Jun Zhang

List of Publications by Year in Descending Order

68 papers	1,223 citations	20 h-index	32 g-index
69 ext. papers	1,566 ext. citations	6.2 avg, IF	4.78 L-index

#	Paper	IF	Citations
68	Molecular insight into the fluidity of cement pastes: Nano-boundary lubrication of cementitious materials. *Construction and Building Materials*, **2022**, 316, 125800	6.7	7
67	Atypical adsorption of polycarboxylate superplasticizers on calcium silicate hydrate surface: Converting interaction by solvent effects. *Construction and Building Materials*, **2022**, 330, 127160	6.7	1
66	An ion sieving conjugated microporous thermoset ultrathin membrane for high-performance Li-S battery. *Energy Storage Materials*, **2022**, 49, 1-10	19.4	0
65	Stability of CH4, CO2, and H2S in two-dimensional clathrate hydrates. *Computational Materials Science*, **2021**, 188, 110174	3.2	
64	Nanoconfined deep eutectic solvent in laminated MXene for efficient CO2 separation. *Chemical Engineering Journal*, **2021**, 405, 126961	14.7	24
63	Combined DFT and kinetic Monte Carlo study of a bridging-spillover mechanism on fluorine-decorated graphene. *Physical Chemistry Chemical Physics*, **2021**, 23, 2384-2391	3.6	1
62	Manipulating the interactions between the lipid bilayer and triblock Janus nanoparticles: insight from dissipative particle dynamics. *Molecular Systems Design and Engineering*, **2021**, 6, 156-162	4.6	0
61	How the oil recovery in deep oil reservoirs is affected by injected gas types: A molecular dynamics simulation study. *Chemical Engineering Science*, **2021**, 231, 116286	4.4	17
60	Polymerization-Induced Self-Assembly of Comb-like Amphiphilic Copolymers into Onion-like Vesicles. *Macromolecules*, **2021**, 54, 7448-7459	5.5	1
59	Molecular insights into the separation mechanism of imidazole-based ionic liquid supported membranes. *Journal of Molecular Liquids*, **2021**, 340, 117173	6	7
58	Molecular insight into the oil displacement mechanism of gas flooding in deep oil reservoir. *Chemical Physics Letters*, **2021**, 783, 139044	2.5	0
57	Quantum Chemical Study of the Carbon Dioxide-Philicity of Surfactants: Effects of Tail Functionalization. *Langmuir*, **2020**, 36, 15352-15361	4	0
56	Two-dimensional hydrogen hydrates: structure and stability. *Physical Chemistry Chemical Physics*, **2020**, 22, 5774-5784	3.6	5
55	Static and dynamic behavior of CO2 enhanced oil recovery in nanoslits: Effects of mineral type and oil components. *International Journal of Heat and Mass Transfer*, **2020**, 153, 119583	4.9	20
54	Why synthetic virus-like nanoparticles can achieve higher cellular uptake efficiency?. *Nanoscale*, **2020**, 12, 14911-14918	7.7	9
53	Water desalination of a new three-dimensional covalent organic framework: a molecular dynamics simulation study. *Physical Chemistry Chemical Physics*, **2020**, 22, 16978-16984	3.6	10
52	Molecular insight into the aggregation and dispersion behavior of modified nanoparticles. *Journal of Petroleum Science and Engineering*, **2020**, 191, 107193	4.4	6

51	Manipulating Hybrid Nanostructures by the Cooperative Assembly of Amphiphilic Oligomers and Triblock Janus Nanoparticles. *Journal of Physical Chemistry Letters*, **2020**, 11, 3369-3375	6.4	4
50	A solution-processable and ultra-permeable conjugated microporous thermoset for selective hydrogen separation. *Nature Communications*, **2020**, 11, 1633	17.4	23
49	Novel joint catalytic properties of Fe and N co-doped graphene for CO oxidation. *Physical Chemistry Chemical Physics*, **2020**, 22, 28376-28382	3.6	0
48	Molecular insight into the oil charging mechanism in tight reservoirs. *Chemical Engineering Science*, **2020**, 211, 115297	4.4	6
47	Migration of oil/methane mixture in shale inorganic nano-pore throat: A molecular dynamics simulation study. *Journal of Petroleum Science and Engineering*, **2020**, 187, 106784	4.4	8
46	Molecular Insights into the Effect of a Solid Surface on the Stability of a Hydrate Nucleus. *Journal of Physical Chemistry C*, **2020**, 124, 2664-2671	3.8	10
45	Photothermal-Responsive Microporous Nanosheets Confined Ionic Liquid for Efficient CO Separation. *Small*, **2020**, 16, e2002699	11	13
44	Insight into the pressure-induced displacement mechanism for selecting efficient nanofluids in various capillaries. *Environmental Science: Nano*, **2020**, 7, 2785-2794	7.1	5
43	Voltage-gated multilayer graphene nanochannel for K+/Na+ separation: A molecular dynamics study. *Journal of Molecular Liquids*, **2020**, 317, 114025	6	6
42	The biphasic effect of ABA triblock copolymers on the self-assembly of surfactants: insight from dissipative particle dynamics. *Molecular Systems Design and Engineering*, **2019**, 4, 921-928	4.6	1
41	Cooperative assembly of Janus particles and amphiphilic oligomers: the role of Janus balance. *Nanoscale*, **2019**, 11, 7221-7228	7.7	9
40	Optimal aggregation number of reverse micelles in supercritical carbon dioxide: a theoretical perspective. *Soft Matter*, **2019**, 15, 3323-3329	3.6	6
39	Electrical field facilitates selective transport of CO2 through a laminated MoS2 supported ionic liquid membrane. *Journal of Materials Chemistry A*, **2019**, 7, 10041-10046	13	24
38	Composite Nanotube Ring Structures Formed by Two-Step Self-Assembly for Drug Loading/Release. *Langmuir*, **2019**, 35, 3108-3115	4	7
37	Prediction of efficient promoter molecules of sH hydrogen hydrate: An ab initio study. *Chemical Physics*, **2019**, 516, 15-21	2.3	7
36	Oil detachment by modified nanoparticles: A molecular dynamics simulation study. *Computational Materials Science*, **2019**, 170, 109177	3.2	15
35	Molecular insight into the miscible mechanism of CO2/C10 in bulk phase and nanoslits. *International Journal of Heat and Mass Transfer*, **2019**, 141, 643-650	4.9	18
34	Ionic liquid gated 2D-CAP membrane for highly efficient CO2/N2 and CO2/CH4 separation. *Applied Surface Science*, **2019**, 494, 477-483	6.7	8

33	Oil extraction mechanism in CO2 flooding from rough surface: Molecular dynamics simulation. *Applied Surface Science*, **2019**, 494, 80-86	6.7	16
32	Bottom-up self-assembly of heterotrimeric nanoparticles and their secondary Janus generations. *Chemical Science*, **2019**, 10, 10388-10394	9.4	20
31	One-pot production of porous assemblies by PISA of star architecture copolymers: a simulation study. *Physical Chemistry Chemical Physics*, **2018**, 20, 10069-10076	3.6	12
30	Competitive adsorption and diffusion of CH4/CO2 binary mixture within shale organic nanochannels. *Journal of Natural Gas Science and Engineering*, **2018**, 53, 329-336	4.6	36
29	The molecular mechanism of the inhibition effects of PVCaps on the growth of sI hydrate: an unstable adsorption mechanism. *Physical Chemistry Chemical Physics*, **2018**, 20, 8326-8332	3.6	19
28	Effect of organic salt on the self-assembly of ammonium gemini surfactant: An experiment and simulation study. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 548, 198-205	5.1	8
27	A bottom-up strategy to surface assembly: Second growth from metal-rich embryos. *Materials Chemistry and Physics*, **2018**, 204, 228-235	4.4	
26	CO2-philic WS2 laminated membranes with a nanoconfined ionic liquid. *Journal of Materials Chemistry A*, **2018**, 6, 16566-16573	13	24
25	Highly efficient water desalination in carbon nanocones. *Carbon*, **2018**, 129, 374-379	10.4	40
24	Molecular mechanism of formation of the face-sharing double cages in structure-I methane hydrate. *Chemical Physics Letters*, **2018**, 691, 155-162	2.5	2
23	Alternating electric field-induced ion current rectification and electroosmotic pump in ultranarrow charged carbon nanocones. *Physical Chemistry Chemical Physics*, **2018**, 20, 27910-27916	3.6	4
22	Dissipative Particle Dynamics Simulation on Vesicles Self-Assembly Controlled by Terminal Groups. *Journal of Physical Chemistry B*, **2018**, 122, 10607-10614	3.4	3
21	Shape transition of water-in-CO reverse micelles controlled by the surfactant midpiece. *Physical Chemistry Chemical Physics*, **2018**, 20, 15535-15542	3.6	4
20	Study on the transformation from linear to branched wormlike micelles: An insight from molecular dynamics simulation. *Journal of Colloid and Interface Science*, **2017**, 494, 47-53	9.3	42
19	Coarse-grained molecular dynamics study on the self-assembly of Gemini surfactants: the effect of spacer length. *Physical Chemistry Chemical Physics*, **2017**, 19, 4462-4468	3.6	24
18	Oil detachment mechanism in CO2 flooding from silica surface: Molecular dynamics simulation. *Chemical Engineering Science*, **2017**, 164, 17-22	4.4	27
17	Molecular-Scale Design of Hydrocarbon Surfactant Self-Assembly in Supercritical CO. *Langmuir*, **2017**, 33, 5291-5297	4	7
16	Correlated Rectification Transport in Ultranarrow Charged Nanocones. *Journal of Physical Chemistry Letters*, **2017**, 8, 435-439	6.4	22

15	Displacement Mechanism of Oil in Shale Inorganic Nanopores by Supercritical Carbon Dioxide from Molecular Dynamics Simulations. *Energy & Fuels*, **2017**, 31, 738-746	4.1	34
14	CO activating hydrocarbon transport across nanopore throat: insights from molecular dynamics simulation. *Physical Chemistry Chemical Physics*, **2017**, 19, 30439-30444	3.6	17
13	Enantioselective Molecular Transport in Multilayer Graphene Nanopores. *Nano Letters*, **2017**, 17, 6742-6746	13	37
12	Mechanism of asphaltene aggregation induced by supercritical CO2: insights from molecular dynamics simulation. *RSC Advances*, **2017**, 7, 50786-50793	3.7	15
11	A graphene-like membrane with an ultrahigh water flux for desalination. *Nanoscale*, **2017**, 9, 18951-18958	7.7	30
10	Enhanced oil recovery mechanism of CO2 water-alternating-gas injection in silica nanochannel. *Fuel* , **2017**, 190, 253-259	7.1	33
9	The self-assembly structure and the CO-philicity of a hybrid surfactant in supercritical CO: effects of hydrocarbon chain length. *Soft Matter*, **2016**, 12, 8177-8185	3.6	13
8	Vesicle formation of catanionic mixtures of CTAC/SDS induced by ratio: a coarse-grained molecular dynamic simulation study. *RSC Advances*, **2016**, 6, 13442-13449	3.7	17
7	Molecular dynamics study of di-CF4 based reverse micelles in supercritical CO. *Physical Chemistry Chemical Physics*, **2016**, 18, 29156-29163	3.6	13
6	Molecular dynamics simulation on volume swelling of CO2□alkane system. *Fuel*, **2015**, 143, 194-201	7.1	40
5	Tuning the self-assembly of surfactants by the confinement of carbon nanotube arrays: a cornucopia of lamellar phase variants. *Nanoscale*, **2015**, 7, 6069-74	7.7	5
4	Unusual, photo-induced self-assembly of azobenzene-containing amphiphiles. *Soft Matter*, **2014**, 10, 8758-64	3.6	24
3	Adsorption mechanism of oil components on water-wet mineral surface: A molecular dynamics simulation study. *Energy*, **2013**, 59, 295-300	7.9	80
2	Nanoparticles mimicking viral surface topography for enhanced cellular delivery. *Advanced Materials*, **2013**, 25, 6233-7	24	129
1	Improved hydrogen storage in the modified metal-organic frameworks by hydrogen spillover effect. *International Journal of Hydrogen Energy*, **2007**, 32, 4005-4010	6.7	146