

# Mashallah Rezakazemi

## List of Publications by Year in descending order

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195  
papers

10,587  
citations

28274

55  
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40979

93  
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209  
all docs

209  
docs citations

209  
times ranked

6812  
citing authors

#	ARTICLE	IF	CITATIONS
1	Low dimensional Bi <sub>2</sub> Se <sub>3</sub> NPs/reduced graphene oxide nanocomposite for simultaneous detection of L-Dopa and acetaminophen in presence of ascorbic acid in biological samples and pharmaceuticals. Journal of Nanostructure in Chemistry, 2022, 12, 513-528.	9.1	11
2	A new insight into catalytic ozonation of sulfasalazine antibiotic by plasma-treated limonite nanostructures: Experimental, modeling and mechanism. Chemical Engineering Journal, 2022, 428, 131230.	12.7	43
3	Water Desalination Using Solar Thermal Collectors Enhanced by Nanofluids. Chemical Engineering and Technology, 2022, 45, 15-25.	1.5	20
4	A review on hollow fiber membrane module towards high separation efficiency: Process modeling in fouling perspective. Chinese Chemical Letters, 2022, 33, 3594-3602.	9.0	20
5	Environmental management of industrial decarbonization with focus on chemical sectors: A review. Journal of Environmental Management, 2022, 302, 114055.	7.8	31
6	UiO-66 metal-organic frameworks in water treatment: A critical review. Progress in Materials Science, 2022, 125, 100904.	32.8	161
7	In-grown flower like Al-Li/Th-LDH@CNT nanocomposite for enhanced photocatalytic degradation of MG dye and selective adsorption of Cr (VI). Journal of Environmental Chemical Engineering, 2022, 10, 106848.	6.7	42
8	Liquid-Liquid membrane contactors incorporating surface skin asymmetric hollow fibres of poly(4-methyl-1-pentene) for ammonium recovery as liquid fertilisers. Separation and Purification Technology, 2022, 283, 120212.	7.9	22
9	Current status and challenges in the heterogeneous catalysis for biodiesel production. Renewable and Sustainable Energy Reviews, 2022, 157, 112012.	16.4	114
10	Performance of graphene-zinc oxide nanocomposite coated-glassy carbon electrode in the sensitive determination of para-nitrophenol. Scientific Reports, 2022, 12, 117.	3.3	21
11	Biopolymer-based membranes from polysaccharides for CO <sub>2</sub> separation: a review. Environmental Chemistry Letters, 2022, 20, 1083-1128.	16.2	21
12	High surface area acid-treated biochar from pomegranate husk for 2,4-dichlorophenol adsorption from aqueous solution. Chemosphere, 2022, 295, 133850.	8.2	35
13	Non-dispersive solvent absorption of post-combustion CO <sub>2</sub> in membrane contactors using ionic liquids. Journal of Molecular Liquids, 2022, 351, 118566.	4.9	12
14	Antibacterial properties of MXene-based nanomaterials: A review. Materials Express, 2022, 12, 34-48.	0.5	10
15	Green hydrogen storage and delivery: Utilizing highly active homogeneous and heterogeneous catalysts for formic acid dehydrogenation. International Journal of Hydrogen Energy, 2022, 47, 11694-11724.	7.1	34
16	Engineered graphene-based mixed matrix membranes to boost CO <sub>2</sub> separation performance: Latest developments and future prospects. Renewable and Sustainable Energy Reviews, 2022, 160, 112294.	16.4	22
17	A comprehensive review of microbial desalination cells for present and future challenges. Desalination, 2022, 535, 115808.	8.2	30
18	Coordination chemistry of metal-organic frameworks: Detection, adsorption, and photodegradation of tetracycline antibiotics and beyond. Coordination Chemistry Reviews, 2022, 464, 214562.	18.8	76

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19	Efficient removal of heavy metal ions from aqueous media by unmodified and modified nanodiamonds. Journal of Environmental Management, 2022, 316, 115214.	7.8	31
20	Assessment of heavy metals accumulation in agricultural soil, vegetables and associated health risks. PLoS ONE, 2022, 17, e0267719.	2.5	13
21	Functionalized pollen-like mesoporous silica. Microporous and Mesoporous Materials, 2021, 310, 110531.	4.4	26
22	Rigorous non-isothermal modeling approach for mass and energy transport during CO <sub>2</sub> absorption into aqueous solution of amino acid ionic liquids in hollow fiber membrane contactors. Separation and Purification Technology, 2021, 254, 117644.	7.9	31
23	Computational modelling of separation and purification of vanillin using microporous membranes. Journal of Molecular Liquids, 2021, 323, 114606.	4.9	3
24	Ethylenediamine-functionalized Zr-based MOF for efficient removal of heavy metal ions from water. Chemosphere, 2021, 264, 128466.	8.2	179
25	Adsorption performance of UiO-66 towards organic dyes: Effect of activation conditions. Journal of Molecular Liquids, 2021, 321, 114487.	4.9	42
26	Magnetic Fe <sub>3</sub> O <sub>4</sub> @UiO-66 nanocomposite for rapid adsorption of organic dyes from aqueous solution. Journal of Molecular Liquids, 2021, 322, 114910.	4.9	97
27	Molecular dynamics simulation of novel diamino-functionalized hollow mesosilica spheres for adsorption of dyes from synthetic wastewater. Journal of Molecular Liquids, 2021, 322, 114812.	4.9	65
28	Protic/aprotic ionic liquids for effective CO <sub>2</sub> separation using supported ionic liquid membrane. Chemosphere, 2021, 267, 128894.	8.2	33
29	Aluminum-based metal-organic frameworks for adsorptive removal of anti-cancer (methotrexate) drug from aqueous solutions. Journal of Environmental Management, 2021, 277, 111448.	7.8	59
30	Preparation of COOH-KCC-1/polyamide 6 composite by in situ ring-opening polymerization: synthesis, characterization, and Cd(II) adsorption study. Journal of Environmental Chemical Engineering, 2021, 9, 104683.	6.7	39
31	Health risk assessment of potentially toxic elements intake via food crops consumption: Monte Carlo simulation-based probabilistic and heavy metal pollution index. Environmental Science and Pollution Research, 2021, 28, 1479-1490.	5.3	77
32	POSS-amorphous thermoplastic nanocomposites. , 2021, , 97-114.		0
33	Prediction bubble point pressure for CO <sub>2</sub> /CH <sub>4</sub> gas mixtures in ionic liquids using intelligent approaches. Emergent Materials, 2021, 4, 565-578.	5.7	8
34	Influence of machine learning membership functions and degree of membership function on each input parameter for simulation of reactors. Scientific Reports, 2021, 11, 1891.	3.3	19
35	Intensification of CO <sub>2</sub> absorption using MDEA-based nanofluid in a hollow fibre membrane contactor. Scientific Reports, 2021, 11, 2649.	3.3	17
36	Mixed Matrix Membranes for Sustainable Electrical Energy-Saving Applications. ChemBioEng Reviews, 2021, 8, 27-43.	4.4	12

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37	Preface on "Nanomaterials for Energy Conversion and Storage Systems", Emergent Materials, 2021, 4, 387-388.	5.7	2
38	Glassy carbon electrode modified by Pd-Cu bimetallic nano-dendrites film decorated on the reduced graphene oxide using galvanic replacement as a low-cost anode in methanol fuel cells. International Journal of Hydrogen Energy, 2021, 46, 14338-14350.	7.1	7
39	Next generation polymers of intrinsic microporosity with tunable moieties for ultrahigh permeation and precise molecular CO <sub>2</sub> separation. Progress in Energy and Combustion Science, 2021, 84, 100903.	31.2	43
40	Fabrication of titanium dioxide nanomaterial for implantable highly flexible composite bioelectrode for biosensing applications. Chemosphere, 2021, 273, 129680.	8.2	11
41	Sustainable MXenes-based membranes for highly energy-efficient separations. Renewable and Sustainable Energy Reviews, 2021, 143, 110878.	16.4	39
42	Cost-effective composite prepared from sewage sludge waste and cement kiln dust as permeable reactive barrier to remediate simulated groundwater polluted with tetracycline. Journal of Environmental Chemical Engineering, 2021, 9, 105194.	6.7	16
43	Fabrication and characterization of functionalized nano-silica based transparent superhydrophobic surface. Materials Chemistry and Physics, 2021, 267, 124694.	4.0	4
44	Development of mass and heat transfer coupled model of hollow fiber membrane for salt recovery from brine via osmotic membrane distillation. Environmental Sciences Europe, 2021, 33, .	5.5	7
45	The effects of adding nano-alumina filler on the properties of polymer-derived SiC coating. International Journal of Applied Ceramic Technology, 2021, 18, 2197-2206.	2.1	5
46	Resource recovery from landfill leachate: An experimental investigation and perspectives. Chemosphere, 2021, 274, 129986.	8.2	57
47	Fe <sub>3</sub> O <sub>4</sub> @PAA@UiO-66-NH <sub>2</sub> magnetic nanocomposite for selective adsorption of Quercetin. Chemosphere, 2021, 275, 130087.	8.2	47
48	Numerical investigation of ethylbenzene dehydrogenation and nitrobenzene hydrogenation in a membrane reactor: Effect of operating conditions. International Journal of Hydrogen Energy, 2021, 46, 28641-28656.	7.1	9
49	Artificial intelligence modeling to predict transmembrane pressure in anaerobic membrane bioreactor-sequencing batch reactor during biohydrogen production. Journal of Environmental Management, 2021, 292, 112759.	7.8	22
50	CO <sub>2</sub> /CH <sub>4</sub> separation by mixed-matrix membranes holding functionalized NH <sub>2</sub> -MIL-101(Al) nanoparticles: Effect of amino-silane functionalization. Chemical Engineering Research and Design, 2021, 176, 49-59.	5.6	34
51	Recent advancements in molecular separation of gases using microporous membrane systems: A comprehensive review on the applied liquid absorbents. Journal of Molecular Liquids, 2021, 337, 116439.	4.9	37
52	Multi-ionic electrolytes and E.coli removal from wastewater using chitosan-based in-situ mediated thin film composite nanofiltration membrane. Journal of Environmental Management, 2021, 294, 112996.	7.8	9
53	Simultaneous detection and removal of fluoride from water using smart metal-organic framework-based adsorbents. Coordination Chemistry Reviews, 2021, 445, 214037.	18.8	76
54	Anaerobic membrane bioreactor for the production of bioH <sub>2</sub> : Electron flow, fouling modeling and kinetic study. Chemical Engineering Journal, 2021, 426, 130716.	12.7	11

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55	Synthesis, molecular dynamics simulation and adsorption study of different pollutants on functionalized mesosilica. Scientific Reports, 2021, 11, 1967.	3.3	41
56	Investigation on performance of particle swarm optimization (PSO) algorithm based fuzzy inference system (PSOFIS) in a combination of CFD modeling for prediction of fluid flow. Scientific Reports, 2021, 11, 1505.	3.3	17
57	Thermal prediction of turbulent forced convection of nanofluid using computational fluid dynamics coupled genetic algorithm with fuzzy interface system. Scientific Reports, 2021, 11, 1308.	3.3	18
58	Predicting Air Superficial Velocity of Two-Phase Reactors Using ANFIS and CFD. ACS Omega, 2021, 6, 239-252.	3.5	10
59	Thermocatalytic Hydrogen Production Through Decomposition of Methane-A Review. Frontiers in Chemistry, 2021, 9, 736801.	3.6	20
60	A Comprehensive Review on Recent Advances in Two-Dimensional (2D) Hexagonal Boron Nitride. ACS Applied Electronic Materials, 2021, 3, 5165-5187.	4.3	42
61	Application of neural networks in membrane separation. Reviews in Chemical Engineering, 2020, 36, 265-310.	4.4	32
62	Zeolitic imidazolate framework membranes for gas and water purification. Environmental Chemistry Letters, 2020, 18, 1-52.	16.2	56
63	Prediction of fluid pattern in a shear flow on intelligent neural nodes using ANFIS and LBM. Neural Computing and Applications, 2020, 32, 13313-13321.	5.6	52
64	Application of ZnO nanostructures in ceramic and polymeric membranes for water and wastewater technologies: A review. Chemical Engineering Journal, 2020, 391, 123475.	12.7	125
65	Textile waste, dyes/inorganic salts separation of cerium oxide-loaded loose nanofiltration polyethersulfone membranes. Chemical Engineering Journal, 2020, 385, 123787.	12.7	232
66	CO2 emission reduction by zero flaring startup in gas refinery. Materials Science for Energy Technologies, 2020, 3, 218-224.	1.8	17
67	Simulation of a Bubble-Column Reactor by Three-Dimensional CFD: Multidimension- and Function-Adaptive Network-Based Fuzzy Inference System. International Journal of Fuzzy Systems, 2020, 22, 477-490.	4.0	27
68	Electrospun hierarchical fibrous composite membrane for pomegranate juice concentration using osmotic membrane distillation. Journal of Environmental Chemical Engineering, 2020, 8, 104475.	6.7	18
69	Impact of scale, activation solvents, and aged conditions on gas adsorption properties of UiO-66. Journal of Environmental Management, 2020, 274, 111155.	7.8	53
70	Computational Simulation of CO2 Sorption in Polymeric Membranes Using Genetic Programming. Arabian Journal for Science and Engineering, 2020, 45, 7655-7666.	3.0	7
71	Functional input and membership characteristics in the accuracy of machine learning approach for estimation of multiphase flow. Scientific Reports, 2020, 10, 17793.	3.3	29
72	Prediction of fluid interface between dispersed and matrix phases by Lattice Boltzmann-adaptive network-based fuzzy inference system. Journal of Experimental and Theoretical Artificial Intelligence, 2020, , 1-13.	2.8	1

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73	Effect of Removal of Household Hazardous Wastes on Leachate Toxicity Based on Toxicity Characteristic Leaching Procedure. Journal of Hazardous, Toxic, and Radioactive Waste, 2020, 24, .	2.0	1
74	Electrocatalytic CO <sub>2</sub> fixation by regenerating reduced cofactor NADH during Calvin Cycle using glassy carbon electrode. PLoS ONE, 2020, 15, e0239340.	2.5	3
75	Molecular investigation into the effect of carbon nanotubes interaction with CO <sub>2</sub> in molecular separation using microporous polymeric membranes. Scientific Reports, 2020, 10, 13285.	3.3	12
76	Developing Intelligent Algorithm as a Machine Learning Overview over the Big Data Generated by Eulerâ€Euler Method To Simulate Bubble Column Reactor Hydrodynamics. ACS Omega, 2020, 5, 20558-20566.	3.5	35
77	Prediction of turbulence eddy dissipation of water flow in a heated metal foam tube. Scientific Reports, 2020, 10, 19280.	3.3	33
78	High-performance hybrid modeling chemical reactors using differential evolution based fuzzy inference system. Scientific Reports, 2020, 10, 21304.	3.3	34
79	Fluid Velocity Prediction Inside Bubble Column Reactor Using ANFIS Algorithm Based on CFD Input Data. Arabian Journal for Science and Engineering, 2020, 45, 7487-7498.	3.0	29
80	Superior chemical stability of UiO-66 metal-organic frameworks (MOFs) for selective dye adsorption. Chemical Engineering Journal, 2020, 399, 125346.	12.7	305
81	Hydrogen separation from synthesis gas using silica membrane: CFD simulation. International Journal of Hydrogen Energy, 2020, 45, 19381-19390.	7.1	10
82	A review on recent advances in hollow spheres for hydrogen storage. International Journal of Hydrogen Energy, 2020, 45, 17583-17604.	7.1	47
83	Mass transfer modelling of hollow fiber membrane contactor for apple juice concentration using osmotic membrane distillation. Separation and Purification Technology, 2020, 250, 117209.	7.9	31
84	Computational study on SO <sub>2</sub> molecular separation applying novel EMISE ionic liquid and DMA aromatic amine solution inside microporous membranes. Journal of Molecular Liquids, 2020, 313, 113531.	4.9	21
85	Prediction of thermal distribution and fluid flow in the domain with multi-solid structures using Cubic-Interpolated Pseudo-Particle model. PLoS ONE, 2020, 15, e0233850.	2.5	34
86	Hydrothermal Decomposition of Strongly Acidic Cationâ€Exchange Resin to Valuable Compounds Using Subcritical Water in Alkaline Media. ChemistrySelect, 2020, 5, 3257-3265.	1.5	2
87	Thermal and Flow Visualization of a Square Heat Source in a Nanofluid Material with a Cubic-Interpolated Pseudo-particle. ACS Omega, 2020, 5, 17658-17663.	3.5	34
88	Producing water from saline streams using membrane distillation: Modeling and optimization using CFD and design expert. International Journal of Energy Research, 2020, 44, 8841-8853.	4.5	26
89	Modeling pre-combustion CO <sub>2</sub> capture with tubular membrane contactor using ionic liquids at elevated temperatures. Separation and Purification Technology, 2020, 241, 116677.	7.9	55
90	Juglone extraction from walnut (Juglans regia L.) green husk by supercritical CO <sub>2</sub> : Process optimization using Taguchi method. Journal of Environmental Chemical Engineering, 2020, 8, 103776.	6.7	21

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91	H <sub>2</sub> S removal from sour water in a combination system of trickling biofilter and biofilter. Environmental Research, 2020, 184, 109380.	7.5	9
92	Post-combustion CO <sub>2</sub> capture with sweep gas in thin film composite (TFC) hollow fiber membrane (HFM) contactor. Journal of CO <sub>2</sub> Utilization, 2020, 40, 101266.	6.8	32
93	Recent progress and remaining challenges in post-combustion CO <sub>2</sub> capture using metal-organic frameworks (MOFs). Progress in Energy and Combustion Science, 2020, 80, 100849.	31.2	235
94	ANFIS grid partition framework with difference between two sigmoidal membership functions structure for validation of nanofluid flow. Scientific Reports, 2020, 10, 15395.	3.3	34
95	Evaluation of product of two sigmoidal membership functions (psigmf) as an ANFIS membership function for prediction of nanofluid temperature. Scientific Reports, 2020, 10, 22337.	3.3	13
96	Mechanistic modeling and numerical simulation of axial flow catalytic reactor for naphtha reforming unit. PLoS ONE, 2020, 15, e0242343.	2.5	9
97	Biofuel types and membrane separation. Environmental Chemistry Letters, 2019, 17, 1-18.	16.2	94
98	Numerical Simulation of Acetone Stripping from Water in a Microchannel Device. Chemical Engineering and Technology, 2019, 42, 2358-2364.	1.5	4
99	Preparation of novel cross-linked graphene oxide membrane for desalination applications using (EDC) Tj ETQq1 1 0.784314 rgBT /Ove	8.2	78
100	Applicability of BaTiO <sub>3</sub> /graphene oxide (GO) composite for enhanced photodegradation of methylene blue (MB) in synthetic wastewater under UVâ€vis irradiation. Environmental Pollution, 2019, 255, 113182.	7.5	92
101	Computational fluid dynamic modeling of water desalination using low-energy continuous direct contact membrane distillation process. Applied Thermal Engineering, 2019, 163, 114391.	6.0	36
102	Comparative study of conventional and unconventional designs of cathode flow fields in PEM fuel cell. Renewable and Sustainable Energy Reviews, 2019, 116, 109420.	16.4	54
103	ANFIS modeling for prediction of CO <sub>2</sub> solubility in potassium and sodium based amino acid Salt solutions. Journal of Environmental Chemical Engineering, 2019, 7, 102925.	6.7	57
104	Mass transfer through PDMS/zeolite 4A MMMs for hydrogen separation: Molecular dynamics and grand canonical Monte Carlo simulations. International Communications in Heat and Mass Transfer, 2019, 108, 104259.	5.6	25
105	Organic-Inorganic Hybrid Materials and Their Applications. Polymers and Polymeric Composites, 2019, , 1135-1156.	0.6	10
106	Synergistic properties of molybdenum disulfide (MoS <sub>2</sub> ) with electro-active materials for high-performance supercapacitors. International Journal of Hydrogen Energy, 2019, 44, 17470-17492.	7.1	45
107	Pomegranate juice concentration using osmotic distillation with membrane contactor. Separation and Purification Technology, 2019, 224, 481-489.	7.9	45
108	Development of Hybrid ANFISâ€CFD Model for Design and Optimization of Membrane Separation of Benzoic Acid. Journal of Non-Equilibrium Thermodynamics, 2019, 44, 285-293.	4.2	3



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109	Sorption in mixed matrix membranes: Experimental and molecular dynamic simulation and Grand Canonical Monte Carlo method. Journal of Molecular Liquids, 2019, 282, 566-576.	4.9	27
110	Development of CFD model for membrane-based energy recovery ventilators. Chemical Engineering Research and Design, 2019, 145, 226-234.	5.6	15
111	Organic/Silica Nanocomposite Membranes Applicable to Green Chemistry. , 2019, , 629-652.		2
112	Enhanced Water Flux by Fabrication of Polysulfone/Alumina Nanocomposite Membrane for Copper(II) Removal. Macromolecular Research, 2019, 27, 565-571.	2.4	29
113	CO <sub>2</sub> absorption enhancement by water-based nanofluids of CNT and SiO <sub>2</sub> using hollow-fiber membrane contactor. Separation and Purification Technology, 2019, 210, 920-926.	7.9	105
114	Microstructural modifications of polyethylene glycol powder binder in the processing of sintered alpha alumina under different conditions of preparation. Materials Science for Energy Technologies, 2019, 2, 89-95.	1.8	13
115	ANFIS pattern for molecular membranes separation optimization. Journal of Molecular Liquids, 2019, 274, 470-476.	4.9	100
116	Cellulose Acetate Polymeric Membrane Fabrication by Nonsolvent-Induced Phase Separation Process: Determination of Velocities of Individual Components. Journal of Non-Equilibrium Thermodynamics, 2019, 44, 71-80.	4.2	3
117	Lignin-chitosan blend for methylene blue removal: Adsorption modeling. Journal of Molecular Liquids, 2019, 274, 778-791.	4.9	78
118	Liquidâ€‘phase chemical reactors: Development of 3D hybrid model based on CFDâ€‘adaptive networkâ€‘based fuzzy inference system. Canadian Journal of Chemical Engineering, 2019, 97, 1676-1684.	1.7	46
119	Heat recovery steam generator: Constructal thermoeconomic optimization. Applied Thermal Engineering, 2019, 148, 747-753.	6.0	16
120	Modeling Dissociation Pressure of Semi-Clathrate Hydrate Systems Containing CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> , and H <sub>2</sub> S in the Presence of Tetra-n-butyl Ammonium Bromide. Journal of Non-Equilibrium Thermodynamics, 2019, 44, 15-28.	4.2	15
121	Gas-Liquid Phase Recirculation in Bubble Column Reactors: Development of a Hybrid Model Based on Local CFD â€‘ Adaptive Neuro-Fuzzy Inference System (ANFIS). Journal of Non-Equilibrium Thermodynamics, 2019, 44, 29-42.	4.2	14
122	Polyurethane-SAPO-34 mixed matrix membrane for CO <sub>2</sub> /CH <sub>4</sub> and CO <sub>2</sub> /N <sub>2</sub> separation. Chinese Journal of Chemical Engineering, 2019, 27, 322-334.	3.5	74
123	An intelligent approach to predict gas compressibility factor using neural network model. Neural Computing and Applications, 2019, 31, 55-64.	5.6	39
124	Fouling-resistant membranes for water reuse. Environmental Chemistry Letters, 2018, 16, 715-763.	16.2	80
125	Accurate prediction of solubility of gases within H <sub>2</sub> -selective nanocomposite membranes using committee machine intelligent system. International Journal of Hydrogen Energy, 2018, 43, 6614-6624.	7.1	63
126	Evaluation of socio-economic factors on CO <sub>2</sub> emissions in Iran: Factorial design and multivariable methods. Journal of Cleaner Production, 2018, 189, 108-115.	9.3	46



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127	CFD simulation of copper(II) extraction with TFA in non-dispersive hollow fiber membrane contactors. Environmental Science and Pollution Research, 2018, 25, 12053-12063.	5.3	38
128	Process intensification. Reviews in Chemical Engineering, 2018, 34, 135-200.	4.4	156
129	Membrane filtration of wastewater from gas and oil production. Environmental Chemistry Letters, 2018, 16, 367-388.	16.2	129
130	CFD simulation of seawater purification using direct contact membrane desalination (DCMD) system. Desalination, 2018, 443, 323-332.	8.2	82
131	Accurate prediction of miscibility of CO <sub>2</sub> and supercritical CO <sub>2</sub> in ionic liquids using machine learning. Journal of CO <sub>2</sub> Utilization, 2018, 25, 99-107.	6.8	74
132	Simulation of Nonporous Polymeric Membranes Using CFD for Bioethanol Purification. Macromolecular Theory and Simulations, 2018, 27, 1700084.	1.4	34
133	Modeling of a CO <sub>2</sub> -piperazine-membrane absorption system. Chemical Engineering Research and Design, 2018, 131, 375-384.	5.6	88
134	Thermally stable polymers for advanced high-performance gas separation membranes. Progress in Energy and Combustion Science, 2018, 66, 1-41.	31.2	252
135	A robust predictive tool for estimating CO <sub>2</sub> solubility in potassium based amino acid salt solutions. Chinese Journal of Chemical Engineering, 2018, 26, 740-746.	3.5	40
136	Adsorption behavior of Cu(II) and Co(II) using chemically modified marine algae. Environmental Technology (United Kingdom), 2018, 39, 2792-2800.	2.2	77
137	Ethylene glycol elimination in amine loop for more efficient gas conditioning. Chemistry Central Journal, 2018, 12, 120.	2.6	5
138	Gas permeation prediction through polymeric membranes using compressible regular solution theory. International Journal of Hydrogen Energy, 2018, 43, 22357-22364.	7.1	9
139	Hormones removal from municipal wastewater using ultrasound. AMB Express, 2018, 8, 91.	3.0	27
140	Quantum chemical calculations and molecular modeling for methylene blue removal from water by a lignin-chitosan blend. International Journal of Biological Macromolecules, 2018, 120, 2065-2075.	7.5	25
141	Estimating CH <sub>4</sub> and CO <sub>2</sub> solubilities in ionic liquids using computational intelligence approaches. Journal of Molecular Liquids, 2018, 271, 661-669.	4.9	60
142	Molecular dynamics, grand canonical Monte Carlo and expert simulations and modeling of water-acetic acid pervaporation using polyvinyl alcohol/tetraethyl orthosilicates membrane. Journal of Molecular Liquids, 2018, 265, 53-68.	4.9	41
143	Computational Simulation of Mass Transfer in Molecular Separation Using Microporous Polymeric Membranes. Chemical Engineering and Technology, 2018, 41, 1975-1981.	1.5	8
144	Development of a 3D Hybrid Intelligent-Mechanistic Model for Simulation of Multiphase Chemical Reactors. Chemical Engineering and Technology, 2018, 41, 1982-1993.	1.5	14

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145	Separation via Pervaporation Techniques Through Polymeric Membranes. , 2018, , 243-263.		14
146	Predictive construction of phase diagram of ternary solutions containing polymer/solvent/nonsolvent using modified Flory-Huggins model. Journal of Molecular Liquids, 2018, 263, 282-287.	4.9	30
147	Organic solvent removal by pervaporation membrane technology: experimental and simulation. Environmental Science and Pollution Research, 2018, 25, 19818-19825.	5.3	20
148	Wastewaters treatment containing phenol and ammonium using aerobic submerged membrane bioreactor. Chemistry Central Journal, 2018, 12, 79.	2.6	19
149	Molecular modeling investigation on mechanism of phenol removal from aqueous media by single- and multi-walled carbon nanotubes. Journal of Molecular Liquids, 2018, 271, 24-30.	4.9	24
150	CFD modeling of CO <sub>2</sub> capture by water-based nanofluids using hollow fiber membrane contactor. International Journal of Greenhouse Gas Control, 2018, 77, 88-95.	4.6	81
151	Development of hybrid models for prediction of gas permeation through FS/POSS/PDMS nanocomposite membranes. International Journal of Hydrogen Energy, 2018, 43, 17283-17294.	7.1	46
152	High Loaded Synthetic Hazardous Wastewater Treatment Using Lab-Scale Submerged Ceramic Membrane Bioreactor. Periodica Polytechnica: Chemical Engineering, 2018, 62, 299-304.	1.1	41
153	Separation Performance of Nanostructured Ceramic Membranes: Analytical Model Development. Journal of Non-Equilibrium Thermodynamics, 2018, 43, 245-253.	4.2	4
154	2.29 Desulfurization Materials. , 2018, , 944-979.		18
155	Fundamentals and Measurement Techniques for Gas Transport in Polymers. , 2018, , 391-423.		19
156	COMPUTATIONAL FLUID DYNAMICS SIMULATION OF MOVING-BED NANOCATALYTIC CRACKING PROCESS FOR THE LIGHTENING OF HEAVY CRUDE OIL. Journal of Porous Media, 2018, 21, 539-553.	1.9	17
157	Effect of flow and module configuration on SO <sub>2</sub> absorption by using membrane contactors. Global Nest Journal, 2018, 19, 716-725.	0.1	3
158	Removal of Heavy Metals from Industrial Wastewaters: A Review. ChemBioEng Reviews, 2017, 4, 37-59.	4.4	739
159	Methods for the Preparation of Organic-Inorganic Nanocomposite Polymer Electrolyte Membranes for Fuel Cells. , 2017, , 311-325.		30
160	H <sub>2</sub> -selective mixed matrix membranes modeling using ANFIS, PSO-ANFIS, GA-ANFIS. International Journal of Hydrogen Energy, 2017, 42, 15211-15225.	7.1	175
161	Hybrid systems: Combining membrane and absorption technologies leads to more efficient acid gases (CO <sub>2</sub> and H <sub>2</sub> S) removal from natural gas. Journal of CO <sub>2</sub> Utilization, 2017, 18, 362-369.	6.8	125
162	Quasi-dynamic modeling of dispersion-free extraction of aroma compounds using hollow fiber membrane contactor. Chemical Engineering Research and Design, 2017, 127, 52-61.	5.6	36

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163	Development of a least squares support vector machine model for prediction of natural gas hydrate formation temperature. Chinese Journal of Chemical Engineering, 2017, 25, 1238-1248.	3.5	48
164	Aluminum Oxide Nanoparticles for Highly Efficient Asphaltene Separation from Crude Oil Using Ceramic Membrane Technology. Oil and Gas Science and Technology, 2017, 72, 34.	1.4	20
165	Simulation of CO <sub>2</sub> absorption by solution of ammonium ionic liquid in hollow-fiber contactors. Chemical Engineering and Processing: Process Intensification, 2016, 108, 27-34.	3.6	75
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