Membrane distillation

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Citation Report

#	Article	IF	CITATIONS
3	A method to evaluate the net membrane distillation coefficient. Journal of Membrane Science, 1998, 143, 219-233.	4.1	22
4	Study of membrane distillation using channel spacers. Journal of Membrane Science, 1998, 144, 45-56.	4.1	149
5	Is condensation the cause of plasma leakage in microporous hollow fiber membrane oxygenators. Journal of Membrane Science, 1998, 147, 87-93.	4.1	20
6	Effects of Polarization on Mass Transport through Hydrophobic Porous Membranes. Industrial & Engineering Chemistry Research, 1998, 37, 4128-4135.	1.8	36
7	Temperature Polarization Coefficients in Membrane Distillation. Separation Science and Technology, 1998, 33, 787-799.	1.3	23
8	Air gap membrane distillation of sucrose aqueous solutions. Journal of Membrane Science, 1999, 155, 291-307.	4.1	134
9	Temperature and concentration polarization in membrane distillation of aqueous salt solutions. Journal of Membrane Science, 1999, 156, 265-273.	4.1	377
10	Thermal effects in osmotic distillation. Journal of Membrane Science, 1999, 163, 75-91.	4.1	77
11	The application of membrane distillation for the concentration of oil-water emulsions. Desalination, 1999, 121, 23-29.	4.0	74
12	Integrated membrane operations in desalination processes. Desalination, 1999, 122, 141-145.	4.0	101
13	Study of evaporation efficiency in membrane distillation. Desalination, 1999, 126, 193-198.	4.0	62
14	Heat and mass transport resistances in vacuum membrane distillation per drop. AICHE Journal, 1999, 45, 1422-1433.	1.8	90
15	Direct Contact Membrane Distillation of Sugar Aqueous Solutions. Separation Science and Technology, 1999, 34, 1773-1801.	1.3	42
16	Concentration of saline wastewater from the production of heparin. Desalination, 2000, 129, 35-44.	4.0	45
17	Modelling of water transport in osmotic distillation using asymmetric membrane. Journal of Membrane Science, 2000, 173, 107-122.	4.1	64
18	A method to evaluate coefficients affecting flux in membrane distillation. Journal of Membrane Science, 2000, 173, 225-234.	4.1	60
19	Kinetic analysis of the vacuum membrane distillation of chloroform from aqueous solutions. Journal of Membrane Science, 2000, 165, 99-110.	4.1	45
20	Direct contact membrane distillation: modelling and concentration experiments. Journal of Membrane Science, 2000, 166, 1-11.	4.1	312

#	Article	IF	Citations
21	Theory and experiments on sweeping gas membrane distillation. Journal of Membrane Science, 2000, 165, 261-272.	4.1	150
22	Mass transfer of HCl and H2O across the hydrophobic membrane during membrane distillation. Journal of Membrane Science, 2000, 166, 149-157.	4.1	79
23	Air gap membrane distillation of aqueous alcohol solutions. Journal of Membrane Science, 2000, 169, 61-80.	4.1	158
24	Nature of flow on sweeping gas membrane distillation. Journal of Membrane Science, 2000, 170, 243-255.	4.1	122
25	Effect of operating conditions on water transport during the concentration of sucrose solutions by osmotic distillation. Journal of Membrane Science, 2000, 170, 281-289.	4.1	76
26	Study of Polarization Phenomena in Membrane Distillation of Aqueous Salt Solutions. Separation Science and Technology, 2000, 35, 1485-1501.	1.3	25
27	Concentration and Purification of Fluosilicic Acid by Membrane Distillation. Industrial & Engineering Chemistry Research, 2000, 39, 3038-3041.	1.8	22
28	Direct Contact Membrane Distillation. Separation Science and Technology, 2000, 35, 1257-1284.	1.3	90
29	Progress and New Perspectives on Integrated Membrane Operations for Sustainable Industrial Growth. Industrial & Engineering Chemistry Research, 2001, 40, 1277-1300.	1.8	232
30	Preparation and Characterization of Polyvinylidene Fluoride Membranes for Membrane Distillation. Industrial & Engineering Chemistry Research, 2001, 40, 5710-5718.	1.8	325
31	Modelling Transport Mechanism Through A Porous Partition. Journal of Non-Equilibrium Thermodynamics, 2001, 26, 1-14.	2.4	42
32	Membrane Crystallizers. Industrial & Engineering Chemistry Research, 2001, 40, 2679-2684.	1.8	157
33	Mass flux enhancement using spacer filled channels in direct contact membrane distillation. Journal of Membrane Science, 2001, 187, 193-201.	4.1	143
34	Direct contact membrane distillation: effect of mass transfer on heat transfer. Journal of Membrane Science, 2001, 188, 137-143.	4.1	131
35	Pervaporation, a novel technique for the measurement of vapor transmission rate of highly permeable films. Polymer Testing, 2001, 20, 901-911.	2.3	15
36	Theoretical and experimental studies on desalination using membrane distillation. Desalination, 2001, 139, 373-379.	4.0	86
37	Title is missing!. Theoretical Foundations of Chemical Engineering, 2001, 35, 470-474.	0.2	0
38	Improved process topology for membrane distillation. Separation and Purification Technology, 2001, 21, 205-217.	3.9	23

3

#	Article	lF	Citations
39	The fermentation process integrated with membrane distillation. Separation and Purification Technology, 2001, 24, 283-296.	3.9	65
40	Design of a vibration isolation actuator for automotive seating systems - Part II: Controller design and actuator performance. International Journal of Vehicle Design, 2002, 29, 357.	0.1	8
41	CONCENTRATION OF NaCl SOLUTION BY MEMBRANE DISTILLATION INTEGRATED WITH CRYSTALLIZATION. Separation Science and Technology, 2002, 37, 3535-3558.	1.3	130
42	Thermal boundary layers in sweeping gas membrane distillation processes. AICHE Journal, 2002, 48, 1488-1497.	1.8	74
43	Gas permeation and direct contact membrane distillation experiments and their analysis using different models. Journal of Membrane Science, 2002, 198, 33-49.	4.1	69
44	Membrane evaporators. Journal of Membrane Science, 2002, 201, 149-159.	4.1	23
45	The assessment of microorganism growth in the membrane distillation system. Desalination, 2002, 142, 79-88.	4.0	96
46	Seawater desalination by direct contact membrane distillation. Desalination, 2002, 143, 279-287.	4.0	213
47	Membrane processes used for potable water quality improvement. Desalination, 2002, 145, 315-319.	4.0	75
48	Water desalination using membrane distillation: comparison between inside/out and outside/in permeation. Desalination, 2002, 147, 139-145.	4.0	110
49	Estimation of vapor transfer coefficient of hydrophobic porous membranes for applications in membrane distillation. Separation and Purification Technology, 2003, 33, 45-55.	3.9	44
50	Modeling heat and mass transfer in osmotic evaporation process. AICHE Journal, 2003, 49, 300-308.	1.8	22
51	Distillation in hollow fibers. AICHE Journal, 2003, 49, 2344-2351.	1.8	30
52	Membrane Contactors and Catalytic Membrane Reactors in Process Intensification. Chemical Engineering and Technology, 2003, 26, 975-981.	0.9	43
53	A new model for mass transfer in direct contact membrane distillation. Desalination, 2003, 151, 217-227.	4.0	98
54	Fluidised bed crystalliser and air gap membrane distillation as a solution to geothermal water desalination. Desalination, 2003, 152, 237-244.	4.0	64
55	Microporous polypropylene and polyethylene hollow fiber membranes. Part 3. Experimental studies on membrane distillation for desalination. Desalination, 2003, 155, 153-156.	4.0	94
56	Theoretical and experimental studies on desalination using the sweeping gas membrane distillation method. Desalination, 2003, 157, 297-305.	4.0	108

#	Article	IF	CITATIONS
57	Modelling temperature and salt concentration distribution in membrane distillation feed channel. Desalination, 2003, 157, 315-324.	4.0	46
58	Application of surface modifying macromolecules for the preparation of membranes for membrane distillation. Desalination, 2003, 158, 51-56.	4.0	133
59	The effect of content of apple juice biopolymers on the concentration by membrane distillation. Journal of Food Engineering, 2003, 60, 275-280.	2.7	34
60	Possibility of nuclear desalination through various membrane distillation configurations: a comparative study. International Journal of Nuclear Desalination, 2003, 1, 30.	0.2	65
61	Chapter 2 Integrated separation systems. Comprehensive Analytical Chemistry, 2003, 39, 37-79.	0.7	3
62	Heat and mass transfer in vacuum membrane distillation. International Journal of Heat and Mass Transfer, 2004, 47, 865-875.	2.5	235
63	Pervaporation and vacuum membrane distillation processes: Modeling and experiments. AICHE Journal, 2004, 50, 1697-1712.	1.8	148
64	Pervaporation membrane process for vapour absorption system. International Journal of Refrigeration, 2004, 27, 604-611.	1.8	26
65	Experimental study of desalination using direct contact membrane distillation: a new approach to flux enhancement. Journal of Membrane Science, 2004, 228, 5-16.	4.1	338
66	Effect of membrane characteristics on mass and heat transfer in the osmotic evaporation process. Journal of Membrane Science, 2004, 228, 159-167.	4.1	47
67	Osmotic distillation with propylene glycol, glycerol and glycerol–salt mixtures. Journal of Membrane Science, 2004, 229, 159-170.	4.1	24
68	The use of VMD data/model to test different thermodynamic models for vapour–liquid equilibrium. Journal of Membrane Science, 2004, 239, 227-241.	4.1	20
69	Direct contact membrane distillation of humic acid solutions. Journal of Membrane Science, 2004, 240, 123-128.	4.1	115
70	Characterization of membranes for membrane distillation by atomic force microscopy and estimation of their water vapor transfer coefficients in vacuum membrane distillation process. Journal of Membrane Science, 2004, 238, 199-211.	4.1	167
71	Comparison of membrane distillation performance using different feeds. Desalination, 2004, 168, 359-365.	4.0	55
72	Grafting of ZrO2 powder and ZrO2 membrane by fluoroalkylsilanes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 243, 43-47.	2.3	57
73	Thermal resistance technique for measuring the thermal conductivity of thin microporous membranes. Journal Physics D: Applied Physics, 2004, 37, 3008-3016.	1.3	39
74	Novel Membrane and Device for Direct Contact Membrane Distillation-Based Desalination Process. Industrial & Device for Direct Contact Membrane Distillation-Based Desalination Process.	1.8	164

#	ARTICLE	IF	Citations
75	Modelling mass transport through a porous partition: Effect of pore size distribution. Journal of Non-Equilibrium Thermodynamics, 2004, 29 , .	2.4	126
76	Characterisation of the polarisations in osmotic distillation of glucose solutions in hollow fibre module. Journal of Food Engineering, 2005, 68, 391-402.	2.7	25
77	Membrane contactor processes for wastewater reclamation in space. Journal of Membrane Science, 2005, 257, 111-119.	4.1	221
78	Novel membrane and device for vacuum membrane distillation-based desalination process. Journal of Membrane Science, 2005, 257, 60-75.	4.1	196
79	Porous hydrophobic/hydrophilic composite membranes. Journal of Membrane Science, 2005, 252, 101-113.	4.1	242
80	Distillation with nanoporous or coated hollow fibers. Journal of Membrane Science, 2005, 257, 3-10.	4.1	31
81	Osmotic MD and other membrane distillation variants. Journal of Membrane Science, 2005, 246, 145-156.	4.1	96
82	Membrane-distillation desalination: Status and potential. Desalination, 2005, 171, 111-131.	4.0	608
83	Analysis of a solar-powered membrane distillation system. Desalination, 2005, 172, 27-40.	4.0	105
84	Comparison of spacers for temperature polarization reduction in air gap membrane distillation. Desalination, 2005, 183, 363-374.	4.0	75
85	State of the Art and Recent Progresses in Membrane Contactors. Chemical Engineering Research and Design, 2005, 83, 223-233.	2.7	133
86	Water recycling and desalination by air gap membrane distillation. Environmental Progress, 2005, 24, 434-441.	0.8	15
87	Humic acid fouling in the membrane distillation process. Desalination, 2005, 174, 63-72.	4.0	172
88	Separation of ethylene glycol solution by vacuum membrane distillation (VMD). Desalination, 2005, 181, 35-41.	4.0	61
89	Modelling of a modified air gap distillation membrane for the desalination of seawater. Desalination, 2005, 181, 257-265.	4.0	39
90	Membrane distillation. , 2005, , 241-319.		16
91	Athermal Membrane Processes for the Concentration of Liquid Foods and Natural Colours. , 2005, , 251-277.		7
92	Membrane distillation crystallization of concentrated saltsâ€"flux and crystal formation. Journal of Membrane Science, 2005, 257, 144-155.	4.1	262

#	Article	IF	CITATIONS
93	Membrane Distillation and Related Operationsâ€"A Review. Separation and Purification Reviews, 2005, 34, 35-86.	2.8	604
94	Removal of Natural Steroid Hormones from Wastewater Using Membrane Contactor Processes. Environmental Science & Environmental	4.6	187
95	Separation of Water and Nitric Acid with Porous Hydrophobic Membrane by Air Gap Membrane Distillation (AGMD). Separation Science and Technology, 2006, 41, 3187-3199.	1.3	23
96	Basic principles of membrane contactors. Membrane Science and Technology, 2006, , 5-39.	0.5	0
97	Membrane materials. Membrane Science and Technology, 2006, 11, 40-104.	0.5	2
98	Membrane Distillation and Osmotic Distillation. Membrane Science and Technology, 2006, , 186-253.	0.5	1
99	Desalination and water recycling by air gap membrane distillation. Desalination, 2006, 187, 291-301.	4.0	218
100	Direct contact membrane distillation mechanism for high concentration NaCl solutions. Desalination, 2006, 188, 251-262.	4.0	254
101	Pilot test of vacuum membrane distillation for seawater desalination on a ship. Desalination, 2006, 189, 165-169.	4.0	113
102	Air-sweep vacuum membrane distillation using fine silicone, rubber, hollow-fiber membranes. Desalination, 2006, 191, 223-231.	4.0	16
103	Concentration of sucrose solutions via vacuum membrane distillation. Desalination, 2006, 195, 60-68.	4.0	52
104	Separation of effluents from regeneration of a cation exchanger by membrane distillation. Desalination, 2006, 197, 50-62.	4.0	6
105	Study of a new metallic membrane evaporator. Desalination, 2006, 199, 185-187.	4.0	4
106	Hybridization of photocatalysis and membrane distillation for purification of wastewater. Catalysis Today, 2006, 118, 181-188.	2.2	45
107	Mass transfer in osmotic membrane distillation. Journal of Membrane Science, 2006, 268, 48-56.	4.1	53
108	Membrane distillation of concentrated brinesâ€"Role of water activities in the evaluation of driving force. Journal of Membrane Science, 2006, 280, 937-947.	4.1	84
109	Application of fluoroalkylsilanes (FAS) grafted ceramic membranes in membrane distillation process of NaCl solutions. Journal of Membrane Science, 2006, 281, 253-259.	4.1	129
110	Characterization of membrane distillation modules and analysis of mass flux enhancement by channel spacers. Journal of Membrane Science, 2006, 274, 123-137.	4.1	89

#	Article	IF	Citations
111	Mass transfer mechanisms and transport resistances in direct contact membrane distillation process. Journal of Membrane Science, 2006, 277, 186-194.	4.1	393
112	Hollow fibers as structured packing for olefin/paraffin separations. Journal of Membrane Science, 2006, 279, 61-69.	4.1	41
113	Coupled membrane process applied to fruit juice concentration. Chemical Papers, 2006, 60, .	1.0	6
114	Pervaporation membrane separation process for enhancing the selectivity of an artificial olfactory system ("electronic noseâ€). Analytical and Bioanalytical Chemistry, 2006, 384, 860-866.	1.9	14
115	Mass transfer in osmotic membrane distillation of phycocyanin colorant and sweet-lime juice. Journal of Membrane Science, 2006, 272, 58-69.	4.1	70
116	A framework for better understanding membrane distillation separation process. Journal of Membrane Science, 2006, 285, 4-29.	4.1	1,103
117	The Role of Operating Conditions in Osmotic Distillation and Direct Contact Membrane Distillation - A Comparative Study. International Journal of Food Engineering, 2006, 2, .	0.7	9
118	Osmotic Membrane Distillation - A Brief Review. International Journal of Food Engineering, 2006, 2, .	0.7	16
119	Comparative Study of Direct-Contact and Air-Gap Membrane Distillation Processes. Industrial & Engineering Chemistry Research, 2007, 46, 584-590.	1.8	61
120	Application of Response Surface Methodology and Experimental Design in Direct Contact Membrane Distillation. Industrial & Distill	1.8	102
121	Design for Cascade of Crossflow Direct Contact Membrane Distillation. Industrial & Engineering Chemistry Research, 2007, 46, 2324-2334.	1.8	98
122	Direct Contact Membrane Distillation-Based Desalination:Â Novel Membranes, Devices, Larger-Scale Studies, and a Model. Industrial & Engineering Chemistry Research, 2007, 46, 2307-2323.	1.8	175
123	Nonisothermal Reactors for the Production of Pure Water from Peritoneal Dialysis Waste Waters. International Journal of Artificial Organs, 2007, 30, 53-63.	0.7	4
124	Preparation and characterization of poly(vinylidene fluoride) hollow fiber membranes for vacuum membrane distillation. Journal of Applied Polymer Science, 2007, 106, 1482-1495.	1.3	88
125	The energy challenge of direct contact membrane distillation in low temperature concentration. Asia-Pacific Journal of Chemical Engineering, 2007, 2, 400-406.	0.8	14
126	A study on membrane distillation by a solar thermalâ€driven system. Heat Transfer - Asian Research, 2007, 36, 417-428.	2.8	0
127	Effects of membrane and module design improvements on flux in direct contact membrane distillation. Desalination, 2007, 205, 97-103.	4.0	40
128	Desalination by using alternative energy: Review and state-of-the-art. Desalination, 2007, 203, 346-365.	4.0	336

#	Article	IF	CITATIONS
129	Membrane distillation of HI/H2OHI/H2O and H2SO4/H2OH2SO4/H2O mixtures for the sulfur–iodine thermochemical process. International Journal of Hydrogen Energy, 2007, 32, 4736-4743.	3.8	20
130	On transport resistances in direct contact membrane distillation. Journal of Membrane Science, 2007, 295, 28-39.	4.1	82
131	Linearized description of the non-isothermal flow of a saturated vapor through a micro-porous membrane. Journal of Membrane Science, 2007, 301, 107-117.	4.1	12
132	Effect of hollow fiber morphology and compatibility on propane/propylene separation. Journal of Membrane Science, 2007, 304, 88-101.	4.1	13
133	Flux enhancement in membrane distillation by fabrication of dual layer hydrophilic–hydrophobic hollow fiber membranes. Journal of Membrane Science, 2007, 306, 134-146.	4.1	317
134	A Monte Carlo simulation model for vacuum membrane distillation process. Journal of Membrane Science, 2007, 306, 341-348.	4.1	39
135	Evaluation of the cleaning of a new hydrophobic membrane for osmotic evaporation. Separation and Purification Technology, 2007, 55, 191-197.	3.9	25
136	Study of a new membrane evaporator with a hydrophobic metallic membrane. Journal of Membrane Science, 2007, 289, 169-177.	4.1	27
137	Application of vacuum membrane distillation for ammonia removal. Journal of Membrane Science, 2007, 301, 200-209.	4.1	204
138	Ethanol and aroma compounds transfer study for partial dealcoholization of wine using membrane contactor. Journal of Membrane Science, 2008, 311, 136-146.	4.1	100
139	Modeling and optimization of hollow fiber DCMD module for desalination. Journal of Membrane Science, 2008, 318, 154-166.	4.1	76
140	Flow rate influence on direct contact membrane distillation experiments: Different empirical correlations for Nusselt number. Journal of Membrane Science, 2008, 321, 356-363.	4.1	39
141	Concentration and temperature polarization effects during osmotic membrane distillation. Journal of Membrane Science, 2008, 322, 146-153.	4.1	72
142	Effect of stretching on structure and properties of polyethylene hollow fiber membranes made by meltâ€spinning and stretching process. Polymers for Advanced Technologies, 2008, 19, 1616-1622.	1.6	18
143	Particle Shape and Purity in Membrane Based Crystallization. Chemical Engineering and Technology, 2008, 31, 157-162.	0.9	25
144	Separation technologies for the recovery and dehydration of alcohols from fermentation broths. Biofuels, Bioproducts and Biorefining, 2008, 2, 553-588.	1.9	474
145	Integration of direct contact membrane distillation and recirculating cooling water system for pure water production. Journal of Cleaner Production, 2008, 16, 1847-1855.	4.6	19
146	Investigation of different hollow fiber module designs for flux enhancement in the membrane distillation process. Journal of Membrane Science, 2008, 311, 371-379.	4.1	117

#	Article	IF	CITATIONS
147	Modeling and analysis of vacuum membrane distillation for the recovery of volatile aroma compounds from black currant juice. Journal of Membrane Science, 2008, 320, 442-455.	4.1	51
148	Pilot plant studies of novel membranes and devices for direct contact membrane distillation-based desalination. Journal of Membrane Science, 2008, 323, 257-270.	4.1	125
149	Effectiveness of photodecomposition of an azo dye on a novel anatase-phase TiO2 and two commercial photocatalysts in a photocatalytic membrane reactor (PMR). Separation and Purification Technology, 2008, 63, 386-391.	3.9	41
150	A novel membrane bioreactor based on membrane distillation. Desalination, 2008, 223, 386-395.	4.0	130
151	Heat and mass transfer analysis in direct contact membrane distillation. Desalination, 2008, 219, 272-292.	4.0	402
152	Evaluation of energy requirements in membrane distillation. Chemical Engineering and Processing: Process Intensification, 2008, 47, 1098-1105.	1.8	154
153	Towards a methodology for the systematic analysis and design of efficient chemical processes. Chemical Engineering and Processing: Process Intensification, 2008, 47, 2051-2060.	1.8	165
154	Hydrophobic PVDF hollow fiber membranes with narrow pore size distribution and ultra-thin skin for the fresh water production through membrane distillation. Chemical Engineering Science, 2008, 63, 2587-2594.	1.9	250
155	Temperature influence on transport parameters characteristic of Knudsen and Poiseuille flows. Chemical Engineering Science, 2008, 63, 5531-5539.	1.9	4
156	Membrane thickness reduction effects on direct contact membrane distillation performance. Journal of Membrane Science, 2008, 312, 143-156.	4.1	74
157	Membrane Separation Technology: Past, Present, and Future. ACS Symposium Series, 2008, , 281-333.	0.5	1
158	COMBINED EFFECT OF OSMOTIC PRESSURE AND SONICATION ON THE REDUCTION OF <i>SALMONELLA</i> SPP. IN CONCENTRATED ORANGE JUICE. Journal of Food Safety, 2008, 28, 499-513.	1.1	15
159	Membranes, Phase Interfaces, and Separations: Novel Techniques and Membranes—An Overview. Industrial & Description (1988) amp; Engineering Chemistry Research, 2008, 47, 5250-5266.	1.8	88
160	Water Droplets as Template for Next-Generation Self-Assembled Poly-(etheretherketone) with Cardo Membranes. Journal of Physical Chemistry B, 2008, 112, 10483-10496.	1.2	37
161	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 3. A Novel Gasâ^'Liquid Reactor for Catalytic Asymmetric Transfer Hydrogenation with Simultaneous Acetone Stripping. Organic Process Research and Development, 2008, 12, 1218-1222.	1.3	17
162	Recovery of Petroleum Ether from Solanesol Extracting Solution through Vacuum Hydrophilic Membrane Distillation. Industrial & Samp; Engineering Chemistry Research, 2008, 47, 9544-9551.	1.8	4
163	Microstructured Mesh Contactor for Asymmetric Transfer Hydrogenation with Simultaneous Stripping: Modeling and Experiments. Industrial & Engineering Chemistry Research, 2008, 47, 8995-9005.	1.8	15
165	Membrane Distillation in Food Processing. , 2008, , 513-551.		1

#	Article	IF	Citations
166	Application of Membrane Contactors as Mass Transfer Devices. , 2008, , 7-24.		2
167	Current Status and Prospects for Ceramic Membrane Applications. , 2008, , 139-179.		3
168	Study on the Reverse Osmosis Rejected Water Treatment Process Based on Vacuum Membrane Distillation. Journal of Sustainable Development, 2009, 1 , .	0.1	1
169	Journal of Sustainable development, Vol. 1, No. 3, November 2008, all in one file. Journal of Sustainable Development, 2009, 1, .	0.1	0
170	Comparing the desalination performance of SMM blended polyethersulfone to SMM blended polyetherimide membranes by direct contact membrane distillation. Desalination and Water Treatment, 2009, 5, 91-98.	1.0	21
171	Gas-Assisted Thin-Film Evaporation from Confined Spaces for Dissipation of High Heat Fluxes. Nanoscale and Microscale Thermophysical Engineering, 2009, 13, 30-53.	1.4	50
172	Preparation of high concentration polyaluminum chloride with high content of Alb or Alc. Journal of Environmental Sciences, 2009, 21, 1342-1346.	3.2	8
173	A novel approach to fabricate macrovoidâ€free and highly permeable PVDF hollow fiber membranes for membrane distillation. AICHE Journal, 2009, 55, 828-833.	1.8	55
174	Effect of surface modifying macromolecules stoichiometric ratio on composite hydrophobic/hydrophilic membranes characteristics and performance in direct contact membrane distillation. AICHE Journal, 2009, 55, 3145-3151.	1.8	49
175	Experimental Study and Design of a Submerged Membrane Distillation Bioreactor. Chemical Engineering and Technology, 2009, 32, 38-44.	0.9	87
176	Fabrication and characterization of hydrophobic PVDF hollow fiber membranes for desalination through direct contact membrane distillation. Separation and Purification Technology, 2009, 69, 78-86.	3.9	125
177	Effect of process parameters on photodegradation of Acid Yellow 36 in a hybrid photocatalysis–membrane distillation system. Chemical Engineering Journal, 2009, 150, 152-159.	6.6	70
178	Heat transfer in vacuum membrane distillation: Effect of velocity slip. Journal of Membrane Science, 2009, 331, 117-125.	4.1	31
179	Novel porous composite hydrophobic/hydrophilic polysulfone membranes for desalination by direct contact membrane distillation. Journal of Membrane Science, 2009, 341, 139-148.	4.1	122
180	CFD simulation on membrane distillation of NaCl solution. Frontiers of Chemical Engineering in China, 2009, 3, 293-297.	0.6	33
181	Vacuum membrane distillation of the main pear aroma compound: Experimental study and mass transfer modeling. Journal of Membrane Science, 2009, 326, 64-75.	4.1	75
182	Surface modification of nanostructured ceramic membranes for direct contact membrane distillation. Journal of Membrane Science, 2009, 331, 1-10.	4.1	169
183	Preparation and characterization of novel hydrophobic/hydrophilic polyetherimide composite membranes for desalination by direct contact membrane distillation. Journal of Membrane Science, 2009, 327, 264-273.	4.1	144

#	Article	IF	CITATIONS
184	Experimental study of arsenic removal by direct contact membrane distillation. Journal of Hazardous Materials, 2009, 163, 874-879.	6.5	107
185	Theoretical modeling and experimental analysis of direct contact membrane distillation. Journal of Membrane Science, 2009, 330, 279-287.	4.1	165
186	High recovery of concentrated RO brines using forward osmosis and membrane distillation. Journal of Membrane Science, 2009, 331, 31-39.	4.1	469
187	Highly porous and macrovoid-free PVDF hollow fiber membranes for membrane distillation by a solvent-dope solution co-extrusion approach. Journal of Membrane Science, 2009, 331, 66-74.	4.1	148
188	Membrane distillation with hydrophobic macrovoid-free PVDF–PTFE hollow fiber membranes. Separation and Purification Technology, 2009, 66, 229-236.	3.9	206
189	Integration of accelerated precipitation softening with membrane distillation for high-recovery desalination of primary reverse osmosis concentrate. Separation and Purification Technology, 2009, 67, 21-25.	3.9	79
190	High-concentration $\acute{\rm E}$ -Al13 nanoclusters sol prepared by chemical synthesis and membrane distillation concentration process. Separation and Purification Technology, 2009, 69, 221-223.	3.9	8
191	High-salinity water desalination using VMD. Chemical Engineering Journal, 2009, 149, 191-195.	6.6	130
192	A general model for membrane-based separation processes. Computers and Chemical Engineering, 2009, 33, 644-659.	2.0	49
193	Separation of HCl from HCl–H2SO4 solutions by membrane distillation. Desalination, 2009, 240, 244-250.	4.0	21
194	A review of membrane processes and renewable energies for desalination. Desalination, 2009, 245, 214-231.	4.0	388
195	Study on concentrating primary reverse osmosis retentate by direct contact membrane distillation. Desalination, 2009, 247, 540-550.	4.0	31
196	Simulation of membrane distillation modules for desalination by developing user's model on Aspen Plus platform. Desalination, 2009, 249, 380-387.	4.0	47
197	Seawater desalination by an innovative solar-powered membrane distillation system: the MEDESOL project. Desalination, 2009, 246, 567-576.	4.0	138
198	Application of Taguchi method in optimization of desalination by vacuum membrane distillation. Desalination, 2009, 249, 83-89.	4.0	78
199	Ammonia removal by sweep gas membrane distillation. Water Research, 2009, 43, 1693-1699.	5.3	136
200	Mixed Matrix PVDF Hollow Fiber Membranes with Nanoscale Pores for Desalination through Direct Contact Membrane Distillation. Industrial & Engineering Chemistry Research, 2009, 48, 4474-4483.	1.8	164
201	CFD simulation of a membrane distillation module channel. Desalination and Water Treatment, 2009, 6, 177-183.	1.0	56

#	Article	IF	CITATIONS
202	Development of a hybrid solar distillator of a basin type distillator and a membrane distillator. Desalination and Water Treatment, 2009, 9, 96-104.	1.0	11
203	Modeling of a membrane-based absorption heat pump. Journal of Membrane Science, 2009, 337, 113-124.	4.1	33
204	Vacuum membrane distillation for an integrated seawater desalination process. Desalination and Water Treatment, 2009, 9, 287-296.	1.0	77
205	Modeling In-Situ Vapor Extraction During Convective Boiling. , 2009, , .		2
206	Concentrating primary reverse osmosis concentrate by direct contact membrane distillation. Water Science and Technology: Water Supply, 2010, 10, 403-410.	1.0	2
208	Monte Carlo simulation and experimental heat and mass transfer in direct contact membrane distillation. International Journal of Heat and Mass Transfer, 2010, 53, 1249-1259.	2.5	69
209	Feasibility study on petrochemical wastewater treatment and reuse using a novel submerged membrane distillation bioreactor. Separation and Purification Technology, 2010, 74, 138-143.	3.9	91
210	Preparation of hollow fibre membranes from PVDF/PVP blends and their application in VMD. Journal of Membrane Science, 2010, 364, 219-232.	4.1	184
211	Characterization of Hydrophobic Polymeric Membranes for Membrane Distillation Process. International Journal of Material Forming, 2010, 3, 563-566.	0.9	9
212	Preparation and humic acid fouling resistance of poly(vinylidene fluoride)–fabric composite membranes for membrane distillation. Journal of Applied Polymer Science, 2010, 117, 3651-3658.	1.3	2
213	Modeling and optimization of a solar driven membrane distillation desalination system. Renewable Energy, 2010, 35, 2714-2722.	4.3	81
214	Recovery of lupanine from Lupinus albus L. leaching waters. Separation and Purification Technology, 2010, 74, 38-43.	3.9	10
215	Boron removal from aqueous solution by direct contact membrane distillation. Journal of Hazardous Materials, 2010, 177, 613-619.	6.5	71
216	Characterization and evaluation of carbon nanotube Bucky-Paper membranes for direct contact membrane distillation. Journal of Membrane Science, 2010, 351, 36-43.	4.1	279
217	Light hydrocarbon distillation using hollow fibers as structured packings. Journal of Membrane Science, 2010, 362, 86-96.	4.1	14
218	Immediate assisted solar direct contact membrane distillation in saline water desalination. Journal of Membrane Science, 2010, 358, 122-130.	4.1	86
219	Surface hydrophilization of microporous polypropylene membrane by grafting zwitterionic polymer for anti-biofouling. Journal of Membrane Science, 2010, 362, 255-264.	4.1	261
220	Performance of asymmetric hollow fibre membranes in membrane distillation under various configurations and vacuum enhancement. Journal of Membrane Science, 2010, 362, 517-528.	4.1	89

#	Article	IF	Citations
221	Preparation and morphological characterization of narrow pore size distributed polypropylene hydrophobic membranes for vacuum membrane distillation via thermally induced phase separation. Desalination, 2010, 256, 27-36.	4.0	97
222	Numerical simulation and experimental studies on heat and mass transfer using sweeping gas membrane distillation. Desalination, 2010, 259, 84-96.	4.0	98
223	Simulation and optimisation of direct contact membrane distillation for energy efficiency. Desalination, 2010, 259, 29-37.	4.0	42
224	Development of novel surface modified phase inversion membranes having hydrophobic surface-modifying macromolecule (nSMM) for vacuum membrane distillation. Desalination, 2010, 261, 300-312.	4.0	52
225	Thermodynamic efficiencies and GHG emissions of alternative desalination processes. Water Science and Technology: Water Supply, 2010, 10, 416-427.	1.0	10
226	Fouling Resistance of PVDF-Fabric Composite Membrane in Membrane Distillation Desalination. Advanced Materials Research, 2010, 150-151, 334-339.	0.3	3
227	Applications of convex optimization in plant-wide control of Membrane Distillation Bio-Reactor (MDBR) water recycling plant. , 2010, , .		1
228	Desalination/concentration of reverse osmosis and electrodialysis brines with membrane distillation. Desalination and Water Treatment, 2010, 24, 293-301.	1.0	21
229	Study on the flow next to the membrane wall in air gap membrane distillation hot-cavity by PIV. , 2010, , .		1
230	Membrane distillation and novel integrated membrane process for reverse osmosis drained wastewater treatment. Desalination and Water Treatment, 2010, 18, 286-291.	1.0	9
231	Effects of operating parameters on permeation flux for desalination of sodium chloride solution using air gap membrane distillation. Desalination and Water Treatment, 2010, 13, 362-368.	1.0	5
232	Influence of Feed Composition on Distillate Flux and Membrane Fouling in Direct Contact Membrane Distillation. Separation Science and Technology, 2010, 45, 967-974.	1.3	20
233	Membrane Distillation and Osmotic Distillation. , 2010, , 1-20.		7
234	Coupling between Membrane Processes and Crystallization Operations. Industrial & Engineering Chemistry Research, 2010, 49, 5489-5495.	1.8	38
235	Recent Developments in Carbon Nanotube Membranes for Water Purification and Gas Separation. Materials, 2010, 3, 127-149.	1.3	232
236	Equilibrium Isotherms of Water and Ethanol Vapors on Immobilized Starch Sorbents. Journal of Chemical & Chemic	1.0	7
237	Coupling sustainable energy with membrane distillation processes for seawater desalination. , 2010, , .		8
238	Recent developments in photocatalytic water treatment technology: A review. Water Research, 2010, 44, 2997-3027.	5 . 3	4,343

#	Article	IF	CITATIONS
239	Removal of arsenic from contaminated groundwater by solar-driven membrane distillation using three different commercial membranes. Water Research, 2010, 44, 5750-5760.	5. 3	97
240	Vacuum membrane distillation of seawater reverse osmosis brines. Water Research, 2010, 44, 5260-5273.	5. 3	281
241	Osmotically and thermally driven membrane processes for enhancement of water recovery in desalination processes. Desalination and Water Treatment, 2010, 15, 279-286.	1.0	46
242	Desalination of water by vapor-phase transport through hydrophobic nanopores. Journal of Applied Physics, 2010, 108, .	1.1	38
243	Supersaturation Control and Heterogeneous Nucleation in Membrane Crystallizers: Facts and Perspectives. Industrial & Engineering Chemistry Research, 2010, 49, 11878-11889.	1.8	83
244	Integrated Membrane Operations in Various Industrial Sectors. , 2010, , 109-164.		19
245	Water Fluxes in Polymeric Membranes for Desalination via Membrane Distillation. AIP Conference Proceedings, 2010, , .	0.3	1
246	Membrane Crystallization Technology. , 2010, , 21-46.		5
247	Vacuum membrane distillation by microchip with temperature gradient. Lab on A Chip, 2010, 10, 899.	3.1	40
248	Desalination of brackish groundwater by direct contact membrane distillation. Water Science and Technology, 2010, 61, 2013-2020.	1.2	14
249	Global trends and performances of desalination research. Desalination and Water Treatment, 2011, 25, 1-12.	1.0	38
250	Experimental and simulation study of an air gap membrane distillation module with solar absorption function for desalination. Desalination and Water Treatment, 2011, 25, 251-258.	1.0	13
251	Membranes Used in MD and Design. , 2011, , 17-40.		3
252	Optimal Design of Multistage Membrane Distillation Systems for Water Purification. Industrial & Engineering Chemistry Research, 2011, 50, 7345-7354.	1.8	32
253	Assessment of desalination technologies for high saline brine applications $\hat{a} \in \mathbb{C}^n$ Discussion Paper. Desalination and Water Treatment, 2011, 30, 22-36.	1.0	27
254	Recovery of Hydrazine and Glycerol from Aqueous Solutions by Membrane Separation Techniques. Separation Science and Technology, 2011, 46, 2418-2426.	1.3	2
255	Interfacial Transport of Evaporating Water Confined in Nanopores. Langmuir, 2011, 27, 10666-10676.	1.6	78
257	Quantitative Visualization of Molecular Transport through Porous Membranes: Enhanced Resolution and Contrast Using Intermittent Contact-Scanning Electrochemical Microscopy. Analytical Chemistry, 2011, 83, 6447-6454.	3.2	24

#	Article	IF	CITATIONS
258	Introduction to Membrane Distillation., 2011,, 1-16.		33
259	Air Gap Membrane Distillation. , 2011, , 361-398.		19
260	Researching and modelling the dependence of MD flux on membrane dimension for scale-up purpose. Desalination and Water Treatment, 2011, 31, 144-150.	1.0	5
261	Comparison of three membrane distillation confi gurations and seawater desalination by vacuum membrane distillation. Desalination and Water Treatment, 2011, 28, 321-327.	1.0	33
262	Effects of channel spacers on direct contact membrane distillation. Desalination and Water Treatment, 2011, 34, 63-69.	1.0	26
263	Treatment of saline aqueous solutions using direct contact membrane distillation. Desalination and Water Treatment, 2011, 32, 234-241.	1.0	42
264	MD Membrane Modules. , 2011, , 227-247.		2
265	Development of Novel Multichannel Rectangular Membranes with Grooved Outer Selective Surface for Membrane Distillation. Industrial & Engineering Chemistry Research, 2011, 50, 14046-14054.	1.8	25
266	Membrane distillation heat transfer enhancement by CFD analysis of internal module geometry. Desalination and Water Treatment, 2011, 25, 195-209.	1.0	38
267	RO brine treatment and disposal methods. Desalination and Water Treatment, 2011, 35, 39-53.	1.0	42
268	Water Desalination by Membrane Distillation. , 0, , .		7
269	Degradation of Ibuprofen Sodium Salt in a Hybrid Photolysis – Membrane Distillation System Utilizing Germicidal UVC Lamp. Journal of Advanced Oxidation Technologies, 2011, 14, .	0.5	2
270	Novel designs for improving the performance of hollow fiber membrane distillation modules. Journal of Membrane Science, 2011, 384, 52-62.	4.1	119
271	Numerical simulation of heat and mass transfer in direct membrane distillation in a hollow fiber module with laminar flow. Journal of Membrane Science, 2011, 384, 107-116.	4.1	128
272	A model of direct contact membrane distillation for black currant juice. Journal of Food Engineering, 2011, 107, 405-414.	2.7	17
273	Potable water recovery from As, U, and F contaminated ground waters by direct contact membrane distillation process. Journal of Hazardous Materials, 2011, 192, 1388-1394.	6.5	89
274	Preparation of High Concentration Polyaluminum Chloride with High Alc Content by Membrane Distillation. Chinese Journal of Chemical Engineering, 2011, 19, 173-176.	1.7	8
275	Modification of Tunisian clay membrane surface by silane grafting: Application for desalination with Air Gap Membrane Distillation process. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 387, 79-85.	2.3	53

#	Article	IF	CITATIONS
276	Energy efficiency evaluation and economic analyses of direct contact membrane distillation system using Aspen Plus. Desalination, 2011, 283, 237-244.	4.0	125
277	Stripping of acetone from isopropanol solution with membrane and mesh gas–liquid contactors. Chemical Engineering and Processing: Process Intensification, 2011, 50, 991-997.	1.8	20
278	Nanostructured materials for water desalination. Nanotechnology, 2011, 22, 292001.	1.3	543
279	Entropy Generation Analysis of Desalination Technologies. Entropy, 2011, 13, 1829-1864.	1.1	229
280	Mathematical modeling of the fine purification of gas mixtures by absorption pervaporation. Theoretical Foundations of Chemical Engineering, 2011, 45, 180-184.	0.2	8
281	Effect of applied pressure on performance of PTFE membrane in DCMD. Journal of Membrane Science, 2011, 369, 514-525.	4.1	79
282	Membrane distillation and applications for water purification in thermal cogeneration plants. Separation and Purification Technology, 2011, 76, 231-237.	3.9	99
283	A scaling mitigation approach during direct contact membrane distillation. Separation and Purification Technology, 2011, 80, 315-322.	3.9	169
284	Air gap membrane distillation on the different types of membrane. Korean Journal of Chemical Engineering, 2011, 28, 770-777.	1.2	49
285	Desalination with a cascade of cross-flow hollow fiber membrane distillation devices integrated with a heat exchanger. AICHE Journal, 2011, 57, 1780-1795.	1.8	98
286	Evaluation of systems coupling vacuum membrane distillation and solar energy for seawater desalination. Chemical Engineering Journal, 2011, 166, 596-606.	6.6	166
287	Dual-layer PVDF/PTFE composite hollow fibers with a thin macrovoid-free selective layer for water production via membrane distillation. Chemical Engineering Journal, 2011, 171, 684-691.	6.6	123
288	Membranes and theoretical modeling of membrane distillation: A review. Advances in Colloid and Interface Science, 2011, 164, 56-88.	7.0	978
289	Morphological control of polymerized n-octadecylsiloxane. Applied Surface Science, 2011, 257, 2080-2085.	3.1	14
290	Concentration of ginseng extracts aqueous solution by vacuum membrane distillation 2. Theory analysis of critical operating conditions and experimental confirmation. Desalination, 2011, 267, 147-153.	4.0	34
291	Study on the effects and properties of hydrophobic poly(tetrafluoroethylene) membrane. Desalination, 2011, 277, 187-192.	4.0	64
292	Towards practical implementations of membrane distillation. Chemical Engineering and Processing: Process Intensification, 2011, 50, 139-150.	1.8	185
293	Modeling of a flat plate membrane-distillation system for liquid desiccant regeneration in air-conditioning applications. International Journal of Heat and Mass Transfer, 2011, 54, 3650-3660.	2.5	32

#	Article	IF	CITATIONS
294	Modeling and analyses of membrane osmotic distillation using non-equilibrium thermodynamics. Journal of Membrane Science, 2011, 378, 462-470.	4.1	20
295	Moisture permeation through porous membranes. Journal of Membrane Science, 2011, 379, 496-503.	4.1	11
296	Generalized guidance for considering pore-size distribution in membrane distillation. Journal of Membrane Science, 2011, 368, 124-133.	4.1	44
297	Performance improvement of PVDF hollow fiber-based membrane distillation process. Journal of Membrane Science, 2011, 369, 437-447.	4.1	216
298	Direct contact membrane distillation (DCMD): Experimental study on the commercial PTFE membrane and modeling. Journal of Membrane Science, 2011, 371, 90-98.	4.1	192
299	Enhanced durability and hydrophobicity of carbon nanotube bucky paper membranes in membrane distillation. Journal of Membrane Science, 2011, 376, 241-246.	4.1	124
300	Experimental and theoretical considerations on breakthrough pressure in membrane-based solvent extraction: Focus on citrus essential oil/hydro-alcoholic solvent systems with low interfacial tension. Journal of Membrane Science, 2011, 378, 203-213.	4.1	20
301	Compressible gases transport through porous membrane: A modified dusty gas model. Journal of Membrane Science, 2011, 379, 200-206.	4.1	11
302	Experimental analysis of an air gap membrane distillation solar desalination pilot system. Journal of Membrane Science, 2011, 379, 386-396.	4.1	233
303	Production of drinking water from saline water by direct contact membrane distillation (DCMD). Journal of Industrial and Engineering Chemistry, 2011, 17, 41-48.	2.9	76
304	The investigation of ethanol separation by the membrane distillation process. Polish Journal of Chemical Technology, 2011, 13, 66-69.	0.3	15
305	Comparative evaluation of two membrane distillation modules. Desalination and Water Treatment, 2011, 31, 226-234.	1.0	10
306	Study on air-bubbling strengthened membrane distillation process. Desalination and Water Treatment, 2011, 34, 2-5.	1.0	25
307	Direct Contact Membrane Distillation. , 2011, , 249-293.		23
308	Vacuum Membrane Distillation. , 2011, , 323-359.		104
309	Study on the Concentration Process of Glutamic Supernatant Fluid by Vacuum Membrane Distillation and the Reuse of Product Water. Applied Mechanics and Materials, 2012, 217-219, 907-913.	0.2	0
310	Dynamic modeling of direct contact membrane distillation processes. Computer Aided Chemical Engineering, 2012, 31, 170-174.	0.3	7
311	Study on the Concentration Process of Glutamic Acid Neutralizer by Vaccum Membrane Distillation Method and the Reuse of Product Water. Advanced Materials Research, 0, 518-523, 2022-2029.	0.3	0

#	Article	IF	CITATIONS
312	Microporous Silica Based Membranes for Desalination. Water (Switzerland), 2012, 4, 629-649.	1.2	91
313	Membranes and theoretical modelling of liquid-gas membrane separation for aromatic compounds removal from water: a review. International Journal of Global Environmental Issues, 2012, 12, 130.	0.1	4
314	Membrane Applications in Fruit Processing Technologies. Contemporary Food Engineering, 2012, , 87-148.	0.2	2
315	Optimization of microstructured hollow fiber design for membrane distillation applications using CFD modeling. Journal of Membrane Science, 2012, 421-422, 258-270.	4.1	81
316	Numerical simulation and theoretical study on simultaneously effects of operating parameters in direct contact membrane distillation. Chemical Engineering and Processing: Process Intensification, 2012, 61, 42-50.	1.8	70
317	Development of a Membrane Distillation module for solar energy seawater desalination. Chemical Engineering Research and Design, 2012, 90, 2101-2121.	2.7	163
318	A study of Computational Fluid Dynamics on membrane module in membrane distillation., 2012,,.		4
319	REMOVED: Effects of Sludge Retention Time (SRT) on the Performance of High-Retention Membrane Distillation Bioreactor (MDBR). Procedia Engineering, 2012, 44, 1831-1834.	1.2	0
320	Is there a Role for Membrane Processes in Localised, Small Scale Desalination Systems Coupled Directly with Solar Energy?. Procedia Engineering, 2012, 44, 1626-1629.	1.2	1
321	Permeate Flux Curve Characteristics Analysis of Cross-Flow Vacuum Membrane Distillation. Industrial & Distillation Chemistry Research, 2012, 51, 487-494.	1.8	17
322	Investigation of Shell Side Heat Transfer in Cross-Flow Designed Vacuum Membrane Distillation Module. Industrial & Engineering Chemistry Research, 2012, 51, 11463-11472.	1.8	11
323	Analysis of the effect of turbulence promoters in hollow fiber membrane distillation modules by computational fluid dynamic (CFD) simulations. Journal of Membrane Science, 2012, 415-416, 758-769.	4.1	68
324	Superhydrophobic modification of TiO2 nanocomposite PVDF membranes for applications in membrane distillation. Journal of Membrane Science, 2012, 415-416, 850-863.	4.1	422
325	Application of PVDF membranes in desalination and comparison of the VMD and DCMD processes. Chemical Engineering Science, 2012, 79, 94-102.	1.9	134
326	Concentration of lignocellulosic hydrolyzates by solar membrane distillation. Bioresource Technology, 2012, 123, 382-385.	4.8	26
327	Effects of membrane properties on water production cost in small scale membrane distillation systems. Desalination, 2012, 306, 60-71.	4.0	77
328	Preparation and characterization of PVDF/nonwoven fabric flat-sheet composite membranes for desalination through direct contact membrane distillation. Separation and Purification Technology, 2012, 101, 1-10.	3.9	60
329	Development of hollow fiber membranes for water and salt recovery from highly concentrated brine via direct contact membrane distillation and crystallization. Journal of Membrane Science, 2012, 421-422, 111-123.	4.1	108

#	Article	IF	CITATIONS
331	Ammonia removal from aqueous solution by membrane distillation. Water and Environment Journal, 2013, 27, 425-434.	1.0	44
332	Some perspectives. , 2012, , 295-321.		3
333	Progress in membrane crystallization. Current Opinion in Chemical Engineering, 2012, 1, 178-182.	3.8	153
334	A study of hydrophobic electrospun membrane applied in seawater desalination by membrane distillation. Fibers and Polymers, 2012, 13, 698-702.	1.1	55
335	Integration Design of Heat Exchanger Networks into Membrane Distillation Systems to Save Energy. Industrial & Distillation Systems to Save Energy.	1.8	12
336	On Mass Transport Through a Membrane Layer. , 2012, , 1-34.		7
337	Membrane Contactors., 2012,, 293-313.		0
338	Membrane Distillation: Principle, Advances, Limitations and Future Prospects in Food Industry. , 0, , .		21
339	Process intensification strategies and membrane engineering. Green Chemistry, 2012, 14, 1561.	4.6	101
340	Modeling of Conjugated Heat Transfer in Directâ€Contact Membrane Distillation of Seawater Desalination Systems. Chemical Engineering and Technology, 2012, 35, 1765-1776.	0.9	4
341	Evaluation of vapor mass transfer in various membrane distillation configurations: an experimental study. Heat and Mass Transfer, 2012, 48, 945-952.	1.2	6
342	Effects of additives on dual-layer hydrophobic–hydrophilic PVDF hollow fiber membranes for membrane distillation and continuous performance. Chemical Engineering Science, 2012, 68, 567-578.	1.9	134
343	Membrane distillation: A comprehensive review. Desalination, 2012, 287, 2-18.	4.0	1,999
344	Treatment of high salinity solutions: Application of air gap membrane distillation. Desalination, 2012, 287, 55-60.	4.0	79
345	Current trends and future prospects in the design of seawater reverse osmosis desalination technology. Desalination, 2012, 284, 1-8.	4.0	381
346	Commercial PTFE membranes for membrane distillation application: Effect of microstructure and support material. Desalination, 2012, 284, 297-308.	4.0	146
347	A CFD study on the effect of spacer orientation on temperature polarization in membrane distillation modules. Desalination, 2012, 284, 332-340.	4.0	127
348	Technical evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 286, 332-341.	4.0	136

#	Article	IF	CITATIONS
349	Energy efficiency comparison of single-stage membrane distillation (MD) desalination cycles in different configurations. Desalination, 2012, 290, 54-66.	4.0	182
350	A novel concept of energy reuse from high concentration photovoltaic thermal (HCPVT) system for desalination. Desalination, 2012, 295, 70-81.	4.0	77
351	Preparation of high concentration polyaluminum chloride by chemical synthesis-membrane distillation method with self-made hollow fiber membrane. Journal of Environmental Sciences, 2012, 24, 834-839.	3.2	2
352	Modelling heat and mass transfers in DCMD using compressible membranes. Journal of Membrane Science, 2012, 387-388, 7-16.	4.1	83
353	Desalination of brine and produced water by direct contact membrane distillation at high temperatures and pressures. Journal of Membrane Science, 2012, 389, 380-388.	4.1	158
354	Preparation and characterization of highly hydrophobic poly(vinylidene fluoride) – Clay nanocomposite nanofiber membranes (PVDF–clay NNMs) for desalination using direct contact membrane distillation. Journal of Membrane Science, 2012, 397-398, 80-86.	4.1	280
355	Hydrophobic porous alumina hollow fiber for water desalination via membrane distillation process. Journal of Membrane Science, 2012, 403-404, 41-46.	4.1	157
356	Analysis of heat and mass transfer by CFD for performance enhancement in direct contact membrane distillation. Journal of Membrane Science, 2012, 405-406, 38-47.	4.1	119
357	CF4 plasma surface modification of asymmetric hydrophilic polyethersulfone membranes for direct contact membrane distillation. Journal of Membrane Science, 2012, 407-408, 164-175.	4.1	174
358	Experimental evaluation of two pilot-scale membrane distillation modules used for solar desalination. Journal of Membrane Science, 2012, 409-410, 264-275.	4.1	130
359	Modeling and simulation for direct contact membrane distillation in hollow fiber modules. AICHE Journal, 2013, 59, 589-603.	1.8	39
360	Treatment of radioactive wastewater using direct contact membrane distillation. Journal of Hazardous Materials, 2013, 261, 307-315.	6.5	122
361	Experimental evaluation of a modified air-gap membrane distillation prototype. Desalination and Water Treatment, 2013, 51, 4998-5004.	1.0	5
362	Novel membrane surface modification to enhance anti-oil fouling property for membrane distillation application. Journal of Membrane Science, 2013, 447, 26-35.	4.1	222
363	A new method for permeability measurement of hydrophobic membranes in Vacuum Membrane Distillation process. Water Research, 2013, 47, 2096-2104.	5.3	27
364	Treatment of saline solutions using Air Gap Membrane Distillation: Experimental study. Desalination, 2013, 323, 2-7.	4.0	45
365	Application of carbon nano-materials in desalination processes. Desalination and Water Treatment, 2013, 51, 627-636.	1.0	28
366	The role of membrane surface energy on direct contact membrane distillation performance. Desalination, 2013, 323, 22-30.	4.0	58

#	Article	IF	CITATIONS
367	Separation of Mineral Acid Solutions by Membrane Distillation and Thermopervaporation through Porous and Nonporous Membranes. Industrial & Engineering Chemistry Research, 2013, 52, 8856-8863.	1.8	26
368	An experimentally optimized model for heat and mass transfer in direct contact membrane distillation. International Journal of Heat and Mass Transfer, 2013, 66, 855-867.	2.5	111
369	Experimental study of the memsys vacuum-multi-effect-membrane-distillation (V-MEMD) module. Desalination, 2013, 323, 150-160.	4.0	161
370	Experimental study on the performance evaluation of vacuum distillation process for NH4HCO3 removal. Journal of Mechanical Science and Technology, 2013, 27, 1171-1178.	0.7	10
371	Preparation and characterization of novel triple layer hydrophilic–hydrophobic composite membrane for desalination using air gap membrane distillation. Separation and Purification Technology, 2013, 118, 598-603.	3.9	80
372	Simulation of solar vacuum membrane distillation unit. Desalination, 2013, 324, 87-92.	4.0	28
373	Self-sustained webs of polyvinylidene fluoride electrospun nanofibers at different electrospinning times: 2. Theoretical analysis, polarization effects and thermal efficiency. Journal of Membrane Science, 2013, 433, 180-191.	4.1	77
374	Theoretical and experimental studies of flux enhancement with roughened surface in direct contact membrane distillation desalination. Journal of Membrane Science, 2013, 433, 160-166.	4.1	37
375	Experimental evaluation on concentrating cooling tower blowdown water by direct contact membrane distillation. Desalination, 2013, 323, 134-141.	4.0	44
376	Simulation study of desalination performance for two large-scale air gap membrane distillation modules. Desalination and Water Treatment, 2013, 51, 5475-5484.	1.0	1
377	Impact of characteristic membrane parameters on the transfer rate of ammonia in membrane contactor application. Separation and Purification Technology, 2013, 116, 327-334.	3.9	36
378	Experimental study of ammonia removal from water by modified direct contact membrane distillation. Desalination, 2013, 326, 135-140.	4.0	101
379	Experimental evaluation and modeling of internal temperatures in an air gap membrane distillation unit. Desalination, 2013, 326, 47-54.	4.0	23
380	Desalination and Reuse of High-Salinity Shale Gas Produced Water: Drivers, Technologies, and Future Directions. Environmental Science & Environmental	4.6	655
381	Field evaluation of coated plates of a compact heat exchanger to mitigate crystallization deposit formation in an MD desalination plant. Desalination, 2013, 324, 21-33.	4.0	13
382	Reserve management and real time optimization for a solar powered Membrane Distillation Bio-Reactor water recycling plant via convex optimization. Renewable Energy, 2013, 60, 489-497.	4.3	5
383	Fabrication and characterization of superhydrophobic poly (vinylidene fluoride) membrane for direct contact membrane distillation. Desalination, 2013, 324, 1-9.	4.0	153
384	Numerical modeling of the vacuum membrane distillation process. Desalination, 2013, 331, 46-55.	4.0	43

#	Article	IF	CITATIONS
385	Effect of temperature-dependent microstructure evolution on pore wetting in PTFE membranes under membrane distillation conditions. Journal of Membrane Science, 2013, 429, 282-294.	4.1	157
386	Vacuum membrane distillation processes for aqueous solution treatmentâ€"A review. Chemical Engineering and Processing: Process Intensification, 2013, 74, 27-54.	1.8	154
387	Emulsion separation using hydrophobic grafted ceramic membranes by. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 436, 402-407.	2.3	47
388	Preparation and characterization of poly(tetrafluoroethylene–cohexafluoropropylene) (FEP) hollow fiber membranes for desalination. Desalination and Water Treatment, 2013, 51, 3948-3953.	1.0	5
389	Application of Membrane Distillation for desalting brines from thermal desalination plants. Desalination, 2013, 314, 101-108.	4.0	192
390	Development and pilot testing of full-scale membrane distillation modules for deployment of waste heat. Desalination, 2013, 323, 55-65.	4.0	102
391	Experimental study of thermal performance in air gap membrane distillation systems, including the direct solar heating of membranes. Desalination, 2013, 330, 100-111.	4.0	66
392	Optimization of morphology and perf ormance of PVDF hollow fiber for direct contact membrane distillation using experimental design. Chemical Engineering Science, 2013, 101, 130-143.	1.9	58
393	Evaluation of geothermal energy in desalination by vacuum membrane distillation. Applied Energy, 2013, 112, 737-746.	5.1	182
394	Three-fluid membrane contactors for improving the energy efficiency of refrigeration and air-handling systems. International Journal of Ambient Energy, 2013, 34, 181-194.	1.4	20
395	A Thermochromic Liquid Crystals Image Analysis technique to investigate temperature polarization in spacer-filled channels for Membrane Distillation. Journal of Membrane Science, 2013, 447, 260-273.	4.1	55
396	Separation technologies in the processing of fruit juices. , 2013, , 381-395.		2
397	Synthesis of solvent stable polymeric membranes via UV depth-curing. Chemical Communications, 2013, 49, 11494.	2.2	46
398	Critical Review of Desalination Concentrate Management, Treatment and Beneficial Use. Environmental Engineering Science, 2013, 30, 502-514.	0.8	129
399	Advances in the effective application of membrane technologies in the food industry., 2013,, 180-201.		1
400	Membrane contactors: fundamentals, membrane materials and key operations. , 2013, , 54-106.		4
401	Design of super-hydrophobic microporous polytetrafluoroethylene membranes. New Journal of Chemistry, 2013, 37, 373-379.	1.4	26
402	Hydrophobic asymmetric ultrafiltration PVDF membranes: an alternative separator for VFB with excellent stability. Physical Chemistry Chemical Physics, 2013, 15, 1766-1771.	1.3	87

#	Article	IF	CITATIONS
403	Multiscale Modeling of Membrane Distillation: Some Theoretical Considerations. Industrial & Engineering Chemistry Research, 2013, 52, 8822-8828.	1.8	29
404	3D Modeling and Simulation of Mass Transfer in Vapor Transport through Porous Membranes. Chemical Engineering and Technology, 2013, 36, 177-185.	0.9	33
405	Fouling and wetting in membrane distillation (MD) and MD-bioreactor (MDBR) for wastewater reclamation. Desalination, 2013, 323, 39-47.	4.0	175
406	DCMD flux curve characteristics of cross-flow hollow fiber membrane. Desalination, 2013, 323, 107-113.	4.0	6
407	High resolution simultaneous dual liquid level measurement system with CMOS camera and FPGA hardware processor. Sensors and Actuators A: Physical, 2013, 201, 468-476.	2.0	9
408	Modeling in situ vapor extraction during convective boiling in fractal-like branching microchannel networks. International Journal of Heat and Mass Transfer, 2013, 60, 700-712.	2.5	15
409	Boron removal and desalination from seawater by PVDF flat-sheet membrane through direct contact membrane distillation. Desalination, 2013, 326, 115-124.	4.0	57
410	Influence of module design and membrane compressibility on VMD performance. Journal of Membrane Science, 2013, 442, 31-38.	4.1	15
411	Thermodynamic modeling of brine and its use in membrane crystallizer. Desalination, 2013, 323, 83-92.	4.0	49
412	Heat and mass transfer during evaporation of thin liquid films confined by nanoporous membranes subjected to air jet impingement. International Journal of Heat and Mass Transfer, 2013, 58, 300-311.	2.5	44
413	Effect of dry-out on the fouling of PVDF and PTFE membranes under conditions simulating intermittent seawater membrane distillation (SWMD). Journal of Membrane Science, 2013, 438, 126-139.	4.1	114
414	State-of-the-art review on hollow fibre contactor technology and membrane-based extraction processes. Journal of Membrane Science, 2013, 430, 263-303.	4.1	191
415	Integrated membrane distillation–crystallization: Process design and cost estimations for seawater treatment and fluxes of single salt solutions. Desalination, 2013, 323, 8-16.	4.0	67
416	Advances in Membrane Distillation for Water Desalination and Purification Applications. Water (Switzerland), 2013, 5, 94-196.	1.2	601
417	Modeling and CFD Simulation of Water Desalination Using Nanoporous Membrane Contactors. Industrial & Desalination Using Nanoporous Membrane Contactors.	1.8	66
418	Performance improvement of countercurrent-flow direct contact membrane distillation in seawater desalination systems. Desalination and Water Treatment, 2013, 51, 5113-5120.	1.0	3
420	Modelling of vacuum membrane distillation. Journal of Membrane Science, 2013, 434, 1-9.	4.1	69
421	Production of ethanol from lactose in a bioreactor integrated with membrane distillation. Desalination, 2013, 323, 114-119.	4.0	40

#	Article	IF	CITATIONS
422	Predicting the influence of operating conditions on DCMD flux and thermal efficiency for incompressible and compressible membrane systems. Desalination, 2013, 323, 142-149.	4.0	30
423	Numerical simulation and theoretical study on simultaneous effects of operating parameters in vacuum membrane distillation. Desalination, 2013, 314, 59-66.	4.0	56
424	Membrane Crystallization of Sodium Carbonate for Carbon Dioxide Recovery: Effect of Impurities on the Crystal Morphology. Crystal Growth and Design, 2013, 13, 2362-2372.	1.4	59
425	Experimental comparison of direct contact membrane distillation (DCMD) with vacuum membrane distillation (VMD). Desalination and Water Treatment, 2013, 51, 6299-6309.	1.0	27
426	Hollow Fibers Structured Packings in Olefin/Paraffin Distillation: Apparatus Scale-Up and Long-Term Stability. Industrial & Engineering Chemistry Research, 2013, 52, 9165-9179.	1.8	10
427	Nanoporous organosilica membrane for water desalination. Chemical Communications, 2013, 49, 4534.	2.2	53
428	Fabrication and characterization of polyvinylidenefluoride-co-hexafluoropropylene (PVDF-HFP) electrospun membranes for direct contact membrane distillation. Journal of Membrane Science, 2013, 428, 104-115.	4.1	301
429	Fabrication of electrospun nanofibrous membranes for membrane distillation application. Desalination and Water Treatment, 2013, 51, 1337-1343.	1.0	47
430	Review and assessment of the newly developed MD for desalination processes. Desalination and Water Treatment, 2013, 51, 574-585.	1.0	29
431	Silica Fouling in Direct Contact Membrane Distillation. Industrial & Engineering Chemistry Research, 2013, 52, 10521-10529.	1.8	60
432	A CFD study of heat transfer through spacer channels of membrane distillation modules. Desalination and Water Treatment, 2013, 51, 3662-3674.	1.0	22
433	Desalination by solar powered membrane distillation systems. Desalination, 2013, 308, 186-197.	4.0	314
434	Performance enhancement and scaling control with gas bubbling in direct contact membrane distillation. Desalination, 2013, 308, 47-55.	4.0	122
435	Performance investigation of a solar-assisted direct contact membrane distillation system. Journal of Membrane Science, 2013, 427, 345-364.	4.1	152
436	Preparation and characterization of electro-spun nanofiber membranes and their possible applications in water treatment. Separation and Purification Technology, 2013, 102, 118-135.	3.9	239
437	Influence of proteins content in the feed on the course of membrane distillation. Desalination and Water Treatment, 2013, 51, 2362-2367.	1.0	10
438	A continuousâ€effect membrane distillation process based on hollow fiber AGMD module with internal latentâ€heat recovery. AICHE Journal, 2013, 59, 1278-1297.	1.8	49
439	An Economics-Based Second Law Efficiency. Entropy, 2013, 15, 2736-2765.	1.1	24

#	Article	IF	Citations
440	Arsenic Removal by Solarâ€Driven Membrane Distillation: Modeling and Experimental Investigation with a New Flash Vaporization Module. Water Environment Research, 2013, 85, 63-76.	1.3	9
441	Advances in membrane-based concentration in the food and beverage industries: direct osmosis and membrane contactors., 2013,, 244-283.		0
442	Integrating different membrane operations and combining membranes with conventional separation techniques in industrial processes., 2013,, 296-343.		3
443	Solar Water Desalination. , 2013, , .		0
444	Preparation of Hydrophobic Microporous Polypropylene/Isotactic Polypropylene Blending Membranes via Thermally Induced Phase Separation for Vacuum Membrane Distillation. Advanced Materials Research, 2013, 790, 81-84.	0.3	2
445	Brackish Water Desalination by Air-Sweep Vacuum Membrane Distillation. Advanced Materials Research, 0, 781-784, 2084-2086.	0.3	0
448	4. Integrated membrane operations in citrus processing. , 2013, , 87-112.		0
449	Theoretical and Experimental Approaches of Liquid Entry Pressure Determination in Membrane Distillation Processes. Periodica Polytechnica: Chemical Engineering, 2014, 58, 81-91.	0.5	74
450	Recent Progress in Membrane Distillation. Jurnal Teknologi (Sciences and Engineering), 2014, 70, .	0.3	1
453	Characteristic and Performance of Polyvinylidene Fluoride Membranes Blended with Lithium Chloride in Direct Contact Membrane Distillation. Jurnal Teknologi (Sciences and Engineering), 2014, 69, .	0.3	1
454	A Pervaporation Study of Ammonia Solutions Using Molecular Sieve Silica Membranes. Membranes, 2014, 4, 40-54.	1.4	42
455	Electrospun Nanofiber Membranes and Their Applications in Water and Wastewater Treatment. Lecture Notes in Nanoscale Science and Technology, 2014, , 111-143.	0.4	8
456	Electrical thermal networks for direct contact membrane distillation modeling., 2014,,.		5
457	Athermal Membrane Processes for the Concentration of Liquid Foods and Natural Colors. , 2014, , 213-237.		2
458	Combining membrane processes with renewable energy technologies: perspectives on membrane desalination, biofuels and biogas production, and microbial fuel cells., 2014,, 44-62.		5
459	Variation of Flux in Membrane Distillation. APCBEE Procedia, 2014, 9, 97-101.	0.5	8
460	Vacuum membrane distillation simulation of desalination using polypropylene hydrophobic microporous membrane. Journal of Applied Polymer Science, 2015, 132, .	1.3	3
461	Energy and exergy analysis and modeling temperature distribution in a membrane distillation feed channel for VMD and DCM. IDA Journal of Desalination and Water Reuse, 2014, 6, 121-127.	0.4	1

#	Article	IF	CITATIONS
462	Preparation, characterisation and performance of polyvinylidene fluoride membrane for sodium chloride rejection in direct contact membrane distillation. Materials Research Innovations, 2014, 18, S6-359-S6-363.	1.0	1
463	Flux Prediction in Direct Contact Membrane Distillation. International Journal of Materials Mechanics and Manufacturing, 2014, 2, 302-308.	0.2	12
464	A ballistic transport model for vacuum membrane distillation. Journal of Membrane Science, 2014, 450, 397-406.	4.1	18
465	An analytical flux decline model for membrane distillation. Desalination, 2014, 345, 1-12.	4.0	45
466	Preparation and characterization of novel poly(vinylidene fluoride) membranes using self-assembled dibenzylidene sorbitol for membrane distillation. Desalination, 2014, 332, 7-17.	4.0	9
467	Performance simulation of a multi-VMD desalination process including the recycle flow. Desalination, 2014, 338, 39-48.	4.0	30
468	Study of membrane fouling in cross-flow vacuum membrane distillation. Separation and Purification Technology, 2014, 122, 133-143.	3.9	32
469	Optimization of operating conditions for a continuous membrane distillation crystallization process with zero salty water discharge. Journal of Membrane Science, 2014, 450, 1-11.	4.1	146
470	Utilization of solar energy for direct contact membrane distillation process: An experimental study for desalination of real seawater. Korean Journal of Chemical Engineering, 2014, 31, 155-161.	1.2	18
471	Condensation studies in membrane evaporation and sweeping gas membrane distillation. Journal of Membrane Science, 2014, 462, 9-16.	4.1	62
472	Performance improvement on distillate flux of countercurrent-flow direct contact membrane distillation systems. Desalination, 2014, 338, 26-32.	4.0	27
473	Novel design of liquid distributors for VMD performance improvement based on cross-flow membrane module. Desalination, 2014, 336, 80-86.	4.0	16
474	Effect of selected spinning parameters on PVDF hollow fiber morphology for potential application in desalination by VMD. Desalination, 2014, 344, 28-35.	4.0	33
475	Going green with silk. Nature Nanotechnology, 2014, 9, 251-252.	15.6	1
476	Recovery of CO ₂ from Monoethanolamine using a Membrane Contactor. Separation Science and Technology, 2014, 49, 1-11.	1.3	17
477	A study on treatment methods of spent pickling liquor generated by pickling process of steel. Clean Technologies and Environmental Policy, 2014, 16, 1515-1527.	2.1	44
478	Vacuum membrane distillation for desalination of water using hollow fiber membranes. Journal of Membrane Science, 2014, 455, 131-142.	4.1	92
479	Simulation of Membrane Distillation for Purifying Water Containing 1,1,1â€Trichloroethane. Chemical Engineering and Technology, 2014, 37, 543-550.	0.9	14

#	Article	IF	CITATIONS
480	Recovery of hydrochloric acid and glycerol from aqueous solutions in chloralkali and chemical process industries by membrane distillation technique. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 1249-1259.	2.7	23
481	A new enhancement technique on air gap membrane distillation. Desalination, 2014, 332, 52-59.	4.0	34
482	Exceptional ion rejection ability of directional solvent for non-membrane desalination. Applied Physics Letters, 2014, 104, 024102.	1.5	26
483	Numerical study on multi-stage vacuum membrane distillation with economic evaluation. Desalination, 2014, 339, 54-67.	4.0	54
484	Heat transfer in the rectangular cross-flow flat-sheet membrane module for vacuum membrane distillation. Chemical Engineering and Processing: Process Intensification, 2014, 79, 23-33.	1.8	22
485	Bubbles as osmotic membranes. Nature Nanotechnology, 2014, 9, 249-251.	15.6	10
486	Effect of a macromolecular- or bio-fouling layer on membrane distillation. Journal of Membrane Science, 2014, 456, 66-76.	4.1	48
487	Membrane processes for heating, ventilation, and air conditioning. Renewable and Sustainable Energy Reviews, 2014, 33, 290-304.	8.2	174
488	Preparation and characterization of silicon nitride hollow fiber membranes for seawater desalination. Journal of Membrane Science, 2014, 450, 197-206.	4.1	101
489	Rejection and fate of trace organic compounds (TrOCs) during membrane distillation. Journal of Membrane Science, 2014, 453, 636-642.	4.1	113
490	Degradation of Reactive Black 5 in a submerged photocatalytic membrane distillation reactor with microwave electrodeless lamps as light source. Separation and Purification Technology, 2014, 122, 54-59.	3.9	41
491	Study on a new air-gap membrane distillation module for desalination. Desalination, 2014, 334, 29-38.	4.0	63
492	Performance evaluation of the DCMD desalination process under bench scale and large scale module operating conditions. Journal of Membrane Science, 2014, 455, 103-112.	4.1	116
493	A review of membrane technology for bioethanol production. Renewable and Sustainable Energy Reviews, 2014, 30, 388-400.	8.2	121
494	Experiments and modeling of a vacuum membrane distillation for high saline water. Journal of Industrial and Engineering Chemistry, 2014, 20, 2174-2183.	2.9	47
495	Effect of operational parameters on distillate flux in direct contact membrane distillation (DCMD): Comparison between experimental and model predicted performance. Desalination, 2014, 336, 110-120.	4.0	102
496	Sustainable operation of membrane distillation for enhancement of mineral recovery from hypersaline solutions. Journal of Membrane Science, 2014, 454, 426-435.	4.1	125
497	Recent progress of membrane distillation using electrospun nanofibrous membrane. Journal of Membrane Science, 2014, 453, 435-462.	4.1	318

#	Article	IF	CITATIONS
498	Effect of hydrophobic surface modifying macromolecules on differently produced PVDF membranes for direct contact membrane distillation. Chemical Engineering Journal, 2014, 242, 387-396.	6.6	72
499	Direct contact membrane distillation with heat recovery: Thermodynamic insights from module scale modeling. Journal of Membrane Science, 2014, 453, 498-515.	4.1	168
500	Two-phase flow in membrane processes: A technology with a future. Journal of Membrane Science, 2014, 453, 566-602.	4.1	134
501	Formation and characterization of polytetrafluoroethylene nanofiber membranes for vacuum membrane distillation. Journal of Membrane Science, 2014, 453, 402-408.	4.1	97
502	PVDF hollow fiber and nanofiber membranes for fresh water reclamation using membrane distillation. Journal of Materials Science, 2014, 49, 2045-2053.	1.7	49
503	Membrane technologies for solar-desalination plants. , 2014, , 347-364.		3
504	Separation and purification of biobutanol during bioconversion of biomass. Separation and Purification Technology, 2014, 132, 513-540.	3.9	139
505	Evaluation method of membrane performance in membrane distillation process for seawater desalination. Environmental Technology (United Kingdom), 2014, 35, 2147-2152.	1.2	3
506	Development of a vacuum membrane distillation unit operation: From experimental data to a simulation model. Chemical Engineering and Processing: Process Intensification, 2014, 86, 90-95.	1.8	14
507	Advanced Physico-chemical Methods of Treatment for Industrial Wastewaters. , 2014, , 81-140.		19
508	Treatment of Industrial Wastewater Containing High Levels of Ammonia and Salt Using Vacuum Membrane Distillation. Applied Mechanics and Materials, 0, 539, 805-810.	0.2	5
509	Current and Emerging Practices for Managing Coalbed Methane Produced Water in the United States. , 2014, , 219-240.		1
510	Structural analysis and modeling of the commercial high performance composite flat sheet membranes for membrane distillation application. Desalination, 2014, 349, 115-125.	4.0	16
511	Superhydrophobic PVDF–PTFE electrospun nanofibrous membranes for desalination by vacuum membrane distillation. Desalination, 2014, 347, 175-183.	4.0	172
512	Physical modification of polytetrafluoroethylene flat membrane by a simple heat setting process and membrane wetting remission in SGMD for desalination. Desalination, 2014, 354, 143-152.	4.0	17
513	Modeling of Distillation Processes. , 2014, , 383-436.		9
514	Study on the effects and properties of PVDF/FEP blend porous membrane. Desalination, 2014, 353, 118-124.	4.0	28
515	Heat transfer intensification and scaling mitigation in bubbling-enhanced membrane distillation for brine concentration. Journal of Membrane Science, 2014, 470, 60-69.	4.1	59

#	Article	IF	CITATIONS
517	Simplified flux prediction in direct-contact membrane distillation using a membrane structural parameter. Desalination, 2014, 351, 151-162.	4.0	33
518	Integration of Thermal Membrane Distillation Networks with Processing Facilities. Industrial & Engineering Chemistry Research, 2014, 53, 5284-5298.	1.8	43
519	Direct contact membrane distillation: An experimental and analytical investigation of the effect of membrane thickness upon transmembrane flux. Journal of Membrane Science, 2014, 470, 257-265.	4.1	67
520	Application of a porous composite hydrophobic/hydrophilic membrane in desalination by air gap and liquid gap membrane distillation: A comparative study. Separation and Purification Technology, 2014, 133, 176-186.	3.9	70
521	Design strategy for networking membrane module and heat exchanger for direct contact membrane distillation process in seawater desalination. Desalination, 2014, 349, 126-135.	4.0	19
522	Electrospun Superhydrophobic Membranes with Unique Structures for Membrane Distillation. ACS Applied Materials & Distillation. ACS Applied Materia	4.0	234
523	Dual-Biomimetic Superhydrophobic Electrospun Polystyrene Nanofibrous Membranes for Membrane Distillation. ACS Applied Materials & Samp; Interfaces, 2014, 6, 2423-2430.	4.0	141
524	Seawater desalination by gas hydrate process and removal characteristics of dissolved ions (Na+, K+,) Tj ETQq1 1	0,7,84314	rgBT /Over
525	Built-up superhydrophobic composite membrane with carbon nanotubes for water desalination. RSC Advances, 2014, 4, 16561.	1.7	20
526	Omniphobic Membrane for Robust Membrane Distillation. Environmental Science and Technology Letters, 2014, 1, 443-447.	3.9	288
527	Modeling and optimization of air gap membrane distillation system for desalination. Desalination, 2014, 354, 68-75.	4.0	49
528	Quantitative Study on Crystallization-Induced Scaling in High-Concentration Direct-Contact Membrane Distillation. Industrial & Engineering Chemistry Research, 2014, 53, 15656-15666.	1.8	28
529	Numerical modeling and optimization of vacuum membrane distillation module for low-cost water production. Desalination, 2014, 339, 1-9.	4.0	48
530	A predictive model for the assessment of the temperature polarization effect in direct contact membrane distillation desalination of high salinity feed. Desalination, 2014, 341, 38-49.	4.0	72
531	Nanofluidic transport governed by the liquid/vapour interface. Nature Nanotechnology, 2014, 9, 317-323.	15.6	159
532	Fluoride removal from aqueous solution by direct contact membrane distillation: theoretical and experimental studies. Environmental Science and Pollution Research, 2014, 21, 10493-10501.	2.7	44
533	Membrane fouling and cleaning in long term plant-scale membrane distillation operations. Journal of Membrane Science, 2014, 468, 360-372.	4.1	146
534	A non-invasive study of flow dynamics in membrane distillation hollow fiber modules using low-field nuclear magnetic resonance imaging (MRI). Journal of Membrane Science, 2014, 451, 46-54.	4.1	34

#	Article	IF	CITATIONS
535	Membrane crystallization for the recovery of a pharmaceutical compound from waste streams. Chemical Engineering Research and Design, 2014, 92, 264-272.	2.7	29
536	Evaluation of hollow fiber-based direct contact and vacuum membrane distillation systems using aspen process simulation. Journal of Membrane Science, 2014, 464, 127-139.	4.1	43
537	High temperature direct contact membrane distillation based desalination using PTFE hollow fibers. Chemical Engineering Science, 2014 , 116 , 824 - 833 .	1.9	26
538	Preparation and characterization of highly micro-porous PVDF membranes for desalination of saline water through vacuum membrane distillation. Desalination, 2014, 346, 9-18.	4.0	56
539	Effects of calcium carbonate nano-particles on the properties of PVDF/nonwoven fabric flat-sheet composite membranes for direct contact membrane distillation. Desalination, 2014, 347, 25-33.	4.0	73
541	Hollow fibers for seawater desalination from blends of PVDF with different molecular weights: Morphology, properties and VMD performance. Polymer, 2014, 55, 1296-1306.	1.8	63
542	Taguchi optimization approach for phenolic wastewater treatment by vacuum membrane distillation. Desalination and Water Treatment, 2014, 52, 1341-1349.	1.0	40
543	Production of drinking water from seawater using membrane distillation (MD) alternative: direct contact MD and sweeping gas MD approaches. Desalination and Water Treatment, 2014, 52, 2372-2381.	1.0	41
544	Modeling of water transport through nanopores of membranes in direct-contact membrane distillation process. Polymer Engineering and Science, 2014, 54, 660-666.	1.5	44
545	Study of the performances of different configurations of seawater desalination with a solar membrane distillation. Desalination and Water Treatment, 2014, 52, 2362-2371.	1.0	12
546	Treatment of Produced Water from Unconventional Resources by Membrane Distillation. , 2014, , .		5
547	Efficient Desalination by Reverse Osmosis: A guide to RO practice. Water Intelligence Online, 2015, 14, .	0.3	1
549	Brackish water treatment for reuse using vacuum membrane distillation process. Water Science and Technology: Water Supply, 2015, 15, 362-369.	1.0	11
550	Preparation of a hydrophobically enhanced antifouling isotactic polypropylene/silicone dioxide flatâ€sheet membrane via thermally induced phase separation for vacuum membrane distillation. Journal of Applied Polymer Science, 2015, 132, .	1.3	7
551	Analysis of countercurrent membrane vapor extraction of a dilute aqueous biosolute. AICHE Journal, 2015, 61, 2795-2809.	1.8	10
552	Energy evaluation and treatment efficiency of vacuum membrane distillation for brackish water desalination. Journal of Water Reuse and Desalination, 2015, 5, 119-131.	1.2	2
553	Mass Transfer Mechanisms and Transport Resistances in Membrane Separation Process., 0,,.		9
554	Membrane Technology., 2015, , 1-68.		0

#	Article	IF	CITATIONS
555	Nonlinear observer to estimate polarization phenomenon in membrane distillation. International Journal for Simulation and Multidisciplinary Design Optimization, 2015, 6, A4.	0.6	0
556	Application of Membrane Crystallization for Minerals' Recovery from Produced Water. Membranes, 2015, 5, 772-792.	1.4	76
557	Osmotic Membrane Distillation in Downstream Processing. Current Biochemical Engineering, 2015, 2, 33-38.	1.3	1
558	Hybrid pressure retarded osmosis–membrane distillation (PRO–MD) process for osmotic power and clean water generation. Environmental Science: Water Research and Technology, 2015, 1, 507-515.	1.2	45
559	Sweeping gas membrane distillation: Numerical simulation of mass and heat transfer in a hollow fiber membrane module. Journal of Membrane Science, 2015, 483, 15-24.	4.1	50
560	Solar-assisted multi-stage vacuum membrane distillation system with heat recovery unit. Desalination, 2015, 367, 161-171.	4.0	67
561	Direct contact membrane distillation for the concentration of saline dairy effluent. Water Research, 2015, 81, 167-177.	5. 3	61
562	Effect of module design and flow patterns on performance of membrane distillation process. Chemical Engineering Journal, 2015, 277, 368-377.	6.6	42
563	A small-scale membrane electro-dialyser for domestic use. Membrane Water Treatment, 2015, 6, 43-52.	0.5	0
564	Morphological and hydrophobic modifications of PVDF flat membrane with silane coupling agent grafting via plasma flow for VMD of ethanol–water mixture. Journal of Membrane Science, 2015, 491, 110-120.	4.1	49
565	Assessment of temperature polarization in membrane distillation channels by liquid crystal thermography. Desalination and Water Treatment, 2015, 55, 2747-2765.	1.0	13
566	Real time optimization of solar powered direct contact membrane distillation based on multivariable extremum seeking., 2015,,.		6
567	Simulation of Vacuum Membrane Distillation Process for Desalination with Aspen Plus. Industrial & Engineering Chemistry Research, 2015, 54, 672-680.	1.8	10
568	Statistical analysis of air-gap membrane desalination experimental data: Hypothesis testing. Desalination, 2015, 362, 117-125.	4.0	8
569	A review of membrane contactors applied in absorption refrigeration systems. Renewable and Sustainable Energy Reviews, 2015, 45, 173-191.	8.2	75
570	Solar energy assisted direct contact membrane distillation (DCMD) process for seawater desalination. Separation and Purification Technology, 2015, 143, 94-104.	3.9	106
571	Membrane Processing Technology in the Food Industry: Food Processing, Wastewater Treatment, and Effects on Physical, Microbiological, Organoleptic, and Nutritional Properties of Foods. Critical Reviews in Food Science and Nutrition, 2015, 55, 1147-1175.	5.4	64
572	Innovative Use of Membrane Contactor as Condenser for Heat Recovery in Carbon Capture. Environmental Science & Environmental S	4.6	47

#	Article	IF	CITATIONS
573	Membrane Distillation Crystallization Applied to Brine Desalination: A Hierarchical Design Procedure. Industrial & Design Procedure Chemistry Research, 2015, 54, 2776-2793.	1.8	35
574	Membrane distillation combined with an anaerobic moving bed biofilm reactor for treating municipal wastewater. Water Research, 2015, 71, 97-106.	5.3	67
575	Treatment of high salinity brines by direct contact membrane distillation: Effect of membrane characteristics and salinity. Chemosphere, 2015, 140, 143-149.	4.2	67
576	Evaluation of heat utilization in membrane distillation desalination system integrated with heat recovery. Desalination, 2015, 366, 80-93.	4.0	70
577	Breakthrough in a flat channel membrane microcontactor. Chemical Engineering Research and Design, 2015, 94, 98-104.	2.7	16
578	Modelling approaches in membrane distillation: A critical review. Separation and Purification Technology, 2015, 142, 48-64.	3.9	216
579	Performance modeling of direct contact membrane distillation (DCMD) seawater desalination process using a commercial composite membrane. Journal of Membrane Science, 2015, 478, 85-95.	4.1	89
580	Synoptic analysis of direct contact membrane distillation performance in Qatar: A case study. Desalination, 2015, 360, 97-107.	4.0	37
581	Membranes used in membrane distillation: preparation and characterization., 2015,, 317-359.		12
582	Modelling of pore wetting inÂmembrane distillation compared with pervaporation., 2015,, 385-413.		8
583	Next generation membranes forÂmembrane distillation andÂfuture prospects., 2015,, 415-447.		8
584	Nanoporous organosilica membrane for water desalination: Theoretical study on the water transport. Journal of Membrane Science, 2015, 482, 56-66.	4.1	33
585	Scaling control during membrane distillation of coal seam gas reverse osmosis brine. Journal of Membrane Science, 2015, 493, 673-682.	4.1	93
586	Superhydrophobic modification of PVDF–SiO ₂ electrospun nanofiber membranes for vacuum membrane distillation. RSC Advances, 2015, 5, 67962-67970.	1.7	97
587	Optimising thermal efficiency of direct contact membrane distillation by brine recycling for small-scale seawater desalination. Desalination, 2015, 374, 1-9.	4.0	102
588	Persian Gulf desalination using air gap membrane distillation: Numerical simulation and theoretical study. Desalination, 2015, 374, 92-100.	4.0	33
589	Driving force and activation energy in air-gap membrane distillation process. Chemical Papers, 2015, 69,	1.0	24
590	Beer dealcoholization using non-porous membrane distillation. Food and Bioproducts Processing, 2015, 94, 180-186.	1.8	57

#	Article	IF	CITATIONS
591	Theoretical and experimental analysis of multi-effect air gap membrane distillation process (ME-AGMD). Journal of Environmental Chemical Engineering, 2015, 3, 2127-2135.	3.3	44
592	Evaluation of air gap membrane distillation process running under sub-atmospheric conditions: Experimental and simulation studies. Journal of Membrane Science, 2015, 489, 73-80.	4.1	73
593	New insights into fabrication of hydrophobic/hydrophilic composite hollow fibers for direct contact membrane distillation. Chemical Engineering Science, 2015, 137, 79-90.	1.9	48
594	CF4 plasma modified highly interconnective porous polysulfone membranes for direct contact membrane distillation (DCMD). Desalination, 2015, 369, 105-114.	4.0	81
595	Engineering flat sheet microporous PVDF films for membrane distillation. Journal of Membrane Science, 2015, 492, 355-363.	4.1	118
596	Effect of Feed Temperature on the DCMD Performances in Treating Synthetic Textile Wastewater. Advanced Materials Research, 2015, 1113, 776-781.	0.3	4
597	Modification of polyvinyl chloride (PVC) membrane for vacuum membrane distillation (VMD) application. Desalination, 2015, 373, 58-70.	4.0	46
598	Arsenic Removal by Membrane Distillation. , 2015, , 179-270.		5
599	Impact of volatile fatty acid recovery on economics of ethanol production from brown algae via mixed alcohol synthesis. Chemical Engineering Research and Design, 2015, 98, 107-122.	2.7	29
600	Performance evaluation of novel PVDF–Cloisite 15A hollow fiber composite membranes for treatment of effluents containing dyes and salts using membrane distillation. RSC Advances, 2015, 5, 38011-38020.	1.7	35
601	Review of thermal efficiency and heat recycling in membrane distillation processes. Desalination, 2015, 367, 223-239.	4.0	122
602	Preparation of ultra-thin poly(vinyl alcohol) membranes supported on polysulfone hollow fiber and their application for production of pure water from seawater. Desalination, 2015, 367, 272-284.	4.0	60
603	Factors contributing to flux improvement in vacuum-enhanced direct contact membrane distillation. Desalination, 2015, 367, 197-205.	4.0	37
604	Removal of volatile organic compounds from aqueous solutions applying thermally driven membrane processes. 1. Thermopervaporation. Chemical Engineering and Processing: Process Intensification, 2015, 94, 62-71.	1.8	30
605	Modeling criteria for extraction regime transitions for microscale in-situ vapor extraction applications. International Journal of Heat and Mass Transfer, 2015, 84, 214-224.	2.5	1
606	Fundamentals of membrane distillation. , 2015, , 277-316.		16
607	A novel method to recover ammonia loss in ammoniaâ€based CO ₂ capture system: ammonia regeneration by vacuum membrane distillation. , 2015, 5, 487-498.		19
608	Optimization of flat sheet hydrophobic membranes synthesis via supercritical CO2 induced phase inversion for direct contact membrane distillation by using response surface methodology (RSM). Journal of Supercritical Fluids, 2015, 103, 105-114.	1.6	17

#	Article	IF	CITATIONS
609	High performance interlayer-free mesoporous cobalt oxide silica membranes for desalination applications. Desalination, 2015, 365, 308-315.	4.0	72
610	A review on the coupling of cooling, desalination and solar photovoltaic systems. Renewable and Sustainable Energy Reviews, 2015, 47, 703-717.	8.2	64
611	Fouling analysis and control in a DCMD process for SWRO brine. Desalination, 2015, 367, 21-27.	4.0	48
612	Desalination by Membrane Distillation using Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Electrospun Polyamide Fiber Membranes with Surface Fluorination Fluori	4.0	130
613	FAS Grafted Electrospun Poly(vinyl alcohol) Nanofiber Membranes with Robust Superhydrophobicity for Membrane Distillation. ACS Applied Materials & Samp; Interfaces, 2015, 7, 22652-22659.	4.0	93
614	Electrospun Superhydrophobic Organic/Inorganic Composite Nanofibrous Membranes for Membrane Distillation. ACS Applied Materials & Samp; Interfaces, 2015, 7, 21919-21930.	4.0	186
615	Molecular Dynamics Study of Carbon Nanotubes/Polyamide Reverse Osmosis Membranes: Polymerization, Structure, and Hydration. ACS Applied Materials & Samp; Interfaces, 2015, 7, 24566-24575.	4.0	58
616	Humic acid fouling mitigation by ultrasonic irradiation in membrane distillation process. Separation and Purification Technology, 2015, 154, 328-337.	3.9	41
617	Study on the heat and mass transfer in air-bubbling enhanced vacuum membrane distillation. Desalination, 2015, 373, 16-26.	4.0	38
618	Study on vacuum membrane distillation (VMD) using FEP hollow fiber membrane. Desalination, 2015, 375, 24-32.	4.0	41
619	Overview of Membrane-Assisted Crystallization Operations. Advances in Chemical and Process Engineering, 2015, , 1-37.	0.0	0
620	Membrane Materials. Advances in Chemical and Process Engineering, 2015, , 77-117.	0.0	0
621	Development of lower cost seawater desalination processes using nanofiltration technologies — A review. Desalination, 2015, 376, 109-116.	4.0	216
622	Ultrasonic assisted direct contact membrane distillation hybrid process for membrane scaling mitigation. Desalination, 2015, 375, 33-39.	4.0	37
623	Treatment of bentazon herbicide solutions by vacuum membrane distillation. Journal of Water Process Engineering, 2015, 8, e17-e22.	2.6	9
624	Prevention of surfactant wetting with agarose hydrogel layer for direct contact membrane distillation used in dyeing wastewater treatment. Journal of Membrane Science, 2015, 475, 511-520.	4.1	95
625	Thermoregulated gas transport through electrospun nanofiber membranes. Chemical Engineering Science, 2015, 123, 557-563.	1.9	9
626	Treatment of RO brine from CSG produced water by spiral-wound air gap membrane distillation — A pilot study. Desalination, 2015, 366, 121-129.	4.0	192

#	Article	IF	Citations
627	Potential of Membrane Distillation for Production of High Quality Fruit Juice Concentrate. Critical Reviews in Food Science and Nutrition, 2015, 55, 1098-1113.	5.4	31
628	Simulation of momentum, heat and mass transfer in direct contact membrane distillation: A computational fluid dynamics approach. Journal of Industrial and Engineering Chemistry, 2015, 21, 1379-1382.	2.9	43
629	Sweeping Gas Membrane Distillation (SGMD) as an Alternative for Integration of Bioethanol Processing: Study on a Commercial Membrane and Operating Parameters. Chemical Engineering Communications, 2015, 202, 457-466.	1.5	33
630	Membrane Distillation Bioreactor (MDBR) – A lower Green-House-Gas (GHG) option for industrial wastewater reclamation. Chemosphere, 2015, 140, 129-142.	4.2	48
631	Shale gas produced water treatment using innovative microbial capacitive desalination cell. Journal of Hazardous Materials, 2015, 283, 847-855.	6.5	93
632	Optimal design of thermal membrane distillation systems with heat integration with process plants. Applied Thermal Engineering, 2015, 75, 154-166.	3.0	25
633	Condensation, re-evaporation and associated heat transfer in membrane evaporation and sweeping gas membrane distillation. Journal of Membrane Science, 2015, 475, 445-454.	4.1	39
634	Synthesis of optimal thermal membrane distillation networks. AICHE Journal, 2015, 61, 448-463.	1.8	23
635	Membrane distillation: Recent developments and perspectives. Desalination, 2015, 356, 56-84.	4.0	833
636	A comprehensive review of vacuum membrane distillation technique. Desalination, 2015, 356, 1-14.	4.0	264
637	Nanofiber based triple layer hydro-philic/-phobic membrane - a solution for pore wetting in membrane distillation. Scientific Reports, 2014, 4, 6949.	1.6	65
638	Direct contact membrane distillation for anaerobic effluent treatment. Journal of Membrane Science, 2015, 475, 330-339.	4.1	78
639	Influence of salt concentration on DCMD performance for treatment of highly concentrated NaCl, KCl, MgCl2 and MgSO4 solutions. Desalination, 2015, 355, 110-117.	4.0	50
640	Membrane Distillation (MD)., 2015,, 61-99.		6
641	Fouling and its control in membrane distillation—A review. Journal of Membrane Science, 2015, 475, 215-244.	4.1	776
642	Characteristic and performance of polyvinylidene fluoride membranes blended with different additives in direct contact membrane distillation. Desalination and Water Treatment, 2015, 54, 3218-3226.	1.0	17
643	Productivity analysis of two spiral-wound membrane distillation prototypes coupled with solar energy. Desalination and Water Treatment, 2015, 55, 2777-2785.	1.0	37
644	Analysis of heat and mass transfer in vacuum membrane distillation for water desalination using computational fluid dynamics (CFD). Desalination and Water Treatment, 2015, 55, 39-52.	1.0	19

#	Article	IF	CITATIONS
645	Submerged membrane distillation for seawater desalination. Desalination and Water Treatment, 2015, 55, 2741-2746.	1.0	24
646	Scaling and fouling in membrane distillation for desalination applications: A review. Desalination, 2015, 356, 294-313.	4.0	607
647	Vacuum membrane distillation–crystallization process of high ammonium salt solutions. Desalination and Water Treatment, 2015, 55, 368-380.	1.0	11
648	Theoretical modeling of direct contact membrane distillation (DCMD): effects of operation parameters on flux. Desalination and Water Treatment, 2015, 56, 2013-2022.	1.0	10
649	Poly(vinylidene fluoride) (PVDF) membranes for fluid separation. Reactive and Functional Polymers, 2015, 86, 134-153.	2.0	112
650	Recent advances in membrane distillation processes: Membrane development, configuration design and application exploring. Journal of Membrane Science, 2015, 474, 39-56.	4.1	740
651	Modelisation of Membrane Distillation: Mass and Heat Transfer in Air Gap Membrane Distillation. Journal of Membrane Science & Technology, 2016, 6, .	0.5	2
653	Salinity gradient engines. , 2016, , 219-256.		5
654	Membrane Distillation., 2016,, 191-251.		12
655	Metal–Organic Framework-Functionalized Alumina Membranes for Vacuum Membrane Distillation. Water (Switzerland), 2016, 8, 586.	1.2	43
656	Treated Seawater as a Magnesium Source for Phosphorous Recovery from Wastewater—A Feasibility and Cost Analysis. Membranes, 2016, 6, 54.	1.4	14
657	Membrane distillation and membrane electrolysis of coal seam gas reverse osmosis brine for clean water extraction and NaOH production. Desalination, 2016, 397, 108-115.	4.0	42
658	Membrane scaling and prevention techniques during seawater desalination by air gap membrane distillation. Desalination, 2016, 397, 92-100.	4.0	68
659	Engineering Surface Energy and Nanostructure of Microporous Films for Expanded Membrane Distillation Applications. Environmental Science & Enchnology, 2016, 50, 8112-8119.	4.6	203
660	Preparation of Highly Oriented Polyethylene Precursor Film with Fibril and Its Influence on Microporous Membrane Formation. Macromolecular Chemistry and Physics, 2016, 217, 974-986.	1.1	12
661	Water desalination by air-gap membrane distillation using meltblown polypropylene nanofiber membrane. IOP Conference Series: Earth and Environmental Science, 2016, 36, 012032.	0.2	4
662	Experimental study of multi-effect membrane distillation (MEMD) for treatment of water containing inorganic salts. Water Practice and Technology, 2016, 11, 765-773.	1.0	4
664	Application of direct contact membrane distillation process to treat anaerobic digestate. Journal of Membrane Science, 2016, 511, 20-28.	4.1	59

#	Article	IF	CITATIONS
665	Evaluation of economic feasibility of reverse osmosis and membrane distillation hybrid system for desalination. Desalination and Water Treatment, 2016, 57, 24662-24673.	1.0	19
666	Composite Membrane with Underwater-Oleophobic Surface for Anti-Oil-Fouling Membrane Distillation. Environmental Science & Eamp; Technology, 2016, 50, 3866-3874.	4.6	190
667	High permeation flux polypropylene/ethylene vinyl acetate co-blending membranes via thermally induced phase separation for vacuum membrane distillation desalination. Desalination, 2016, 394, 44-55.	4.0	21
668	Calibration and analysis of a direct contact membrane distillation model using Monte Carlo filtering. Journal of Membrane Science, 2016, 515, 63-78.	4.1	22
669	Preparation of alumina membranes comprising a thin separation layer and a support with straight open pores for water desalination. Ceramics International, 2016, 42, 12427-12434.	2.3	47
670	Response surface modeling and optimization of direct contact membrane distillation for water desalination. Desalination, 2016, 394, 108-122.	4.0	45
671	Characterization and performance evaluation of commercially available hydrophobic membranes for direct contact membrane distillation. Desalination, 2016, 392, 63-73.	4.0	90
672	Performance improvement of membrane distillation of high-concentration saline solution with pulse feeding. Desalination and Water Treatment, 2016, 57, 21685-21695.	1.0	1
673	Effect of operating parameters and membrane characteristics on air gap membrane distillation performance for the treatment of highly saline water. Journal of Membrane Science, 2016, 512, 73-82.	4.1	144
674	Development of Omniphobic Desalination Membranes Using a Charged Electrospun Nanofiber Scaffold. ACS Applied Materials & Scaffold. ACS Applied Materials & Scaffold. 8, 11154-11161.	4.0	218
675	Theoretical and Experimental Studies of a Compact Multiunit Direct Contact Membrane Distillation Module. Industrial & Engineering Chemistry Research, 2016, 55, 5385-5394.	1.8	2
676	A novel integrated thermal-/membrane-based solar energy-driven hybrid desalination system: Concept description and simulation results. Water Research, 2016, 100, 7-19.	5.3	39
677	Performance evaluation of hollow fiber air gap membrane distillation module with multiple cooling channels. Desalination, 2016, 385, 58-68.	4.0	22
678	Influence of microporous membrane properties on the desalination performance in direct contact membrane distillation. Journal of Membrane Science, 2016, 513, 280-293.	4.1	56
679	Tri-bore PVDF hollow fibers with a super-hydrophobic coating for membrane distillation. Journal of Membrane Science, 2016, 514, 165-175.	4.1	95
680	Evaluating energy consumption of air gap membrane distillation for seawater desalination at pilot scale level. Separation and Purification Technology, 2016, 166, 55-62.	3.9	144
681	Robust carbon nanotube membranes directly grown on Hastelloy substrates and their potential application for membrane distillation. Carbon, 2016, 106, 243-251.	5.4	24
682	Synthesis, characterization, and electroanalytical studies of Pb2+-selective polypyrrole-Zr(IV) phosphate ion exchange membrane. Journal of Solid State Electrochemistry, 2016, 20, 2079-2091.	1.2	9

#	Article	IF	CITATIONS
685	Evaluation of commercial PTFE membranes for desalination of brine water through vacuum membrane distillation. Chemical Engineering and Processing: Process Intensification, 2016, 110, 52-63.	1.8	26
686	Solar-driven membrane distillation demonstration in Leupp, Arizona. Reviews on Environmental Health, 2016, 31, 79-83.	1.1	5
687	Electrical equivalent thermal network for direct contact membrane distillation modeling and analysis. Journal of Process Control, 2016, 47, 87-97.	1.7	11
688	A critical review of membrane crystallization for the purification of water and recovery of minerals. Reviews in Environmental Science and Biotechnology, 2016, 15, 411-439.	3.9	61
689	Principles and applications of direct contact membrane distillation (DCMD): A comprehensive review. Desalination, 2016, 398, 222-246.	4.0	292
690	Effect of Ethylene Glycol on Polymeric Membrane Fabrication for Membrane Distillation. Key Engineering Materials, 0, 701, 250-254.	0.4	2
693	How To Optimize the Membrane Properties for Membrane Distillation: A Review. Industrial & Engineering Chemistry Research, 2016, 55, 9333-9343.	1.8	211
694	Electrospun nanofiber membranes incorporating fluorosilane-coated TiO2 nanocomposite for direct contact membrane distillation. Journal of Membrane Science, 2016, 520, 145-154.	4.1	161
695	A systematic study of the impact of hydrophobicity on the wetting of MD membranes. Journal of Membrane Science, 2016, 520, 850-859.	4.1	69
696	Hydrophobic Al ₂ O ₃ Membrane for Sucrose Concentration via Vacuum Membrane Distillation System. Journal of Chemical Engineering of Japan, 2016, 49, 915-919.	0.3	5
697	Nanostructured PVDF membrane for MD application by an O2 and CF4 plasma treatment. Desalination, 2016, 399, 178-184.	4.0	25
698	Modeling SO2 absorption into water accompanied with reversible reaction in a hollow fiber membrane contactor. Chemical Engineering Science, 2016, 156, 136-146.	1.9	29
699	How to select a membrane distillation configuration? Process conditions and membrane influence unraveled. Desalination, 2016, 399, 105-115.	4.0	73
700	Nonlinear observer-based Lyapunov boundary control of distributed heat transfer mechanisms for membrane distillation plant. Journal of Process Control, 2016, 47, 78-86.	1.7	11
701	Simulation study of flat-sheet air gap membrane distillation modules coupled with an evaporative crystallizer for zero liquid discharge water desalination. Applied Thermal Engineering, 2016, 108, 486-501.	3.0	43
702	Selective hydrophilization of the permeate surface to enhance flux in membrane distillation. Separation and Purification Technology, 2016, 170, 427-433.	3.9	22
703	Experimental investigation of nanofibrous poly(vinylidene fluoride) membranes for desalination through air gap membrane distillation process. Korean Journal of Chemical Engineering, 2016, 33, 2953-2960.	1.2	36
704	A novel multi-stage direct contact membrane distillation module: Design, experimental and theoretical approaches. Water Research, 2016, 107, 47-56.	5.3	72

#	ARTICLE	IF	CITATIONS
705	Mixed Matrix Carbon Molecular Sieve and Alumina (CMS-Al2O3) Membranes. Scientific Reports, 2016, 6, 30703.	1.6	30
706	Physikalische Verfahren zur Entalkoholisierung verschiedener GetrĤkematrizes und deren Einfluss auf qualitäsrelevante Merkmale. Chemie-Ingenieur-Technik, 2016, 88, 1911-1928.	0.4	6
707	Materials for Water Remediation (Membranes). , 2016, , 37-74.		0
708	<i>Inâ€situ</i> crossâ€linked PVDF membranes with enhanced mechanical durability for vacuum membrane distillation. AICHE Journal, 2016, 62, 4013-4022.	1.8	26
709	Thin film composite membranes combining carbon nanotube intermediate layer and microfiltration support for high nanofiltration performances. Journal of Membrane Science, 2016, 515, 238-244.	4.1	239
710	Membrane distillation for concentration of hypersaline brines from the Great Salt Lake: Effects of scaling and fouling on performance, efficiency, and salt rejection. Separation and Purification Technology, 2016, 170, 78-91.	3.9	92
711	Recovery and development of correlations for heat and mass transfer in vacuum membrane distillation for desalination. Desalination and Water Treatment, 2016, 57, 26886-26898.	1.0	10
712	Desalination by Membrane Distillation. , 2016, , 77-109.		11
713	Electrospun polystyrene nanofibrous membranes for direct contact membrane distillation. Journal of Membrane Science, 2016, 515, 86-97.	4.1	114
714	Tailoring surface charge and wetting property for robust oil-fouling mitigation in membrane distillation. Journal of Membrane Science, 2016, 516, 113-122.	4.1	119
715	Numerical simulation of 3D hollow-fiber vacuum membrane distillation by computational fluid dynamics. Chemical Engineering Science, 2016, 152, 172-185.	1.9	40
716	Understanding wetting phenomena in membrane distillation and how operational parameters can affect it. Journal of Membrane Science, 2016, 515, 163-174.	4.1	119
717	Structural evolution of nickel oxide silica sol-gel for the preparation of interlayer-free membranes. Journal of Non-Crystalline Solids, 2016, 447, 9-15.	1.5	40
718	Novel method for the design and assessment of direct contact membrane distillation modules. Journal of Membrane Science, 2016, 513, 260-269.	4.1	15
719	The Global Rise of Zero Liquid Discharge for Wastewater Management: Drivers, Technologies, and Future Directions. Environmental Science & Environmenta	4.6	682
720	Review of membrane distillation process for water purification. Desalination and Water Treatment, 2016, 57, 2959-2981.	1.0	78
721	Theoretical and experimental studies of immediate assisted solar air gap membrane distillation systems. Desalination and Water Treatment, 2016, 57, 3846-3860.	1.0	8
722	A review on fouling of membrane distillation. Desalination and Water Treatment, 2016, 57, 10052-10076.	1.0	83

#	ARTICLE	IF	CITATIONS
723	Mathematical and CFD modeling of vacuum membrane distillation for desalination. Desalination and Water Treatment, 2016, 57, 11956-11971.	1.0	22
724	Vacuum enhanced direct contact membrane distillation for oil field produced water desalination: specific energy consumption and energy efficiency. Desalination and Water Treatment, 2016, 57, 11945-11955.	1.0	8
725	Effect of humic-acid fouling on membrane distillation. Journal of Membrane Science, 2016, 504, 263-273.	4.1	41
726	Membrane distillation by novel hydrogel composite membranes. Journal of Membrane Science, 2016, 504, 220-229.	4.1	34
727	Theoretical and experimental studies of laminar flow hollow fiber direct contact membrane distillation modules. Desalination, 2016, 378, 108-116.	4.0	9
728	Comparison of hollow fiber module designs in membrane distillation process employed lumen-side and shell-side feed. Desalination and Water Treatment, 2016, 57, 7700-7710.	1.0	4
729	Air gap membrane distillation for enrichment of H218O isotopomers in natural water using poly(vinylidene fluoride) nanofibrous membrane. Chemical Engineering and Processing: Process Intensification, 2016, 100, 26-36.	1.8	47
730	Energy efficiency of permeate gap and novel conductive gap membrane distillation. Journal of Membrane Science, 2016, 502, 171-178.	4.1	119
731	Morphology-properties relationship of gas plasma treated hydrophobic meso-porous membranes and their improved performance for desalination by membrane distillation. Applied Surface Science, 2016, 363, 273-285.	3.1	24
732	A novel plasma-induced surface hydrophobization strategy for membrane distillation: Etching, dipping and grafting. Journal of Membrane Science, 2016, 499, 544-554.	4.1	58
733	Energy saving potential of hybrid membrane and distillation process in butanol purification: Experiments, modelling and simulation. Chemical Engineering and Processing: Process Intensification, 2016, 104, 201-211.	1.8	32
734	Preparation and properties of iPP hollow fiber membranes for air gap membrane distillation. Desalination and Water Treatment, 2016, 57, 23546-23555.	1.0	7
735	Desalination by pervaporation: A review. Desalination, 2016, 387, 46-60.	4.0	232
736	A numerical approach to module design for crossflow vacuum membrane distillation systems. Journal of Membrane Science, 2016, 510, 489-496.	4.1	44
737	Dynamic performance of vacuum membrane distillation system. Desalination and Water Treatment, 2016, 57, 23196-23205.	1.0	3
738	Desalination and concentration of saline aqueous solutions up to supersaturation by air gap membrane distillation and crystallization fouling. Desalination, 2016, 393, 39-51.	4.0	43
739	Exploration and optimization of two-stage vacuum membrane distillation process for the treatment of saline wastewater produced by natural gas exploitation. Desalination, 2016, 385, 117-125.	4.0	38
740	Bacterial Nanocellulose Aerogel Membranes: Novel High-Porosity Materials for Membrane Distillation. Environmental Science and Technology Letters, 2016, 3, 85-91.	3.9	79

#	ARTICLE	IF	Citations
741	Environmental Applications of Interfacial Materials with Special Wettability. Environmental Science &	4.6	273
742	Study of the rectangular cross-flow flat-sheet membrane module for desalination by vacuum membrane distillation. Chemical Engineering and Processing: Process Intensification, 2016, 102, 169-185.	1.8	16
743	A study of membrane distillation and crystallization for lithium recovery from high-concentrated aqueous solutions. Journal of Membrane Science, 2016, 505, 167-173.	4.1	158
744	Development of Ethenylene-Bridged Organosilica Membranes for Desalination Applications. Industrial & Lamp; Engineering Chemistry Research, 2016, 55, 2183-2190.	1.8	32
745	Dynamic modeling and experimental validation for direct contact membrane distillation (DCMD) process. Desalination, 2016, 384, 1-11.	4.0	64
746	Assessment of alternative draw solutions for optimized performance of a closed-loop osmotic heat engine. Journal of Membrane Science, 2016, 504, 162-175.	4.1	42
747	Highly porous PVDF hollow fiber membranes for VMD application by applying a simultaneous co-extrusion spinning process. Journal of Membrane Science, 2016, 505, 82-91.	4.1	36
748	Preparation of PVDF-CTFE hydrophobic membranes for MD application: Effect of LiCl-based mixed additives. Journal of Membrane Science, 2016, 506, 71-85.	4.1	56
749	How To Functionalize Ceramics by Perfluoroalkylsilanes for Membrane Separation Process? Properties and Application of Hydrophobized Ceramic Membranes. ACS Applied Materials & Samp; Interfaces, 2016, 8, 7564-7577.	4.0	56
750	Critical review of membrane distillation performance criteria. Desalination and Water Treatment, 2016, 57, 20093-20140.	1.0	58
751	Multistage vacuum membrane distillation (MSVMD) systems for high salinity applications. Journal of Membrane Science, 2016, 497, 128-141.	4.1	92
752	Amphiphobic PVDF composite membranes for anti-fouling direct contact membrane distillation. Journal of Membrane Science, 2016, 505, 61-69.	4.1	141
753	Superhydrophobic nanofiber membrane containing carbon nanotubes for high-performance direct contact membrane distillation. Journal of Membrane Science, 2016, 502, 158-170.	4.1	320
7 54	Flux enhancement in membrane distillation by incorporating AC particles into PVDF polymer matrix. Journal of Membrane Science, 2016, 500, 46-54.	4.1	47
755	Solar-driven flash vaporization membrane distillation for arsenic removal from groundwater: Experimental investigation and analysis of performance parameters. Chemical Engineering and Processing: Process Intensification, 2016, 99, 51-57.	1.8	31
756	Exploring the potential of commercial polyethylene membranes for desalination by membrane distillation. Journal of Membrane Science, 2016, 497, 239-247.	4.1	136
757	Surface treatment of polyethersulfone membranes for applying in desalination by direct contact membrane distillation. Desalination, 2016, 377, 99-107.	4.0	51
758	Removal of volatile organic compounds from aqueous solutions applying thermally driven membrane processes. 2. Air gap membrane distillation. Journal of Membrane Science, 2016, 499, 245-256.	4.1	40

#	ARTICLE	IF	CITATIONS
759	Computational Fluid Dynamic (CFD) opportunities applied to the membrane distillation process: State-of-the-art and perspectives. Desalination, 2016, 377, 73-90.	4.0	116
760	Membrane materials for water purification: design, development, and application. Environmental Science: Water Research and Technology, 2016, 2, 17-42.	1.2	494
761	A stepwise model of direct contact membrane distillation for application to large-scale systems: Experimental results and model predictions. Desalination, 2016, 378, 14-27.	4.0	52
762	Study on the heat and mass transfer in AGMD module with latentÂheat recovery. Desalination and Water Treatment, 2016, 57, 15276-15284.	1.0	11
763	A new vacuum membrane distillation system using an aspirator: concept modeling and optimization. Desalination and Water Treatment, 2016, 57, 12915-12928.	1.0	9
764	Study on the fabrication and properties of FEP/SiO ₂ hybrid flat-sheet membrane and its application in VMD. Desalination and Water Treatment, 2016, 57, 14908-14918.	1.0	3
765	Evaluation of membrane-based desalting processes for RO brine treatment. Desalination and Water Treatment, 2016, 57, 7432-7439.	1.0	12
766	CFD simulation of water transport through porous membrane evaporators. Desalination and Water Treatment, 2016, 57, 10515-10522.	1.0	O
767	Electrospun dual-layer nonwoven membrane for desalination by air gap membrane distillation. Desalination, 2017, 403, 187-198.	4.0	133
768	Assessment of direct contact membrane distillation under different configurations, velocities and membrane properties. Applied Energy, 2017, 185, 2058-2073.	5.1	52
769	Characteristics of membrane foulants at different degrees of SWRO brine concentration by membrane distillation. Desalination, 2017, 409, 7-20.	4.0	36
770	Modeling biosolids drying through a laminated hydrophobic membrane. Water Research, 2017, 111, 244-253.	5.3	7
771	Combination of photocatalytic and membrane distillation hybrid processes for reactive dyes treatment. Environmental Technology (United Kingdom), 2017, 38, 2743-2751.	1.2	40
772	Desalination Performances of Large Hollow Fiber-Based DCMD Devices. Industrial & Engineering Chemistry Research, 2017, 56, 1594-1603.	1.8	4
773	Crystallization techniques in wastewater treatment: An overview of applications. Chemosphere, 2017, 173, 474-484.	4.2	128
774	Theoretical framework for predicting inorganic fouling in membrane distillation and experimental validation with calcium sulfate. Journal of Membrane Science, 2017, 528, 381-390.	4.1	78
775	Simulation of heat and mass transfer with cross-flow hollow fiber vacuum membrane distillation: The influence of fiber arrangement. Chemical Engineering Research and Design, 2017, 119, 12-22.	2.7	20
776	Membrane fouling and wetting in membrane distillation and their mitigation by novel membranes with special wettability. Water Research, 2017, 112, 38-47.	5.3	248

#	Article	IF	Citations
777	Statistical theory of vapor transport through hollow fiber membranes in vacuum membrane distillation: Effusion analogy. Desalination, 2017, 410, 77-90.	4.0	3
778	Removal of strontium ions from simulated radioactive wastewater by vacuum membrane distillation. Annals of Nuclear Energy, 2017, 103, 363-368.	0.9	62
779	Fluoride removal from groundwater using direct contact membrane distillation (DCMD) and vacuum enhanced DCMD (VEDCMD). Separation and Purification Technology, 2017, 180, 125-132.	3.9	31
781	Coaxially electrospun super-amphiphobic silica-based membrane for anti-surfactant-wetting membrane distillation. Journal of Membrane Science, 2017, 531, 122-128.	4.1	100
782	Wetting prevention in membrane distillation through superhydrophobicity and recharging an air layer on the membrane surface. Journal of Membrane Science, 2017, 530, 42-52.	4.1	110
783	Conversion of saline water and dissolved carbon dioxide into value-added chemicals by electrodialysis. Journal of CO2 Utilization, 2017, 19, 177-184.	3.3	12
784	Separation of cesium ions from aqueous solution by vacuum membrane distillation process. Progress in Nuclear Energy, 2017, 98, 293-300.	1.3	54
785	Anti-wetting behavior of negatively charged superhydrophobic PVDF membranes in direct contact membrane distillation of emulsified wastewaters. Journal of Membrane Science, 2017, 535, 230-238.	4.1	126
786	Techno-economic assessment of a closed-loop osmotic heat engine. Journal of Membrane Science, 2017, 535, 178-187.	4.1	37
787	Separation of fermentation products from ABE mixtures by perstraction using hydrophobic ionic liquids as extractants. Journal of Membrane Science, 2017, 537, 337-343.	4.1	44
788	Spacer optimization strategy for direct contact membrane distillation: Shapes, configurations, diameters, and numbers of spacer filaments. Desalination, 2017, 417, 9-18.	4.0	49
789	Understanding the impact of membrane properties and transport phenomena on the energetic performance of membrane distillation desalination. Journal of Membrane Science, 2017, 539, 458-474.	4.1	100
790	Sustainable Membrane Distillation Coupled with Solar Pond. Energy Procedia, 2017, 110, 414-419.	1.8	39
791	Fabrication of hierarchical poly (vinylidene fluoride) micro/nano-composite membrane with anti-fouling property for membrane distillation. Journal of Membrane Science, 2017, 535, 258-267.	4.1	59
792	Control of protein (BSA) fouling by ultrasonic irradiation during membrane distillation process. Separation and Purification Technology, 2017, 175, 287-297.	3.9	47
793	Study of advancement to higher temperature membrane distillation. Desalination, 2017, 419, 88-100.	4.0	40
794	Assessment of air-gap membrane distillation with hydrophobic porous membranes utilized for damaged paintings humidification. Journal of Membrane Science, 2017, 538, 1-8.	4.1	24
795	PVDF hollow fibers with novel sandwich structure and superior wetting resistance for vacuum membrane distillation. Desalination, 2017, 417, 94-101.	4.0	41

#	Article	IF	CITATIONS
796	Water Treatment by Membrane-Separation Technology. , 2017, , 173-242.		12
797	Nanophotonics-enabled solar membrane distillation for off-grid water purification. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6936-6941.	3.3	348
798	Using green solvent, triethyl phosphate (TEP), to fabricate highly porous PVDF hollow fiber membranes for membrane distillation. Journal of Membrane Science, 2017, 539, 295-304.	4.1	95
799	Numerical modeling and economic evaluation of two multi-effect vacuum membrane distillation (ME-VMD) processes. Desalination, 2017, 419, 39-48.	4.0	17
800	Haze particles removal and thermally induced membrane dehumidification system. Separation and Purification Technology, 2017, 185, 24-32.	3.9	9
801	Characterizing convective heat transfer coefficients in membrane distillation cassettes. Journal of Membrane Science, 2017, 538, 108-121.	4.1	23
802	Novel PVDF membranes comprising n-butylamine functionalized graphene oxide for direct contact membrane distillation. Journal of Membrane Science, 2017, 539, 34-42.	4.1	103
803	Experimental assessment of a hydrophobic membrane-based desorber/condenser with H2O/LiBr mixture for absorption systems. Experimental Thermal and Fluid Science, 2017, 88, 145-159.	1.5	44
804	Membrane distillation: Perspectives for sustainable and improved desalination. Renewable and Sustainable Energy Reviews, 2017, 80, 238-259.	8.2	348
805	Performance of PVDF flat membranes and hollow fibers in desalination by direct contact membrane distillation at high temperatures. Separation and Purification Technology, 2017, 187, 264-273.	3.9	17
806	Poly(vinyl alcohol) incorporated with surfactant based electrospun nanofibrous layer onto polypropylene mat for improved desalination by using membrane distillation. Desalination, 2017, 414, 18-27.	4.0	45
807	Dehydration of diethylene glycol using a vacuum membrane distillation process. Journal of the Taiwan Institute of Chemical Engineers, 2017, 74, 233-237.	2.7	6
808	Seawater desalination with solar-energy-integrated vacuum membrane distillation system. Journal of Water Reuse and Desalination, 2017, 7, 16-24.	1.2	6
809	Membrane and spacer evaluation with respect to future module design in membrane distillation. Desalination, 2017, 413, 154-167.	4.0	38
810	Mass transfer in hollow fiber vacuum membrane distillation process based on membrane structure. Journal of Membrane Science, 2017, 532, 115-123.	4.1	21
811	Anti-fouling membranes by manipulating surface wettability and their anti-fouling mechanism. Desalination, 2017, 413, 127-135.	4.0	108
812	A review on membrane applications and transport mechanisms in vacuum membrane distillation. Reviews in Chemical Engineering, 2017, 34, 73-106.	2.3	21
813	Integrating membrane distillation with waste heat from natural gas compressor stations for produced water treatment in Pennsylvania. Desalination, 2017, 413, 144-153.	4.0	99

#	Article	IF	CITATIONS
814	Membrane synthesis for membrane distillation: A review. Separation and Purification Technology, 2017, 182, 36-51.	3.9	318
815	Mass and heat transfer study in osmotic membrane distillation-crystallization for CO2 valorization as sodium carbonate. Separation and Purification Technology, 2017, 176, 173-183.	3.9	28
816	Liquid desiccant lithium chloride regeneration by membrane distillation for air conditioning. Separation and Purification Technology, 2017, 177, 121-128.	3.9	65
817	Heat extraction and brine management from salinity gradient solar pond and membrane distillation. Chemical Engineering Research and Design, 2017, 118, 226-237.	2.7	34
818	Selecting membranes for treating hydraulic fracturing produced waters by membrane distillation. Separation Science and Technology, 2017, 52, 266-275.	1.3	20
819	Study of mass transfer coefficient in membrane desalination. Desalination, 2017, 407, 46-51.	4.0	42
820	The impact of low-surface-energy functional groups on oil fouling resistance in membrane distillation. Journal of Membrane Science, 2017, 527, 68-77.	4.1	58
821	Photothermal nanocomposite membranes for direct solar membrane distillation. Journal of Materials Chemistry A, 2017, 5, 23712-23719.	5.2	129
822	Novel Janus Membrane for Membrane Distillation with Simultaneous Fouling and Wetting Resistance. Environmental Science & Envir	4.6	227
823	Fermentative energy conversion: Renewable carbon source to biofuels (ethanol) using Saccharomyces cerevisiae and downstream purification through solar driven membrane distillation and nanofiltration. Energy Conversion and Management, 2017, 150, 545-557.	4.4	35
824	Probing Pore Wetting in Membrane Distillation Using Impedance: Early Detection and Mechanism of Surfactant-Induced Wetting. Environmental Science and Technology Letters, 2017, 4, 505-510.	3.9	79
825	Membrane Distillation in Desalination and Water Treatment. Green Chemistry and Sustainable Technology, 2017, , 201-219.	0.4	0
826	Removal of Toxic Compounds from Water by Membrane Distillation (Case Study on Arsenic). Green Chemistry and Sustainable Technology, 2017, , 243-263.	0.4	0
827	Recovery of boric acid from the simulated radioactive wastewater by vacuum membrane distillation crystallization. Annals of Nuclear Energy, 2017, 110, 1148-1155.	0.9	36
828	Laminated PTFE membranes to enhance the performance in direct contact membrane distillation for high salinity solution. Desalination, 2017, 424, 140-148.	4.0	35
829	Energy Efficiency and Performance Limiting Effects in Thermo-Osmotic Energy Conversion from Low-Grade Heat. Environmental Science & Encology, 2017, 51, 12925-12937.	4.6	82
830	A theoretical approach of a vacuum multi-effect membrane distillation system. Desalination, 2017, 422, 25-41.	4.0	29
831	Acid Rock Drainage Treatment Using Membrane Distillation: Impacts of Chemical-Free Pretreatment on Scale Formation, Pore Wetting, and Product Water Quality. Environmental Science & Echnology, 2017, 51, 11928-11934.	4.6	38

#	Article	IF	CITATIONS
832	TiO 2 -FTCS modified superhydrophobic PVDF electrospun nanofibrous membrane for desalination by direct contact membrane distillation. Desalination, 2017, 423, 1-11.	4.0	80
833	Novel α-Si3N4 planar nanowire superhydrophobic membrane prepared through in-situ nitridation of silicon for membrane distillation. Journal of Membrane Science, 2017, 543, 98-105.	4.1	37
834	Reversing membrane wetting in membrane distillation: comparing dryout to backwashing with pressurized air. Environmental Science: Water Research and Technology, 2017, 3, 930-939.	1.2	47
835	Bioinspired silica-based superhydrophobic materials. Applied Surface Science, 2017, 426, 1-18.	3.1	40
836	Methodical design and operation of membrane distillation plants for desalination. Chemical Engineering Research and Design, 2017, 125, 265-281.	2.7	19
837	Stabilization Mechanism of Micropore in Highâ€Density Polyethylene: A Comparison between Thermal and Mechanical Pathways. Macromolecular Materials and Engineering, 2017, 302, 1700178.	1.7	10
838	Membrane-based zero liquid discharge: Myth or reality?. Journal of the Taiwan Institute of Chemical Engineers, 2017, 80, 192-202.	2.7	95
839	Physical Methods for Dealcoholization of Beverage Matrices and their Impact on Quality Attributes. ChemBioEng Reviews, 2017, 4, 310-326.	2.6	41
840	Membrane distillation research & implementation: Lessons from the past five decades. Separation and Purification Technology, 2017, 189, 108-127.	3.9	174
841	Evaluation of the antifouling and photocatalytic properties of novel poly(vinylidene fluoride) membranes with a reduced graphene oxide–Bi ₂ WO ₆ active layer. Journal of Applied Polymer Science, 2017, 134, 45426.	1.3	22
843	Biofouling of membrane distillation, forward osmosis and pressure retarded osmosis: Principles, impacts and future directions. Journal of Membrane Science, 2017, 542, 378-398.	4.1	137
844	Assessing the performance of solar thermal driven membrane distillation for seawater desalination by computer simulation. Journal of Membrane Science, 2017, 542, 133-142.	4.1	54
845	Integration of membrane distillation into traditional salt farming method: Process development and modelling. AIP Conference Proceedings, 2017, , .	0.3	3
846	Evaluation of Thermal Efficiency of Membrane Distillation under Conductive Layer Integration. Energy Procedia, 2017, 105, 4935-4942.	1.8	2
847	Vacuum film etching effect of carbon alumina mixed matrix membranes. Journal of Membrane Science, 2017, 541, 53-61.	4.1	13
848	Experimental and theoretical investigations on water desalination using direct contact membrane distillation. Desalination, 2017, 404, 22-34.	4.0	156
849	Energy saving potential of emerging technologies in milk powder production. Trends in Food Science and Technology, 2017, 60, 31-42.	7.8	38
850	Analysis and design of direct contact membrane distillation. Journal of Membrane Science, 2017, 523, 301-316.	4.1	19

#	Article	IF	CITATIONS
851	Preparation, characterization, and applications of electrospun ultrafine fibrous PTFE porous membranes. Journal of Membrane Science, 2017, 523, 317-326.	4.1	107
853	Zero thermal input membrane distillation, a zero-waste and sustainable solution for freshwater shortage. Applied Energy, 2017, 187, 910-928.	5.1	35
854	Water desalination using visible light by disperse red 1 modified PTFE membrane. Desalination, 2017, 404, 79-86.	4.0	40
855	Effects of membrane structure and operational variables on membrane distillation performance. Journal of Membrane Science, 2017, 524, 87-96.	4.1	39
856	Membrane distillation against a pressure difference. Journal of Membrane Science, 2017, 524, 151-162.	4.1	25
857	Membrane-assisted crystallization: Membrane characterization, modelling and experiments. Chemical Engineering Science, 2017, 158, 277-286.	1.9	25
858	Membrane distillation (MD) integrated with crystallization (MDC) for shale gas produced water (SGPW) treatment. Desalination, 2017, 403, 172-178.	4.0	110
859	Air gap membrane distillation: A detailed study of high saline solution. Desalination, 2017, 403, 179-186.	4.0	75
860	Analysis of direct contact membrane distillation based on a lumped-parameter dynamic predictive model. Desalination, 2017, 402, 50-61.	4.0	39
861	The effects of iCVD film thickness and conformality on the permeability and wetting of MD membranes. Journal of Membrane Science, 2017, 523, 470-479.	4.1	43
862	Open-source predictive simulators for scale-up of direct contact membrane distillation modules for seawater desalination. Desalination, 2017, 402, 72-87.	4.0	35
863	Hydrophobic/hydrophilic PVDF/Ultem® dual-layer hollow fiber membranes with enhanced mechanical properties for vacuum membrane distillation. Journal of Membrane Science, 2017, 523, 103-110.	4.1	112
864	Janus hollow fiber membrane with a mussel-inspired coating on the lumen surface for direct contact membrane distillation. Journal of Membrane Science, 2017, 523, 1-7.	4.1	110
865	Interlayer-free hybrid carbon-silica membranes for processing brackish to brine salt solutions by pervaporation. Journal of Membrane Science, 2017, 523, 197-204.	4.1	59
866	Performance study of a pilot-scale multi-effect vacuum membrane distillation desalination plant. Desalination, 2017, 403, 199-207.	4.0	26
867	Full-scale direct contact membrane distillation (DCMD) model including membrane compaction effects. Journal of Membrane Science, 2017, 524, 245-256.	4.1	45
868	Low Energy Membrane Distillation: A Numerical Study on The Role of Conductive Spacers. Energy Procedia, 2017, 142, 4056-4063.	1.8	8
869	Theoretical Analysis of Pressure Retarded Membrane Distillation (PRMD) Process for Simultaneous Production of Water and Electricity. Industrial & Engineering Chemistry Research, 2017, 56, 14888-14901.	1.8	27

#	Article	IF	CITATIONS
870	Electrospun porous poly(tetrafluoroethylene- <i>co</i> -hexafluoropropylene- <i>co</i> -vinylidene) Tj ETQq0 0 0	rgBŢ.¦Ove	rlock 10 Tf 50
871	Distillate flux enhancement in the air gap membrane distillation with inserting carbon-fiber spacers. Separation Science and Technology, 2017, 52, 2817-2828.	1.3	9
872	1.7 PVDF Hollow Fibers Membranes. , 2017, , 137-189.		10
873	Membrane-Based Desalination Technology for Energy Efficiency and Cost Reduction., 2017,, 31-74.		2
874	Thermodynamics, Exergy, and Energy Efficiency in Desalination Systems., 2017, , 127-206.		10
875	Fouling in Membrane Distillation, Osmotic Distillation and Osmotic Membrane Distillation. Applied Sciences (Switzerland), 2017, 7, 334.	1.3	73
876	Increasing the Performance of Vacuum Membrane Distillation Using Micro-Structured Hydrophobic Aluminum Hollow Fiber Membranes. Applied Sciences (Switzerland), 2017, 7, 357.	1.3	24
877	Functionalization of a Hydrophilic Commercial Membrane Using Inorganic-Organic Polymers Coatings for Membrane Distillation. Applied Sciences (Switzerland), 2017, 7, 637.	1.3	9
878	Design of Membrane-Separation Systems., 2017,, 507-531.		0
879	Emerging Technologies for Wastewater Treatment. , 2017, , 93-179.		1
880	3.11 Membrane Crystallization Technology. , 2017, , 297-317.		3
881	3.10 Membrane Distillation and Osmotic Distillation. , 2017, , 282-296.		5
882	Preparation of super-hydrophobic PVDF membrane for MD purpose via hydroxyl induced crystallization-phase inversion. Journal of Membrane Science, 2017, 543, 288-300.	4.1	62
883	4.8 New Membrane Distillation Integrated Systems. , 2017, , 150-163.		1
884	Membrane Contactor., 2017,, 335-356.		O
885	Modeling and multi-objective optimization of vacuum membrane distillation for enhancement of water productivity and thermal efficiency in desalination. Chemical Engineering Research and Design, 2018, 132, 697-713.	2.7	19
886	Atmospheric plasma coatings for membrane distillation. Journal of Membrane Science, 2018, 554, 175-183.	4.1	16
887	Metal–Organic Frameworks Supported on Nanofiber for Desalination by Direct Contact Membrane Distillation. ACS Applied Materials & Samp; Interfaces, 2018, 10, 11251-11260.	4.0	96

#	Article	IF	CITATIONS
888	Preparation of high-efficiency ceramic planar membrane and its application for water desalination. Journal of Advanced Ceramics, 2018, 7, 117-123.	8.9	41
889	Air gap and water gap multistage membrane distillation for water desalination. Desalination, 2018, 437, 175-183.	4.0	47
890	Novel technique for fabrication of electrospun membranes with high hydrophobicity retention. Desalination, 2018, 436, 98-106.	4.0	13
891	Boron removal from geothermal water by air gap membrane distillation. Desalination, 2018, 433, 141-150.	4.0	57
892	Elucidating the impact of temperature gradients across membranes during forward osmosis: Coupling heat and mass transfer models for better prediction of real osmotic systems. Journal of Membrane Science, 2018, 553, 189-199.	4.1	35
893	The Effect of Voltage Charging on the Transport Properties of Gold Nanotube Membranes. Small, 2018, 14, 1703290.	5.2	8
894	Numerical simulation for the effect of vaporization intensity in membrane on the performance of PEM fuel cell. Numerical Heat Transfer; Part A: Applications, 2018, 73, 177-194.	1.2	8
895	On boundary layers and the attenuation of driving forces in forward osmosis and other membrane processes. Desalination, 2018, 429, 167-174.	4.0	24
896	Testing of three different PVDF membranes in membrane assisted-crystallization process: Influence of membrane structural-properties on process performance. Desalination, 2018, 440, 68-77.	4.0	31
897	Experimental and theoretical investigation of air gap membrane distillation process for water desalination. Chemical Engineering Research and Design, 2018, 130, 95-108.	2.7	33
898	Membrane desalination using surface fluorination treated electrospun polyacrylonitrile membranes with nonwoven structure and quasi-parallel fibrous structure. Desalination, 2018, 429, 70-75.	4.0	35
899	Polyoxadiazole hollow fibers for produced water treatment by direct contact membrane distillation. Desalination, 2018, 432, 32-39.	4.0	38
901	Hybrid vinyl silane and P123 template solâ^'gel derived carbon silica membrane for desalination. Journal of Sol-Gel Science and Technology, 2018, 85, 280-289.	1.1	15
902	Sustainable Desalination Process and Nanotechnology. Environmental Chemistry for A Sustainable World, 2018, , 185-228.	0.3	1
903	Detailed modeling and simulation of an out-in configuration vacuum membrane distillation process. Water Research, 2018, 132, 23-33.	5.3	9
904	Mechanism of pore wetting in membrane distillation with alcohol vs. surfactant. Journal of Membrane Science, 2018, 559, 183-195.	4.1	109
905	Comparison of fouling propensity between reverse osmosis, forward osmosis, and membrane distillation. Journal of Membrane Science, 2018, 556, 352-364.	4.1	101
906	Wetting phenomena in membrane distillation: Mechanisms, reversal, and prevention. Water Research, 2018, 139, 329-352.	5.3	498

#	Article	IF	CITATIONS
907	Novel intermittent absorption cooling system based on membrane separation process. Applied Thermal Engineering, 2018, 136, 718-729.	3.0	13
908	Titanium white waste acid concentration by DCMD: Wetting, crystallization, and fouling. Desalination, 2018, 440, 161-174.	4.0	6
909	Omniphobic Hollow-Fiber Membranes for Vacuum Membrane Distillation. Environmental Science & Environmental Science & Technology, 2018, 52, 4472-4480.	4.6	118
910	Vapor-gap membranes for highly selective osmotically driven desalination. Journal of Membrane Science, 2018, 555, 407-417.	4.1	31
911	Pore channel surface modification for enhancing anti-fouling membrane distillation. Applied Surface Science, 2018, 443, 217-226.	3.1	48
912	Preparation of omniphobic PVDF membrane with hierarchical structure for treating saline oily wastewater using direct contact membrane distillation. Journal of Membrane Science, 2018, 555, 197-205.	4.1	156
913	Organic Matter Composition More Important than Concentration in Ion Exchange Demineralization of Different Water Qualities for the Production of Steam. Industrial & Engineering Chemistry Research, 2018, 57, 3742-3752.	1.8	6
914	Geothermal Membrane Distillation in Industrial Greenhouse Applications: Membrane Fabrication and Characterization. Environmental Engineering Science, 2018, 35, 815-828.	0.8	5
915	Flux-enhanced PVDF mixed matrix membranes incorporating APTS-functionalized graphene oxide for membrane distillation. Journal of Membrane Science, 2018, 554, 309-323.	4.1	144
916	Membrane distillation at the water-energy nexus: limits, opportunities, and challenges. Energy and Environmental Science, 2018, 11, 1177-1196.	15.6	740
917	Observer-based perturbation extremum seeking control with input constraints for direct-contact membrane distillation process. International Journal of Control, 2018, 91, 1363-1375.	1.2	17
918	A simple coating method to prepare superhydrophobic layers on ceramic alumina for vacuum membrane distillation. Separation and Purification Technology, 2018, 198, 79-86.	3.9	69
919	Thermal efficiency enhancement of the direct contact membrane distillation: Conductive layer integration and geometrical undulation. Applied Energy, 2018, 227, 7-17.	5.1	18
920	Comparative study of air gap and permeate gap membrane distillation using internal heat recovery hollow fiber membrane module. Desalination, 2018, 426, 42-49.	4.0	52
921	Application and modification of polysulfone membranes. Reviews in Chemical Engineering, 2018, 34, 657-693.	2.3	66
922	Composite membrane with electrospun multiscale-textured surface for robust oil-fouling resistance in membrane distillation. Journal of Membrane Science, 2018, 546, 179-187.	4.1	83
923	Experimental investigation of the solar drying of Tunisian phosphate under different conditions. Renewable Energy, 2018, 116, 762-774.	4.3	16
924	Novel cylindrical cross-flow hollow fiber membrane module for direct contact membrane distillation-based desalination. Journal of Membrane Science, 2018, 545, 312-322.	4.1	12

#	Article	IF	Citations
925	Carbon nanotube immobilized membrane with controlled nanotube incorporation via phase inversion polymerization for membrane distillation based desalination. Separation and Purification Technology, 2018, 194, 249-255.	3.9	58
926	Octadecylâ€silicaâ€"PVDF membrane of superior MD desalination performance. Journal of Applied Polymer Science, 2018, 135, 46043.	1.3	10
927	Fabrication of a novel octadecylamine functionalized graphene oxide/PVDF dual-layer flat sheet membrane for desalination via air gap membrane distillation. Desalination, 2018, 428, 227-239.	4.0	87
928	Removal of cobalt ions from simulated radioactive wastewater by vacuum membrane distillation. Progress in Nuclear Energy, 2018, 103, 20-27.	1.3	7 5
929	A novel electrospun, hydrophobic, and elastomeric styrene-butadiene-styrene membrane for membrane distillation applications. Journal of Membrane Science, 2018, 549, 420-427.	4.1	74
930	Comparison of colloidal silica involved fouling behavior in three membrane distillation configurations using PTFE membrane. Water Research, 2018, 130, 343-352.	5.3	37
931	Comparative studies of different membrane distillation configurations and membranes for potential use on board cruise vessels. Desalination, 2018, 429, 44-51.	4.0	40
932	Effect of chemical and physical factors on the crystallization of calcium sulfate in seawater reverse osmosis brine. Desalination, 2018, 426, 78-87.	4.0	41
933	Microwave-Induced Desalination via Direct Contact Membrane Distillation. ACS Sustainable Chemistry and Engineering, 2018, 6, 626-632.	3.2	40
934	Treatment of flue gas desulfurization wastewater with near-zero liquid discharge by nanofiltration-membrane distillation process. Separation Science and Technology, 2018, 53, 146-153.	1.3	33
935	Evaluation of semi-volatile contaminant transport in a novel, gas-tight direct contact membrane distillation system. Desalination, 2018, 427, 35-41.	4.0	19
937	Engineered Slippery Surface to Mitigate Gypsum Scaling in Membrane Distillation for Treatment of Hypersaline Industrial Wastewaters. Environmental Science & Environmental Science & 2018, 52, 14362-14370.	4.6	148
938	Emerging Membrane Technologies for Water and Energy Sustainability: Future Prospects, Constrains and Challenges. Energies, 2018, 11, 2997.	1.6	76
939	Heat and Mass Transport in Modeling Membrane Distillation Configurations: A Review. Frontiers in Energy Research, 2018, 6, .	1.2	88
940	Membrane desalination technologies in water treatment: A review. Water Practice and Technology, 2018, 13, 738-752.	1.0	47
941	Treatment of heavy-metal wastewater by vacuum membrane distillation: effect of wastewater properties. IOP Conference Series: Earth and Environmental Science, 2018, 108, 042019.	0.2	7
942	Passive solar high-yield seawater desalination by modular and low-cost distillation. Nature Sustainability, 2018, 1, 763-772.	11.5	262
946	Simultaneous Energy and Water Optimisation in Shale Exploration. Processes, 2018, 6, 86.	1.3	22

#	Article	IF	CITATIONS
947	Immobilization of Graphene Oxide on the Permeate Side of a Membrane Distillation Membrane to Enhance Flux. Membranes, 2018, 8, 63.	1.4	31
948	Membrane distillation hybridized with a thermoelectric heat pump for energy-efficient water treatment and space cooling. Applied Energy, 2018, 231, 1079-1088.	5.1	30
949	Near-azeotropic volatility behavior of hydrous and anhydrous ethanol gasoline mixtures and impact on droplet evaporation dynamics. Fuel Processing Technology, 2018, 181, 166-174.	3.7	24
950	Removal of Sodium Dodecylbenzenesulfonate by Macroporous Adsorbent Resins. Materials, 2018, 11, 1324.	1.3	8
951	Optimization and modification of PVDF dual-layer hollow fiber membrane for direct contact membrane distillation; application of response surface methodology and morphology study. Korean Journal of Chemical Engineering, 2018, 35, 2241-2255.	1,2	8
952	Salt Recovery from Wastewater Using Membrane Distillation–Crystallization. Crystal Growth and Design, 2018, 18, 7275-7285.	1.4	23
953	Membrane fouling and reusability in membrane distillation of shale oil and gas produced water: Effects of membrane surface wettability. Journal of Membrane Science, 2018, 567, 199-208.	4.1	101
954	Flux model for the membrane distillation process to treat wastewater: Effect of solids concentration. Journal of Membrane Science, 2018, 566, 396-405.	4.1	13
955	Short Review on Porous Metal Membranesâ€"Fabrication, Commercial Products, and Applications. Membranes, 2018, 8, 83.	1.4	39
956	Direct contact membrane distillation for the treatment of wastewater for a cooling tower in the power industry. H2Open Journal, 2018, 1, 57-68.	0.8	10
957	How to select the optimal membrane distillation system for industrial applications. Journal of Membrane Science, 2018, 565, 402-410.	4.1	14
958	PVDF-co-HFP/superhydrophobic acetylene-based nanocarbon hybrid membrane for seawater desalination via DCMD. Chemical Engineering Research and Design, 2018, 138, 248-259.	2.7	32
959	Split-feed counterflow reverse osmosis for brine concentration. Desalination, 2018, 445, 280-291.	4.0	50
960	Model development and experimental verification for tubular solar still operating under vacuum condition. Energy, 2018, 157, 115-130.	4. 5	44
961	Current Advances on Nanofiber Membranes for Water Purification Applications. , 2018, , 25-46.		10
962	Developments in forward osmosis and membrane distillation for desalination of waters. Environmental Chemistry Letters, 2018, 16, 1247-1265.	8.3	63
963	Self-roughened omniphobic coatings on nanofibrous membrane for membrane distillation. Separation and Purification Technology, 2018, 206, 14-25.	3.9	82
964	Synthesis and dual-objective optimization of industrial combined heat and power plants compromising the water–energy nexus. Applied Energy, 2018, 224, 448-468.	5.1	17

#	Article	IF	Citations
965	Energy efficient membrane distillation through localized heating. Desalination, 2018, 442, 99-107.	4.0	33
966	Highly Efficient Water Harvesting with Optimized Solar Thermal Membrane Distillation Device. Global Challenges, 2018, 2, 1800001.	1.8	108
967	Simulation and experimental study of an AGMD membrane distillation pilot for the desalination of seawater or brackish water with zero liquid discharged. Heat and Mass Transfer, 2018, 54, 3521-3531.	1.2	20
968	Introduction to Renewable Energy Powered Desalination. , 2018, , 3-46.		7
969	Model-guided design of high-performance membrane distillation modules for water desalination. Journal of Membrane Science, 2018, 563, 794-803.	4.1	13
970	Membrane Distillation, Forward Osmosis, and Pressure-Retarded Osmosis Through Polymer Membranes. , 2018, , 323-346.		1
971	Combined electrocoagulation and membrane distillation for treating high salinity produced waters. Journal of Membrane Science, 2018, 564, 82-96.	4.1	79
972	Antiwettability and Performance Stability of a Composite Hydrophobic/Hydrophilic Dual-Layer Membrane in Wastewater Treatment by Membrane Distillation. Industrial & Engineering Chemistry Research, 2018, 57, 9313-9322.	1.8	33
973	Membrane Distillation Biofouling: Impact of Feedwater Temperature on Biofilm Characteristics and Membrane Performance. Environmental Science & Environ	4.6	57
974	Membrane contactors., 2018,, 153-208.		10
975	Membrane contactor aided catalyst recycle and organic acid recovery from aqueous solutions using porous hydrophobic polyvinylidene fluoride barriers. Journal of Cleaner Production, 2018, 199, 923-936.	4.6	2
976	Direct integration of a vacuum membrane distillation module within a solar collector for small-scale units adapted to seawater desalination in remote places: Design, modeling & evaluation of a flat-plate equipment. Journal of Membrane Science, 2018, 564, 617-633.	4.1	48
977	Physiochemical Property Characterization of Hydrous and Anhydrous Ethanol Blended Gasoline. Industrial & Engineering Chemistry Research, 2018, 57, 11239-11245.	1.8	15
978	Parabolic-trough plant integrated with direct-contact membrane distillation system: Concept, simulation, performance, and economic evaluation. Solar Energy, 2018, 173, 348-361.	2.9	45
979	Substrate Effect on Carbon/Ceramic Mixed Matrix Membrane Prepared by a Vacuum-Assisted Method for Desalination. Processes, 2018, 6, 47.	1.3	6
980	A Feasibility Study of Ammonia Recovery from Coking Wastewater by Coupled Operation of a Membrane Contactor and Membrane Distillation. International Journal of Environmental Research and Public Health, 2018, 15, 441.	1.2	22
981	Visualizing and evaluating wetting in membrane distillation: New methodology and indicators based on Detection of Dissolved Tracer Intrusion (DDTI). Desalination, 2018, 443, 307-322.	4.0	37
982	Kinetic model for surfactant-induced pore wetting in membrane distillation. Journal of Membrane Science, 2018, 564, 275-288.	4.1	54

#	Article	IF	CITATIONS
983	Exploring the interactions between hydrodynamics and fouling in membrane distillation systems – A multiscale approach using CFD. Desalination, 2018, 444, 63-74.	4.0	24
984	Membrane crystallization via membrane distillation. Chemical Engineering and Processing: Process Intensification, 2018, 123, 258-271.	1.8	77
985	Numerical study of CaCO3 scaling in submerged vacuum membrane distillation and crystallization (VMDC). Journal of Membrane Science, 2018, 559, 87-97.	4.1	20
986	A general predictive model for sweeping gas membrane distillation. Desalination, 2018, 443, 285-306.	4.0	31
987	Enhancement of energy utilization using nanofluid in solar powered membrane distillation. Chemosphere, 2018, 212, 554-562.	4.2	51
988	A review on electrochemically modified carbon nanotubes (CNTs) membrane for desalination and purification of water. Materials Research Express, 2018, 5, 102001.	0.8	32
989	Performance and economic investigations of solar power tower plant integrated with direct contact membrane distillation system. Energy Conversion and Management, 2018, 174, 626-638.	4.4	61
990	Sustainable operation of membrane distillation for hypersaline applications: Roles of brine salinity, membrane permeability and hydrodynamics. Desalination, 2018, 445, 123-137.	4.0	24
991	Anti-wetting behaviour of a superhydrophobic octadecyltrimethoxysilane blended PVDF/recycled carbon black composite membrane for enhanced desalination. Environmental Science: Water Research and Technology, 2018, 4, 1612-1623.	1.2	27
992	A general predictive model for direct contact membrane distillation. Desalination, 2018, 445, 181-196.	4.0	22
993	Theoretical modeling and simulation of AGMD and LGMD desalination processes using a composite membrane. Journal of Membrane Science, 2018, 565, 14-24.	4.1	20
994	Fabrication of polyethylene nanofibrous membranes by biaxial stretching. Materials Today Communications, 2018, 17, 24-30.	0.9	26
995	Localized heating with a photothermal polydopamine coating facilitates a novel membrane distillation process. Journal of Materials Chemistry A, 2018, 6, 18799-18807.	5.2	138
996	Membrane distillation to regenerate different liquid desiccant solutions for air conditioning. Desalination, 2018, 443, 137-142.	4.0	32
997	Membrane distillationâ€"Principles, applications, configurations, design, and implementation. , 2018, , 55-106.		33
998	Membrane properties in membrane distillation. , 2018, , 107-156.		52
999	Separation Technologies for Salty Wastewater Reduction in the Dairy Industry. Separation and Purification Reviews, 2019, 48, 325-353.	2.8	19
1000	Principles and advancements of air gap membrane distillation. Reviews in Chemical Engineering, 2019, 35, 817-859.	2.3	28

#	Article	IF	Citations
1001	Experimental and mathematical study of air gap membrane distillation for aqueous HCl azeotropic separation. Journal of Chemical Technology and Biotechnology, 2019, 94, 63-78.	1.6	16
1002	Air gap membrane distillation: A review. Journal of Renewable and Sustainable Energy, 2019, 11, .	0.8	36
1003	Isopropanol,nâ€butanol and ethanol recovery from IBE model solutions by saltingâ€out using potassium pyrophosphate. Journal of Chemical Technology and Biotechnology, 2019, 94, 3850-3858.	1.6	7
1004	Hydrophobic nanostructured wood membrane for thermally efficient distillation. Science Advances, 2019, 5, eaaw3203.	4.7	81
1005	Harnessing Solarâ€Driven Photothermal Effect toward the Water–Energy Nexus. Advanced Science, 2019, 6, 1900883.	5.6	188
1006	Enhanced ammonia recovery from wastewater by Nafion membrane with highly porous honeycomb nanostructure and its mechanism in membrane distillation. Journal of Membrane Science, 2019, 590, 117265.	4.1	40
1007	Trade-off in membrane distillation with monolithic omniphobic membranes. Nature Communications, 2019, 10, 3220.	5.8	106
1008	Membrane distillation of high salinity water by induction heated thermally conducting membranes. Journal of Membrane Science, 2019, 589, 117253.	4.1	62
1009	Experimental study on VMD and its performance comparison with AGMD for treating copper-containing solution. Chemical Engineering Science, 2019, 207, 876-891.	1.9	10
1010	Facile fabrication of omniphobic PVDF composite membrane via a waterborne coating for anti-wetting and anti-fouling membrane distillation. Journal of Membrane Science, 2019, 589, 117262.	4.1	77
1011	Membrane scaling in Vacuum Membrane Distillation - Part 1: In-situ observation of crystal growth and membrane wetting. Journal of Membrane Science, 2019, 590, 117294.	4.1	14
1012	Bi-dimensional modelling of the thermal boundary layer and mass flux prediction for direct contact membrane distillation. International Journal of Heat and Mass Transfer, 2019, 141, 1205-1215.	2.5	4
1013	Organic Matter and Microbial Cell Density Behavior during Ion Exchange Demineralization of Surface Water for Boiler Feedwater. Industrial & Engineering Chemistry Research, 2019, 58, 14368-14379.	1.8	8
1014	Membrane-based treatment of shale oil and gas wastewater: The current state of knowledge. Frontiers of Environmental Science and Engineering, 2019, 13, 1.	3.3	44
1015	Membrane desalination performance governed by molecular reflection at the liquid-vapor interface. International Journal of Heat and Mass Transfer, 2019, 140, 1006-1022.	2.5	13
1016	Innovative swirling flow-type microbubble generator for multi-stage DCMD desalination system: Focus on the two-phase flow pattern, bubble size distribution, and its effect on MD performance. Journal of Membrane Science, 2019, 588, 117197.	4.1	26
1017	Effect of oscillating temperature and crystallization on graphene oxide composite pervaporation membrane for inland brine desalination. Journal of Membrane Science, 2019, 588, 117210.	4.1	35
1018	Mass Transport through Composite Asymmetric Membranes. , 2019, 23, 151-172.		0

#	Article	IF	CITATIONS
1019	Janus Nanofibrous Membranes for Desalination by Air Gap Membrane Distillation. ACS Applied Polymer Materials, 2019, 1, 3443-3451.	2.0	22
1020	On the Morphological Characterization Procedures of Multilayer Hydrophobic Ceramic Membranes for Membrane Distillation Operations. Membranes, 2019, 9, 125.	1.4	4
1021	Cyclopentane hydrates – A candidate for desalination?. Journal of Environmental Chemical Engineering, 2019, 7, 103359.	3.3	48
1022	Maximizing quality of life remains an ultimate goal in the era of precision medicine: exemplified by lung cancer. Precision Clinical Medicine, 2019, 2, 8-12.	1.3	9
1023	The Effect of Spacer Orientations on Temperature Polarization in a Direct Contact Membrane Distillation Process Using 3-d CFD Modeling. Arabian Journal for Science and Engineering, 2019, 44, 10269-10284.	1.7	9
1024	Microwave Induced Membrane Distillation for Enhanced Ethanol–Water Separation on a Carbon Nanotube Immobilized Membrane. Industrial & Engineering Chemistry Research, 2019, 58, 18313-18319.	1.8	28
1025	Analysis of water gap membrane distillation process for water desalination. Desalination, 2019, 470, 114088.	4.0	23
1026	Effect of bubble characteristics and nozzle size on the membrane distillation enhanced by gas–liquid two-phase flow. Journal of Water Reuse and Desalination, 2019, 9, 292-300.	1.2	1
1027	Performance improvements by embedded spacer in direct contact membrane distillation – Computational study. Desalination, 2019, 470, 114103.	4.0	28
1028	Elucidating mechanisms of silica scaling in membrane distillation: effects of membrane surface wettability. Environmental Science: Water Research and Technology, 2019, 5, 2004-2014.	1.2	17
1029	Design of ultrathin hybrid membranes with improved retention efficiency of molecular dyes. RSC Advances, 2019, 9, 28657-28669.	1.7	13
1030	Computational fluid dynamic modeling of water desalination using low-energy continuous direct contact membrane distillation process. Applied Thermal Engineering, 2019, 163, 114391.	3.0	36
1031	Field Demonstration of a Nanophotonics-Enabled Solar Membrane Distillation Reactor for Desalination. Industrial & Engineering Chemistry Research, 2019, 58, 18829-18835.	1.8	42
1032	Dense Membrane Crystallization in Gas–Liquid Systems: Key Parameters Influencing Fouling. Industrial & Lamp; Engineering Chemistry Research, 2019, 58, 20134-20146.	1.8	3
1033	Conversion of saline waste-water and gaseous carbon dioxide to (bi)carbonate salts, hydrochloric acid and desalinated water for on-site industrial utilization. Reaction Chemistry and Engineering, 2019, 4, 141-150.	1.9	4
1034	Treatment of Wastewater Solutions from Anodizing Industry by Membrane Distillation and Membrane Crystallization. Applied Sciences (Switzerland), 2019, 9, 287.	1.3	13
1035	3-D numerical investigation on commercial PTFE membranes for membrane distillation: Effect of inlet conditions on heat and mass transfer. Case Studies in Thermal Engineering, 2019, 13, 100396.	2.8	18
1036	Investigation of thermodynamic and kinetic effects of cyclopentane derivatives on CO2 hydrates for potential application to seawater desalination. Chemical Engineering Journal, 2019, 363, 99-106.	6.6	70

#	Article	IF	CITATIONS
1037	Electrospun polyvinylidene fluoride/fluorinated acrylate copolymer tree-like nanofiber membrane with high flux and salt rejection ratio for direct contact membrane distillation. Desalination, 2019, 466, 68-76.	4.0	43
1038	Aluminum fumarate MOF/PVDF hollow fiber membrane for enhancement of water flux and thermal efficiency in direct contact membrane distillation. Journal of Membrane Science, 2019, 588, 117204.	4.1	64
1039	The effect of â€~High-pH pretreatment' on RO concentrate minimization in a groundwater desalination facility using batch air gap membrane distillation. Separation and Purification Technology, 2019, 227, 115699.	3.9	12
1040	Low-temperature heat utilization with vapor pressure-driven osmosis: Impact of membrane properties on mass and heat transfer. Journal of Membrane Science, 2019, 588, 117181.	4.1	10
1041	Economic Model-Based Controller Design Framework for Hydraulic Fracturing To Optimize Shale Gas Production and Water Usage. Industrial & Engineering Chemistry Research, 2019, 58, 12097-12115.	1.8	17
1042	Numerical simulations for fluid dynamics and temperature patterns in membrane distillation channels. Heat and Mass Transfer, 2019, 55, 3509-3522.	1.2	3
1043	Design of omniphobic interfaces for membrane distillation – A review. Water Research, 2019, 162, 64-77.	5.3	204
1044	Membrane distillation as post-treatment for anaerobic fluidized bed membrane bioreactor for organic and nitrogen removal. Chemosphere, 2019, 234, 756-762.	4.2	25
1045	Computational fluid dynamics simulations of polarization phenomena in direct contact membrane distillation. Journal of Membrane Science, 2019, 591, 117150.	4.1	47
1046	Surface modification of polyvinylidene fluoride membrane for enhanced wetting resistance. Applied Surface Science, 2019, 491, 32-42.	3.1	16
1047	A closer look on the development and commercialization of membrane contactors for mass transfer and separation processes. Separation and Purification Technology, 2019, 227, 115679.	3.9	20
1048	Performance study of a solar-assisted hollow-fiber-membrane-based air humidification-dehumidification desalination system: Effects of membrane properties. Chemical Engineering Science, 2019, 206, 164-179.	1.9	26
1049	Zero-liquid discharge (ZLD) technology for resource recovery from wastewater: A review. Science of the Total Environment, 2019, 681, 551-563.	3.9	230
1050	Membrane distillation crystallization for brine mining and zero liquid discharge: opportunities, challenges, and recent progress. Environmental Science: Water Research and Technology, 2019, 5, 1202-1221.	1.2	53
1051	Modeling of heat and mass transfer in vacuum membrane distillation for ammonia separation. Separation and Purification Technology, 2019, 224, 121-131.	3.9	23
1052	Membrane distillation coupled with a novel two-stage pretreatment process for petrochemical wastewater treatment and reuse. Separation and Purification Technology, 2019, 224, 23-32.	3.9	38
1053	A review of membrane development in membrane distillation for emulsified industrial or shale gas wastewater treatments with feed containing hybrid impurities. Journal of Environmental Management, 2019, 243, 45-66.	3.8	56
1054	Open-source industrial-scale module simulation: Paving the way towards the right configuration choice for membrane distillation. Desalination, 2019, 464, 48-62.	4.0	18

#	ARTICLE	IF	CITATIONS
1055	Morphological changes and creep recovery behavior of expanded polytetrafluoroethylene (ePTFE) membranes used for membrane distillation. Journal of Membrane Science, 2019, 584, 236-245.	4.1	13
1056	Advanced desalination technologies. , 2019, , 93-131.		7
1057	Membrane distillation development., 2019, , 133-159.		4
1058	Recent Studies on Fluorinated Silica Nanometer-Sized Particles. Nanomaterials, 2019, 9, 684.	1.9	14
1060	Investigation of salt penetration mechanism in hydrolyzed polyacrylonitrile asymmetric membranes for pervaporation desalination. Desalination, 2019, 463, 32-39.	4.0	34
1061	Persulfate oxidation-assisted membrane distillation process for micropollutant degradation and membrane fouling control. Separation and Purification Technology, 2019, 222, 321-331.	3.9	34
1062	Structures, Properties, and Performancesâ€"Relationships of Polymeric Membranes for Pervaporative Desalination. Membranes, 2019, 9, 58.	1.4	16
1063	Novel PTFE hollow fiber membrane fabricated by emulsion electrospinning and sintering for membrane distillation. Journal of Membrane Science, 2019, 583, 200-208.	4.1	102
1064	Fabrication of α â€Si 3 N 4 â€nanowire/ γ â€Y 2 Si 2 O 7 composite superhydrophobic membrane for membrane distillation. International Journal of Applied Ceramic Technology, 2019, 16, 2173-2180.	1.1	11
1065	Fouling and wetting in the membrane distillation driven wastewater reclamation process – A review. Advances in Colloid and Interface Science, 2019, 269, 370-399.	7.0	164
1066	Preparation of particulate polyvinylidene fluoride membranes of different particle sizes for membrane distillation applications. Journal of Polymer Engineering, 2019, 39, 254-263.	0.6	2
1067	Surface Modification of PVDF Membranes for Treating Produced Waters by Direct Contact Membrane Distillation. International Journal of Environmental Research and Public Health, 2019, 16, 685.	1.2	33
1068	Effect of intermittent operation on performance of a solar-powered membrane distillation system. Separation and Purification Technology, 2019, 220, 300-308.	3.9	32
1069	Electrospun nanofibrous membranes in membrane distillation: Recent developments and future perspectives. Separation and Purification Technology, 2019, 221, 44-63.	3.9	7 5
1070	Biomimetic membranes as potential tools for water purification: Preceding and future avenues. Desalination, 2019, 458, 97-115.	4.0	70
1071	Technologies for the Extraction, Separation and Purification of polyphenols – A Review. Nepal Journal of Biotechnology, 2019, 6, 74-91.	0.5	33
1072	Computational and experimental study for the desalination of petrochemical industrial effluents using direct contact membrane distillation. Applied Water Science, 2019, 9, 1.	2.8	11
1073	Hydrophobic ceramic membrane for membrane distillation: A mini review on preparation, characterization, and applications. Separation and Purification Technology, 2019, 217, 71-84.	3.9	94

#	Article	IF	CITATIONS
1074	Mechanical Vibration for the Control of Membrane Fouling in Direct Contact Membrane Distillation. Symmetry, 2019, 11, 126.	1.1	6
1075	Electrospun Nanofibrous Membranes for Desalination. , 2019, , 81-104.		13
1076	Full-Scale Membrane Distillation Systems and Performance Improvement Through Modeling. , 2019, , 105-140.		3
1077	Membrane Wetting in Membrane Distillation. , 2019, , 143-174.		4
1078	Mathematical modeling and optimal operation condition analysis of heat pump two-effect direct contact membrane distillation system. IOP Conference Series: Materials Science and Engineering, 2019, 612, 032004.	0.3	0
1079	Alcohol Reduction by Physical Methods. , O, , .		1
1080	Recent Progress of Membrane Distillation Technology Applied in Desalination. E3S Web of Conferences, 2019, 131, 01039.	0.2	1
1081	Low Energy Desalination via Direct Contact Membrane Distillation: Looking Into the Concentration Polarization., 2019,,.		0
1083	Superstructure-Enabled Anti-Fouling Membrane for Efficient Photothermal Distillation. ACS Sustainable Chemistry and Engineering, 2019, 7, 20151-20158.	3.2	41
1084	Techno-Economic Assessment of Air and Water Gap Membrane Distillation for Seawater Desalination under Different Heat Source Scenarios. Water (Switzerland), 2019, 11, 2117.	1.2	23
1085	Concentration of 1,3-dimethyl-2-imidazolidinone in Aqueous Solutions by Sweeping Gas Membrane Distillation: From Bench to Industrial Scale. Membranes, 2019 , 9 , 158 .	1.4	8
1086	Distinct Behaviors between Gypsum and Silica Scaling in Membrane Distillation. Environmental Science &	4.6	105
1088	An Overview of Membrane Distillation. , 2019, , 251-281.		10
1089	Thermal analysis evaluation of direct contact membrane distillation system. Case Studies in Thermal Engineering, 2019, 13, 100377.	2.8	64
1090	Evaluation of a real-time visualization system for scaling detection during DCMD, and its correlation with wetting. Desalination, 2019, 454, 59-70.	4.0	21
1091	Effect of seawater-coolant feed arrangement in a waste heat driven multi-stage vacuum membrane distillation system. Separation and Purification Technology, 2019, 212, 12-20.	3.9	7
1092	Mass Transport Through a Membrane Layer. , 2019, , 21-68.		13
1093	Membrane Distillation. , 2019, , 483-496.		4

#	Article	IF	CITATIONS
1094	Asymmetric membranes for membrane distillation and thermo-osmotic energy conversion. Desalination, 2019, 452, 141-148.	4.0	46
1095	Effective treatment of shale oil and gas produced water by membrane distillation coupled with precipitative softening and walnut shell filtration. Desalination, 2019, 454, 82-90.	4.0	92
1096	Effects of embedding functionalized multi-walled carbon nanotubes and alumina on the direct contact poly(vinylidene fluoride- <i>co</i> -hexafluoropropylene) membrane distillation performance. Chemical Engineering Communications, 2019, 206, 1035-1057.	1.5	33
1097	Thermal Conductivity of Polyvinylidene Fluoride Membranes for Direct Contact Membrane Distillation. Environmental Engineering Science, 2019, 36, 420-430.	0.8	11
1098	Gas-liquid interface extraction: An effective pretreatment approach to retard pore channel wetting in hydrophobic membrane application processes. Journal of Membrane Science, 2019, 574, 174-180.	4.1	8
1099	Integrated electrocoagulation – Forward osmosis – Membrane distillation for sustainable water recovery from hydraulic fracturing produced water. Journal of Membrane Science, 2019, 574, 325-337.	4.1	62
1100	Membrane distillation using surface modified multi-layer porous ceramics. International Journal of Heat and Mass Transfer, 2019, 129, 764-772.	2.5	32
1101	Removal of copper sulfate from aqueous solution by air-gap membrane distillation process. Chemical Papers, 2019, 73, 543-554.	1.0	0
1102	Development of a dual-layered PVDF-HFP/cellulose membrane with dual wettability for desalination of oily wastewater. Journal of Membrane Science, 2019, 570-571, 418-426.	4.1	37
1103	Water recovery from hydrolysed human urine samples via direct contact membrane distillation using PVDF/PTFE membrane. Separation and Purification Technology, 2019, 211, 610-617.	3.9	57
1104	Analysis of Absorption Cooling and MD Desalination Cogeneration System. Arabian Journal for Science and Engineering, 2019, 44, 1081-1095.	1.7	10
1105	Water Treatment by Renewable Energy-Driven Membrane Distillation. , 2019, , 179-211.		6
1107	Fabrication of low thermal conductivity yttrium silicate ceramic flat membrane for membrane distillation. Journal of the European Ceramic Society, 2019, 39, 442-448.	2.8	31
1108	Wastewater Treatment by Renewable Energy Driven Membrane Processes. , 2019, , 1-19.		4
1109	Renewable Energy-Powered Membrane Systems for Water Desalination. , 2019, , 153-177.		5
1110	Distillate flux enhancement of the concentric circular direct contact membrane distillation module with spiral wired flow channel. Journal of the Taiwan Institute of Chemical Engineers, 2019, 94, 70-80.	2.7	1
1111	Comparative performance evaluations of nanomaterials mixed polysulfone: A scale-up approach through vacuum enhanced direct contact membrane distillation for water desalination. Desalination, 2019, 451, 111-116.	4.0	25
1112	Fabrication of PVDF nanofibrous hydrophobic composite membranes reinforced with fabric substrates via electrospinning for membrane distillation desalination. Journal of Environmental Sciences, 2019, 75, 277-288.	3.2	62

#	Article	IF	Citations
1113	Ceramic Membrane Distillation for Desalination. Separation and Purification Reviews, 2020, 49, 317-356.	2.8	31
1114	Membrane technologies for Li+/Mg2+ separation from salt-lake brines and seawater: A comprehensive review. Journal of Industrial and Engineering Chemistry, 2020, 81, 7-23.	2.9	186
1115	An omniphobic slippery membrane with simultaneous anti-wetting and anti-scaling properties for robust membrane distillation. Journal of Membrane Science, 2020, 595, 117572.	4.1	98
1116	Preparation of re-entrant and anti-fouling PVDF composite membrane with omniphobicity for membrane distillation. Journal of Membrane Science, 2020, 595, 117563.	4.1	51
1117	Performance assessment of chemical mechanical planarization wastewater treatment in nano-electronics industries using membrane distillation. Separation and Purification Technology, 2020, 235, 116201.	3.9	20
1118	Effect and mechanism of an anionic surfactant on membrane performance during direct contact membrane distillation. Journal of Membrane Science, 2020, 595, 117495.	4.1	50
1119	Mass transfer during membrane distillation treatment of wastewater from hot-dip galvanization. Separation and Purification Technology, 2020, 235, 116164.	3.9	13
1120	Building an operational framework for selective nitrogen recovery via electrochemical stripping. Water Research, 2020, 169, 115226.	5.3	35
1121	Membrane Separation Processes Applied to Whey: A Review. Food Reviews International, 2020, 36, 499-528.	4.3	31
1122	Superhydrophobic membrane by hierarchically structured PDMS-POSS electrospray coating with cauliflower-shaped beads for enhanced MD performance. Journal of Membrane Science, 2020, 597, 117638.	4.1	44
1123	Apple juice concentration using submerged direct contact membrane distillation (SDCMD). Journal of Food Engineering, 2020, 272, 109807.	2.7	30
1124	A review of heat and mass transfer mechanisms of dehumidifiers and regenerators for liquid desiccant cooling systems. Science and Technology for the Built Environment, 2020, 26, 465-483.	0.8	6
1125	A pilot study of spiral-wound air gap membrane distillation process and its energy efficiency analysis. Chemosphere, 2020, 239, 124696.	4.2	21
1126	Effect of ionic liquid on the structure and desalination performance of PVDFâ€PTFE electrospun membrane. Journal of Applied Polymer Science, 2020, 137, 48467.	1.3	13
1127	Novel hydrophobic PVDF membranes prepared by nonsolvent induced phase separation for membrane distillation. Journal of Membrane Science, 2020, 596, 117575.	4.1	88
1128	Numerical study of desalination by vacuum membrane distillation – Transient three-dimensional analysis. Journal of Membrane Science, 2020, 596, 117609.	4.1	12
1129	Heat and mass transfer evaluation of air-gap diffusion distillation by $\hat{l}\mu\text{-NTU}$ method. Desalination, 2020, 478, 114281.	4.0	17
1130	An experimental study on liquid regeneration process of a liquid desiccant air conditioning system (LDACs) based on vacuum membrane distillation. Energy, 2020, 194, 116891.	4.5	27

#	Article	IF	CITATIONS
1131	Optimization and design of a novel small-scale integrated vacuum membrane distillation - solar flat-plate collector module with heat recovery strategy through heat pumps. Desalination, 2020, 478, 114285.	4.0	30
1132	A polyvinylidene fluoride (PVDF)–silica aerogel (SiAG) insulating membrane for improvement of thermal efficiency during membrane distillation. Journal of Membrane Science, 2020, 597, 117632.	4.1	9
1133	Prediction model to analyze the performance of VMD desalination process. Computers and Chemical Engineering, 2020, 132, 106619.	2.0	24
1134	Engineering construction of robust superhydrophobic two-tier composite membrane with interlocked structure for membrane distillation. Journal of Membrane Science, 2020, 598, 117813.	4.1	41
1135	Hybrid forward osmosis-membrane distillation system: Demonstration of technical feasibility. Journal of Water Process Engineering, 2020, 33, 101042.	2.6	20
1136	Fabrication of interweaving hierarchical fibrous composite (iHFC) membranes for high-flux and robust direct contact membrane distillation. Desalination, 2020, 477, 114264.	4.0	26
1137	Membrane technologies assisting plant-based and agro-food by-products processing: A comprehensive review. Trends in Food Science and Technology, 2020, 95, 219-232.	7.8	143
1138	Modeling and optimization of solar thermal-photovoltaic vacuum membrane distillation system by response surface methodology. Solar Energy, 2020, 195, 230-238.	2.9	38
1139	Low surface energy nanofibrous membrane for enhanced wetting resistance in membrane distillation process. Desalination, 2020, 476, 114210.	4.0	39
1140	Review on Blueprint of Designing Anti-Wetting Polymeric Membrane Surfaces for Enhanced Membrane Distillation Performance. Polymers, 2020, 12, 23.	2.0	29
1141	Superior membrane distillation by induction heating of 3D rGO/Nafion/Ni foam for water treatment. Journal of Membrane Science, 2020, 616, 118609.	4.1	12
1142	Alternative heating techniques in membrane distillation: A review. Desalination, 2020, 496, 114713.	4.0	108
1143	Membrane desalination processes for water recovery from pre-treated brewery wastewater: Performance and fouling. Separation and Purification Technology, 2020, 252, 117420.	3.9	13
1144	On-site treatment capacity of membrane distillation powered by waste heat or natural gas for unconventional oil and gas wastewater in the Denver-Julesburg Basin. Environment International, 2020, 145, 106142.	4.8	17
1145	Modulating Solar Energy Harvesting on TiO ₂ Nanochannel Membranes by Plasmonic Nanoparticle Assembly for Desalination of Contaminated Seawater. ACS Applied Nano Materials, 2020, 3, 10895-10904.	2.4	31
1146	Numerical study on performance and efficiency of batch submerged vacuum membrane distillation for desalination. Chemical Engineering Research and Design, 2020, 163, 217-229.	2.7	14
1147	Hybridizing photovoltaic cell with direct contact membrane distillation for electricity and freshwater cogeneration: Concept and performance evaluation. Desalination, 2020, 496, 114701.	4.0	10
1148	Vacuum membrane distillation multi-component numerical model for ammonia recovery from liquid streams. Journal of Membrane Science, 2020, 614, 118399.	4.1	16

#	Article	IF	Citations
1149	Lithium recovery from salt-lake brine: Impact of competing cations, pretreatment and preconcentration. Chemosphere, 2020, 260, 127623.	4.2	38
1150	Application of projection and immersed boundary methods to simulating heat and mass transport in membrane distillation. Computers and Fluids, 2020, 212, 104711.	1.3	9
1151	Review on the Evaluation of the Impacts of Wastewater Disposal in Hydraulic Fracturing Industry in the United States. Technologies, 2020, 8, 67.	3.0	30
1152	Modeling of Air-Gap Membrane Distillation and Comparative Study with Direct Contact Membrane Distillation. Industrial & Engineering Chemistry Research, 2020, 59, 21930-21947.	1.8	33
1153	Study of the effective thickness of the water-intrudable hydrophilic layer in dual-layer hydrophilic-hydrophobic hollow fiber membranes for direct contact membrane distillation. Journal of Membrane Science, 2020, 615, 118552.	4.1	11
1154	Membrane distillation., 2020, , 77-97.		0
1155	The effects of membrane surface wettability on pore wetting and scaling reversibility associated with mineral scaling in membrane distillation. Journal of Membrane Science, 2020, 614, 118503.	4.1	52
1156	Performance of sweeping gas membrane distillation for treating produced water: Modeling and experiments. Desalination, 2020, 492, 114597.	4.0	32
1157	Multicomponent transport of methanol and sodium acetate in poly(ethylene glycol) diacrylate membranes of varied fractional free volume. European Polymer Journal, 2020, 134, 109809.	2.6	14
1158	Analytical study of evacuated annulus tube collector assisted solar desaltification system: A review. Solar Energy, 2020, 207, 1404-1426.	2.9	29
1159	Multifunctional nanocoated membranes for high-rate electrothermal desalination of hypersaline waters. Nature Nanotechnology, 2020, 15, 1025-1032.	15.6	88
1160	Theoretical aspects, design, and modeling in thermal induced membrane separation processes. , 2020, , 17-39.		0
1161	Membrane crystallization. , 2020, , 121-142.		0
1162	Energetic Performance and Permeate Flux Investigation of Directâ€Contact Membrane Distillation for Seawater Desalination. Chemical Engineering and Technology, 2020, 43, 2457-2468.	0.9	10
1163	Role of Membrane Technology in Absorption Heat Pumps: A Comprehensive Review. Membranes, 2020, 10, 216.	1.4	9
1164	A Numerical Simulation of Membrane Distillation Treatment of Mine Drainage by Computational Fluid Dynamics. Water (Switzerland), 2020, 12, 3403.	1.2	5
1165	Tuning the Pore Structures of Organosilica Membranes for Enhanced Desalination Performance via the Control of Calcination Temperatures. Membranes, 2020, 10, 392.	1.4	5
1166	Large-pore-size membranes tuned by chemically vapor deposited nanocoatings for rapid and controlled desalination. RSC Advances, 2020, 10, 40562-40568.	1.7	11

#	Article	IF	CITATIONS
1167	Performance analysis of a single and multi-staged direct contact membrane distillation module integrated with heat recovery units. Chemical Engineering Journal Advances, 2020, 4, 100055.	2.4	10
1168	Experimental investigation of two-side heat transfer in spacer-filled channels. Journal of Physics: Conference Series, 2020, 1599, 012005.	0.3	4
1169	Augmenting CO2 Absorption Flux through a Gas–Liquid Membrane Module by Inserting Carbon-Fiber Spacers. Membranes, 2020, 10, 302.	1.4	3
1170	Performance of electrospun polystyrene membranes in synthetic produced industrial water using direct-contact membrane distillation. Desalination, 2020, 493, 114663.	4.0	30
1171	Interplay of the Factors Affecting Water Flux and Salt Rejection in Membrane Distillation: A State-of-the-Art Critical Review. Water (Switzerland), 2020, 12, 2841.	1.2	38
1172	Minimum Net Driving Temperature Concept for Membrane Distillation. Membranes, 2020, 10, 100.	1.4	3
1173	Concentrating water-soluble ionic liquids from aqueous solutions: Osmotic distillation with hydrophobic membranes. Journal of Membrane Science, 2020, 608, 118222.	4.1	11
1174	Hyflon/PVDF membranes prepared by NIPS and TIPS: Comparison in MD performance. Separation and Purification Technology, 2020, 247, 116992.	3.9	31
1175	The design of a unit sweeping gas membrane distillation: experimental study on a membrane and operating parameters. Applied Water Science, 2020, 10, 1.	2.8	11
1176	Membrane distillation for the removal of micro-pollutants. , 2020, , 253-280.		1
1177	Simulation and multi-objective optimization of heat and mass transfer in direct contact membrane distillation by response surface methodology integrated modeling. Chemical Engineering Research and Design, 2020, 159, 565-581.	2.7	13
1178	Fabrication of polymeric membranes for membrane distillation process and application for wastewater treatment: Critical review. Chemical Engineering Research and Design, 2020, 141, 190-201.	2.7	79
1179	Introduction to membrane materials, processes, and modules. , 2020, , 3-69.		3
1180	Sweeping gas membrane distillation (SGMD) for wastewater treatment, concentration, and desalination: A comprehensive review. Chemical Engineering and Processing: Process Intensification, 2020, 153, 107960.	1.8	48
1181	Electrospun Nanofibrous Membranes for Water Treatment. , 0, , .		8
1182	Introduction to modeling membrane separation processes. , 2020, , 101-157.		0
1183	Cost optimization of high recovery single stage gap membrane distillation. Journal of Membrane Science, 2020, 611, 118370.	4.1	18
1184	Modelling of the coupling of desalination plants with the thermal solar energy system. Water Science and Technology: Water Supply, 2020, 20, 1807-1822.	1.0	7

#	Article	IF	CITATIONS
1185	Water recovery from flue gas condensate in municipal solid waste fired cogeneration plants using membrane distillation. Chemical Engineering Journal, 2020, 399, 125707.	6.6	9
1186	Direct contact membrane distillation for effective concentration of perfluoroalkyl substances – Impact of surface fouling and material stability. Water Research, 2020, 182, 116010.	5.3	32
1187	Low-cost desalination of seawater and hypersaline brine using nanophotonics enhanced solar energy membrane distillation. Environmental Science: Water Research and Technology, 2020, 6, 2180-2196.	1.2	10
1188	Approaches to the mitigation of ammonia inhibition during anaerobic digestion – a review. Water Practice and Technology, 2020, 15, 551-570.	1.0	10
1189	Development of hierarchical surface roughness on porous poly (vinylidene fluoride) membrane for membrane distillation process. Polymer Engineering and Science, 2020, 60, 1686-1698.	1.5	12
1190	Energy for desalination: A state-of-the-art review. Desalination, 2020, 491, 114569.	4.0	247
1191	Controlling the formation of porous polyketone membranes via a cross-linkable alginate additive for oil-in-water emulsion separations. Journal of Membrane Science, 2020, 611, 118362.	4.1	34
1192	Seawater Desalination Using MOF-Incorporated Cu-Based Alginate Beads without Energy Consumption. ACS Applied Materials & Samp; Interfaces, 2020, 12, 16319-16326.	4.0	48
1193	PIM-1/PAN Thin-Film Composite Hollow Fiber Membrane as Structured Packings for Isopropanol (IPA)/Water Distillation. Industrial & Engineering Chemistry Research, 2020, 59, 6210-6218.	1.8	5
1194	Application of membranes in district energy systems. , 2020, , 31-47.		2
1195	Process intensification of treatment of inorganic water pollutants., 2020,, 245-271.		31
1196	Unraveling effects of Dean vortices on membrane fouling in a sinusoidally curved channel. Journal of Membrane Science, 2020, 603, 118008.	4.1	7
1197	Highly Saline Water Desalination Using Direct Contact Membrane Distillation (DCMD): Experimental and Simulation Study. Water (Switzerland), 2020, 12, 1575.	1.2	28
1198	State-of-the-art methods for overcoming temperature polarization in membrane distillation process: A review. Journal of Membrane Science, 2020, 616, 118413.	4.1	149
1199	Secondary effluent purification towards reclaimed water production through the hybrid post-coagulation and membrane distillation technology: A preliminary test. Journal of Cleaner Production, 2020, 271, 121797.	4.6	20
1200	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.	2.2	26
1201	Numerical simulation and evaluation of spacer-filled direct contact membrane distillation module. Applied Water Science, 2020, 10, .	2.8	15
1202	A solar driven hybrid photovoltaic module/direct contact membrane distillation system for electricity generation and water desalination. Energy Conversion and Management, 2020, 221, 113146.	4.4	38

#	Article	IF	CITATIONS
1203	Enhancement of Flux Performance in PTFE Membranes for Direct Contact Membrane Distillation. Polymers, 2020, 12, 345.	2.0	25
1204	Wastewater treatment by membrane distillation. , 2020, , 3-34.		4
1205	Optimization of nanocomposite membrane for vacuum membrane distillation (VMD) using static and continuous flow cells: Effect of nanoparticles and film thickness. Separation and Purification Technology, 2020, 241, 116685.	3.9	29
1206	Hybrid membrane distillation: Resource, nutrient and energy recovery. Journal of Membrane Science, 2020, 599, 117832.	4.1	90
1207	Polydopamine/hydroxyapatite nanowire-based bilayered membrane for photothermal-driven membrane distillation. Journal of Materials Chemistry A, 2020, 8, 5147-5156.	5.2	61
1208	Silanization of tubular ceramic membranes for application in membrane distillation. Journal of Membrane Science, 2020, 601, 117911.	4.1	26
1209	Multistage and passive cooling process driven by salinity difference. Science Advances, 2020, 6, eaax5015.	4.7	22
1210	Membrane Distillation: Basics, Advances, and Applications. , 0, , .		23
1211	Novel Isothermal Membrane Distillation with Acidic Collector for Selective and Energy-Efficient Recovery of Ammonia from Urine. ACS Sustainable Chemistry and Engineering, 2020, 8, 7324-7334.	3.2	49
1212	Engineering hierarchically structured superhydrophobic PTFE/POSS nanofibrous membranes for membrane distillation. Desalination, 2020, 486, 114481.	4.0	66
1213	Beneficial CNT Intermediate Layer for Membrane Fluorination toward Robust Superhydrophobicity and Wetting Resistance in Membrane Distillation. ACS Applied Materials & Samp; Interfaces, 2020, 12, 20942-20954.	4.0	44
1214	Produced water management., 2020, , 349-369.		0
1215	Computational study of sweeping gas membrane distillation process – Flux performance and polarization characteristics. Desalination, 2020, 485, 114444.	4.0	23
1216	Triple-Layered Nanofibrous Metal–Organic Framework-Based Membranes for Desalination by Direct Contact Membrane Distillation. ACS Sustainable Chemistry and Engineering, 2020, 8, 6601-6610.	3.2	40
1217	Controlling the inner surface pore and spherulite structures of PVDF hollow fiber membranes in thermally induced phase separation using triple-orifice spinneret for membrane distillation. Separation and Purification Technology, 2021, 258, 117988.	3.9	15
1218	Sugarcane Stillage Treatment Using Direct Contact Membrane Distillation. Waste and Biomass Valorization, 2021, 12, 3987-3999.	1.8	4
1219	A review study of solar desalting units with evacuated tube collectors. Journal of Cleaner Production, 2021, 279, 123542.	4.6	35
1220	Experimental and theoretical investigation of a high performance PTFE membrane for vacuum-membrane distillation. Journal of Membrane Science, 2021, 617, 118524.	4.1	29

#	Article	IF	Citations
1221	Hydrophobizing polyether sulfone membrane by sol-gel for water desalination using air gap membrane distillation. Polymer-Plastics Technology and Materials, 2021, 60, 47-59.	0.6	1
1222	Environmental Biotechnology Vol. 3. Environmental Chemistry for A Sustainable World, 2021, , .	0.3	O
1223	Hollow fiber membranes with hierarchical spherulite surface structure developed by thermally induced phase separation using triple-orifice spinneret for membrane distillation. Journal of Membrane Science, 2021, 618, 118586.	4.1	21
1224	Wetting, Scaling, and Fouling in Membrane Distillation: State-of-the-Art Insights on Fundamental Mechanisms and Mitigation Strategies. ACS ES&T Engineering, 2021, 1, 117-140.	3.7	217
1225	Fabrication and characterisation of superhydrophobic bio-ceramic hollow fibre membranes prepared from cow bone waste. Ceramics International, 2021, 47, 4178-4186.	2.3	19
1226	Step-by-step improvement of mixed-matrix nanofiber membrane with functionalized graphene oxide for desalination via air-gap membrane distillation. Separation and Purification Technology, 2021, 256, 117809.	3.9	33
1227	Porous evaporators with special wettability for low-grade heat-driven water desalination. Journal of Materials Chemistry A, 2021, 9, 702-726.	5.2	60
1228	Novel two-step phase inversion and dry surface coated carbon membranes on alumina freeze-cast substrates for desalination. Desalination, 2021, 500, 114862.	4.0	5
1229	Showerhead feed distribution for optimized performance of large scale membrane distillation modules. Journal of Membrane Science, 2021, 618, 118664.	4.1	15
1230	Spatial Analysis of Membrane Distillation Powered by Waste Heat from Natural Gas Compressor Stations for Unconventional Oil and Gas Wastewater Treatment in Weld County, Colorado. ACS ES&T Engineering, 2021, 1, 192-203.	3.7	4
1231	Experimental investigation of the effect of the spacer and operating conditions on mass transfer in direct contact membrane distillation. Desalination, 2021, 500, 114839.	4.0	19
1232	Dissolved methane recovery from anaerobically treated wastewaters using solvent-based membrane contactor: An experimental and modelling study. Separation and Purification Technology, 2021, 258, 118004.	3.9	6
1233	Computational fluid dynamics simulations of unsteady mixing in spacer-filled direct contact membrane distillation channels. Journal of Membrane Science, 2021, 622, 118931.	4.1	22
1234	Scaling sets the limits of large scale membrane distillation modules for the treatment of high salinity feeds. Journal of Cleaner Production, 2021, 287, 125555.	4.6	27
1235	Three-layered hollow fiber (HF) membrane and its modification to enhance wetting resistance for membrane distillation (MD). Environmental Technology and Innovation, 2021, 21, 101227.	3.0	3
1236	Membrane Crystallization for Process Intensification and Control: A Review. Engineering, 2021, 7, 50-62.	3.2	45
1237	Use of membrane distillation for oily wastewater treatment – A review. Journal of Environmental Chemical Engineering, 2021, 9, 104641.	3.3	91
1238	Thermoeconomic investigation for a multi-stage solar-thermal vacuum membrane distillation system for coastal cities. Desalination, 2021, 498, 114797.	4.0	13

#	Article	IF	CITATIONS
1239	Analysis of the membrane effects on the energy efficiency of water desalination in a direct contact membrane distillation (DCMD) system with heat recovery. Applied Thermal Engineering, 2021, 182, 116063.	3.0	21
1240	Membrane-based technologies for industrial wastewater treatment and resource recovery. , 2021, , 403-421.		1
1241	Emerging forward osmosis and membrane distillation for liquid food concentration: A review. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 1910-1936.	5.9	24
1242	Hollow fiber membranes for membrane distillation applications. , 2021, , 495-521.		0
1243	Zero liquid discharge wastewater treatment technologies. , 2021, , 209-234.		2
1244	Introduction of water remediation processes. , 2021, , 741-777.		2
1245	Correlation between the feed composition and membrane wetting in a direct contact membrane distillation process. Environmental Science: Water Research and Technology, 2021, 7, 1020-1031.	1,2	6
1246	Nanotechnological Developments in Nanofiber-Based Membranes Used for Water Treatment Applications. Environmental Chemistry for A Sustainable World, 2021, , 205-259.	0.3	0
1247	Nanoparticles functionalized ceramic membranes: fabrication, surface modification, and performance. Environmental Science and Pollution Research, 2021, 28, 12256-12281.	2.7	27
1248	Membrane bioreactors for wastewater treatment. , 2021, , 423-443.		2
1249	Photothermal Membrane Distillation toward Solar Water Production. Small Methods, 2021, 5, e2001200.	4.6	137
1250	Evaluating Critical Influencing Factors of Desalination by Membrane Distillation Process—Using Multi-Criteria Decision-Making. Membranes, 2021, 11, 164.	1.4	3
1251	Flat sheet direct contact membrane distillation desalination system using temperature-dependent correlations: thermal efficiency via a multi-parameter sensitivity analysis based on Monte Carlo method. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2641.	2.0	12
1252	An inclusive study on new conceptual designs of passive solar desalting systems. Heliyon, 2021, 7, e05793.	1.4	25
1253	New insights of nanomaterials usage toward superhydrophobic membranes for water desalination via membrane distillation: A review. Critical Reviews in Environmental Science and Technology, 2022, 52, 2104-2149.	6.6	51
1254	Studies on membrane distillation towards mitigating thermal pollution. Chemical Papers, 2021, 75, 2819-2833.	1.0	4
1255	Porous Hydrophobic–Hydrophilic Composite Hollow Fiber and Flat Membranes Prepared by Plasma Polymerization for Direct Contact Membrane Distillation. Membranes, 2021, 11, 120.	1.4	15
1256	Regeneration of CO2 absorbent with membrane contactor via pressure swing. Chemical Engineering Research and Design, 2021, 167, 107-115.	2.7	7

#	Article	IF	Citations
1257	Forward Osmosis–Membrane Distillation Process for Zero Liquid Discharge of Flue Gas Desulfurization Wastewater. Energy & Samp; Fuels, 2021, 35, 5130-5140.	2.5	20
1258	Correlating scalants characteristic and air bubbling rate in submerged vacuum membrane distillation: A fouling control strategy. Journal of Membrane Science, 2021, 621, 118991.	4.1	11
1259	Membrane distillation process application using a novel ceramic membrane for Brackish water desalination. Desalination, 2021, 500, 114906.	4.0	25
1260	Delignified Wood from Understanding the Hierarchically Aligned Cellulosic Structures to Creating Novel Functional Materials: A Review. Advanced Sustainable Systems, 2021, 5, 2000251.	2.7	70
1261	Fully Polymeric Distillation Unit Based on Polypropylene Hollow Fibers. Polymers, 2021, 13, 1031.	2.0	14
1262	POSS-Functionalized Graphene Oxide/PVDF Electrospun Membranes for Complete Arsenic Removal Using Membrane Distillation. ACS Applied Polymer Materials, 2021, 3, 1854-1865.	2.0	32
1263	Contrasting Behaviors between Gypsum and Silica Scaling in the Presence of Antiscalants during Membrane Distillation. Environmental Science & Environm	4.6	54
1264	Fabrication of omniphobic PVDF composite membrane with dual-scale hierarchical structure via chemical bonding for robust membrane distillation. Journal of Membrane Science, 2021, 622, 119038.	4.1	43
1265	District heating driven membrane distillation for advanced flue gas condensate treatment in combined heat and power plants. Journal of Cleaner Production, 2021, 292, 125979.	4.6	5
1266	Operation conditions affecting scale formation in membrane distillation - An in situ scale study based on optical coherence tomography. Journal of Membrane Science, 2021, 623, 118989.	4.1	15
1267	Experimental and numerical investigation of a new hollow fiber-based multi-effect vacuum membrane distillation design. Desalination, 2021, 501, 114908.	4.0	16
1268	Enhancing the Permeate Flux of Direct Contact Membrane Distillation Modules with Inserting 3D Printing Turbulence Promoters. Membranes, 2021, 11, 266.	1.4	10
1269	Direct contact membrane distillation: A sensitivity analysis and an outlook on membrane effective thermal conductivity. Journal of Membrane Science, 2021, 624, 119035.	4.1	23
1270	Stack Thermo-Osmotic System for Low-Grade Thermal Energy Conversion. ACS Applied Materials & Interfaces, 2021, 13, 21371-21378.	4.0	15
1271	Multiphysics Modeling and Analysis of a Solar Desalination Process Based on Vacuum Membrane Distillation. Membranes, 2021, 11, 386.	1.4	1
1272	Development of a self-sustained model to predict the performance of direct contact membrane distillation. Separation and Purification Technology, 2021, 263, 118407.	3.9	17
1273	Advances in seawater membrane distillation (SWMD) towards stand-alone zero liquid discharge (ZLD) desalination. Reviews in Chemical Engineering, 2022, 38, 959-990.	2.3	8
1274	Status of direct and indirect solar desalination methods: comprehensive review. European Physical Journal Plus, 2021, 136, 1.	1.2	17

#	Article	IF	CITATIONS
1275	Membrane distillation for concentrated blackwater: Influence of configuration (air gap, direct) Tj ETQq0 0 0 rgBT / 263, 118390.	Overlock 3.9	10 Tf 50 747 24
1276	Fabrication and Characterization of Hydrophobic Porous Metallic Membranes for High Temperature Applications. Processes, 2021, 9, 809.	1.3	3
1277	Conducting thermal energy to the membrane/water interface for the enhanced desalination of hypersaline brines using membrane distillation. Journal of Membrane Science, 2021, 626, 119188.	4.1	21
1278	Nanofiltration-Inspired Janus Membranes with Simultaneous Wetting and Fouling Resistance for Membrane Distillation. Environmental Science & Eamp; Technology, 2021, 55, 7654-7664.	4.6	62
1279	Three-Dimensional Membrane Imaging with X-ray Ptychography: Determination of Membrane Transport Properties for Membrane Distillation. Transport in Porous Media, 2021, 138, 265-284.	1.2	6
1280	Experimental Performance of a Membrane Desorber Operating under Simulated Warm Weather Condensation Temperatures. Membranes, 2021, 11, 474.	1.4	4
1281	Distributed solar desalination by membrane distillation: current status and future perspectives. Water Research, 2021, 198, 117154.	5. 3	50
1282	Flux decline induced by scaling of calcium sulfate in membrane distillation: Theoretical analysis on the role of different mechanisms. Journal of Membrane Science, 2021, 628, 119257.	4.1	10
1283	Omniphobic palygorskite coated Janus membrane with enhanced fouling and wetting resistance for direct contact membrane distillation. Desalination, 2021, 505, 114986.	4.0	31
1284	Bispacer Multi-Stage Direct Contact Membrane Distillation System: Analytical and Experimental Study. Processes, 2021, 9, 1297.	1.3	3
1285	Box–Behnken design assisted by theoretical mass and heat transfer using for multi-responses optimization of membrane distillation process. Chemical Papers, 2021, 75, 6009-6024.	1.0	5
1286	Review of Remediation Solutions for Acid Mine Drainage Using the Modified Hill Framework. Sustainability, 2021, 13, 8118.	1.6	10
1287	Theoretical Investigation of Vapor Transport Mechanism Using Tubular Membrane Distillation Module. Membranes, 2021, 11, 560.	1.4	17
1288	Pretreatment of brackish water reverse osmosis (BWRO) concentrate to enhance water recovery in inland desalination plants by direct contact membrane distillation (DCMD). Desalination, 2021, 508, 115050.	4.0	19
1289	Carbon composite membranes for thermal-driven membrane processes. Carbon, 2021, 179, 600-626.	5 . 4	12
1290	Acid mine drainage and sewage impacted groundwater treatment by membrane distillation: Organic micropollutant and metal removal and membrane fouling. Journal of Environmental Management, 2021, 291, 112708.	3.8	25
1291	A comparison between average and local thermal evaluations to improve the performance of a direct contact membrane distillation for the solar desalination purposes. Journal of Thermal Analysis and Calorimetry, 0 , 1 .	2.0	0
1292	Analysis of integrated membrane distillation-heat pump system for water desalination. Desalination, 2021, 510, 115087.	4.0	19

#	Article	IF	Citations
1293	Modeling of the flow inside a pore in vacuum membrane distillation. Euro-Mediterranean Journal for Environmental Integration, 2021, 6, 1.	0.6	1
1294	Membrane distillation crystallization of ammonium nitrate solutions to enable sustainable cold storage: Electrical conductivity as an in-situ saturation indicator. Journal of Membrane Science, 2021, 631, 119321.	4.1	5
1295	Mass and Heat Transfer Coefficients in a Thermophilic Membrane Distillation Bioreactor. Chemical Engineering and Technology, 2021, 44, 1668-1676.	0.9	0
1296	Hydrophobic polydimethylsiloxane thin-film composite membranes for the efficient pervaporative desalination of seawater and brines. Separation and Purification Technology, 2022, 280, 119819.	3.9	7
1297	Membrane distillation crystallization technology for zero liquid discharge and resource recovery: Opportunities, challenges and futuristic perspectives. Science of the Total Environment, 2022, 806, 150692.	3.9	67
1298	Optimal cleaning strategy to alleviate fouling in membrane distillation process to treat anaerobic digestate. Chemosphere, 2021, 279, 130524.	4.2	23
1299	Non-solvent Flux Augmentation of an LDPE-Coated Polytetrafluoroethylene Hollow Fiber Membrane for Direct Contact Membrane Distillation. ACS Omega, 2021, 6, 25201-25210.	1.6	1
1300	A review on the manufacturing techniques of porous hydrophobic ceramic membranes applied to direct contact membrane distillation. Advances in Applied Ceramics, 2021, 120, 336-357.	0.6	5
1301	Textile wastewater treatment via membrane distillation. Environmental Engineering Research, 2022, 27, 210228-0.	1.5	11
1302	Optimization of preparation process and characterization for hydrophobic α-Al2O3 ceramic membrane. Materials Chemistry and Physics, 2022, 276, 125280.	2.0	8
1303	How far can membrane characteristic parameters bestow at the vacuum membrane distillation (VMD) performance: Modeling and simulation. Separation Science and Technology, 2022, 57, 1211-1233.	1.3	4
1304	Micropore formation and crystalline evolution during biaxial stretching process of iPP film constructed of ordered and continuous \hat{l}^2 -transcrystallinity. Journal of Membrane Science, 2021, 636, 119558.	4.1	6
1305	Membrane distillation using low-grade energy for desalination: A review. Journal of Environmental Chemical Engineering, 2021, 9, 105818.	3.3	90
1306	Ultrasound-assisted membrane technologies for fouling control and performance improvement: A review. Journal of Water Process Engineering, 2021, 43, 102268.	2.6	21
1307	An ultra-robust fabric-embedded PVDF membrane fabricated by NTIPS method and its application for monosodium glutamate concentration in membrane distillation. Journal of Membrane Science, 2021, 635, 119448.	4.1	9
1308	Nanofluids improve energy efficiency of membrane distillation. Nano Energy, 2021, 88, 106235.	8.2	21
1309	Exploring the potential usage of 3D printed membranes combined with PVDF coating in direct contact membrane distillation. Desalination, 2021, 513, 115134.	4.0	13
1310	Effect of support on PVDF membranes for distillation process. Journal of Membrane Science, 2021, 635, 119528.	4.1	12

#	Article	IF	CITATIONS
1311	Fouling mitigation strategies for different foulants in membrane distillation. Chemical Engineering and Processing: Process Intensification, 2021, 167, 108517.	1.8	74
1312	Membrane fouling in direct contact membrane distillation for liquid desiccant regeneration: Effects of feed temperature and flow velocity. Journal of Membrane Science, 2022, 642, 119936.	4.1	19
1313	Biofouling in membrane distillation applications - a review. Desalination, 2021, 516, 115241.	4.0	30
1314	Decontamination of uranium contained low-level radioactive wastewater from UO2 fuel element industry with vacuum membrane distillation. Desalination, 2021, 516, 115226.	4.0	31
1315	Hollow fibre polymeric membranes for desalination by membrane distillation technology: A review of different morphological structures and key strategic improvements. Desalination, 2021, 516, 115235.	4.0	26
1316	Membrane distillation & Description among the state of th	4.1	5
1317	Study on vacuum membrane distillation performance of PP/POE blending membranes prepared via thermally induced phase separation using bidiluent. Separation and Purification Technology, 2021, 274, 118475.	3.9	7
1318	Spray development of iso-octane, ethanol, hydrous ethanol and water from a multi-hole injector under ultra cold fuel temperature conditions. Fuel, 2021, 303, 120983.	3.4	4
1319	Liquid-like surface modification for effective anti-scaling membrane distillation with uncompromised flux. Journal of Membrane Science, 2021, 637, 119673.	4.1	16
1320	Comparison of calcium scaling in direct contact membrane distillation (DCMD) and nanofiltration (NF). Journal of Membrane Science, 2021, 638, 119647.	4.1	21
1321	Omniphobic membrane with nest-like re-entrant structure via electrospraying strategy for robust membrane distillation. Journal of Membrane Science, 2021, 640, 119824.	4.1	18
1322	Worldwide research trends on desalination. Desalination, 2021, 519, 115305.	4.0	41
1323	Molecular thermodynamics for scaling prediction: Case of membrane distillation. Separation and Purification Technology, 2021, 276, 119231.	3.9	16
1324	Fabrication of robust green superhydrophobic hybrid nanofiber-nanosphere membrane for membrane distillation. Desalination, 2021, 520, 115314.	4.0	21
1325	Effect of interactions between ammonium and organic fouling simulated by sodium alginate on performance of direct contact membrane distillation. Separation and Purification Technology, 2021, 278, 119551.	3.9	11
1326	Salt storage and induced crystallisation in porous asymmetric inorganic membranes. Journal of Membrane Science, 2022, 641, 119872.	4.1	2
1327	Membrane distillation. , 2022, , 261-344.		1
1328	Mechanically strong Janus tri-bore hollow fiber membranes with asymmetric pores for anti-wetting and anti-fouling membrane distillation. Chemical Engineering Journal, 2022, 429, 132455.	6.6	21

#	Article	IF	CITATIONS
1329	Fuelling a solid oxide fuel cell with ammonia recovered from water by vacuum membrane stripping. Chemical Engineering Journal, 2022, 428, 131081.	6.6	13
1330	Effect of water content in ethanol on spray formation at subcooled and flash-boiling conditions. International Journal of Heat and Mass Transfer, 2022, 182, 121884.	2.5	5
1331	Distributed vacuum membrane distillation driven by direct-solar heating at ultra-low temperature. Energy, 2022, 239, 121891.	4.5	18
1332	Dealcoholization of white wines. , 2022, , 369-377.		2
1333	The use of carbon nanomaterials in membrane distillation membranes: a review. Frontiers of Chemical Science and Engineering, 2021, 15, 755-774.	2.3	37
1334	Recent advances in membrane distillation using electrospun membranes: advantages, challenges, and outlook. Environmental Science: Water Research and Technology, 2021, 7, 1002-1019.	1.2	11
1335	Recent Developments in Membrane Technologies for Concentration of Liquid Foods and Food Ingredients., 2021,, 100-121.		4
1336	Wastewater. , 2021, , 237-324.		0
1337	Ammonia Removal from Saline Water by Direct Contact Membrane Distillation., 0,, 309-317.		1
1339	Membrane based processes with immobilised interfaces. , 2000, , 55-72.		13
1340	Membrankontaktoren. , 2004, , 495-532.		1
1341	Characterization Of Membrane Distillation Membranes By Tapping Mode Atomic Force Microscopy. , 2005, , 141-148.		1
1342	Transport analysis of material gap membrane distillation desalination processes. Desalination, 2020, 481, 114361.	4.0	19
1343	Direct contact membrane distillation system for waste heat recovery: Modelling and multi-objective optimization. Energy, 2018, 148, 1060-1068.	4. 5	57
1344	Ultrafiltration pretreatment enhances membrane distillation flux, resilience and permeate quality during water recovery from concentrated blackwater (urine/faeces). Separation and Purification Technology, 2020, 253, 117547.	3.9	18
1345	Mixed Matrix Carbon Molecular Sieve and Alumina (CMS-Al2O3) Membranes. , 0, .		1
1346	Chapter 1. Current State-of-the-art Membrane Based Filtration and Separation Technologies. RSC Nanoscience and Nanotechnology, 2018, , 1-13.	0.2	6
1347	Factors Affecting Membrane Distillation Process for Seawater Desalination. Journal of Applied Membrane Science & Technology, 2018, 22, .	0.3	3

#	Article	IF	CITATIONS
1348	Application of membrane distillation process for tap water purification. Membrane Water Treatment, 2010, 1, 1-12.	0.5	22
1349	Emerging membrane technologies developed in NUS for water reuse and desalination applications: membrane distillation and forward osmosis. Membrane Water Treatment, 2011, 2, 1-24.	0.5	6
1350	Effect of structure of PVDF membranes on the performance of membrane distillation. Membrane Water Treatment, 2014, 5, 41-56.	0.5	9
1351	Experimental determination of liquid entry pressure (LEP) in vacuum membrane distillation for oily wastewaters. Membrane Water Treatment, 2015, 6, 237-249.	0.5	26
1352	Preparation and Characterization of Hydrophobic Flat Sheet Membranes Based on a Recycled Polymer. International Polymer Processing, 2019, 34, 376-382.	0.3	4
1353	Transport Analysis of Anti-Wetting Composite Fibrous Membranes for Membrane Distillation. Membranes, 2021, 11, 14.	1.4	4
1354	Preparation and Characterization of Hydrophobic Porous Yttria-stabilized Zir-conia Hollow Fiber for Water Desalination. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2013, 28, 393-397.	0.6	3
1355	Analysis of thermal energy efficiency for hollow fiber membranes in direct contact membrane distillation. Environmental Engineering Research, 2019, 24, 347-353.	1.5	12
1356	Experimental Investigation of Heat and Mass Transfer in Tubular Membrane Distillation Module for Desalination. ISRN Chemical Engineering, 2012, 2012, 1-8.	1.2	23
1357	Renewable Thermal Energy Driven Desalination Process for a Sustainable Management of Reverse Osmosis Reject Water. Sustainability, 2021, 13, 10860.	1.6	1
1358	Assessment of module arrangements of a direct contact membrane distillation process for a small-scale desalination plant. Brazilian Journal of Chemical Engineering, 2022, 39, 773-787.	0.7	0
1359	The Anodising Industry Wastewater: Considerations of Its Treatment for Environmental Protection. Water Conservation Science and Engineering, 2022, 7, 65-76.	0.9	6
1360	PPy nanotubes-enabled in-situ heating nanofibrous composite membrane for solar-driven membrane distillation. Separation and Purification Technology, 2022, 281, 119995.	3.9	27
1361	Brackish Water Distillation With Plane Microporous Membranes Driven by Temperature Difference. , 2000, , 261-264.		0
1362	Desalination seawater desalination Technology for Sustainable Water Resource desalination for sustainable water resource., 2012,, 2897-2929.		0
1363	Integrating Hydrophobic Surface-Modifying Macromolecules into Hydrophilic Polymers to Produce Membranes for Membrane Distillation., 2012, , 159-178.		0
1364	The Study of Wetting in Direct Contact Membrane Distillation. The KSFM Journal of Fluid Machinery, 2014, 17, 30-34.	0.0	0
1365	Mathematical Model of Direct Contact Membrane Distillation for Orange Juice Concentration. International Journal of Chemical Engineering and Applications (IJCEA), 2014, 5, 147-150.	0.3	1

#	Article	IF	CITATIONS
1366	Membrane Distillation (MD)., 2015,, 1-9.		0
1367	Membrane Distillation Applications. , 2015, , 1-4.		0
1369	Feasibility study on the application of membrane distillation process to treat high strength wastewater. Journal of the Korean Society of Water and Wastewater, 2015, 29, 261-269.	0.3	1
1370	Direct Contact Membrane Distillation (DCMD). , 2016, , 559-561.		O
1371	Simulation of transport phenomena in porous membrane evaporators using computational fluid dynamics. Membrane Water Treatment, 2016, 7, 87-100.	0.5	1
1372	Effect of ultrasonic irradiation on membrane fouling and membrane wetting in direct contact membrane distillation process. Journal of the Korean Society of Water and Wastewater, 2016, 30, 343-350.	0.3	0
1373	Preparation of Membranes Based on Polysulfone (PSU) and Graphene Oxide (GrO) by Electrospinning. , 2017, , 23-30.		0
1374	Fruit and Vegetable Juice Processing Applications. Contemporary Food Engineering, 2017, , 195-240.	0.2	0
1375	Activity-Driven Membrane Processes. Contemporary Food Engineering, 2017, , 67-90.	0.2	0
1376	An Experimental Study on the Characteristic of Thermal Performance according to Feed Water Conditions to of Vacuum Membrane Distillation Module using PVDF Hollow Fiber. Journal of the Korean Society of Water and Wastewater, 2017, 31, 339-346.	0.3	0
1377	Intensified Food Processing Through Membrane Operations. RSC Green Chemistry, 2018, , 397-429.	0.0	1
1378	Prevention of membrane fouling by roughing filter for the stand-alone MD process. Journal of the Korean Society of Water and Wastewater, 2018, 32, 301-307.	0.3	0
1379	Comparison of membrane distillation with reverse osmosis process for the treatment of anaerobic digestate of livestock wastewater. Journal of the Korean Society of Water and Wastewater, 2020, 34, 259-266.	0.3	0
1380	Surface Design of Liquid Separation Membrane through Graft Polymerization: A State of the Art Review. Membranes, 2021, 11, 832.	1.4	22
1381	Selectivity of vacuum ammonia stripping using porous gas-permeable and dense pervaporation membranes under various hydraulic conditions and feed water compositions. Journal of Membrane Science, 2022, 642, 120005.	4.1	5
1382	Continuous Membrane Crystallization. , 2020, , 321-352.		2
1383	Inorgainc fouling and it fouling reduction in direct contact membrane distillation process. Journal of the Korean Society of Water and Wastewater, 2020, 34, 115-125.	0.3	0
1384	A contact angle study of different greywater sources with hydrophobic membranes. Water Quality Research Journal of Canada, 2020, 55, 310-326.	1.2	1

#	Article	IF	CITATIONS
1385	Membrankontaktoren., 2007,, 507-547.		0
1387	Thermal performance of hydrophobic α-Al2O3 ceramic membrane for solar-thermal membrane coupling water desalination process. Solar Energy, 2022, 231, 27-40.	2.9	5
1388	Development of pressure evolution modeling for the combustion of distinct metal dust morphologies. Journal of Loss Prevention in the Process Industries, 2022, 75, 104704.	1.7	2
1389	Modelling mass transport within the membrane of direct contact membrane distillation modules used for desalination and wastewater treatment: Scrutinising assumptions. Journal of Water Process Engineering, 2022, 45, 102460.	2.6	6
1390	The use of anti-scalants in gypsum scaling mitigation: Comparison with membrane surface modification and efficiency in combined reverse osmosis and membrane distillation. Journal of Membrane Science, 2022, 643, 120077.	4.1	10
1391	Study on recent progress and advances in air-to-air membrane enthalpy exchangers: Materials selection, performance improvement, design optimisation and effects of operating conditions. Renewable and Sustainable Energy Reviews, 2022, 156, 111941.	8.2	11
1392	A Single Step Preparation of Photothermally Active Polyvinylidene Fluoride Membranes Using Triethyl Phosphate as a Green Solvent for Distillation Applications. Membranes, 2021, 11, 896.	1.4	9
1393	Membranes for the Gas/Liquid Phase Separation at Elevated Temperatures: Characterization of the Liquid Entry Pressure. Membranes, 2021, 11, 907.	1.4	4
1394	Membrane distillation technology for molecular separation: A review on the fouling, wetting and transport phenomena. Journal of Molecular Liquids, 2022, 349, 118115.	2.3	56
1395	Desired properties and corresponding improvement measures of electrospun nanofibers for membrane distillation, reinforcement, and selfâ€healing applications. Polymer Engineering and Science, 2022, 62, 247-268.	1.5	9
1396	Vaporâ€Deposited Janus Membranes with Fouling Resistance for Desalination of Oilâ€Contaminated Wastewater. Advanced Materials Interfaces, 2022, 9, 2101738.	1.9	7
1397	ZnO-Nanorod Induced Omniphobic Polypropylene Membrane for Improved Anti-Wetting Performance in Membrane Distillation. SSRN Electronic Journal, 0, , .	0.4	0
1398	High-permeability vacuum membrane distillation utilizing mechanically compressed carbon nanotube membranes. RSC Advances, 2021, 12, 201-206.	1.7	6
1399	Experimental study and numerical optimization for removal of methyl orange using polytetrafluoroethylene membranes in vacuum membrane distillation process. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 635, 128070.	2.3	24
1400	Effects of sour oilfield produced water on direct contact membrane distillation systems. Materials Chemistry and Physics, 2022, 277, 125593.	2.0	1
1401	Membrane crystallization: Engineering the crystallization via microscale interfacial technology. Chemical Engineering Research and Design, 2022, 178, 454-465.	2.7	10
1402	Gypsum scaling in membrane distillation: Impacts of temperature and vapor flux. Desalination, 2022, 525, 115499.	4.0	12
1403	Construction of omniphobic PVDF membranes for membrane distillation: Investigating the role of dimension, morphology, and coating technology of silica nanoparticles. Desalination, 2022, 525, 115498.	4.0	22

#	Article	IF	CITATIONS
1404	Mitigating membrane wetting in the treatment of unconventional oil and gas wastewater by membrane distillation: A comparison of pretreatment with omniphobic membrane. Journal of Membrane Science, 2022, 645, 120198.	4.1	19
1405	Comprehensive insights into performance of water gap and air gap membrane distillation modules using hollow fiber membranes. Desalination, 2022, 525, 115497.	4.0	16
1406	Membrane distillation as a second stage treatment of hydrothermal liquefaction wastewater after ultrafiltration. Separation and Purification Technology, 2022, 285, 120379.	3.9	12
1407	Investigation of the Effects of Temperature on the Microstructure of PTFE Microfiltration Membranes Under Membrane Distillation Conditions. Journal of Advanced Thermal Science Research, 0, 7, 11-21.	0.4	6
1408	A Review on Recent Progress in Membrane Distillation Crystallization. ChemBioEng Reviews, 2022, 9, 93-109.	2.6	11
1409	Carbon Black/Polyvinylidene Fluoride Nanocomposite Membranes for Direct Solar Distillation. Energies, 2022, 15, 740.	1.6	11
1410	Omniphobic Polyvinylidene Fluoride Membrane Decorated with a ZnO Nano Sea Urchin Structure: Performance Against Surfactant-Wetting in Membrane Distillation. Industrial & Distillation amp; Engineering Chemistry Research, 2022, 61, 2237-2244.	1.8	7
1411	Development of high performance pervaporation desalination membranes: A brief review. Chemical Engineering Research and Design, 2022, 159, 1092-1104.	2.7	18
1412	Advances in Membrane Distillation Module Configurations. Membranes, 2022, 12, 81.	1.4	35
1413	Transport phenomena in membrane distillation processes. , 2022, , 111-128.		0
1414	Desalination by Membrane Distillation., 0,,.		2
1415	A comprehensive review of electrospray technique for membrane development: Current status, challenges, and opportunities. Journal of Membrane Science, 2022, 646, 120248.	4.1	26
1416	Effect of hollow fiber membrane properties and operating conditions on preventing scale precipitation in seawater desalination with vacuum membrane distillation. Desalination, 2022, 527, 115578.	4.0	18
1417	Development in forward Osmosis-Membrane distillation hybrid system for wastewater treatment. Separation and Purification Technology, 2022, 286, 120498.	3.9	39
1418	Boron removal by using vacuum assisted air gap membrane distillation (VAGMD). Environmental Technology and Innovation, 2022, 26, 102395.	3.0	8
1419	A Novel Concentrated Solar Membrane-Distillation for Water Purification in a Building Integrated Design. SSRN Electronic Journal, 0, , .	0.4	0
1420	Polymer-based membranes for membrane distillation. , 2022, , 597-635.		0
1421	Theoretical and Experimental Studies of CO2 Absorption in Double-Unit Flat-Plate Membrane Contactors. Membranes, 2022, 12, 370.	1.4	2

#	Article	IF	CITATIONS
1422	Micromechanism Underlying Wetting Behavior of the Vacuum Membrane Distillation during Desalination. Industrial & Desalination. In	1.8	5
1423	Robust super-hydrophobic inorganic nanoparticles modified layered structure Si2N2O membrane for membrane distillation. Journal of the European Ceramic Society, 2022, 42, 4189-4195.	2.8	2
1424	Treatment and Recovery of High-Value Elements from Produced Water. Water (Switzerland), 2022, 14, 880.	1.2	11
1425	Application of a membrane condenser system for ammonia recovery from humid waste gaseous streams at a minimum energy consumption. Applied Water Science, 2022, 12, 1.	2.8	3
1426	Comparative study of small-scale flat-plate direct contact membrane distillation and vacuum membrane distillation modules with integrated direct solar heating. Desalination, 2022, 529, 115633.	4.0	6
1427	Functionalized polymeric smart membrane for remediation of emerging environmental contaminants from industrial sources: Synthesis, characterization and potential applications. Chemical Engineering Research and Design, 2022, 161, 684-702.	2.7	10
1428	Synergy of feed-side aeration and super slippery interface in membrane distillation for enhanced water flux and scaling mitigation. Water Research, 2022, 215, 118246.	5.3	21
1429	Comparative analysis of separation methods used for the elimination of pharmaceuticals and personal care products (PPCPs) from water – A critical review. Separation and Purification Technology, 2022, 290, 120797.	3.9	41
1430	Membrane Distillation-Crystallization for inland desalination brine treatment. Separation and Purification Technology, 2022, 290, 120788.	3.9	24
1431	Detection and treatment of organic matters in hydraulic fracturing wastewater from shale gas extraction: A critical review. Science of the Total Environment, 2022, 824, 153887.	3.9	24
1432	Performance analyses on a concentrated photovoltaics driven direct contact membrane distillation coupled system. Desalination, 2022, 531, 115695.	4.0	12
1433	Optimizing the performance of sweeping gas membrane distillation for treating naturally heated saline groundwater. Desalination, 2022, 532, 115736.	4.0	7
1434	Insights into the wetting phenomenon induced by scaling of calcium sulfate in membrane distillation. Water Research, 2022, 216, 118282.	5. 3	11
1435	Effect of cations on surfactant induced membrane wetting during membrane distillation. Desalination, 2022, 532, 115739.	4.0	5
1436	Flat sheet direct contact membrane distillation study to decrease the energy demand for solar desalination purposes. Sustainable Energy Technologies and Assessments, 2022, 52, 102100.	1.7	21
1437	Membrane cleaning in membrane distillation of reverse osmosis concentrate generated in landfill leachate treatment. Water Science and Technology, 2022, 85, 244-256.	1.2	9
1438	Enhancing Absorption Performance of CO2 by Amine Solution through the Spiral Wired Channel in Concentric Circular Membrane Contactors. Membranes, 2022, 12, 4.	1.4	2
1439	Distillate Flux Enhancement of Direct Contact Membrane Distillation Modules with Inserting Cross-Diagonal Carbon-Fiber Spacers. Membranes, 2021, 11, 973.	1.4	1

#	Article	IF	CITATIONS
1440	A review on membrane distillation in process engineering: design and exergy equations, materials and wetting problems. Frontiers of Chemical Science and Engineering, 2022, 16, 592-613.	2.3	8
1442	Membrane Distillation for Wastewater Treatment: A Mini Review. Water (Switzerland), 2021, 13, 3480.	1.2	15
1443	ZnO Nanorod Induced Omniphobic Polypropylene Membrane for Improved Antiwetting Performance in Membrane Distillation. Industrial & Engineering Chemistry Research, 2022, 61, 5963-5970.	1.8	5
1444	Evaluation of the Specific Energy Consumption of Sea Water Reverse Osmosis Integrated with Membrane Distillation and Pressure–Retarded Osmosis Processes with Theoretical Models. Membranes, 2022, 12, 432.	1.4	6
1445	Long-Chain PFASs-Free Omniphobic Membranes for Sustained Membrane Distillation. ACS Applied Materials & Samp; Interfaces, 2022, 14, 23808-23816.	4.0	14
1446	Computational fluid dynamics based numerical simulations of heat transfer, fluid flow and mass transfer in vacuum membrane distillation process. Water Science and Technology: Water Supply, 2022, 22, 6262-6280.	1.0	6
1447	Effect of membrane surface wetting on the performance of direct contact membrane distillation for seawater desalination. Cleaner Engineering and Technology, 2022, 8, 100495.	2.1	2
1448	Energetic and exergetic analyses of a closed-loop pressure retarded membrane distillation (PRMD) for low-grade thermal energy utilization and freshwater production. Desalination, 2022, 534, 115799.	4.0	12
1449	In situ conductive spacers for early pore wetting detection in membrane distillation. Separation and Purification Technology, 2022, 294, 121162.	3.9	10
1450	A novel concentrated solar membrane-distillation for water purification in a building integrated design. Desalination, 2022, 535, 115828.	4.0	9
1451	Rejection of trace organic compounds by membrane processes: mechanisms, challenges, and opportunities. Reviews in Chemical Engineering, 2023, 39, 875-910.	2.3	4
1452	Optimization of operational parameters in air-gap membrane distillation using central composite design applied in recovery of dye manufacturing wastewaters. Separation Science and Technology, 0 , , $1-17$.	1.3	0
1453	Revealing interfacial heating effects on water evaporation during surface distillation. Desalination, 2022, 537, 115867.	4.0	0
1454	CFD Model Development and Experimental Measurements for Ammonia–Water Separation Using a Vacuum Membrane Distillation Module. Industrial & Engineering Chemistry Research, 2022, 61, 7381-7396.	1.8	8
1455	Impact of Organic and Volatile Compounds in Produced Water from Unconventional Reservoirs on Direct Contact Membrane Distillation Permeate Quality. ACS ES&T Water, 2022, 2, 1003-1012.	2.3	6
1456	Graphene-based membranes for membrane distillation applications: A review. Journal of Environmental Chemical Engineering, 2022, 10, 107974.	3.3	19
1457	Recent developments in utilizing hydrous ethanol for diverse engine technologies. Chemical Engineering and Processing: Process Intensification, 2022, 177, 108985.	1.8	22
1458	Applications of Metalâ [^] Organic Frameworks in Wastewater Treatment and Gas Separation and Purification. ACS Symposium Series, 0, , 271-337.	0.5	0

#	Article	IF	Citations
1459	High-Yielding and Stable Desalination Via Photothermal Membrane Distillation with Free-Flow Evaporation Channel. SSRN Electronic Journal, 0, , .	0.4	0
1460	Les Simulations of a Vacuum Membrane Distillation Channel with Geometric Alterations. SSRN Electronic Journal, 0, , .	0.4	0
1461	Performance of an air gap membrane distillation system and enhancement using a low-cost surface modification. International Journal of Green Energy, 2023, 20, 714-724.	2.1	0
1462	Wave-Powered and Zero-Discharging Membrane-Distillation Desalination System: Conceptual Design and Analysis. Water (Switzerland), 2022, 14, 1897.	1.2	0
1463	Drivers, challenges, and emerging technologies for desalination of high-salinity brines: A critical review. Desalination, 2022, 538, 115827.	4.0	67
1464	Materials for energy conversion in membrane distillation localized heating: Review, analysis and future perspectives of a paradigm shift. Renewable and Sustainable Energy Reviews, 2022, 167, 112702.	8.2	16
1465	Performance Investigation of a Novel Ultrasonic-Assisted Non-Contact Membrane Distillation Process for Preventing Membrane Fouling. SSRN Electronic Journal, 0, , .	0.4	0
1466	Vacuum-Assisted Multistage Membrane Distillation with Bubble Column Dehumidifier for Efficient Water Production. Journal of Energy Resources Technology, Transactions of the ASME, 0, , 1-18.	1.4	0
1467	Engineering beads-on-string structural electrospun nanofiber Janus membrane with multi-level roughness for membrane distillation. Desalination, 2022, 539, 115950.	4.0	14
1468	Experimental investigation of two novel arrangements of air gap membrane distillation module with heat recovery. Energy Reports, 2022, 8, 8563-8573.	2.5	13
1469	Influences of Permeate Solution and Feed pH on Enhancement of Ammonia Recovery from Wastewater by Negatively Charged PTFE Membranes in Direct Contact Membrane Distillation Operation. ACS Omega, 2022, 7, 27722-27733.	1.6	8
1470	Effect of Configurations and Operating Parameters on the Desalination Performance of Membrane Distillation: A Review. Journal of Applied Membrane Science & Technology, 2022, 26, 49-60.	0.3	0
1471	One-step preparation of omniphobic membrane with concurrent anti-scaling and anti-wetting properties for membrane distillation. Journal of Membrane Science, 2022, 660, 120846.	4.1	12
1472	Stacked Laser-Induced Graphene Joule Heaters for Desalination and Water Recycling. ACS Applied Nano Materials, 2022, 5, 10991-11002.	2.4	14
1473	A Zero-Brine Discharge Seawater Desalination Using a Pilot-Scale Membrane Distillation System Integrated with Crystallizer. Membranes, 2022, 12, 799.	1.4	3
1474	Novel structures of direct contact membrane distillation for brackish water desalination using distributed feed flow. Desalination, 2022, 540, 116000.	4.0	1
1475	PVDF/MAF-4 composite membrane for high flux and scaling-resistant membrane distillation. Desalination, 2022, 540, 116013.	4.0	38
1476	Membranes in Zero-Liquid-Discharge Systems for Efficient Processes toward Sustainable Environment: A Review. Journal of Environmental Engineering, ASCE, 2022, 148, .	0.7	5

#	ARTICLE	IF	CITATIONS
1477	Membrane distillation by novel Janus-enhanced membrane featuring hydrophobic-hydrophilic dual-surface for freshwater recovery. Separation and Purification Technology, 2022, 302, 122036.	3.9	15
1478	High-yielding and stable desalination via photothermal membrane distillation with free-flow evaporation channel. Desalination, 2022, 543, 116103.	4.0	6
1479	Investigations on the effect of spacer in direct contact and air gap membrane distillation using computational fluid dynamics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 654, 130111.	2.3	8
1480	Recent development of membranes modified with natural compounds: Preparation methods and applications in water treatment. Separation and Purification Technology, 2022, 302, 122101.	3.9	8
1481	Experimental investigation of two-side heat transfer in spacer-filled channels representative of membrane distillation. Experimental Thermal and Fluid Science, 2023, 140, 110770.	1.5	2
1482	Review of Boron Nitride–Based Membranes in Water Purification Applications. SSRN Electronic Journal, O, , .	0.4	1
1483	ENHANCING DCMD EFFICIENCY FOR DESALINATION AT MODULE SCALE THROUGH DUAL HEAT RECOVERY AND RETENTATE RECIRCULATION. , 2022, , .		0
1484	Electrospun nanofibrous membranes for membrane distillation. , 2022, , 215-261.		2
1485	Recent Progress in Electrospun Nanofibers for theÂMembrane Distillation of Hypersaline Wastewaters. Advanced Fiber Materials, 2022, 4, 1357-1374.	7.9	46
1486	Analysis of effective thermal conductivity and tortuosity modeling in membrane distillation simulation. Micro and Nano Engineering, 2022, 17, 100165.	1.4	2
1487	Preparation and Evaluation of Hydrophobic Grafted Ceramic Membrane: For Application in Water Desalination. , 0, , .		0
1488	Unraveling relative roles of bulk precipitation and surface growth in developing a scaling layer in membrane distillation. Desalination, 2022, 544, 116133.	4.0	5
1489	Direct Contact Membrane Distillation for Treatment of Mixed Wastewater of Humic Acid and Reactive Dye: Membrane Flux Decline and Fouling Analysis. ACS Omega, 2022, 7, 37846-37856.	1.6	0
1490	Structural design of the electrospun nanofibrous membrane for membrane distillation application: a review. Environmental Science and Pollution Research, 2022, 29, 82632-82659.	2.7	4
1491	Numerical and Experimental Performance Evaluation of a Photovoltaic Thermal Integrated Membrane Desalination System. Energies, 2022, 15, 7417.	1.6	1
1492	Friction and Heat Transfer in Membrane Distillation Channels: An Experimental Study on Conventional and Novel Spacers. Membranes, 2022, 12, 1029.	1.4	2
1493	Comprehensive experimental and theoretical studies on material-gap and water-gap membrane distillation using composite membranes. Journal of Membrane Science, 2022, , 121108.	4.1	5
1494	Porous condensers can double the efficiency of membrane distillation. Desalination, 2023, 545, 116129.	4.0	9

#	Article	IF	CITATIONS
1495	Performance analyses on a novel evacuated U-tube solar collector powered direct contact membrane distillation hybrid system for seawater desalination. Applied Thermal Engineering, 2023, 219, 119490.	3.0	6
1496	Lithium recovery through WS2 nanofillers-promoted solar photothermal membrane crystallization of LiCl. Desalination, 2023, 546, 116186.	4.0	7
1497	Preparation and characterization of fluoroalkyl activated carbons/PVDF composite membranes for water and resources recovery by membrane distillation. Separation and Purification Technology, 2023, 305, 122519.	3.9	8
1498	Review of boron nitride-based membranes in liquid purification/separation applications. Chemical Engineering Journal, 2023, 453, 139740.	6.6	10
1499	Biofouling control of membrane distillation for seawater desalination: Effect of air-backwash and chemical cleaning on biofouling formation. Biofouling, 2022, 38, 889-902.	0.8	1
1500	Performance Analysis of an Eductor-Based Membrane Distillation Unit. Water (Switzerland), 2022, 14, 3624.	1.2	1
1501	Reject brine management: Denitrification and zero liquid discharge (ZLD)â€"Current status, challenges and future prospects. Journal of Cleaner Production, 2022, 381, 135124.	4.6	15
1502	Performance Study of Eductor with Finite Secondary Source for Membrane Distillation. Energies, 2022, 15, 8620.	1.6	1
1503	Viability of waste heat capture, storage, and transportation for decentralized flowback and produced water treatment. Applied Energy, 2023, 330, 120342.	5.1	2
1504	Comprehensive experimental and theoretical investigations on the effect of microbubble two-phase flow on the performance of direct-contact membrane distillation. Water Research, 2023, 229, 119407.	5. 3	3
1505	Application of membrane distillation for purification of radioactive liquid. Cleaner Engineering and Technology, 2023, 12, 100589.	2.1	4
1506	Numerical simulations of membrane distillation systems with actively heated membranes. Journal of Membrane Science, 2023, 668, 121206.	4.1	1
1507	Molecular dynamics study on water desalination performance and related mechanism of hydrophobic î±-Al2O3 ceramic membrane. International Journal of Heat and Mass Transfer, 2023, 202, 123739.	2. 5	1
1508	Evolution of Membrane Surface Properties for Membrane Distillation: A Mini Review. Journal of Applied Membrane Science & Technology, 2022, 26, 45-64.	0.3	0
1509	A membrane-based seawater electrolyser for hydrogen generation. Nature, 2022, 612, 673-678.	13.7	196
1510	Design Parameters of a Direct Contact Membrane Distillation and a Case Study of Its Applicability to Low-Grade Waste Energy. Membranes, 2022, 12, 1279.	1.4	3
1511	Augmentation of Waterâ€"Can Oceans Help?. , 2023, , 253-270.		0
1512	Polyamide Thin-Film Composite Janus Membranes Avoiding Direct Contact between Feed Liquid and Hydrophobic Pores for Excellent Wetting Resistance in Membrane Distillation. ACS ES&T Water, 2023, 3, 176-184.	2.3	8

#	Article	IF	CITATIONS
1513	Breaking the Saturated Vapor Layer with a Thin Porous Membrane. Membranes, 2022, 12, 1231.	1.4	0
1514	Bubble Column Dehumidification for Sweeping Air Membrane Distillation. Arabian Journal for Science and Engineering, 2023, 48, 11537-11544.	1.7	1
1515	Observation and Isochoric Thermodynamic Analysis of Partially Water-Filled 1.32 and 1.45 nm Diameter Carbon Nanotubes. Nano Letters, 2023, 23, 389-397.	4.5	0
1516	Desalination technologies, membrane distillation, and electrospinning, an overview. Heliyon, 2023, 9, e12810.	1.4	20
1517	Permeate Flux Enhancement in Air Gap Membrane Distillation Modules with Inserting $\hat{\nu}$ -Ribs Carbon-Fiber Open Slots. Membranes, 2023, 13, 66.	1.4	3
1518	New Materials and Phenomena in Membrane Distillation. Chemistry, 2023, 5, 65-84.	0.9	2
1519	Integration of desalination and energy conversion in a thermo-osmotic system using low-grade heat: Performance analysis and techno-economic evaluation. Applied Thermal Engineering, 2023, 223, 120039.	3.0	38
1520	Directing the research agenda on water and energy technologies with process and economic analysis. Energy and Environmental Science, 2023, 16, 714-722.	15.6	13
1521	Comparative Energetics of Various Membrane Distillation Configurations and Guidelines for Design and Operation. Membranes, 2023, 13, 273.	1.4	3
1522	Enhancing Thermoâ€Osmotic Lowâ€Grade Heat Recovery by Applying a Negative Pressure to the Feed. Global Challenges, 2023, 7, .	1.8	1
1523	Anti-fouling/wetting electrospun nanofibrous membranes for membrane distillation desalination: A comprehensive review. Desalination, 2023, 553, 116475.	4.0	16
1524	A deep dive into membrane distillation literature with data analysis, bibliometric methods, and machine learning. Desalination, 2023, 553, 116482.	4.0	8
1525	Trace organic contaminants removal by membrane distillation: A review on mechanisms, performance, applications, and challenges. Chemical Engineering Journal, 2023, 464, 142461.	6.6	11
1526	Efficient NH3-N recovery from municipal wastewaters via membrane hybrid systems: Nutrient-Energy-Water (NEW) nexus in circular economy. Chemical Engineering Journal, 2023, 465, 142876.	6.6	9
1527	Energy duty in direct contact membrane distillation of hypersaline brines operating at the water-energy nexus. Journal of Membrane Science, 2023, 676, 121585.	4.1	2
1528	Hydrogen isotopic water separation in membrane distillation through BN, MoS2 and their heterostructure membranes. Separation and Purification Technology, 2023, 314, 123634.	3.9	2
1529	Detailed numerical analysis of air gap membrane distillation performance using different membrane materials and porosity. Desalination, 2023, 551, 116436.	4.0	14
1530	Nickel Chalcogenide Nanoparticles-Assisted Photothermal Solar Driven Membrane Distillation (PSDMD). Membranes, 2023, 13, 195.	1.4	1

#	Article	IF	CITATIONS
1531	A visualization study of vacuum enhancement on vapor flow and yield in tubular solar still. Solar Energy, 2023, 252, 145-155.	2.9	5
1532	Performance evaluation of a novel integrated adsorption desalination system with direct contact membrane distillation plant. Desalination, 2023, 552, 116441.	4.0	4
1533	The Potential of Membrane Contactors in the Pre-Treatment and Post-Treatment Lines of a Reverse Osmosis Desalination Plant. Separations, 2023, 10, 129.	1.1	0
1534	Investigation on the Performance of CO2 Absorption in Ceramic Hollow-Fiber Gas/Liquid Membrane Contactors. Membranes, 2023, 13, 249.	1.4	0
1535	Surface Modification of UiO-66 on Hollow Fibre Membrane for Membrane Distillation. Membranes, 2023, 13, 253.	1.4	4
1536	In situ real-time monitoring technologies for fouling detection in membrane processes. , 2023, , 43-64.		1
1537	Electrical impedance spectroscopy for non-destructive detection of wetting, fouling and scaling in membrane distillation. Journal of Water Process Engineering, 2023, 53, 103608.	2.6	3
1538	Techno-Economic Analysis of Vacuum Membrane Distillation for Seawater Desalination. Membranes, 2023, 13, 339.	1.4	3
1539	Quantifying the Benefits of Membranes with Ultrahigh Vapor Permeability for Membrane Distillation. ACS ES&T Engineering, 2023, 3, 981-988.	3.7	3
1540	Preparation and characterization of ZIF-8 and ZIF-67 engineered PVDF mixed-matrix membranes: stability enhancement in pervaporation study. Environmental Science: Water Research and Technology, 2023, 9, 1502-1517.	1.2	4
1541	Plasma-Induced Superhydrophobicity as a Green Technology for Enhanced Air Gap Membrane Distillation. ACS Applied Materials & Interfaces, 2023, 15, 18493-18504.	4.0	6
1542	Near-Zero Liquid Discharge for Wastewater Through Membrane Technology. Energy, Environment, and Sustainability, 2023, , 447-477.	0.6	0
1543	Biomimetic Membranes for Effective Desalination and Emerging Contaminants (ECs) Removal. Energy, Environment, and Sustainability, 2023, , 383-411.	0.6	0
1544	Geothermal energy integrated multi-effect evaporator (MEE) and multi-effect distillation (MED)-based desalination systems: an ecofriendly and sustainable solutions. Environmental Science and Pollution Research, 2023, 30, 67941-67952.	2.7	2
1564	Desalination Technology for Sustainable Water Resource. , 2012, , 197-230.		0
1566	Remediation and recycling of inorganic acids and their green alternatives for sustainable industrial chemical processes. Environmental Science Advances, 2023, 2, 1306-1339.	1.0	0
1570	Thermal Effect on Algae, Biofilm and Their Composition Towards Membrane Distillation Unit: A Mini-review. Molecular Biotechnology, 0, , .	1.3	0
1586	Electrospun Nanofibers for Water Distillation and Pervaporation. Nanostructure Science and Technology, 2023, , 195-225.	0.1	0

#	Article	IF	CITATIONS
1600	Design and evaluation of a microrectification platform using 3D printing. Reaction Chemistry and Engineering, 0 , , .	1.9	0
1609	EXTREME COOLING VIA SWEEPING GAS MEMBRANE DISTILLATION., 2023,,.		0
1615	Saline Water Desalination Using Direct Contact Membrane Distillation: A Theoretical and Experimental Investigation. Earth and Environmental Sciences Library, 2024, , 253-269.	0.3	0
1616	Lithium and Boron Recovery From Oil Field Produced Water: A Mini Review. Lecture Notes in Civil Engineering, 2024, , 119-131.	0.3	0
1617	Solar Desalination Systems. , 2024, , 441-493.		0
1618	Process intensification strategies and equipment for chemical industries. , 2024, , 1-14.		0
1619	Membranes for the downstream treating of biotechnology processes. , 2024, , 519-547.		0
1624	Nanomaterials in membrane technology. , 2024, , 361-391.		0
1627	Membrane distillation for ammonia separation. , 2024, , 131-177.		0