Jia Wei Chew

List of Publications by Citations

228 papers	6,545 citations	42 h-index	71 g-index
234 ext. papers	8,380 ext. citations	7.7 avg, IF	6.75 L-index

#	Paper	IF	Citations
228	Clay-Inspired MXene-Based Electrochemical Devices and Photo-Electrocatalyst: State-of-the-Art Progresses and Challenges. *Advanced Materials*, **2018**, 30, e1704561	24	301
227	Visible-light-driven removal of tetracycline antibiotics and reclamation of hydrogen energy from natural water matrices and wastewater by polymeric carbon nitride foam. *Water Research*, **2018**, 144, 215-225	12.5	296
226	First-principles and direct design approaches for the control of pharmaceutical crystallization. *Journal of Process Control*, **2005**, 15, 493-504	3.9	246
225	Quasi-polymeric construction of stable perovskite-type LaFeO/g-CN heterostructured photocatalyst for improved Z-scheme photocatalytic activity via solid p-n heterojunction interfacial effect. *Journal of Hazardous Materials*, **2018**, 347, 412-422	12.8	220
224	Formation of quasi-core-shell In2S3/anatase TiO2@metallic Ti3C2Tx hybrids with favorable charge transfer channels for excellent visible-light-photocatalytic performance. *Applied Catalysis B: Environmental*, **2018**, 233, 213-225	21.8	211
223	Membrane-based separation for oily wastewater: A practical perspective. *Water Research*, **2019**, 156, 347-365	12.5	188
222	Construction of hierarchical 2D-2D Zn3In2S6/fluorinated polymeric carbon nitride nanosheets photocatalyst for boosting photocatalytic degradation and hydrogen production performance. *Applied Catalysis B: Environmental*, **2018**, 233, 58-69	21.8	155
221	Electrical promotion of spatially photoinduced charge separation via interfacial-built-in quasi-alloying effect in hierarchical Zn2In2S5/Ti3C2(O, OH)x hybrids toward efficient photocatalytic hydrogen evolution and environmental remediation. *Applied Catalysis B: Environmental*, **2019**, 245, 290-301	21.8	155
220	Photogenerated charge transfer via interfacial internal electric field for significantly improved photocatalysis in direct Z-scheme oxygen-doped carbon nitrogen/CoAl-layered double hydroxide heterojunction. *Applied Catalysis B: Environmental*, **2018**, 227, 530-540	21.8	152
219	Behavior of oil droplets at the membrane surface during crossflow microfiltration of oil–water emulsions. *Journal of Membrane Science*, **2016**, 500, 211-224	9.6	143
218	Comparative performance of concentration and temperature controlled batch crystallizations. *Journal of Process Control*, **2008**, 18, 399-407	3.9	133
217	Metal-organic framework membranes for wastewater treatment and water regeneration. *Coordination Chemistry Reviews*, **2020**, 404, 213116	23.2	132
216	Petal-like CdS nanostructures coated with exfoliated sulfur-doped carbon nitride via chemically activated chain termination for enhanced visible-light-driven photocatalytic water purification and H2 generation. *Applied Catalysis B: Environmental*, **2018**, 229, 181-191	21.8	123
215	Plasmonic Bi nanoparticles and BiOCl sheets as cocatalyst deposited on perovskite-type ZnSn(OH)6 microparticle with facet-oriented polyhedron for improved visible-light-driven photocatalysis. *Applied Catalysis B: Environmental*, **2017**, 209, 543-553	21.8	120
214	Recent Advances in Crystallization control. *Chemical Engineering Research and Design*, **2007**, 85, 893-905	5.5	105
213	Chemical looping gasification of biomass with Fe2O3/CaO as the oxygen carrier for hydrogen-enriched syngas production. *Chemical Engineering Journal*, **2020**, 379, 122346	14.7	81
212	Cluster characteristics of Geldart Group B particles in a pilot-scale CFB riser. I. Monodisperse systems. *Chemical Engineering Science*, **2012**, 68, 72-81	4.4	79

211	Unsteady-state shear strategies to enhance mass-transfer for the implementation of ultrapermeable membranes in reverse osmosis: A review. *Desalination*, **2015**, 356, 328-348	10.3	75
210	Review of cluster characteristics in circulating fluidized bed (CFB) risers. *Chemical Engineering Science*, **2017**, 158, 70-95	4.4	70
209	Thermochromic Ionogel: A New Class of Stimuli Responsive Materials with Super Cyclic Stability for Solar Modulation. *Chemistry of Materials*, **2017**, 29, 6947-6955	9.6	62
208	Understanding oily wastewater treatment via membrane distillation. *Journal of Membrane Science*, **2017**, 539, 284-294	9.6	61
207	Cluster characteristics of Geldart group B particles in a pilot-scale CFB riser. II. Polydisperse systems. *Chemical Engineering Science*, **2012**, 68, 82-93	4.4	61
206	Ultrafiltration of saline oil-in-water emulsions stabilized by an anionic surfactant: Effect of surfactant concentration and divalent counterions. *Journal of Membrane Science*, **2017**, 537, 384-395	9.6	60
205	Membrane fouling by emulsified oil: A review. *Separation and Purification Technology*, **2020**, 248, 116919	8.3	60
204	Photothermal-enhanced and fouling-resistant membrane for solar-assisted membrane distillation. *Journal of Membrane Science*, **2018**, 565, 254-265	9.6	59
203	Effect of cross-flow velocity, oil concentration and salinity on the critical flux of an oil-in-water emulsion in microfiltration. *Journal of Membrane Science*, **2017**, 530, 11-19	9.6	58
202	Effects of composition faults in ternary metal chalcogenides (Zn In2S3+, x = 1) layered crystals for visible-light-driven catalytic hydrogen generation and carbon dioxide reduction. *Applied Catalysis B: Environmental*, **2019**, 256, 117810	21.8	57
201	Stable polymorphs: difficult to make and difficult to predict. *CrystEngComm*, **2007**, 9, 128	3.3	57
200	Impact of the surface energy of particulate foulants on membrane fouling. *Journal of Membrane Science*, **2016**, 510, 101-111	9.6	52
199	Axial segregation in bubbling gas-fluidized beds with Gaussian and lognormal distributions of Geldart Group B particles. *AICHE Journal*, **2010**, 56, 3049-3061	3.6	51
198	Fast Pyrolysis of Cellulose, Hemicellulose, and Lignin: Effect of Operating Temperature on Bio-oil Yield and Composition and Insights into the Intrinsic Pyrolysis Chemistry. *Industrial & Engineering Chemistry Research*, **2019**, 58, 15838-15852	3.9	49
197	Species segregation of binary mixtures and a continuous size distribution of Group B particles in riser flow. *Chemical Engineering Science*, **2011**, 66, 4595-4604	4.4	49
196	Review of entrainment correlations in gas–solid fluidization. *Chemical Engineering Journal*, **2015**, 260, 152-171	14.7	48
195	Particle cluster dynamics during fluidization. *Chemical Engineering Science*, **2013**, 100, 39-51	4.4	48
194	Automated In-line Technique Using FBRM to Achieve Consistent Product Quality in Cooling Crystallization. *Crystal Growth and Design*, **2007**, 7, 1416-1422	3.5	45

193	Zwitterionic grafting of sulfobetaine methacrylate (SBMA) on hydrophobic PVDF membranes for enhanced anti-fouling and anti-wetting in the membrane distillation of oil emulsions. *Journal of Membrane Science*, **2019**, 588, 117196	9.6	44
192	Evaluation of correlations for minimum fluidization velocity (U) in gas-solid fluidization. *Powder Technology*, **2018**, 323, 454-485	5.2	44
191	Assessment of oil fouling by oil-membrane interaction energy analysis. *Journal of Membrane Science*, **2018**, 560, 21-29	9.6	44
190	Effect of mechanical scouring by granular activated carbon (GAC) on membrane fouling mitigation. *Desalination*, **2017**, 403, 80-87	10.3	42
189	The behavior of suspensions and macromolecular solutions in crossflow microfiltration: An update. *Journal of Membrane Science*, **2020**, 601, 117865	9.6	42
188	Analyzing external and internal membrane fouling by oil emulsions via 3D optical coherence tomography. *Journal of Membrane Science*, **2018**, 548, 632-640	9.6	42
187	Polarity Reversal in Homologous Series of Surfactant-Free Janus Nanoparticles: Toward the Next Generation of Amphiphiles. *Langmuir*, **2016**, 32, 6376-86	4	42
186	Contaminant rejection in the presence of humic acid by membrane distillation for surface water treatment. *Journal of Membrane Science*, **2017**, 541, 291-299	9.6	42
185	Cluster characteristics of continuous size distributions and binary mixtures of Group B particles in dilute riser flow. *Chemical Engineering Journal*, **2011**, 178, 348-358	14.7	41
184	Link between bubbling and segregation patterns in gas-fluidized beds with continuous size distributions. *AICHE Journal*, **2011**, 57, 3003-3011	3.6	39
183	Introduction of amino groups into polyphosphazene framework supported on CNT and coated Fe3O4 nanoparticles for enhanced selective U(VI) adsorption. *Applied Surface Science*, **2019**, 466, 893-902	6.7	39
182	Correlating the hydrodynamics of fluidized granular activated carbon (GAC) with membrane-fouling mitigation. *Journal of Membrane Science*, **2016**, 510, 38-49	9.6	37
181	Effect of a macromolecular- or bio-fouling layer on membrane distillation. *Journal of Membrane Science*, **2014**, 456, 66-76	9.6	37
180	Characterizing the scouring efficiency of Granular Activated Carbon (GAC) particles in membrane fouling mitigation via wavelet decomposition of accelerometer signals. *Journal of Membrane Science*, **2016**, 498, 105-115	9.6	36
179	Elutriation and Species Segregation Characteristics of Polydisperse Mixtures of Group B Particles in a dilute CFB Riser. *AICHE Journal*, **2013**, 59, 84-95	3.6	35
178	Understanding membrane fouling by oil-in-water emulsion via experiments and molecular dynamics simulations. *Journal of Membrane Science*, **2018**, 566, 140-150	9.6	34
177	Dry powder inhaler formulation of high-payload antibiotic nanoparticle complex intended for bronchiectasis therapy: Spray drying versus spray freeze drying preparation. *International Journal of Pharmaceutics*, **2016**, 499, 38-46	6.5	33
176	Influence of backwashing on the pore size of hollow fiber ultrafiltration membranes. *Journal of Membrane Science*, **2017**, 521, 33-42	9.6	33

175	Multifunctional Piezoelectric Heterostructure of BaTiO@Graphene: Decomplexation of Cu-EDTA and Recovery of Cu. *Environmental Science & Technology*, **2019**, 53, 8342-8351	10.3	32
174	Tetrabromobisphenol A (TBBPA) inhibits denitrification via regulating carbon metabolism to decrease electron donation and bacterial population. *Water Research*, **2019**, 162, 190-199	12.5	32
173	Effect of spacer and crossflow velocity on the critical flux of bidisperse suspensions in microfiltration. *Journal of Membrane Science*, **2016**, 513, 101-107	9.6	32
172	Segregation dynamics of a binary-size mixture in a three-dimensional rotating drum. *Chemical Engineering Science*, **2017**, 172, 652-666	4.4	32
171	Understanding membrane pore-wetting in the membrane distillation of oil emulsions via molecular dynamics simulations. *Journal of Membrane Science*, **2018**, 551, 76-84	9.6	30
170	The Performance and Fouling Control of Submerged Hollow Fiber (HF) Systems: A Review. *Applied Sciences (Switzerland)*, **2017**, 7, 765	2.6	30
169	Impact of material property and operating conditions on mass flux profiles of monodisperse and polydisperse Group B particles in a CFB riser. *Powder Technology*, **2011**, 214, 89-98	5.2	30
168	Particle-scale modeling of biomass gasification in the three-dimensional bubbling fluidized bed. *Energy Conversion and Management*, **2019**, 196, 1-17	10.6	29
167	Roles of sulfur-edge sites, metal-edge sites, terrace sites, and defects in metal sulfides for photocatalysis. *Chem Catalysis*, **2021**, 1, 44-68		29
166	Microfiltration of oil emulsions stabilized by different surfactants. *Journal of Membrane Science*, **2019**, 579, 199-209	9.6	28
165	Pre-deposited dynamic membrane filtration - A review. *Water Research*, **2020**, 173, 115558	12.5	28
164	Effect of humic-acid fouling on membrane distillation. *Journal of Membrane Science*, **2016**, 504, 263-273	9.6	28
163	Comparison between Open-Loop Temperature Control and Closed-Loop Supersaturation Control for Cooling Crystallization of Glycine. *Industrial & Engineering Chemistry Research*, **2007**, 46, 830-838	3.9	28
162	The roles of particles in enhancing membrane filtration: A review. *Journal of Membrane Science*, **2020**, 595, 117570	9.6	28
161	Numerical investigation on the effect of draft plates on spouting stability and gas-solid characteristics in a spout-fluid bed. *Chemical Engineering Science*, **2016**, 148, 108-125	4.4	27
160	Enhanced performance of submerged hollow fibre microfiltration by fluidized granular activated carbon. *Journal of Membrane Science*, **2016**, 499, 47-55	9.6	27
159	Reverse core-annular flow of Geldart Group B particles in risers. *Powder Technology*, **2012**, 221, 1-12	5.2	26
158	Influence of Alkali and Alkaline-Earth Metals on the Cleavage of Glycosidic Bond in Biomass Pyrolysis: A DFT Study Using Cellobiose as a Model Compound. *Journal of Physical Chemistry A*, **2018**, 122, 7646-7658	2.8	26

157	Effect of surfactant hydrophobicity and charge type on membrane distillation performance. *Journal of Membrane Science*, **2019**, 587, 117168	9.6	25
156	Unlocking the high redox activity of MoS2 on dual-doped graphene as a superior piezocatalyst. *Nano Energy*, **2020**, 68, 104366	17.1	25
155	Assembly of three-dimensional ultralight poly(amidoxime)/graphene oxide nanoribbons aerogel for efficient removal of uranium(VI) from water samples. *Science of the Total Environment*, **2021**, 765, 142686	10.2	25
154	Eulerian-Lagrangian simulation of air-steam biomass gasification in a three-dimensional bubbling fluidized gasifier. *Energy*, **2019**, 181, 1075-1093	7.9	24
153	Effect of fluidized granular activated carbon (GAC) on critical flux in the microfiltration of particulate foulants. *Journal of Membrane Science*, **2017**, 523, 409-417	9.6	24
152	Comparative study of Transport Disengaging Height (TDH) correlations in gas–solid fluidization. *Powder Technology*, **2015**, 275, 220-238	5.2	24
151	Effects of binary particle size distribution on minimum pick-up velocity in pneumatic conveying. *Powder Technology*, **2011**, 208, 166-174	5.2	23
150	Spacer vibration for fouling control of submerged flat sheet membranes. *Separation and Purification Technology*, **2019**, 210, 719-728	8.3	23
149	Nickel cobalt catalyst supported on TiO2-coated SiO2 spheres for CO2 methanation in a fluidized bed. *International Journal of Hydrogen Energy*, **2019**, 44, 13443-13455	6.7	22
148	DEM study of granular flow characteristics in the active and passive regions of a three-dimensional rotating drum. *AICHE Journal*, **2016**, 62, 3874-3888	3.6	22
147	Enhancing fouling mitigation of submerged flat-sheet membranes by vibrating 3D-spacers. *Separation and Purification Technology*, **2019**, 215, 70-80	8.3	22
146	Impact of continuous particle size distribution width and particle sphericity on minimum pickup velocity in gas–solid pneumatic conveying. *Chemical Engineering Science*, **2015**, 130, 92-100	4.4	21
145	Membrane distillation hybridized with a thermoelectric heat pump for energy-efficient water treatment and space cooling. *Applied Energy*, **2018**, 231, 1079-1088	10.7	21
144	A network-based approach to interpreting pore blockage and cake filtration during membrane fouling. *Journal of Membrane Science*, **2017**, 528, 112-125	9.6	20
143	Application of machine learning methods to understand and predict circulating fluidized bed riser flow characteristics. *Chemical Engineering Science*, **2020**, 217, 115503	4.4	20
142	Effect of the surface charge of monodisperse particulate foulants on cake formation. *Journal of Membrane Science*, **2018**, 548, 108-116	9.6	20
141	Influence of module orientation and geometry in the membrane distillation of oily seawater. *Desalination*, **2017**, 423, 111-123	10.3	19
140	A three-dimensional plasmonic spacer enables highly efficient solar-enhanced membrane distillation of seawater. *Journal of Materials Chemistry A*, **2019**, 7, 10206-10211	13	19

139	Engineering highly effective nanofibrous membranes to demulsify surfactant-stabilized oil-in-water emulsions. *Journal of Membrane Science*, **2020**, 611, 118398	9.6	19
138	Interpreting Differential Pressure Signals for Particle Properties and Operating Conditions in a Pilot-Scale Circulating Fluidized Bed Riser. *Industrial & Engineering Chemistry Research*, **2016**, 55, 8659-8670	3.9	19
137	Effect of bubble characteristics on critical flux in the microfiltration of particulate foulants. *Journal of Membrane Science*, **2017**, 535, 279-293	9.6	18
136	DEM investigation of the axial dispersion behavior of a binary mixture in the rotating drum. *Powder Technology*, **2018**, 330, 93-104	5.2	18
135	Effect of Temperature and Transport on the Yield and Composition of Pyrolysis-Derived Bio-Oil from Glucose. *Energy & Fuels*, **2018**, 32, 6008-6021	4.1	18
134	Impact of granular segregation on the solid residence time and active-passive exchange in a rotating drum. *Chemical Engineering Science*, **2017**, 173, 287-302	4.4	18
133	CFD study on the hydrodynamics of fluidized granular activated carbon in AnFMBR applications. *Separation and Purification Technology*, **2017**, 178, 75-89	8.3	17
132	Construction of hole-transported MoO3-x coupled with CdS nanospheres for boosting photocatalytic performance via oxygen-defects-mediated Z-scheme charge transfer. *Applied Organometallic Chemistry*, **2019**, 33, e4780	3.1	17
131	Fouling behavior of colloidal particles in organic solvent ultrafiltration. *Journal of Membrane Science*, **2020**, 599, 117836	9.6	17
130	N, P and S co-doped carbon materials derived from polyphosphazene for enhanced selective U(VI) adsorption. *Science of the Total Environment*, **2020**, 706, 136019	10.2	17
129	Impact of particle diameter, density and sphericity on minimum pickup velocity of binary mixtures in gas-solid pneumatic conveying. *Powder Technology*, **2016**, 297, 311-319	5.2	17
128	Porosimetric membrane characterization techniques: A review. *Journal of Membrane Science*, **2021**, 619, 118750	9.6	17
127	Unravelling the catalytic influence of naturally occurring salts on biomass pyrolysis chemistry using glucose as a model compound: a combined experimental and DFT study. *Catalysis Science and Technology*, **2019**, 9, 3504-3524	5.5	16
126	Improved design and protocol for evapoporometry determination of the pore-size distribution. *Journal of Membrane Science*, **2015**, 496, 334-343	9.6	16
125	Fast and High Amount of U(VI) Uptake by Functional Magnetic Carbon Nanotubes with Phosphate Group. *Industrial & Engineering Chemistry Research*, **2018**, 57, 14551-14560	3.9	16
124	Critical flux and fouling mechanism in cross flow microfiltration of oil emulsion: Effect of viscosity and bidispersity. *Separation and Purification Technology*, **2019**, 212, 684-691	8.3	15
123	Consistent second-order boundary implementations for convection-diffusion lattice Boltzmann method. *Physical Review E*, **2018**, 97, 023302	2.4	14
122	In-situ characterization of cake layer fouling during crossflow microfiltration of oil-in-water emulsion. *Separation and Purification Technology*, **2019**, 218, 51-58	8.3	13

121	Striping phenomenon during cross-flow microfiltration of oil-in-water emulsions. *Separation and Purification Technology*, **2018**, 207, 514-522	8.3	13
120	Understanding the varying discharge rates of lognormal particle size distributions from a hopper using the Discrete Element Method. *Powder Technology*, **2019**, 342, 356-370	5.2	13
119	Membrane characterization via evapoporometry (EP) and liquid-liquid displacement porosimetry (LLDP) techniques. *Journal of Membrane Science*, **2019**, 586, 248-258	9.6	12
118	Cake formation of bidisperse suspensions in dead-end microfiltration. *Journal of Membrane Science*, **2019**, 577, 31-40	9.6	12
117	Numerical investigation of the back-mixing and non-uniform characteristics in the three-dimensional full-loop circulating fluidized bed combustor with six parallel cyclones. *Applied Thermal Engineering*, **2019**, 153, 524-535	5.8	12
116	Impact of multi-hole-wall air coupling with air-staged technology on H2S evolution during pulverized coal combustion. *Fuel Processing Technology*, **2018**, 179, 277-284	7.2	12
115	Tunable affinity separation enables ultrafast solvent permeation through layered double hydroxide membranes. *Journal of Membrane Science*, **2019**, 591, 117318	9.6	12
114	Annulus flow behavior of Geldart Group B particles in a pilot-scale CFB riser. *Powder Technology*, **2017**, 305, 816-828	5.2	12
113	Consistent lattice Boltzmann methods for incompressible axisymmetric flows. *Physical Review E*, **2016**, 94, 023302	2.4	12
112	Membrane oscillation and slot (pore) blocking in oil–water separation. *Chemical Engineering Research and Design*, **2019**, 142, 111-120	5.5	12
111	Effect of membrane fouling on chiral separation. *Journal of Membrane Science*, **2020**, 593, 117352	9.6	12
110	DEM study on the discharge characteristics of lognormal particle size distributions from a conical hopper. *AICHE Journal*, **2018**, 64, 1174-1190	3.6	12
109	Flow-field mitigation of membrane fouling (FMMF) via manipulation of the convective flow in cross-flow membrane applications. *Journal of Membrane Science*, **2017**, 526, 377-386	9.6	11
108	Metallicity-Dependent Ultrafast Water Transport in Carbon Nanotubes. *Small*, **2020**, 16, e1907575	11	11
107	Internal fouling during microfiltration with foulants of different surface charges. *Journal of Membrane Science*, **2020**, 602, 117983	9.6	11
106	An environmentally sustainable approach for online chemical cleaning of MBR with activated peroxymonosulfate. *Journal of Membrane Science*, **2020**, 600, 117872	9.6	11
105	Localized induction heating of metallic spacers for energy-efficient membrane distillation. *Journal of Membrane Science*, **2020**, 606, 118150	9.6	11
104	Impact of the Multihole Wall Air Coupling with Air Staged on NOx Emission during Pulverized Coal Combustion. *Energy & Fuels*, **2018**, 32, 1464-1473	4.1	11

103	Boron transfer during desalination by electrodialysis. *Journal of Membrane Science*, **2018**, 547, 64-72	9.6	11
102	Influence of operating parameters and flow regime on solid dispersion behavior in a gas–solid spout-fluid bed. *Chemical Engineering Science*, **2016**, 142, 112-125	4.4	11
101	Minimum pickup velocity (U pu) of nanoparticles in gas–solid pneumatic conveying. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	11
100	In-situ monitoring of oil emulsion fouling in ultrafiltration via electrical impedance spectroscopy (EIS): Influence of surfactant. *Journal of Membrane Science*, **2020**, 616, 118527	9.6	11
99	Two-Dimensional Transition-Metal Dichalcogenide-Based Membrane for Ultrafast Solvent Permeation. *Chemistry of Materials*, **2019**, 31, 10002-10007	9.6	11
98	Link between interfacial interaction and membrane fouling during organic solvent ultrafiltration of colloidal foulants. *Journal of Membrane Science*, **2020**, 611, 118369	9.6	10
97	DEM study of the size-induced segregation dynamics of a ternary-size granular mixture in the rolling-regime rotating drum. *Physics of Fluids*, **2017**, 29, 123301	4.4	10
96	Modeling fluid–particle interaction in dilute-phase turbulent liquid–particle flow simulation. *Particuology*, **2010**, 8, 150-160	2.8	10
95	Metallic spacers to enhance membrane distillation. *Journal of Membrane Science*, **2019**, 572, 171-183	9.6	10
94	Oil droplet behavior on model nanofiltration membrane surfaces under conditions of hydrodynamic shear and salinity. *Journal of Colloid and Interface Science*, **2020**, 560, 247-259	9.3	10
93	A fluidized-bed model for NiMgW-catalyzed CO2 methanation. *Particuology*, **2020**, 49, 55-64	2.8	10
92	Effect of initial particle deposition rate on cake formation during dead-end microfiltration. *Journal of Membrane Science*, **2021**, 618, 118672	9.6	10
91	Membrane fouling mitigation techniques for oily wastewater: A short review. *Journal of Water Process Engineering*, **2021**, 43, 102293	6.7	10
90	Millifluidic synthesis of amorphous drug-polysaccharide nanoparticle complex with tunable size intended for supersaturating drug delivery applications. *European Journal of Pharmaceutics and Biopharmaceutics*, **2017**, 112, 196-203	5.7	9
89	Evapoporometry adaptation to determine the lumen-side pore-size distribution (PSD) of hollow fiber and tubular membranes. *Journal of Membrane Science*, **2017**, 526, 1-8	9.6	9
88	Numerical study on the axial segregation dynamics of a binary-size granular mixture in a three-dimensional rotating drum. *Physics of Fluids*, **2017**, 29, 103302	4.4	9
87	Monitoring local membrane fouling mitigation by fluidized GAC in lab-scale and pilot-scale AnFMBRs. *Separation and Purification Technology*, **2018**, 199, 331-345	8.3	9
86	Three-dimensional axial dispersion dynamics of granular flow in the rolling-regime rotating drum. *Powder Technology*, **2018**, 332, 131-138	5.2	9

85	Simulation of the granular flow of cylindrical particles in the rotating drum. *AICHE Journal*, **2018**, 64, 3835-3848	3.6	9
84	Internal membrane fouling by proteins during microfiltration. *Journal of Membrane Science*, **2021**, 637, 119589	9.6	9
83	Investigation of the high U(VI) adsorption properties of phosphoric acid-functionalized heteroatoms-doped carbon materials. *Solid State Sciences*, **2020**, 104, 106248	3.4	8
82	CFDDEM investigation into the scaling up of spout-fluid beds via two interconnected chambers. *AICHE Journal*, **2016**, 62, 1898-1916	3.6	8
81	Intrusive probes in riser applications. *AICHE Journal*, **2017**, 63, 5361-5374	3.6	8
80	Surfactant-free synthesis of sub-100 nm poly(styrene-co-divinylbenzene) nanoparticles by one-step ultrasonic assisted emulsification/polymerization. *RSC Advances*, **2015**, 5, 103218-103228	3.7	8
79	Mechanistic understanding of the adsorption of natural organic matter by heated aluminum oxide particles (HAOPs) via molecular dynamics simulation. *Journal of Membrane Science*, **2020**, 598, 117651	9.6	8
78	Numerical investigation of the cluster property and flux distribution in three-dimensional full-loop circulating fluidized bed with multiple parallel cyclones. *Powder Technology*, **2019**, 342, 253-266	5.2	8
77	Extending the uppermost pore diameter measureable via Evapoporometry. *Journal of Membrane Science*, **2017**, 524, 637-643	9.6	7
76	Relationship between scouring efficiency and overall concentration of fluidized granular activated carbon (GAC) in microfiltration. *Chemical Engineering Research and Design*, **2018**, 132, 28-39	5.5	7
75	A numerical study of the segregation phenomenon of lognormal particle size distributions in the rotating drum. *Physics of Fluids*, **2018**, 30, 053301	4.4	7
74	Consistent boundary conditions of the multiple-relaxation-time lattice Boltzmann method for convectiondiffusion equations. *Computers and Fluids*, **2018**, 170, 24-40	2.8	7
73	Synthesis of ligand-carrying polymeric nanoparticles for use in extraction and recovery of metal ions. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2017**, 533, 179-186	5.1	7
72	Alternative extrapolation-based symmetry boundary implementations for the axisymmetric lattice Boltzmann method. *Physical Review E*, **2017**, 95, 043312	2.4	7
71	Analyzing the Minimum Entrainment Velocity of Ternary Particle Mixtures in Horizontal Pneumatic Transport. *Industrial & Engineering Chemistry Research*, **2012**, 51, 5626-5632	3.9	7
70	Segregation behavior of binary mixtures of cylindrical particles with different length ratios in the rotating drum. *AICHE Journal*, **2020**, 66, e16799	3.6	7
69	Assessing internal fouling during microfiltration using optical coherence tomography and evapoporometry. *Journal of Membrane Science*, **2020**, 595, 117588	9.6	7
68	The physisorption mechanism of SO on graphitized carbon. *Physical Chemistry Chemical Physics*, **2020**, 22, 21463-21473	3.6	7

67	Minimum pickup velocity: The transition between nano-scale and micro-scale. *AICHE Journal*, **2017**, 63, 1512-1519	3.6	6
66	Impact of draft plate on the inter-chamber interaction in a two-chamber spout-fluid bed. *Applied Thermal Engineering*, **2017**, 119, 490-504	5.8	6
65	Incorporation of single cobalt active sites onto N-doped graphene for superior conductive membranes in electrochemical filtration. *Journal of Membrane Science*, **2020**, 602, 117966	9.6	6
64	Membrane fouling mitigation by fluidized granular activated carbon: Effect of fiber looseness and impact on irreversible fouling. *Separation and Purification Technology*, **2020**, 242, 116764	8.3	6
63	Characteristics of non-spherical fluidized media in a fluidized bed membrane reactor: Effect of particle sphericity on critical flux. *Separation and Purification Technology*, **2018**, 202, 185-199	8.3	6
62	Correlating the hydrodynamics of fluidized media with the extent of membrane fouling mitigation: Effect of bidisperse GAC mixtures. *Separation and Purification Technology*, **2018**, 192, 309-321	8.3	6
61	Forcing scheme analysis for the axisymmetric lattice Boltzmann method under incompressible limit. *Physical Review E*, **2017**, 95, 043311	2.4	6
60	Computational study of spout collapse and impact of partition plate in a double slot-rectangular spouted bed. *AICHE Journal*, **2015**, 61, 4087-4101	3.6	6
59	Development of an integrated aerobic granular sludge MBR and reverse osmosis process for municipal wastewater reclamation. *Science of the Total Environment*, **2020**, 748, 141309	10.2	6
58	Do particle-related parameters influence circulating fluidized bed (CFB) riser flux and elutriation?. *Chemical Engineering Science*, **2020**, 227, 115935	4.4	6
57	Membrane fouling by mixtures of oppositely charged particles. *Journal of Membrane Science*, **2021**, 625, 119093	9.6	6
56	Alternative kinetic theory based lattice Boltzmann model for incompressible axisymmetric flows. *Computers and Mathematics With Applications*, **2016**, 72, 2751-2772	2.7	6
55	Adaptation of evapoporometry (EP) to characterize the continuous pores and interpore connectivity in polymeric membranes. *Journal of Membrane Science*, **2019**, 575, 17-27	9.6	6
54	Key influence of clusters of Geldart Group B particles in a circulating fluidized bed riser. *Chemical Engineering Journal*, **2021**, 413, 127386	14.7	6
53	Size-induced axial band structure and directional flow of a ternary-size granular material in a 3-D horizontal rotating drum. *Physics of Fluids*, **2018**, 30, 053302	4.4	6
52	Towards the generalization of membrane structure-property relationship of polyimides and copolyimides: A group contribution study. *Journal of Membrane Science*, **2017**, 543, 233-254	9.6	5
51	Improving the operational stability of the multi-chamber spout-fluid bed via the insertion of a submerged partition plate. *AICHE Journal*, **2017**, 63, 485-500	3.6	5
50	Organic solvent forward osmosis membranes for pharmaceutical concentration. *Journal of Membrane Science*, **2022**, 642, 119965	9.6	5

49	Organic matter removal from a membrane bioreactor effluent for reverse osmosis fouling mitigation by microgranular adsorptive filtration system. *Desalination*, **2021**, 506, 115016	10.3	5
48	Membrane fouling by lysozyme: Effect of local interaction. *AICHE Journal*, **2021**, 67, e17212	3.6	5
47	Lattice model effects on the accuracy of the boundary condition implementations for the convection□diffusion lattice Boltzmann method. *Computers and Fluids*, **2018**, 176, 153-169	2.8	5
46	Directionally tailoring the macroscopic polarization of piezocatalysis for hollow zinc sulfide on dual-doped graphene. *Nano Energy*, **2021**, 88, 106312	17.1	5
45	Augmentation of hydroxyl groups as electrocatalytic active sites in porous graphene. *Carbon*, **2019**, 154, 384-390	10.4	4
44	A comparative study of the axisymmetric lattice Boltzmann models under the incompressible limit. *Computers and Mathematics With Applications*, **2017**, 74, 817-841	2.7	4
43	Concrete waste-derived aggregate for concrete manufacture. *Journal of Cleaner Production*, **2022**, 338, 130637	10.3	4
42	Flow dynamics of binary mixtures of non-spherical particles in the rolling-regime rotating drum. *Powder Technology*, **2020**, 361, 930-942	5.2	4
41	Particle-scale characteristics of the three distinct regions in the multi-chamber slot-rectangular spouted bed. *Powder Technology*, **2020**, 360, 658-672	5.2	4
40	Detailed kinetic modeling of H2S formation during fuel-rich combustion of pulverized coal. *Fuel Processing Technology*, **2020**, 199, 106276	7.2	4
39	Preparation of porous carbon materials by polyphosphazene as precursor for sorption of U(VI). *Colloids and Interface Science Communications*, **2021**, 41, 100387	5.4	4
38	Computational Study of the Effect of Draft Plates on the Solid Behavior in a Spout-Fluid Bed. *Industrial & Engineering Chemistry Research*, **2016**, 55, 12598-12615	3.9	4
37	CFD-DEM study of geometry changes in an AnFMBR towards particle momentum. *Chemical Engineering Journal*, **2020**, 379, 122336	14.7	4
36	Synthesis and characterization of poly(TRIM/VPA) functionalized graphene oxide nanoribbons aerogel for highly efficient capture of thorium(IV) from aqueous solutions. *Applied Surface Science*, **2021**, 536, 147829	6.7	4
35	Electrically conductive hydrophobic membrane cathode for membrane distillation with super anti-oil-fouling capability: Performance and mechanism. *Desalination*, **2021**, 516, 115199	10.3	4
34	Review on Reaction Mechanisms of Sulfur Species During Coal Combustion. *Journal of Energy Resources Technology, Transactions of the ASME*, **2019**, 141,	2.6	3
33	An energy-efficient method for mitigating membrane fouling: A novel embodiment of the inverse fluidized bed. *Separation Science and Technology*, **2018**, 53, 683-695	2.5	3
32	Numerical Investigation of Bubble Dynamics during Biomass Gasification in a Bubbling Fluidized Bed. *ACS Sustainable Chemistry and Engineering*, **2019**,	8.3	3

31	Critical flux of colloidal foulant in microfiltration: Effect of organic solvent. *Journal of Membrane Science*, **2020**, 616, 118531	9.6	3
30	Superior membrane distillation by induction heating of 3D rGO/Nafion/Ni foam for water treatment. *Journal of Membrane Science*, **2020**, 616, 118609	9.6	3
29	Cross-Linked Polycarbonate Microfiltration Membranes with Improved Solvent Resistance. *Langmuir*, **2021**, 37, 4025-4032	4	3
28	Effect of lognormal particle size distributions on particle spreading in additive manufacturing. *Advanced Powder Technology*, **2021**, 32, 1127-1144	4.6	3
27	DEM Study on the effect of particle-size distribution on jamming in a 3D conical hopper. *AICHE Journal*, **2018**, 65, 512	3.6	3
26	Molecular dynamics investigation of membrane fouling in organic solvents. *Journal of Membrane Science*, **2021**, 632, 119329	9.6	3
25	Investigation of Surfactant–Membrane Interaction Using Molecular Dynamics Simulation with Umbrella Sampling. *ACS ES&T Engineering*,		3
24	Electrospun polyimide-based thin-film composite membranes for organic solvent nanofiltration. *Journal of Membrane Science*, **2021**, 640, 119825	9.6	3
23	Assessing the potential of highly permeable reverse osmosis membranes for desalination: Specific energy and footprint analysis. *Desalination*, **2022**, 533, 115771	10.3	3
22	Discrete element method study on hopper discharge behaviors of binary mixtures of nonspherical particles. *AICHE Journal*, **2020**, 66, e16254	3.6	2
21	Organic Solvent Permeation through Negatively Charged Graphene Oxide Membranes. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1499-1508	8.3	2
20	Zeolite-based Fenton-like catalysis for pollutant removal and reclamation from wastewater. *Chinese Chemical Letters*, **2022**,	8.1	2
19	Influence of pH and NaCl concentration on boron rejection during nanofiltration. *Separation and Purification Technology*, **2021**, 261, 118248	8.3	2
18	Competitive and Synergistic Adsorption of Mixtures of Polar and Nonpolar Gases in Carbonaceous Nanopores. *Langmuir*, **2021**, 37, 6754-6764	4	2
17	Molecular dynamics study on membrane fouling by oppositely charged proteins. *AICHE Journal*, **2021**, 67, e17335	3.6	2
16	Enantiomeric Separation of Racemic Mixtures Using Chiral-Selective and Organic-Solvent-Resistant Thin-Film Composite Membranes.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	2
15	Effect of lognormal particle size distributions of non-spherical particles on hopper discharge characteristics. *Chemical Engineering Research and Design*, **2020**, 163, 230-240	5.5	1
14	The effect of particle initial charge on minimum pickup velocity (U) in pneumatic conveying. *Chemical Engineering Research and Design*, **2020**, 156, 343-352	5.5	1

13	Highly Robust Interfacially Polymerized PA Layer on Thermally Responsive Semi-IPN Hydrogel: Toward On-Demand Tuning of Porosity and Surface Charge. *ACS Applied Materials & Interfaces*, **2021**,	9.5	1
12	Microfiltration of saline crude oil emulsions: Effects of dispersant and salinity. *Journal of Hazardous Materials*, **2021**, 412, 124747	12.8	1
11	Fast versus turbulent fluidization of Geldart Group B particles. *AICHE Journal*, **2021**, 67, e17216	3.6	1
10	An alternative implementation of the kinetic theory based axisymmetric lattice Boltzmann model. *Computers and Mathematics With Applications*, **2018**, 76, 1388-1407	2.7	1
9	Effect of polydispersity on bubble characteristics of Geldart Group B particles. *Chemical Engineering Journal*, **2021**, 420, 129880	14.7	1
8	Influence of foulant particle shape on membrane fouling in dead-end microfiltration. *Journal of Membrane Science*, **2022**, 647, 120265	9.6	0
7	Mechanistic insights into the membrane fouling mechanism during ultrafiltration of high-concentration proteins via in-situ electrical impedance spectroscopy (EIS). *Journal of Industrial and Engineering Chemistry*, **2021**, 106, 429-429	6.3	0
6	Understanding the Effect of Pore Size on the Separation Efficiency of Methane–Ethane Mixtures Using Kinetic Monte Carlo Simulation. *Industrial & Engineering Chemistry Research*, **2021**, 60, 15264-15273	3.9	0
5	Molecular dynamics simulation of the competitive adsorption behavior of effluent organic matters by heated aluminum oxide particles (HAOPs). *Separation and Purification Technology*, **2022**, 292, 120961	8.3	0
4	Realizing the Intrinsic Electrochemical Activity of Acidic N-Doped Graphene through 1-Pyrenesulfonic Acid Bridges. *Advanced Functional Materials*, **2020**, 30, 2001237	15.6	
3	Coriolis Effect Particles Segregator (CEPS): the feasibility of scaling up lab-on-a-chip separation. *Microfluidics and Nanofluidics*, **2022**, 26, 1	2.8	
2	Membrane filtration of dextran solutions with water and formamide as solvent. *Separation Science and Technology*,1-19	2.5	
1	Nucleation of water clusters on functionalised graphite with kinetic Monte Carlo scheme. *Molecular Simulation*,1-12	2	