, 1224-1231	5.7	16
174	Revealing the impacting factors of cathodic carbon catalysts for Li-CO2 batteries in the pore-structure point of view. *Electrochimica Acta*, **2019**, 311, 41-49	6.7	17
173	A ZIF-8@H:ZnO core shell nanorod arrays/Si heterojunction self-powered photodetector with ultrahigh performance. *Journal of Materials Chemistry C*, **2019**, 7, 5172-5183	7.1	11
172	A hierarchical structured steel mesh decorated with metal organic framework/graphene oxide for high-efficient oil/water separation. *Journal of Hazardous Materials*, **2019**, 373, 725-732	12.8	65
171	Flexible self-powered high-performance ammonia sensor based on Au-decorated MoSe2 nanoflowers driven by single layer MoS2-flake piezoelectric nanogenerator. *Nano Energy*, **2019**, 65, 103974	17.1	136
170	TiO@TiOHx core-shell nanoparticle film/Si heterojunction for ultrahigh detectivity and sensitivity broadband photodetector. *Nanotechnology*, **2019**, 30, 415203	3.4	4
169	A durable mesh decorated with polydopamine/graphene oxide for highly efficient oil/water mixture separation. *Applied Surface Science*, **2019**, 479, 351-359	6.7	38
168	High-efficiency separation performance of oil-water emulsions of polyacrylonitrile nanofibrous membrane decorated with metal-organic frameworks. *Applied Surface Science*, **2019**, 476, 61-69	6.7	71
167	Layer-by-layer self-assembly of polyaniline nanofibers/TiO nanotubes heterojunction thin film for ammonia detection at room temperature. *Nanotechnology*, **2019**, 30, 135501	3.4	15
166	Critical factors controlling shale gas adsorption mechanisms on Different Minerals Investigated Using GCMC simulations. *Marine and Petroleum Geology*, **2019**, 100, 31-42	4.7	14

165	Confined hetero double helix structure induced by graphene nanoribbon. *2D Materials*, **2019**, 6, 034001	5.9	2
164	Numerical simulation of enhancing shale gas recovery using electrical resistance heating method. *International Journal of Heat and Mass Transfer*, **2019**, 128, 1218-1228	4.9	10
163	Multi-shelled ZnCo2O4 yolk-shell spheres for high-performance acetone gas sensor. *Applied Surface Science*, **2018**, 443, 114-121	6.7	49
162	Synthesis of nanowire bundle-like WO-WO heterostructures for highly sensitive NH sensor application. *Journal of Hazardous Materials*, **2018**, 353, 290-299	12.8	74
161	Ultrahigh photosensitivity and detectivity of hydrogen-treated TiO2 nanorod array/SiO2/Si heterojunction broadband photodetectors and its mechanism. *Journal of Materials Chemistry C*, **2018**, 6, 2319-2328	7.1	14
160	Charge-modulated CO2 capture of C3N nanosheet: Insights from DFT calculations. *Chemical Engineering Journal*, **2018**, 338, 92-98	14.7	87
159	GCMC simulations on the adsorption mechanisms of CH4 and CO2 in K-illite and their implications for shale gas exploration and development. *Fuel*, **2018**, 224, 521-528	7.1	36
158	S-graphite slit pore: A superior selective adsorbent for light hydrocarbons. *Applied Surface Science*, **2018**, 444, 772-779	6.7	11
157	Ultra-sensitive NH sensor based on flower-shaped SnS nanostructures with sub-ppm detection ability. *Journal of Hazardous Materials*, **2018**, 341, 159-167	12.8	94
156	Outstanding capacitive performance of ordered mesoporous carbon modified by anthraquinone. *Electrochimica Acta*, **2018**, 259, 110-121	6.7	29
155	Inherent wettability of different rock surfaces at nanoscale: a theoretical study. *Applied Surface Science*, **2018**, 434, 73-81	6.7	28
154	High-performance WO3-WSe2/SiO2/n-Si heterojunction near-infrared photodetector via a homo-doping strategy. *Journal of Materials Chemistry C*, **2018**, 6, 5821-5829	7.1	23
153	Stable CoSe2/carbon nanodice@reduced graphene oxide composites for high-performance rechargeable aluminum-ion batteries. *Energy and Environmental Science*, **2018**, 11, 2341-2347	35.4	169
152	Great enhancement of CH4 sensitivity of SnO2 based nanofibers by heterogeneous sensitization and catalytic effect. *Sensors and Actuators B: Chemical*, **2018**, 254, 393-401	8.5	46
151	Chemically functionalized 3D reticular graphene oxide frameworks decorated with MOF-derived Co3O4: Towards highly sensitive and selective detection to acetone. *Sensors and Actuators B: Chemical*, **2018**, 259, 289-298	8.5	50
150	Carbon-encapsulated CoSe nanoparticles derived from metal-organic frameworks as advanced cathode material for Al-ion battery. *Journal of Power Sources*, **2018**, 401, 6-12	8.9	65
149	MeNC (Me = Fe, Cu, and Co) nanosheet as a promising charge-controlled CO2 capture material. *Journal of Materials Chemistry A*, **2018**, 6, 12404-12410	13	21
148	Ultra-high selective capture of CO2 on one-sided N-doped carbon nanoscrolls. *Journal of CO2 Utilization*, **2017**, 18, 275-282	7.6	13

147	Effects of Sulfur Doping and Humidity on CO Capture by Graphite Split Pore: A Theoretical Study. *ACS Applied Materials & Interfaces*, **2017**, 9, 8336-8343	9.5	34
146	Keys to linking GCMC simulations and shale gas adsorption experiments. *Fuel*, **2017**, 199, 14-21	7.1	53
145	Defective germanene as a high-efficiency helium separation membrane: a first-principles study. *Nanotechnology*, **2017**, 28, 135703	3.4	11
144	Functionalization of petroleum coke-based mesoporous carbon for synergistically enhanced capacitive performance. *Journal of Materials Research*, **2017**, 32, 1248-1257	2.5	4
143	Enhanced Room Temperature Oxygen Sensing Properties of LaOCl-SnO Hollow Spheres by UV Light Illumination. *ACS Sensors*, **2017**, 2, 679-686	9.2	31
142	Theoretical study of H 2 separation performance of two-dimensional graphitic carbon oxide membrane. *International Journal of Hydrogen Energy*, **2017**, 42, 13120-13126	6.7	14
141	Mixed Matrix Membranes with Excellent CO2 Capture Induced by Nano-Carbon Hybrids. *ChemNanoMat*, **2017**, 3, 560-568	3.5	8
140	Ultrahigh broadband photoresponse of SnO nanoparticle thin film/SiO/p-Si heterojunction. *Nanoscale*, **2017**, 9, 8848-8857	7.7	26
139	Ultrahigh permittivity of polymer nanocomposites based on surface-modified amorphous carbon/MWCNTs shell/core structured nanohybrids. *Composites Part A: Applied Science and Manufacturing*, **2017**, 100, 324-332	8.4	8
138	Remarkable supercapacitor performance of petal-like LDHs vertically grown on graphene/polypyrrole nanoflakes. *Journal of Materials Chemistry A*, **2017**, 5, 8964-8971	13	41
137	Antifouling hydrolyzed polyacrylonitrile/graphene oxide membrane with spindle-knotted structure for highly effective separation of oil-water emulsion. *Journal of Membrane Science*, **2017**, 532, 38-46	9.6	122
136	Effective enhancement of gas separation performance in mixed matrix membranes using core/shell structured multi-walled carbon nanotube/graphene oxide nanoribbons. *Nanotechnology*, **2017**, 28, 065702	3.4	31
135	Pinning Down the Anomalous Light Soaking Effect toward High-Performance and Fast-Response Perovskite Solar Cells: The Ion-Migration-Induced Charge Accumulation. *Journal of Physical Chemistry Letters*, **2017**, 8, 5069-5076	6.4	43
134	Molecular Simulation of Oil Mixture Adsorption Character in Shale System. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 6198-6209	1.3	8
133	Superior Selective CO Adsorption of CN Pores: GCMC and DFT Simulations. *ACS Applied Materials & Interfaces*, **2017**, 9, 31161-31169	9.5	60
132	Insight of synergistic effect of different active metal ions in layered double hydroxides on their electrochemical behaviors. *Electrochimica Acta*, **2017**, 253, 302-310	6.7	54
131	Fluorine-rich carbon nanoscrolls for CO2/CO (C2H2) adsorptive separation. *Journal of CO2 Utilization*, **2017**, 21, 429-435	7.6	8
130	Electrostatic Self-Assembly of Sandwich-Like CoAl-LDH/Polypyrrole/Graphene Nanocomposites with Enhanced Capacitive Performance. *ACS Applied Materials & Interfaces*, **2017**, 9, 31699-31709	9.5	81

129	585 divacancy-defective germanene as a hydrogen separation membrane: A DFT study. *International Journal of Hydrogen Energy*, **2017**, 42, 24189-24196	6.7	27
128	Facile synthesis of La2O2CO3 nanoparticle films and Its CO2 sensing properties and mechanisms. *Applied Surface Science*, **2017**, 426, 725-733	6.7	20
127	Bifuntional petaloid nickel manganese layered double hydroxides decorated on a freestanding carbon foam for flexible asymmetric supercapacitor and oxygen evolution. *Electrochimica Acta*, **2017**, 252, 275-285	6.7	24
126	Extracting the inner wall from nested double-walled carbon nanotube by platinum nanowire: molecular dynamics simulations. *RSC Advances*, **2017**, 7, 39480-39489	3.7	4
125	Pore-scale characterization of tight sandstone in Yanchang Formation Ordos Basin China using micro-CT and SEM imaging from nm- to cm-scale. *Fuel*, **2017**, 209, 254-264	7.1	75
124	SulfurNitrogen Codoped Graphite Slit-Pore for Enhancing Selective Carbon Dioxide Adsorption: Insights from Molecular Simulations. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 8815-8823	8.3	17
123	Two-dimensional graphene oxide membrane for H2/CH4 separation: Insights from molecular dynamics simulations. *International Journal of Hydrogen Energy*, **2017**, 42, 30653-30660	6.7	18
122	Effect of the Wettability on Two-Phase Flow Inside Porous Medium at Nanoscale: Lattice Boltzmann Simulations. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 6620-6625	1.3	1
121	ZIF-derived porous ZnO-Co3O4 hollow polyhedrons heterostructure with highly enhanced ethanol detection performance. *Sensors and Actuators B: Chemical*, **2017**, 253, 523-532	8.5	76
120	Layered double hydroxides toward high-performance supercapacitors. *Journal of Materials Chemistry A*, **2017**, 5, 15460-15485	13	188
119	Effective CO2 detection based on LaOCl-doped SnO2 nanofibers: Insight into the role of oxygen in carrier gas. *Sensors and Actuators B: Chemical*, **2017**, 241, 725-734	8.5	48
118	Graphene oxide/polyacrylonitrile fiber hierarchical-structured membrane for ultra-fast microfiltration of oil-water emulsion. *Chemical Engineering Journal*, **2017**, 307, 643-649	14.7	229
117	Quantitative Characterization of the Effect of Interfacial Fluid Layer on Water Flow Inside Nano-Porous Medium Using the Lattice Boltzmann Method. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 6216-6223	1.3	1
116	Extraction of kerogen from oil shale with supercritical carbon dioxide: Molecular dynamics simulations. *Journal of Supercritical Fluids*, **2016**, 107, 499-506	4.2	35
115	Sandwich-like graphene/polypyrrole/layered double hydroxide nanowires for high-performance supercapacitors. *Journal of Power Sources*, **2016**, 331, 67-75	8.9	54
114	Theoretical study of a tunable and strain-controlled nanoporous graphenylene membrane for multifunctional gas separation. *Journal of Materials Chemistry A*, **2016**, 4, 15015-15021	13	47
113	Self-Assembly of Hydrofluorinated Janus Graphene Monolayer: A Versatile Route for Designing Novel Janus Nanoscrolls. *Scientific Reports*, **2016**, 6, 26914	4.9	15
112	Super flexibility and stability of graphene nanoribbons under severe twist. *Physical Chemistry Chemical Physics*, **2016**, 18, 18406-13	3.6	15

111	High hydrogen sensitivity of vertically standing layered MoS2/Si heterojunctions. *Journal of Alloys and Compounds*, **2016**, 682, 29-34	5.7	32
110	Understanding the relationship between ion migration and the anomalous hysteresis in high-efficiency perovskite solar cells: A fresh perspective from halide substitution. *Nano Energy*, **2016**, 26, 620-630	17.1	127
109	Ultra-high dielectric constant of poly(vinylidene fluoride) composites filled with hydroxyl modified graphite powders. *Polymer Composites*, **2016**, 37, 327-333	3	7
108	Room temperature hydrogen sensor with ultrahigh-responsive characteristics based on Pd/SnO2/SiO2/Si heterojunctions. *Sensors and Actuators B: Chemical*, **2016**, 227, 438-447	8.5	31
107	Self-powered broadband, high-detectivity and ultrafast photodetectors based on Pd-MoS2/Si heterojunctions. *Physical Chemistry Chemical Physics*, **2016**, 18, 1131-9	3.6	37
106	Sandwich-like nitrogen-doped porous carbon/graphene nanoflakes with high-rate capacitive performance. *Nanoscale*, **2016**, 8, 7889-98	7.7	48
105	How to select an optimal surfactant molecule to speed up the oil-detachment from solid surface: A computational simulation. *Chemical Engineering Science*, **2016**, 147, 47-53	4.4	33
104	Effect of interfacial layer on water flow in nanochannels: Lattice Boltzmann simulations. *Physica B: Condensed Matter*, **2016**, 487, 18-24	2.8	9
103	Outstanding capacitive performance of reticular porous carbon/graphene sheets with superhigh surface area. *Electrochimica Acta*, **2016**, 190, 923-931	6.7	27
102	Helical wrapping of long-chained polyacetylene (PA) on metallic nanowires: MD simulation insights. *Computational Materials Science*, **2016**, 117, 103-109	3.2	4
101	Ultrafast breathing humidity sensing properties of low-dimensional Fe-doped SnO2 flower-like spheres. *RSC Advances*, **2016**, 6, 27008-27015	3.7	26
100	Preparation of spherical and dendritic CdS@TiO2 hollow double-shelled nanoparticles for photocatalysis. *Materials Letters*, **2016**, 166, 113-115	3.3	18
99	Enhanced photovoltaic characteristics of MoS2/Si hybrid solar cells by metal Pd chemical doping. *RSC Advances*, **2016**, 6, 1346-1350	3.7	12
98	Fabrication and characterization of an ultrasensitive humidity sensor based on metal oxide/graphene hybrid nanocomposite. *Sensors and Actuators B: Chemical*, **2016**, 225, 233-240	8.5	286
97	Effective Enhancement of Humidity Sensing Characteristics of Novel Thermally Treated MWCNTs/Polyvinylpyrrolidone Film Caused by Interfacial Effect. *Advanced Materials Interfaces*, **2016**, 3, 1600153	4.6	9
96	Hierarchical NiO Nanoflake Arrays on Nickel Foam as a Supercapacitor Electrode with High Capacitance and High Rate Capability. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 4169-73	1.3	1
95	Excellent dielectric properties of PVDF-based composites filled with carbonized PAN/PEG copolymer fibers. *Composites Part A: Applied Science and Manufacturing*, **2016**, 87, 46-53	8.4	22
94	Mechanism of oil molecules transportation in nano-sized shale channel: MD simulation. *RSC Advances*, **2015**, 5, 25684-25692	3.7	19

93	High performance sponge MnO2 nanotube monoliths. *RSC Advances*, **2015**, 5, 60831-60834	3.7	4
92	Oil detachment from silica surface modified by carboxy groups in aqueous cetyltriethylammonium bromide solution. *Applied Surface Science*, **2015**, 353, 1103-1111	6.7	28
91	High-performance n-MoS2/i-SiO2/p-Si heterojunction solar cells. *Nanoscale*, **2015**, 7, 8304-8	7.7	76
90	Electrical and photovoltaic characteristics of MoS2/Si p-n junctions. *Journal of Applied Physics*, **2015**, 117, 114502	2.5	112
89	Growth and humidity-dependent electrical properties of bulk-like MoS2 thin films on Si. *RSC Advances*, **2015**, 5, 74329-74335	3.7	23
88	Insight into high areal capacitances of low apparent surface area carbons derived from nitrogen-rich polymers. *Carbon*, **2015**, 94, 560-567	10.4	44
87	C2N: an excellent two-dimensional monolayer membrane for He separation. *Journal of Materials Chemistry A*, **2015**, 3, 21351-21356	13	117
86	Iron-doping-enhanced photoelectrochemical water splitting performance of nanostructured WO3: a combined experimental and theoretical study. *Nanoscale*, **2015**, 7, 2933-40	7.7	143
85	Carbon nanoscroll from C4H/C4F-type graphene superlattice: MD and MM simulation insights. *Physical Chemistry Chemical Physics*, **2015**, 17, 3441-50	3.6	11
84	Theoretical Prediction of Hydrogen Separation Performance of Two-Dimensional Carbon Network of Fused Pentagon. *ACS Applied Materials & Interfaces*, **2015**, 7, 28502-7	9.5	28
83	Superhigh-rate capacitive performance of heteroatoms-doped double shell hollow carbon spheres. *Carbon*, **2015**, 86, 235-244	10.4	60
82	Electrical characterization and ammonia sensing properties of MoS2/Si p□ junction. *Journal of Alloys and Compounds*, **2015**, 631, 105-110	5.7	41
81	Gigantic enhancement in the dielectric properties of polymer-based composites using core/shell MWCNT/amorphous carbon nanohybrids. *Nanoscale*, **2015**, 7, 3660-7	7.7	65
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