

The solution-diffusion model: a review

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Citation Report

#	ARTICLE	IF	CITATIONS
7	Cuticular water permeability and its physiological significance. <i>Journal of Experimental Botany</i> , 1996, 47, 1813-1832.	2.4	425
8	Pervaporation with chitosan membranes. I. Separation of water from ethylene glycol by a chitosan/polysulfone composite membrane. <i>Journal of Membrane Science</i> , 1996, 116, 67-76.	4.1	135
9	Transport of organic vapors through poly(1-trimethylsilyl-1-propyne). <i>Journal of Membrane Science</i> , 1996, 116, 199-209.	4.1	235
10	Estimation of activation energy for permeation in pervaporation processes. <i>Journal of Membrane Science</i> , 1996, 118, 127-131.	4.1	271
11	Synthesis and gas permeation properties of poly(4-methyl-2-pentyne). <i>Journal of Membrane Science</i> , 1996, 121, 243-250.	4.1	168
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17	Permselective properties of PVA-PAA blended membrane used for dehydration of fusel oil by pervaporation. <i>Journal of Membrane Science</i> , 1997, 125, 293-301.	4.1	36
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24	Pervaporative extraction of volatile organic compounds from aqueous systems with use of a tubular transverse flow module. <i>Journal of Membrane Science</i> , 1998, 143, 137-157.	4.1	25

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1952	Predicting Gas Separation through Graphene Nanopore Ensembles with Realistic Pore Size Distributions. <i>ACS Nano</i> , 2021, 15, 1727-1740.	7.3	28
1953	Membrane-based technology for methane separation from biogas. , 2021, , 117-157.		1
1954	Organic molecular sieve membranes for chemical separations. <i>Chemical Society Reviews</i> , 2021, 50, 5468-5516.	18.7	170
1955	Energy Consumption of Brackish Water Desalination: Identifying the Sweet Spots for Electrodialysis and Reverse Osmosis. <i>ACS ES&T Engineering</i> , 2021, 1, 851-864.	3.7	81
1956	Substituted polynorbornene membranes: a modular template for targeted gas separations. <i>Polymer Chemistry</i> , 2021, 12, 2947-2977.	1.9	39
1957	Polymeric composite/nanocomposite membranes for diverse applications. , 2021, , 169-199.		4
1958	Metal-Organic Frameworks for Environmental Applications. <i>Engineering Materials</i> , 2021, , 1-39.	0.3	0
1959	Carbon dioxide as a main source of air pollution: Prospective and current trends to control. , 2021, , 623-688.		3
1960	Metal-organic framework-based processes for water desalination: Current development and future prospects. , 2021, , 491-532.		0
1961	The influence of temperature on the intrinsic transport properties of water in inorganic and polymeric coatings. <i>Thin Solid Films</i> , 2021, 717, 138476.	0.8	4
1962	Fluoroalkyl-grafted methacrylate-PDMS membranes using fluoromonomer as a diluent for enhancing biobutanol pervaporation. <i>Green Chemistry</i> , 2021, 23, 7053-7064.	4.6	17
1963	Water Transport Through Synthetic Membranes as Inspired by Transport Through Biological Membranes. <i>Biologically-inspired Systems</i> , 2021, , 211-241.	0.4	0
1964	A simulation study for the treatment of Kuwait sour gas by membranes. <i>Heliyon</i> , 2021, 7, e05953.	1.4	4
1965	Microporous Polymers for Gas Separation Membranes: Overview and Advances. , 2021, , 1527-1555.		0
1966	Recent advances in simulating gas permeation through MOF membranes. <i>Materials Advances</i> , 2021, 2, 5300-5317.	2.6	22
1967	Polymer nanocomposite membranes for wastewater treatment. , 2021, , 605-672.		0
1968	Layer-by-layer of graphene oxide-chitosan assembly on PVA membrane surface for the pervaporation separation of water-isopropanol mixtures. <i>Korean Journal of Chemical Engineering</i> , 2021, 38, 411-421.	1.2	4

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1969	Experimental Characterization of Commercial and Synthesized Aromatic Polyamide Films for Reverse Osmosis Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 2898-2910.	1.8	2
1970	Toward predictive permeabilities: Experimental measurements and multiscale simulation of methanol transport in Nafion. <i>Journal of Polymer Science</i> , 2021, 59, 594-613.	2.0	6
1971	A Review on Glassy and Rubbery Polymeric Membranes for Natural Gas Purification. <i>ChemBioEng Reviews</i> , 2021, 8, 90-109.	2.6	23
1972	Partial Desalination of Saline Groundwater: Comparison of Nanofiltration, Reverse Osmosis and Membrane Capacitive Deionisation. <i>Membranes</i> , 2021, 11, 126.	1.4	6
1973	Fast Evaporation Enabled Ultrathin Polymer Coatings on Nanoporous Substrates for Highly Permeable Membranes. <i>Innovation(China)</i> , 2021, 2, 100088.	5.2	4
1974	Effect of Feed Water pH on the Partitioning of Alkali Metal Salts from Aqueous Phase into the Polyamide Active Layers of Reverse Osmosis Membranes. <i>Environmental Science & Technology</i> , 2021, 55, 3250-3259.	4.6	13
1975	Pervaporation Zeolite-Based Composite Membranes for Solvent Separations. <i>Molecules</i> , 2021, 26, 1242.	1.7	21
1976	Fabrication of Polydimethylsiloxane (PDMS) Dense Layer on Polyetherimide (PEI) Hollow Fiber Support for the Efficient CO ₂ /N ₂ Separation Membranes. <i>Polymers</i> , 2021, 13, 756.	2.0	15
1977	Designing Biomimic Two-Dimensional Ionic Transport Channels for Efficient Ion Sieving. <i>ACS Nano</i> , 2021, 15, 5209-5220.	7.3	98
1979	A model to predict the solubility and permeability of gaseous penetrant in the glassy polymeric membrane at high pressure. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50548.	1.3	4
1980	Systematic Analysis Reveals Thermal Separations Are Not Necessarily Most Energy Intensive. <i>Joule</i> , 2021, 5, 330-343.	11.7	20
1981	Artificial Wood-Lignocellulosic Membranes: Influence of Kraft Lignin on the Properties and Gas Transport in Tunicate-Based Nanocellulose Composites. <i>Membranes</i> , 2021, 11, 204.	1.4	2
1982	Comonomer effects on co-permeation of methanol and acetate in cation exchange membranes. <i>European Polymer Journal</i> , 2021, 147, 110307.	2.6	11
1983	Theoretical Analysis of a Mathematical Relation between Driving Pressures in Membrane-Based Desalting Processes. <i>Membranes</i> , 2021, 11, 220.	1.4	3
1984	Oxygen Enrichment Membranes for Kuwait Power Plants: A Case Study. <i>Membranes</i> , 2021, 11, 211.	1.4	1
1985	Covalent triazine framework CTF-fluorene as porous filler material in mixed matrix membranes for CO ₂ /CH ₄ separation. <i>Microporous and Mesoporous Materials</i> , 2021, 316, 110941.	2.2	15
1986	Design and Gas Separation Performance of Imidazolium Poly(ILs) Containing Multivalent Imidazolium Fillers and Crosslinking Agents. <i>Polymers</i> , 2021, 13, 1388.	2.0	11
1987	Predicting Flux Rates against Pressure via Solution-Diffusion in Reverse Osmosis Membranes. <i>Engineering, Technology & Applied Science Research</i> , 2021, 11, 6902-6906.	0.8	2

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1988	The effect of structure change from polymeric membrane to gel membrane on CO2 separation performance. Separation and Purification Technology, 2021, 261, 118243.	3.9	9
1989	Tuning the permeability of regular polymeric networks by the cross-link ratio. Journal of Chemical Physics, 2021, 154, 154902.	1.2	15
1990	Comparison analysis of different technologies for the removal of boron from seawater: A review. Journal of Environmental Chemical Engineering, 2021, 9, 105133.	3.3	53
1991	Using Pressure-Driven Membrane Processes to Remove Emerging Pollutants from Aqueous Solutions. International Journal of Environmental Research and Public Health, 2021, 18, 4036.	1.2	11
1992	Defect Engineering in Metal-Organic Frameworks Towards Advanced Mixed Matrix Membranes for Efficient Propylene/Propane Separation. Angewandte Chemie - International Edition, 2021, 60, 13081-13088.	7.2	70
1993	Effect of pressure and temperature on solvent transport across nanofiltration and reverse osmosis membranes: An activity-derived transport model. Desalination, 2021, 501, 114905.	4.0	13
1994	One-Step Reverse Osmosis Based on Riverbank Filtration for Future Drinking Water Purification. Engineering, 2022, 9, 27-34.	3.2	15
1995	Defect Engineering in Metal-Organic Frameworks Towards Advanced Mixed Matrix Membranes for Efficient Propylene/Propane Separation. Angewandte Chemie, 2021, 133, 13191-13198.	1.6	20
1996	A microporous polymer TFC membrane with 2-D MOF nanosheets gutter layer for efficient H2 separation. Separation and Purification Technology, 2021, 261, 118283.	3.9	20
1997	Effect of crosslinker 3-methacryloxypropylmethyldimethoxysilane on UV-crosslinked PDMS-PTFPMS block copolymer membranes for ethanol pervaporation. Chemical Engineering Research and Design, 2021, 168, 13-24.	2.7	15
1998	The Effect of Molecular Isomerism on the Barrier Properties of Polyimides: Perspectives from Experiments and Simulations. Polymers, 2021, 13, 1749.	2.0	7
1999	Understanding water and solute transport in thin film nanocomposite membranes by resistance-in-series theory combined with Monte Carlo simulation. Journal of Membrane Science, 2021, 626, 119106.	4.1	10
2000	Introducción a la tecnología de membranas para la purificación de biogas y algunos desarrollos recientes. Revista Politécnica, 2021, 17, 76-89.	0.0	0
2001	Highly permeable reverse osmosis membranes incorporated with hydrophilic polymers of intrinsic microporosity via interfacial polymerization. Chinese Journal of Chemical Engineering, 2022, 45, 194-202.	1.7	6
2002	Modeling and simulation for design and analysis of membrane-based separation processes. Computers and Chemical Engineering, 2021, 148, 107258.	2.0	36
2003	Recent development of polyimides: Synthesis, processing, and application in gas separation. Journal of Polymer Science, 2021, 59, 943-962.	2.0	43
2004	Massively Parallel GPU-Accelerated String Method for Fast and Accurate Prediction of Molecular Diffusivity in Nanoporous Materials. ACS Applied Nano Materials, 2021, 4, 5394-5403.	2.4	5
2005	Correlations for Concentration Polarization and Pressure Drop in Spacer-Filled RO Membrane Modules Based on CFD Simulations. Membranes, 2021, 11, 338.	1.4	14

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2006	Analysing organic micropollutant accumulation in closed loop FO“RO systems: A pilot plant study. <i>Journal of Membrane Science</i> , 2021, 626, 119182.	4.1	4
2007	Novel stand-alone PVA mixed matrix membranes conjugated with graphene oxide for highly improved reverse osmosis performance. <i>Arabian Journal of Chemistry</i> , 2021, 14, 103109.	2.3	5
2008	Next generation polymers of intrinsic microporosity with tunable moieties for ultrahigh permeation and precise molecular CO ₂ separation. <i>Progress in Energy and Combustion Science</i> , 2021, 84, 100903.	15.8	43
2009	A review on recent advances in CO ₂ separation using zeolite and zeolite-like materials as adsorbents and fillers in mixed matrix membranes (MMMs). <i>Chemical Engineering Journal Advances</i> , 2021, 6, 100091.	2.4	102
2010	Understanding the Effect of Water on CO ₂ Adsorption. <i>Chemical Reviews</i> , 2021, 121, 7280-7345.	23.0	194
2011	Immobilization of carbonic anhydrase for CO ₂ capture and its industrial implementation: A review. <i>Journal of CO₂ Utilization</i> , 2021, 47, 101475.	3.3	63
2012	Gyroid“Nanostructured All“Solid Polymer Films Combining High H + Conductivity with Low H ₂ Permeability. <i>Macromolecular Rapid Communications</i> , 2021, 42, 2100115.	2.0	3
2013	An optimization framework for the design of reverse osmosis desalination plants under food-energy-water nexus considerations. <i>Desalination</i> , 2021, 503, 114937.	4.0	38
2014	Improved Gas Permeation Properties of 6FDA-TrMPD Mixed-Matrix Membrane with SAPO-34 Crystals Toward CO ₂ Separation. <i>Energy & Fuels</i> , 2021, 35, 10680-10688.	2.5	5
2015	An Analysis of the Effect of ZIF-8 Addition on the Separation Properties of Polysulfone at Various Temperatures. <i>Membranes</i> , 2021, 11, 427.	1.4	4
2016	Fluorinated MOF-808 with various modulators to fabricate high-performance hybrid membranes with enhanced hydrophobicity for organic-organic pervaporation. <i>Separation and Purification Technology</i> , 2021, 264, 118315.	3.9	23
2017	Enhanced removal of hydrophobic endocrine disrupting compounds from wastewater by nanofiltration membranes intercalated with hydrophilic MoS ₂ nanosheets: Role of surface properties and internal nanochannels. <i>Journal of Membrane Science</i> , 2021, 628, 119267.	4.1	49
2018	Tunable Pore Size from Sub-Nanometer to a Few Nanometers in Large-Area Graphene Nanoporous Atomically Thin Membranes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29926-29935.	4.0	23
2019	Pervaporation-aided Processes for the Selective Separation of Aromas, Fragrances and Essential (AFE) Solutes from Agro-food Products and Wastes. <i>Food Reviews International</i> , 2023, 39, 1499-1525.	4.3	20
2020	Advances in the Use of Nanocomposite Membranes for Carbon Capture Operations. <i>International Journal of Chemical Engineering</i> , 2021, 2021, 1-22.	1.4	5
2021	Recent Advances of Pervaporation Separation in DMF/H ₂ O Solutions: A Review. <i>Membranes</i> , 2021, 11, 455.	1.4	13
2022	ZIF-301 MOF/6FDA-DAM polyimide mixed-matrix membranes for CO ₂ /CH ₄ separation. <i>Separation and Purification Technology</i> , 2021, 264, 118431.	3.9	40
2023	Fundamental insights into the rejection behavior of polyimide-based OSN membranes. <i>Separation and Purification Technology</i> , 2021, 265, 118492.	3.9	13

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2025	MXene-Based Membranes for Separation Applications. Small Science, 2021, 1, 2100013.	5.8	49
2026	Polycrystalline zeolite and metal-organic framework membranes for molecular separations. Coordination Chemistry Reviews, 2021, 437, 213794.	9.5	52
2027	The Effect of the Temperature and Moisture to the Permeation Properties of PEO-Based Membranes for Carbon-Dioxide Separation. Polymers, 2021, 13, 2053.	2.0	3
2028	Ultrafiltration for recovery of rice protein: Fouling analysis and technical assessment. Innovative Food Science and Emerging Technologies, 2021, 70, 102692.	2.7	11
2029	Fouling behavior and performance of a submerged flat-sheet nanofiltration membrane system for direct treatment of secondary wastewater effluent. Journal of Water Process Engineering, 2021, 41, 101991.	2.6	10
2030	Analytical study of optimum operating conditions in semi-batch closed-circuit reverse osmosis (CCRO). Separation and Purification Technology, 2021, 264, 118421.	3.9	12
2031	Aminophosphonates in Nanofiltration and Reverse Osmosis Permeates. Membranes, 2021, 11, 446.	1.4	3
2032	Enhancement of membrane system performance using artificial intelligence technologies for sustainable water and wastewater treatment: A critical review. Critical Reviews in Environmental Science and Technology, 2022, 52, 3689-3719.	6.6	23
2033	Polymeric membranes for CO ₂ separation and capture. Journal of Membrane Science, 2021, 628, 119244.	4.1	235
2034	Analyzing and Modeling of Water Transport Phenomena in Open-Cathode Polymer Electrolyte Membrane Fuel Cell. Applied Sciences (Switzerland), 2021, 11, 5964.	1.3	5
2035	Towards a systematic determination of multicomponent gas separation with membranes: the case of CO ₂ /CH ₄ in cellulose acetates. Journal of Membrane Science, 2021, 628, 119226.	4.1	18
2036	Fast water transport through biomimetic reverse osmosis membranes embedded with peptide-attached (pR)-pillar[5]arenes water channels. Journal of Membrane Science, 2021, 628, 119276.	4.1	35
2037	Experimental study of a reverse osmosis pilot plant for reuse of refinery wastewater. Journal of Chemical Technology and Biotechnology, 2021, 96, 2852-2864.	1.6	0
2038	Physical and Mechanical Properties of Hollow Fiber Membranes and Technological Parameters of the Gas Separation Process. Membranes, 2021, 11, 583.	1.4	4
2039	Efficient separation of small organic contaminants in water using functionalized nanoporous graphene membranes: Insights from molecular dynamics simulations. Journal of Membrane Science, 2021, 630, 119331.	4.1	30
2040	Non-equilibrium Lattice Fluid Modeling of Gas Sorption for Fluorinated Poly(ether imide)s. Macromolecules, 2021, 54, 6628-6638.	2.2	5
2041	Disclosing the Role of Defect-Engineered Metal-Organic Frameworks in Mixed Matrix Membranes for Efficient CO ₂ Separation: A Joint Experimental-Computational Exploration. Advanced Functional Materials, 2021, 31, 2103973.	7.8	47

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2042	Preparation of heteroatom isomorphously substituted MEL zeolite membranes for pervaporation separation of dimethylformamide/water mixtures. <i>Korean Journal of Chemical Engineering</i> , 2021, 38, 2150-2156.	1.2	1
2043	Transport and co-transport of carboxylate ions and alcohols in cation exchange membranes. <i>Journal of Polymer Science</i> , 2021, 59, 2545-2558.	2.0	8
2044	In-situ generation of polymer molecular sieves in polymer membranes for highly selective gas separation. <i>Journal of Membrane Science</i> , 2021, 630, 119302.	4.1	17
2045	Recent Advances in Polymer-Inorganic Mixed Matrix Membranes for CO ₂ Separation. <i>Polymers</i> , 2021, 13, 2539.	2.0	27
2046	Development of new pervaporation composite membranes for desalination: Theoretical and experimental investigations. <i>Desalination</i> , 2021, 507, 115006.	4.0	18
2047	Molecular dynamics simulation based design of biomimetic membrane with artificial water channels. <i>Journal of Membrane Science</i> , 2021, 630, 119279.	4.1	11
2048	Nafion membranes modified by cationic cyclodextrin derivatives for enantioselective separation. <i>Separation and Purification Technology</i> , 2021, 266, 118538.	3.9	13
2049	EVA Films Loaded with Layered Double Hydroxide (LDH) Modified with Methacrylic Anion: Effect of the Nanohybrid Filler on the Photodegradation Phenomena. <i>Polymers</i> , 2021, 13, 2525.	2.0	0
2050	Performance evaluation of water vapor permeation through perfluorosulfonic acid capillary membranes. <i>Separation and Purification Technology</i> , 2021, 266, 118508.	3.9	8
2051	Markedly improved photo-oxidation stability of β form isotactic polypropylene with nodular morphology. <i>Polymer Degradation and Stability</i> , 2021, 189, 109595.	2.7	7
2052	Methoxy groups increase water and decrease salt permeability properties of sulfonated polysulfone desalination membranes. <i>Journal of Membrane Science</i> , 2021, 630, 119298.	4.1	10
2053	Thermally Cross-Linked Amidoxime-Functionalized Polymers of Intrinsic Microporosity Membranes for Highly Selective Hydrogen Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9426-9435.	3.2	14
2054	Stitch and copolymerization of thin-film composite membranes to enhance hydrophilicity and organics resistance for the separation of glycerol-based wastewater. <i>Journal of Hazardous Materials</i> , 2021, 413, 125446.	6.5	4
2055	Carbon composite membranes for thermal-driven membrane processes. <i>Carbon</i> , 2021, 179, 600-626.	5.4	12
2057	Transport and Co-Transport of Carboxylate Ions and Ethanol in Anion Exchange Membranes. <i>Polymers</i> , 2021, 13, 2885.	2.0	9
2058	Gas permeability and mechanical properties of polyethylene films subjected to ultraviolet irradiation. <i>Separation Science and Technology</i> , 2022, 57, 1111-1118.	1.3	0
2059	High Permeance or High Selectivity? Optimization of System-Scale Nanofiltration Performance Constrained by the Upper Bound. <i>ACS ES&T Engineering</i> , 2022, 2, 377-390.	3.7	29
2060	Influence of Solute Molecular Diameter on Permeability-Selectivity Tradeoff of Thin-Film Composite Polyamide Membranes in Aqueous Separations. <i>Water Research</i> , 2021, 201, 117311.	5.3	20

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2062	Nanochannels and nanodroplets in polymer membranes controlling ionic transport. <i>Current Opinion in Colloid and Interface Science</i> , 2021, 56, 101501.	3.4	2
2063	Predicting Micropollutant Removal by Reverse Osmosis and Nanofiltration Membranes: Is Machine Learning Viable?. <i>Environmental Science & Technology</i> , 2021, 55, 11348-11359.	4.6	44
2064	Quantification and modelling of organic micropollutant removal by reverse osmosis (RO) drinking water treatment. <i>Journal of Water Process Engineering</i> , 2021, 42, 102164.	2.6	28
2065	Facile Defect Engineering of Zeolitic Imidazolate Frameworks towards Enhanced C_{3H_6}/C_{3H_8} Separation Performance. <i>Advanced Functional Materials</i> , 2021, 31, 2105577.	7.8	26
2066	State of the art and prospects of chemically and thermally aggressive membrane gas separations: Insights from polymer science. <i>Polymer</i> , 2021, 229, 123988.	1.8	18
2067	Evidence for Size-Sieving Driven Vapor Sorption and Diffusion in a Glassy Polybenzoxazole Exhibiting Configurational Free Volume. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 13326-13337.	1.8	4
2068	Design and operation of an enhanced pervaporation device with static mixers. <i>AIChE Journal</i> , 2022, 68, e17455.	1.8	7
2069	Diversity matters: Widening the chemical space in organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2022, 641, 119929.	4.1	15
2070	The Effect of pH on Atenolol/Nanofiltration Membranes Affinity. <i>Membranes</i> , 2021, 11, 689.	1.4	5
2071	Macromolecular Design for Oxygen/Nitrogen Permselective Membranesâ€”Top-Performing Polymers in 2020â€”. <i>Polymers</i> , 2021, 13, 3012.	2.0	13
2072	A review on chitosan-based membranes for sustainable CO ₂ separation applications: Mechanism, issues, and the way forward. <i>Carbohydrate Polymers</i> , 2021, 267, 118178.	5.1	16
2073	Origins of Lithium/Sodium Reverse Permeability Selectivity in 12-Crown-4-Functionalized Polymer Membranes. <i>ACS Macro Letters</i> , 2021, 10, 1167-1173.	2.3	13
2074	A floating solar still inspired by continuous root water intake. <i>Desalination</i> , 2021, 512, 115133.	4.0	23
2075	Membranes for olefinâ€”paraffin separation: An industrial perspective. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	32
2076	Transport-Relevant Pore Limiting Diameter for Molecular Separations in Metalâ€”Organic Framework Membranes. <i>Journal of Physical Chemistry C</i> , 2021, 125, 20416-20425.	1.5	6
2078	Experimental Study on Carbon Capture Performance of Polyimide Hollow Fiber Membrane in Post-combustion Process. <i>Environmental Science and Engineering</i> , 2022, , 621-632.	0.1	0
2079	Engineering Li/Na selectivity in 12-Crown-4â€”functionalized polymer membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	65

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2081	Ultrahigh permeance metal coated porous graphene membranes with tunable gas selectivities. <i>CheM</i> , 2021, 7, 2385-2394.	5.8	15
2082	Acid catalyzed crossâ€‘linking of polyvinyl alcohol for humidifier membranes. <i>Journal of Applied Polymer Science</i> , 0, , 51606.	1.3	7
2083	Enhanced propylene/propane separation in facilitated transport membranes containing multisilver complex. <i>AIChE Journal</i> , 2022, 68, e17410.	1.8	16
2084	Optimization of membrane-cryogenic hybrid propane recovery process: From molecular to process simulation. <i>Journal of Cleaner Production</i> , 2021, 321, 129049.	4.6	8
2085	Transport mechanisms behind enhanced solute rejection in forward osmosis compared to reverse osmosis mode. <i>Journal of Membrane Science</i> , 2021, 636, 119561.	4.1	12
2086	Optimal design of membrane cascades for gaseous and liquid mixtures via MINLP. <i>Journal of Membrane Science</i> , 2021, 636, 119514.	4.1	6
2087	Exploring the potential of highly selective alkanolamine containing deep eutectic solvents based supported liquid membranes for CO ₂ capture. <i>Journal of Molecular Liquids</i> , 2021, 340, 117274.	2.3	23
2088	Modeling of water-in-oil Pickering emulsion nanofiltration - Influence of temperature. <i>Journal of Membrane Science</i> , 2021, 636, 119547.	4.1	2
2089	Pervaporation membrane materials: Recent trends and perspectives. <i>Journal of Membrane Science</i> , 2021, 636, 119557.	4.1	140
2090	Rigorous simulation and techno-economic evaluation on the hybrid membrane/cryogenic distillation processes for air separation. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 127, 56-68.	2.7	10
2091	Comparison of pervaporation and perstraction for the separation of p-â€‘xylene/m-â€‘xylene mixtures using PDMS and CTA membranes. <i>Separation and Purification Technology</i> , 2021, 274, 118986.	3.9	13
2092	Boric acid removal with polyol-functionalized polyether membranes. <i>Journal of Membrane Science</i> , 2021, 638, 119690.	4.1	4
2093	Aqueous ion partitioning in Nafion: Applicability of Manning's counter-ion condensation theory. <i>Journal of Membrane Science</i> , 2021, 638, 119687.	4.1	19
2094	Ionic liquid-based semi-interpenetrating polymer network (sIPN) membranes for CO ₂ separation. <i>Separation and Purification Technology</i> , 2021, 274, 118437.	3.9	11
2095	Manipulating interfacial polymerization for polymeric nanofilms of composite separation membranes. <i>Progress in Polymer Science</i> , 2021, 122, 101450.	11.8	90
2096	Modelling of mass transfer during pervaporation of ethanol/water mixture using polydimethylsiloxane membrane. <i>Chemical Engineering Research and Design</i> , 2021, 175, 320-329.	2.7	7
2097	Sour mixed-gas upper bounds of glassy polymeric membranes. <i>Separation and Purification Technology</i> , 2021, 277, 119535.	3.9	12

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2098	True driving force and characteristics of water transport in osmotic membranes. <i>Desalination</i> , 2021, 520, 115360.	4.0	20
2099	Water and salt transport properties of pentiptycene-containing sulfonated polysulfones for desalination membrane applications. <i>Journal of Membrane Science</i> , 2021, 640, 119806.	4.1	9
2100	Enabling experimental characterization and prediction of ternary mixed-gas sorption in polymers: C ₂ H ₆ /CO ₂ /CH ₄ in PIM-1. <i>Chemical Engineering Journal</i> , 2021, 426, 130715.	6.6	17
2101	Multicomponent Fickian solution-diffusion model for osmotic transport through membranes. <i>Journal of Membrane Science</i> , 2021, 640, 119819.	4.1	7
2102	Framework for predicting the fractionation of complex liquid feeds via polymer membranes. <i>Journal of Membrane Science</i> , 2021, 640, 119767.	4.1	21
2103	Membrane-based technologies for per- and poly-fluoroalkyl substances (PFASs) removal from water: Removal mechanisms, applications, challenges and perspectives. <i>Environment International</i> , 2021, 157, 106876.	4.8	27
2104	Single-molecule magnets as novel fillers with superior dispersibility – First application of a tetranuclear iron(III) molecular magnet [Fe ₄ (acac) ₆ (Br-mp) ₂] for pervaporative dehydration of ethanol. <i>Separation and Purification Technology</i> , 2021, 277, 119038.	3.9	10
2105	3D-printed monolithic porous adsorbents from a solution-processible, hypercrosslinkable, functionalizable polymer. <i>Chemical Engineering Journal</i> , 2022, 427, 130883.	6.6	15
2106	A critical review on porous substrates of TFC polyamide membranes: Mechanisms, membrane performances, and future perspectives. <i>Journal of Membrane Science</i> , 2022, 641, 119871.	4.1	167
2107	Hydrophilic and organophilic pervaporation of industrially important $\hat{I}\pm, \hat{I}^2$ and $\hat{I}\pm, \hat{I}\%$ -diols. <i>RSC Advances</i> , 2021, 11, 9274-9284.	1.7	8
2108	Hydrogen sulfide removal from natural gas using membrane technology: a review. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20211-20240.	5.2	37
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