# Saeed Shirazian

## List of Publications by Citations

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#	Paper	IF	Citations
219	Activated lignin-chitosan extruded blends for efficient adsorption of methylene blue. <i>Chemical Engineering Journal</i> , <b>2017</b> , 307, 264-272	14.7	460
218	CFD simulation of natural gas sweetening in a gasllquid hollow-fiber membrane contactor. <i>Chemical Engineering Journal</i> , <b>2011</b> , 168, 1217-1226	14.7	155
217	H2-selective mixed matrix membranes modeling using ANFIS, PSO-ANFIS, GA-ANFIS. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 15211-15225	6.7	137
216	Simulation of ammonia removal from industrial wastewater streams by means of a hollow-fiber membrane contactor. <i>Desalination</i> , <b>2012</b> , 285, 383-392	10.3	132
215	CFD simulation of water removal from water/ethylene glycol mixtures by pervaporation. <i>Chemical Engineering Journal</i> , <b>2011</b> , 168, 60-67	14.7	101
214	Numerical simulation of mass transfer in gas[Iquid hollow fiber membrane contactors for laminar flow conditions. <i>Simulation Modelling Practice and Theory</i> , <b>2009</b> , 17, 708-718	3.9	94
213	Computational fluid dynamics simulation of transport phenomena in ceramic membranes for SO2 separation. <i>Mathematical and Computer Modelling</i> , <b>2012</b> , 56, 278-286		79
212	Separation of CO2 by single and mixed aqueous amine solvents in membrane contactors: fluid flow and mass transfer modeling. <i>Engineering With Computers</i> , <b>2012</b> , 28, 189-198	4.5	77
211	Hydrodynamics and mass transfer simulation of wastewater treatment in membrane reactors. <i>Desalination</i> , <b>2012</b> , 286, 290-295	10.3	75
210	Effect of lignin on the release rate of acetylsalicylic acid tablets. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 124, 354-359	7.9	73
209	Simulation of CO 2 absorption by solution of ammonium ionic liquid in hollow-fiber contactors. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2016</b> , 108, 27-34	3.7	72
208	Numerical modeling and optimization of wastewater treatment using porous polymeric membranes. <i>Polymer Engineering and Science</i> , <b>2013</b> , 53, 1272-1278	2.3	70
207	Mathematical modeling and numerical simulation of CO2 transport through hollow-fiber membranes. <i>Applied Mathematical Modelling</i> , <b>2011</b> , 35, 174-188	4.5	69
206	Biofuel types and membrane separation. Environmental Chemistry Letters, 2019, 17, 1-18	13.3	68
205	Mathematical modeling and simulation of CO2 stripping from monoethanolamine solution using nano porous membrane contactors. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 13, 1-8	4.2	66
204	Facile one-pot synthesis of thiol-functionalized mesoporous silica submicrospheres for Tl(I) adsorption: Isotherm, kinetic and thermodynamic studies. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 371, 146-155	12.8	63
203	Microcrystalline cellulose, lactose and lignin blends: Process mapping of dry granulation via roll compaction. <i>Powder Technology</i> , <b>2019</b> , 341, 38-50	5.2	63

# (2015-2019)

202	Developing ANN-Kriging hybrid model based on process parameters for prediction of mean residence time distribution in twin-screw wet granulation. <i>Powder Technology</i> , <b>2019</b> , 343, 568-577	5.2	63	
201	Development of a mass transfer model for simulation of sulfur dioxide removal in ceramic membrane contactors. <i>Asia-Pacific Journal of Chemical Engineering</i> , <b>2012</b> , 7, 828-834	1.3	59	
200	Design of Controlled Release System for Paracetamol Based on Modified Lignin. <i>Polymers</i> , <b>2019</b> , 11,	4.5	58	
199	Modeling and CFD Simulation of Water Desalination Using Nanoporous Membrane Contactors. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2013</b> , 52, 3490-3498	3.9	57	
198	Application of lignin in controlled release: development of predictive model based on artificial neural network for API release. <i>Cellulose</i> , <b>2019</b> , 26, 6165-6178	5.5	56	
197	Effect of graphene oxide on modifying polyethersulfone membrane performance and its application in wastewater treatment. <i>Scientific Reports</i> , <b>2020</b> , 10, 2049	4.9	56	
196	CFD simulation of CO2 capture from gas mixtures in nanoporous membranes by solution of 2-amino-2-methyl-1-propanol and piperazine. <i>International Journal of Greenhouse Gas Control</i> , <b>2013</b> , 15, 142-149	4.2	56	
195	A hierarchical LDH/MOF nanocomposite: single, simultaneous and consecutive adsorption of a reactive dye and Cr(vi). <i>Dalton Transactions</i> , <b>2020</b> , 49, 5323-5335	4.3	55	
194	Applicability of BaTiO/graphene oxide (GO) composite for enhanced photodegradation of methylene blue (MB) in synthetic wastewater under UV-vis irradiation. <i>Environmental Pollution</i> , <b>2019</b> , 255, 113182	9.3	54	
193	ANFIS pattern for molecular membranes separation optimization. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 274, 470-476	6	53	
192	Lignin-chitosan blend for methylene blue removal: Adsorption modeling. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 274, 778-791	6	53	
191	Transient computational fluid dynamics modeling of pervaporation separation of aromatic/aliphatic hydrocarbon mixtures using polymer composite membrane. <i>Polymer Engineering and Science</i> , <b>2013</b> , 53, 1494-1501	2.3	51	
190	Artificial neural network modelling of continuous wet granulation using a twin-screw extruder. <i>International Journal of Pharmaceutics</i> , <b>2017</b> , 521, 102-109	6.5	50	
189	Novel diamino-functionalized fibrous silica submicro-spheres with a bimodal-micro-mesoporous network: Ultrasonic-assisted fabrication, characterization, and their application for superior uptake of Congo red. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 294, 111617	6	45	
188	Estimating CH4 and CO2 solubilities in ionic liquids using computational intelligence approaches. Journal of Molecular Liquids, <b>2018</b> , 271, 661-669	6	45	
187	Synthesis and characterization of novel N-methylimidazolium-functionalized KCC-1: A highly efficient anion exchanger of hexavalent chromium. <i>Chemosphere</i> , <b>2020</b> , 239, 124735	8.4	44	
186	Synthesis of substrate-modified LTA zeolite membranes for dehydration of natural gas. <i>Fuel</i> , <b>2015</b> , 148, 112-119	7.1	43	
185	LTA and ion-exchanged LTA zeolite membranes for dehydration of natural gas. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2015</b> , 22, 132-137	6.3	41	

184	Meso-architectured siliceous hollow quasi-capsule. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 570, 390-401	9.3	41
183	Development of hybrid models for prediction of gas permeation through FS/POSS/PDMS nanocomposite membranes. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 17283-17294	6.7	41
182	Near-Critical Extraction of the Fermentation Products by Membrane Contactors: A Mass Transfer Simulation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 2245-2253	3.9	40
181	Prediction of Nanofluid Temperature Inside the Cavity by Integration of Grid Partition Clustering Categorization of a Learning Structure with the Fuzzy System. <i>ACS Omega</i> , <b>2020</b> , 5, 3571-3578	3.9	39
180	Prediction of fluid pattern in a shear flow on intelligent neural nodes using ANFIS and LBM. <i>Neural Computing and Applications</i> , <b>2020</b> , 32, 13313-13321	4.8	39
179	Mesostructured Hollow Siliceous Spheres for Adsorption of Dyes. <i>Chemical Engineering and Technology</i> , <b>2020</b> , 43, 392-402	2	39
178	Liquid-phase chemical reactors: Development of 3D hybrid model based on CFD-adaptive network-based fuzzy inference system. <i>Canadian Journal of Chemical Engineering</i> , <b>2019</b> , 97, 1676-1684	2.3	39
177	Correlation of interaction parameters in Wilson, NRTL and UNIQUAC models using theoretical methods. <i>Fluid Phase Equilibria</i> , <b>2016</b> , 417, 181-186	2.5	38
176	Modeling of water transport through nanopores of membranes in direct-contact membrane distillation process. <i>Polymer Engineering and Science</i> , <b>2014</b> , 54, 660-666	2.3	38
175	Oak wood ash/GO/Fe3O4 adsorption efficiencies for cadmium and lead removal from aqueous solution: Kinetics, equilibrium and thermodynamic evaluation. <i>Arabian Journal of Chemistry</i> , <b>2021</b> , 14, 102991	5.9	38
174	Multi-dimensional population balance modelling of pharmaceutical formulations for continuous twin-screw wet granulation: Determination of liquid distribution. <i>International Journal of Pharmaceutics</i> , <b>2019</b> , 566, 352-360	6.5	37
173	Phenol removal from wastewater by means of nanoporous membrane contactors. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2015</b> , 21, 1410-1416	6.3	37
172	Shell-in-shell monodispersed triamine-functionalized SiO2 hollow microspheres with micro-mesostructured shells for highly efficient removal of heavy metals from aqueous solutions. Journal of Environmental Chemical Engineering, 2019, 7, 102832	6.8	37
171	Phase diagram of ternary polymeric solutions containing nonsolvent/solvent/polymer: Theoretical calculation and experimental validation. <i>Polymer</i> , <b>2015</b> , 73, 1-8	3.9	36
170	Mass transfer simulation of ion separation by nanofiltration considering electrical and dielectrical effects. <i>Desalination</i> , <b>2012</b> , 284, 316-323	10.3	36
169	Numerical simulation of CO2 separation from gas mixtures in membrane modules: Effect of chemical absorbent. <i>Arabian Journal of Chemistry</i> , <b>2016</b> , 9, 62-71	5.9	35
168	Investigations on the ability of di-isopropanol amine solution for removal of CO2 from natural gas in porous polymeric membranes. <i>Polymer Engineering and Science</i> , <b>2015</b> , 55, 598-603	2.3	34
167	Computational simulation of mass transfer in extraction of alkali metals by means of nanoporous membrane extractors. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2013</b> , 69, 57-62	3.7	34

166	Mass transfer simulation of solvent extraction in hollow-fiber membrane contactors. <i>Desalination</i> , <b>2011</b> , 275, 126-132	10.3	34
165	Molecular dynamics simulation of novel diamino-functionalized hollow mesosilica spheres for adsorption of dyes from synthetic wastewater. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 322, 114812	6	34
164	Simulation of heavy metal extraction in membrane contactors using computational fluid dynamics. <i>Desalination</i> , <b>2011</b> , 281, 422-428	10.3	33
163	Supercritical extraction of organic solutes from aqueous solutions by means of membrane contactors: CFD simulation. <i>Desalination</i> , <b>2011</b> , 277, 135-140	10.3	32
162	Changes in the Number of Membership Functions for Predicting the Gas Volume Fraction in Two-Phase Flow Using Grid Partition Clustering of the ANFIS Method. <i>ACS Omega</i> , <b>2020</b> , 5, 16284-16297	13.9	31
161	Preparation and optimization of activated nano-carbon production using physical activation by water steam from agricultural wastes <i>RSC Advances</i> , <b>2020</b> , 10, 1463-1475	3.7	31
160	Measuring solubility of a chemotherapy-anti cancer drug (busulfan) in supercritical carbon dioxide. Journal of Molecular Liquids, <b>2020</b> , 317, 113954	6	31
159	Using quantum chemical modeling and calculations for evaluation of cellulose potential for estrogen micropollutants removal from water effluents. <i>Chemosphere</i> , <b>2017</b> , 178, 411-423	8.4	30
158	Simulation of Nonporous Polymeric Membranes Using CFD for Bioethanol Purification. Macromolecular Theory and Simulations, <b>2018</b> , 27, 1700084	1.5	30
157	A water-stable functionalized NiCo-LDH/MOF nanocomposite: green synthesis, characterization, and its environmental application for heavy metals adsorption. <i>Arabian Journal of Chemistry</i> , <b>2021</b> , 14, 103052	5.9	30
156	A societal transition of MSW management in Xiamen (China) toward a circular economy through integrated waste recycling and technological digitization. <i>Environmental Pollution</i> , <b>2021</b> , 277, 116741	9.3	28
155	On the search of rigorous thermo-kinetic model for wet phase inversion technique. <i>Journal of Membrane Science</i> , <b>2017</b> , 538, 18-33	9.6	27
154	Experimental Solubility Measurements of Fenoprofen in Supercritical Carbon Dioxide. <i>Journal of Chemical &amp; Che</i>	2.8	27
153	Mass transfer modeling of ion transport through nanoporous media. <i>Desalination</i> , <b>2011</b> , 281, 325-333	10.3	27
152	Hierarchical multi-shell hollow micro-meso-macroporous silica for Cr(VI) adsorption. <i>Scientific Reports</i> , <b>2020</b> , 10, 9788	4.9	26
151	Preparation of COOH-KCC-1/polyamide 6 composite by in situ ring-opening polymerization: synthesis, characterization, and Cd(II) adsorption study. <i>Journal of Environmental Chemical Engineering</i> , <b>2021</b> , 9, 104683	6.8	26
150	ANFIS grid partition framework with difference between two sigmoidal membership functions structure for validation of nanofluid flow. <i>Scientific Reports</i> , <b>2020</b> , 10, 15395	4.9	25
149	Efficient oxidation/mineralization of pharmaceutical pollutants using a novel Iron (III) oxyhydroxide nanostructure prepared via plasma technology: Experimental, modeling and DFT studies. <i>Journal of Hazardous Materials</i> <b>2021</b> 411 125074	12.8	25

148	Predictive construction of phase diagram of ternary solutions containing polymer/solvent/nonsolvent using modified Flory-Huggins model. <i>Journal of Molecular Liquids</i> , <b>2018</b> , 263, 282-287	6	24
147	Loxoprofen Solubility in Supercritical Carbon Dioxide: Experimental and Modeling Approaches. Journal of Chemical & Engineering Data, 2020, 65, 4613-4620	2.8	24
146	ANN-Kriging hybrid model for predicting carbon and inorganic phosphorus recovery in hydrothermal carbonization. <i>Waste Management</i> , <b>2019</b> , 85, 242-252	8.6	24
145	Measuring salsalate solubility in supercritical carbon dioxide: Experimental and thermodynamic modelling. <i>Journal of Chemical Thermodynamics</i> , <b>2021</b> , 152, 106271	2.9	24
144	A novel and facile green synthesis method to prepare LDH/MOF nanocomposite for removal of Cd(II) and Pb(II). <i>Scientific Reports</i> , <b>2021</b> , 11, 1609	4.9	24
143	Mathematical Model for Numerical Simulation of Organic Compound Recovery Using Membrane Separation. <i>Chemical Engineering and Technology</i> , <b>2018</b> , 41, 345-352	2	24
142	Mechanistic modelling of industrial-scale roller compactor Breund TF-MINI model Computers and Chemical Engineering, 2017, 104, 141-150	4	23
141	Fluid Velocity Prediction Inside Bubble Column Reactor Using ANFIS Algorithm Based on CFD Input Data. <i>Arabian Journal for Science and Engineering</i> , <b>2020</b> , 45, 7487-7498	2.5	22
140	Simulation of a Bubble-Column Reactor by Three-Dimensional CFD: Multidimension- and Function-Adaptive Network-Based Fuzzy Inference System. <i>International Journal of Fuzzy Systems</i> , <b>2020</b> , 22, 477-490	3.6	22
139	Developing Intelligent Algorithm as a Machine Learning Overview over the Big Data Generated by Euler-Euler Method To Simulate Bubble Column Reactor Hydrodynamics. <i>ACS Omega</i> , <b>2020</b> , 5, 20558-20	o <i>≩6</i> 6	22
138	Synthesis of multi-application activated carbon from oak seeds by KOH activation for methylene blue adsorption and electrochemical supercapacitor electrode. <i>Arabian Journal of Chemistry</i> , <b>2021</b> , 14, 102958	5.9	22
137	Modelling tyramine extraction from wastewater using a non-dispersive solvent extraction process. <i>Environmental Science and Pollution Research</i> , <b>2020</b> , 27, 39068-39076	5.1	21
136	Compartmental approach for modelling twin-screw granulation using population balances. <i>International Journal of Pharmaceutics</i> , <b>2020</b> , 576, 118737	6.5	21
135	Computational fluid dynamics simulation of NO2 molecular sequestration from a gaseous stream using NaOH liquid absorbent through porous membrane contactors. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 313, 113584	6	21
134	Molecular modeling investigation on mechanism of cationic dyes removal from aqueous solutions by mesoporous materials. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 329, 115485	6	21
133	Functionalized pollen-like mesoporous silica. <i>Microporous and Mesoporous Materials</i> , <b>2021</b> , 310, 110531	5.3	21
132	Using neural networks coupled with particle swarm optimization technique for mathematical modeling of air gap membrane distillation (AGMD) systems for desalination process. <i>Neural Computing and Applications</i> , <b>2017</b> , 28, 2099-2104	4.8	20
131	Sorption in mixed matrix membranes: Experimental and molecular dynamic simulation and Grand Canonical Monte Carlo method. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 282, 566-576	6	20

## (2020-2020)

130	Computational investigation on the effect of [Bmim][BF4] ionic liquid addition to MEA alkanolamine absorbent for enhancing CO2 mass transfer inside membranes. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 314, 113635	6	20
129	Prediction of thermal distribution and fluid flow in the domain with multi-solid structures using Cubic-Interpolated Pseudo-Particle model. <i>PLoS ONE</i> , <b>2020</b> , 15, e0233850	3.7	20
128	Thermal and Flow Visualization of a Square Heat Source in a Nanofluid Material with a Cubic-Interpolated Pseudo-particle. <i>ACS Omega</i> , <b>2020</b> , 5, 17658-17663	3.9	20
127	Using static method to measure tolmetin solubility at different pressures and temperatures in supercritical carbon dioxide. <i>Scientific Reports</i> , <b>2020</b> , 10, 19595	4.9	20
126	Prediction of turbulence eddy dissipation of water flow in a heated metal foam tube. <i>Scientific Reports</i> , <b>2020</b> , 10, 19280	4.9	20
125	Organic solvent removal by pervaporation membrane technology: experimental and simulation. <i>Environmental Science and Pollution Research</i> , <b>2018</b> , 25, 19818-19825	5.1	19
124	Molecular modeling investigation on mechanism of phenol removal from aqueous media by single-and multi-walled carbon nanotubes. <i>Journal of Molecular Liquids</i> , <b>2018</b> , 271, 24-30	6	19
123	Molecular separation in liquid phase: Development of mechanistic model in membrane separation of organic compounds. <i>Journal of Molecular Liquids</i> , <b>2018</b> , 262, 336-344	6	19
122	Pattern recognition of the fluid flow in a 3D domain by combination of Lattice Boltzmann and ANFIS methods. <i>Scientific Reports</i> , <b>2020</b> , 10, 15908	4.9	19
121	Thermodynamic modelling and experimental validation of pharmaceutical solubility in supercritical solvent. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 319, 114120	6	19
120	Molecular dynamic simulations and quantum chemical calculations of adsorption process using amino-functionalized silica. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 330, 115544	6	19
119	Quantum chemical calculations and molecular modeling for methylene blue removal from water by a lignin-chitosan blend. <i>International Journal of Biological Macromolecules</i> , <b>2018</b> , 120, 2065-2075	7.9	19
118	ANN Analysis of a Roller Compaction Process in the Pharmaceutical Industry. <i>Chemical Engineering and Technology</i> , <b>2017</b> , 40, 487-492	2	18
117	CFD SIMULATION OF TRANSPORT PHENOMENA IN WASTEWATER TREATMENT VIA VACUUM MEMBRANE DISTILLATION. <i>Journal of Porous Media</i> , <b>2016</b> , 19, 515-526	2.9	18
116	Computational study on SO2 molecular separation applying novel EMISE ionic liquid and DMA aromatic amine solution inside microporous membranes. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 313, 11353	16	17
115	Novel mesoporous crumpled paper-like silica balls. <i>Materials Letters</i> , <b>2020</b> , 281, 128230	3.3	17
114	Mass transfer modeling absorption using nanofluids in porous polymeric membranes. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 318, 114115	6	17
113	Bubbly flow prediction with randomized neural cells artificial learning and fuzzy systems based on k-lturbulence and Eulerian model data set. <i>Scientific Reports</i> , <b>2020</b> , 10, 13837	4.9	17

112	Resource recovery toward sustainability through nutrient removal from landfill leachate. <i>Journal of Environmental Management</i> , <b>2021</b> , 287, 112265	7.9	17
111	Artificial intelligence simulation of suspended sediment load with different membership functions of ANFIS. <i>Neural Computing and Applications</i> , <b>2021</b> , 33, 6819-6833	4.8	17
110	Regime-separated approach for population balance modelling of continuous wet granulation of pharmaceutical formulations. <i>Powder Technology</i> , <b>2018</b> , 325, 420-428	5.2	17
109	Resource recovery from landfill leachate: An experimental investigation and perspectives. <i>Chemosphere</i> , <b>2021</b> , 274, 129986	8.4	17
108	Prediction of carbon dioxide sorption in polymers for capture and storage feasibility analysis. <i>Chemical Engineering Research and Design</i> , <b>2017</b> , 120, 254-258	5.5	16
107	Mass transfer through PDMS/zeolite 4A MMMs for hydrogen separation: Molecular dynamics and grand canonical Monte Carlo simulations. <i>International Communications in Heat and Mass Transfer</i> , <b>2019</b> , 108, 104259	5.8	16
106	Molecular-level understanding of supported ionic liquid membranes for gas separation. <i>Journal of Molecular Liquids</i> , <b>2018</b> , 262, 230-236	6	16
105	Polymer-water partition coefficients in polymeric passive samplers. <i>Environmental Science and Pollution Research</i> , <b>2017</b> , 24, 2627-2631	5.1	16
104	High-performance hybrid modeling chemical reactors using differential evolution based fuzzy inference system. <i>Scientific Reports</i> , <b>2020</b> , 10, 21304	4.9	16
103	Novel bimodal micro-mesoporous Ni50Co50-LDH/UiO-66-NH2 nanocomposite for Tl(I) adsorption. <i>Arabian Journal of Chemistry</i> , <b>2021</b> , 14, 103058	5.9	16
102	Synthesis, molecular dynamics simulation and adsorption study of different pollutants on functionalized mesosilica. <i>Scientific Reports</i> , <b>2021</b> , 11, 1967	4.9	16
101	Effect of Water Content of Synthetic Hydrogel on Dehydration Performance of Nanoporous LTA Zeolite Membranes. <i>International Journal of Applied Ceramic Technology</i> , <b>2014</b> , 11, 793-803	2	15
100	Development of high-performance hybrid ANN-finite volume scheme (ANN-FVS) for simulation of pharmaceutical continuous granulation. <i>Chemical Engineering Research and Design</i> , <b>2020</b> , 163, 320-326	5.5	15
99	Functional input and membership characteristics in the accuracy of machine learning approach for estimation of multiphase flow. <i>Scientific Reports</i> , <b>2020</b> , 10, 17793	4.9	15
98	Development of a 3D Hybrid Intelligent-Mechanistic Model for Simulation of Multiphase Chemical Reactors. <i>Chemical Engineering and Technology</i> , <b>2018</b> , 41, 1982-1993	2	14
97	Influence of number of membership functions on prediction of membrane systems using adaptive network based fuzzy inference system (ANFIS). <i>Scientific Reports</i> , <b>2020</b> , 10, 16110	4.9	14
96	SO2 Removal from Gas Streams by Ammonia Scrubbing: Process Optimization by Response Surface Methodology. <i>Chemical Engineering and Technology</i> , <b>2019</b> , 42, 45-52	2	14
95	Chloroquine (antimalaria medication with anti SARS-CoV activity) solubility in supercritical carbon dioxide. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 322, 114539	6	14

## (2021-2022)

94	A new insight into catalytic ozonation of sulfasalazine antibiotic by plasma-treated limonite nanostructures: Experimental, modeling and mechanism. <i>Chemical Engineering Journal</i> , <b>2022</b> , 428, 1312	23 <sup>1</sup> 0 <sup>4.7</sup>	14
93	Application of Mineral Iron-Based Natural Catalysts in Electro-Fenton Process: A Comparative Study. <i>Catalysts</i> , <b>2021</b> , 11, 57	4	14
92	Computational Modeling of Transport in Porous Media Using an Adaptive Network-Based Fuzzy Inference System. <i>ACS Omega</i> , <b>2020</b> , 5, 30826-30835	3.9	13
91	Application of adaptive network-based fuzzy inference system (ANFIS) in the numerical investigation of Cu/water nanofluid convective flow. <i>Case Studies in Thermal Engineering</i> , <b>2020</b> , 22, 100	7 <b>5</b> 3	13
90	Gas-Liquid Phase Recirculation in Bubble Column Reactors: Development of a Hybrid Model Based on Local CFD [Adaptive Neuro-Fuzzy Inference System (ANFIS). <i>Journal of Non-Equilibrium Thermodynamics</i> , <b>2019</b> , 44, 29-42	3.8	13
89	Thermodynamic study on solubility of brain tumor drug in supercritical solvent: Temozolomide case study. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 321, 114926	6	13
88	Tenoxicam (Mobiflex) Solubility in Carbon Dioxide under Supercritical Conditions. <i>Journal of Chemical &amp; Chemi</i>	2.8	13
87	Experimental investigation and thermodynamic modeling of amino acids partitioning in a water/ionic liquid system. <i>Journal of Molecular Liquids</i> , <b>2018</b> , 260, 386-390	6	12
86	Investigation into Ethanol Purification Using Polymeric Membranes and a Pervaporation Process. <i>Chemical Engineering and Technology</i> , <b>2018</b> , 41, 278-284	2	12
85	3 dimensional hydrodynamic analysis of concentric draft tube airlift reactors with different tube diameters. <i>Mathematical and Computer Modelling</i> , <b>2013</b> , 57, 1184-1189		12
84	CFD Simulation of Mass Transfer in Membrane Evaporators for Concentration of Aqueous Solutions. <i>Oriental Journal of Chemistry</i> , <b>2012</b> , 28, 83-87	0.8	12
83	Mathematical Modeling and CFD Simulation of Hydrocarbon Purification Using Membrane Technology. <i>Oriental Journal of Chemistry</i> , <b>2012</b> , 28, 123-129	0.8	12
82	Theoretical investigations on the effect of absorbent type on carbon dioxide capture in hollow-fiber membrane contactors. <i>PLoS ONE</i> , <b>2020</b> , 15, e0236367	3.7	12
81	Modification of polyethersulfone membrane using MWCNT-NH2 nanoparticles and its application in the separation of azeotropic solutions by means of pervaporation. <i>PLoS ONE</i> , <b>2020</b> , 15, e0236529	3.7	12
8o	Evaluation of potassium glycinate, potassium lysinate, potassium sarcosinate and potassium threonate solutions in CO2 capture using membranes. <i>Arabian Journal of Chemistry</i> , <b>2021</b> , 14, 102979	5.9	12
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73	Evaluation of product of two sigmoidal membership functions (psigmf) as an ANFIS membership function for prediction of nanofluid temperature. <i>Scientific Reports</i> , <b>2020</b> , 10, 22337	4.9	10
72	Continuous twin screw wet granulation: The combined effect of process parameters on residence time, particle size, and granule morphology. <i>Journal of Drug Delivery Science and Technology</i> , <b>2018</b> , 48, 319-327	4.5	10
71	Thermal prediction of turbulent forced convection of nanofluid using computational fluid dynamics coupled genetic algorithm with fuzzy interface system. <i>Scientific Reports</i> , <b>2021</b> , 11, 1308	4.9	10
70	Topology optimization of neural networks based on a coupled genetic algorithm and particle swarm optimization techniques (c-GAPSO-NN). <i>Neural Computing and Applications</i> , <b>2018</b> , 29, 1073-1076	4.8	9
69	Mathematical Modeling of Gas Separation in Flat-sheet Membrane Contactors. <i>Oriental Journal of Chemistry</i> , <b>2012</b> , 28, 13-18	0.8	9
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66	Influence of machine learning membership functions and degree of membership function on each input parameter for simulation of reactors. <i>Scientific Reports</i> , <b>2021</b> , 11, 1891	4.9	9
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63	Contaminant uptake by polymeric passive samplers: A modeling study with experimental validation. <i>Chemical Engineering Research and Design</i> , <b>2018</b> , 129, 231-236	5.5	8
62	Computational Simulation of Mass Transfer in Molecular Separation Using Microporous Polymeric Membranes. <i>Chemical Engineering and Technology</i> , <b>2018</b> , 41, 1975-1981	2	8
61	Theoretical Studies on Copper Extraction by means of Polymeric Membrane Contactors. <i>Oriental Journal of Chemistry</i> , <b>2012</b> , 28, 23-28	0.8	8
60	Modeling of Organic Mixtures Separation in Dense Membranes Using Finite Element Method (FEM) Oriental Journal of Chemistry, <b>2012</b> , 28, 41-46	0.8	8
59	Prediction of Flow Behavior of Crude Oil-in-Water Emulsion through the Pipe by Using Rheological Properties. <i>Oriental Journal of Chemistry</i> , <b>2012</b> , 28, 109-113	0.8	8

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57	Understanding solid-state processing of pharmaceutical cocrystals via milling: Role of tablet excipients. <i>International Journal of Pharmaceutics</i> , <b>2021</b> , 601, 120514	6.5	8
56	Development and validation of a graphical sorption model: application to sorption of organic liquids into low density polyethylene polymeric membrane. <i>Asia-Pacific Journal of Chemical Engineering</i> , <b>2017</b> , 12, 561-572	1.3	7
55	Numerical simulation of reactive extraction of benzoic acid from wastewater via membrane contactors. <i>Environmental Science and Pollution Research</i> , <b>2017</b> , 24, 11518-11527	5.1	7
54	Investigations on permeation of water vapor through synthesized nanoporous zeolite membranes; a mass transfer model. <i>RSC Advances</i> , <b>2015</b> , 5, 30719-30726	3.7	7
53	Separation of greenhouse gases from gas mixtures using nanoporous polymeric membranes. <i>Polymer Engineering and Science</i> , <b>2015</b> , 55, 975-980	2.3	7
52	Mathematical-thermodynamic solubility model developed by the application of discrete Volterra functional series theory. <i>Fluid Phase Equilibria</i> , <b>2015</b> , 385, 205-211	2.5	7
51	Physical adsorption of CO2 in biomass at atmospheric pressure and ambient temperature. <i>Environmental Chemistry Letters</i> , <b>2020</b> , 18, 1423-1431	13.3	7
50	Application of CFD Techniques for Prediction of NH3 Transport Through Porous Membranes. <i>Oriental Journal of Chemistry</i> , <b>2012</b> , 28, 67-72	0.8	7
49	Predicting Air Superficial Velocity of Two-Phase Reactors Using ANFIS and CFD. <i>ACS Omega</i> , <b>2021</b> , 6, 239-252	3.9	7
48	Multidimensional machine learning algorithms to learn liquid velocity inside a cylindrical bubble column reactor. <i>Scientific Reports</i> , <b>2020</b> , 10, 21502	4.9	7
47	Predictive thermodynamic modeling and experimental measurements on solubility of active pharmaceutical ingredient: Lornoxicam case study. <i>Journal of Molecular Liquids</i> , <b>2021</b> , 326, 115285	6	7
46	High performance ozone based advanced oxidation processes catalyzed with novel argon plasma treated iron oxyhydroxide hydrate for phenazopyridine degradation. <i>Scientific Reports</i> , <b>2021</b> , 11, 964	4.9	7
45	Intensification of CO absorption using MDEA-based nanofluid in a hollow fibre membrane contactor. <i>Scientific Reports</i> , <b>2021</b> , 11, 2649	4.9	7
44	Velocity prediction of nanofluid in a heated porous pipe: DEFIS learning of CFD results. <i>Scientific Reports</i> , <b>2021</b> , 11, 1209	4.9	7
43	Synthesis of multi-organo-functionalized fibrous silica KCC-1 for highly efficient adsorption of acid fuchsine and acid orange II from aqueous solution. <i>Scientific Reports</i> , <b>2021</b> , 11, 2716	4.9	7
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39	gbell Learning function along with Fuzzy Mechanism in Prediction of Two-Phase Flow. <i>ACS Omega</i> , <b>2020</b> , 5, 25882-25890	3.9	6
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36	Controlled release evaluation of paracetamol loaded amine functionalized mesoporous silica KCC1 compared to microcrystalline cellulose based tablets. <i>Scientific Reports</i> , <b>2021</b> , 11, 535	4.9	6
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34	Prediction of gas velocity in two-phase flow using developed fuzzy logic system with differential evolution algorithm. <i>Scientific Reports</i> , <b>2021</b> , 11, 2380	4.9	6
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32	Mechanistic modeling and numerical simulation of axial flow catalytic reactor for naphtha reforming unit. <i>PLoS ONE</i> , <b>2020</b> , 15, e0242343	3.7	5
31	Facilitated Dissociation of Water in the Presence of Lithium Metal at Ambient Temperature as a Requisite for Lithium Las Reactions. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 16016-16022	3.8	5
30	Computational Simulation of CO2 Sorption in Polymeric Membranes Using Genetic Programming. <i>Arabian Journal for Science and Engineering</i> , <b>2020</b> , 45, 7655-7666	2.5	5
29	Application of artificial neural network for prediction of particle size in pharmaceutical cocrystallization using mechanochemical synthesis. <i>Neural Computing and Applications</i> , <b>2021</b> , 33, 12621	4.8	5
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23	Preparation and characterization of nanoporous ceramic membranes for separation of water from ethanol. <i>Desalination and Water Treatment</i> , <b>2014</b> , 1-6		4

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22	Calculation of the Density and Activity of Water in ATPS Systems for Separation of Biomolecules. Journal of Solution Chemistry, <b>2013</b> , 42, 1423-1437	1.8	4
21	A molecular scale analysis of TEMPO-oxidation of native cellulose molecules. <i>Heliyon</i> , <b>2020</b> , 6, e05776	3.6	4
20	Revisiting penetration depth@n falling film mass transfer. <i>Chemical Engineering Research and Design</i> , <b>2020</b> , 155, 18-21	5.5	4
19	Molecular separation of ibuprofen and 4-isobutylacetophenone using octanol organic solution by porous polymeric membranes. <i>PLoS ONE</i> , <b>2020</b> , 15, e0237271	3.7	4
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6	A thermokinetic model for penetrant-induced swelling in polymeric membranes: Water in polybenzimidazole membranes. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 317, 114000	6	2
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