John H Lienhard V

List of Publications by Year
in descending order

203 papers	14,374 citations	18482 62 h-index	22166 113 g-index
210 all docs	210 docs citations	210 times ranked	9064 citing authors

#	Article	IF	Citations
1	Thermophysical properties of seawater: a review of existing correlations and data. Desalination and Water Treatment, 2010, 16, 354-380.	1.0	1,063
2	Scaling and fouling in membrane distillation for desalination applications: A review. Desalination, 2015, 356, 294-313.	8.2	607
3	A History of the MIT Heat Transfer Laboratory. Heat Transfer Engineering, 2003, 24, 3-17.	1.9	539
4	Wetting phenomena in membrane distillation: Mechanisms, reversal, and prevention. Water Research, 2018, 139, 329-352.	11.3	498
5	A review of polymeric membranes and processes for potable water reuse. Progress in Polymer Science, 2018, 81, 209-237.	24.7	483
6	Energy requirements for water production, treatment, end use, reclamation, and disposal. Renewable and Sustainable Energy Reviews, 2012, 16, 4818-4848.	16.4	468
7	The ins and outs of microorganismâ€“electrode electron transfer reactions. Nature Reviews Chemistry, 2017, 1, .	30.2	385
8	Thermophysical properties of seawater: A review and new correlations that include pressure dependence. Desalination, 2016, 390, 1-24.	8.2	370
9	The potential of solar-driven humidificationâ€“dehumidification desalination for small-scale decentralized water production. Renewable and Sustainable Energy Reviews, 2010, 14, 1187-1201.	16.4	332
10	Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. Energy and Environmental Science, 2020, 13, 830-839.	30.8	317
11	Quantifying the potential of ultra-permeable membranes for water desalination. Energy and Environmental Science, 2014, 7, 1134-1141.	30.8	282
12	Thermodynamic analysis of humidification dehumidification desalination cycles. Desalination and Water Treatment, 2010, 16, 339-353.	1.0	274
13	Entropy Generation Analysis of Desalination Technologies. Entropy, 2011, 13, 1829-1864.	2.2	229
14	On the potential of forward osmosis to energetically outperform reverse osmosis desalination. Journal of Membrane Science, 2014, 469, 245-250.	8.2	202
15	Energy consumption in desalinating produced water from shale oil and gas extraction. Desalination, 2015, 366, 94-112.	8.2	190
16	Energy efficiency comparison of single-stage membrane distillation (MD) desalination cycles in different configurations. Desalination, 2012, 290, 54-66.	8.2	182
17	Boiling and Evaporation in Small Diameter Channels. Heat Transfer Engineering, 2003, 24, 18-40.	1.9	164
18	On the cost of electrodialysis for the desalination of high salinity feeds. Applied Energy, 2014, 136, 649-661.	10.1	143

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19	Second law analysis of reverse osmosis desalination plants: An alternative design using pressure retarded osmosis. Energy, 2011, 36, 6617-6626.	8.8	142
20	On exergy calculations of seawater with applications in desalination systems. International Journal of Thermal Sciences, 2011, 50, 187-196.	4.9	137
21	Technical evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 286, 332-341.	8.2	136
22	Energy efficiency of batch and semi-batch (CCRO) reverse osmosis desalination. Water Research, 2016, 106, 272-282.	11.3	136
23	Effect of temperature on ion transport in nanofiltration membranes: Diffusion, convection and electromigration. Desalination, 2017, 420, 241-257.	8.2	134
24	Entropy generation minimization of combined heat and mass transfer devices. International Journal of Thermal Sciences, 2010, 49, 2057-2066.	4.9	132
25	Energy efficiency of membrane distillation up to high salinity: Evaluating critical system size and optimal membrane thickness. Applied Energy, 2018, 211, 715-734.	10.1	129
26	Fundamentals of low-pressure nanofiltration: Membrane characterization, modeling, and understanding the multi-ionic interactions in water softening. Journal of Membrane Science, 2017, 521, 18-32.	8.2	128
27	Effect of entropy generation on the performance of humidification-dehumidification desalination cycles. International Journal of Thermal Sciences, 2010, 49, 1837-1847.	4.9	126
28	Economic evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 299, 55-62.	8.2	122
29	Energy efficiency of permeate gap and novel conductive gap membrane distillation. Journal of Membrane Science, 2016, 502, 171-178.	8.2	119
30	How RO membrane permeability and other performance factors affect process cost and energy use: A review. Desalination, 2019, 470, 114064.	8.2	119
31	Thermal design of the humidification dehumidification desalination system: An experimental investigation. International Journal of Heat and Mass Transfer, 2013, 58, 740-748.	4.8	114
32	Performance limits of zero and single extraction humidification-dehumidification desalination systems. Applied Energy, 2013, 102, 1081-1090.	10.1	113
33	Wetting prevention in membrane distillation through superhydrophobicity and recharging an air layer on the membrane surface. Journal of Membrane Science, 2017, 530, 42-52.	8.2	110
34	The hydraulic jump in circular jet impingement and in other thin liquid films. Experiments in Fluids, 1993, 15, 108-116.	2.4	105
35	Comparison of fouling propensity between reverse osmosis, forward osmosis, and membrane distillation. Journal of Membrane Science, 2018, 556, 352-364.	8.2	101
36	Membrane distillation model based on heat exchanger theory and configuration comparison. Applied Energy, 2016, 184, 491-505.	10.1	97

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37	Thermodynamic balancing of the humidification dehumidification desalination system by mass extraction and injection. International Journal of Heat and Mass Transfer, 2013, 57, 756-770.	4.8	95
38	Sodium Hydroxide Production from Seawater Desalination Brine: Process Design and Energy Efficiency. Environmental Science & Technology, 2018, 52, 5949-5958.	10.0	94
39	Generalized Least Energy of Separation for Desalination and Other Chemical Separation Processes. Entropy, 2013, 15, 2046-2080.	2.2	93
40	Multistage vacuum membrane distillation (MSVMD) systems for high salinity applications. Journal of Membrane Science, 2016, 497, 128-141.	8.2	92
41	Lithium Recovery from Oil and Gas Produced Water: A Need for a Growing Energy Industry. ACS Energy Letters, 2019, 4, 1471-1474.	17.4	92
42	Design and optimization of an air heating solar collector with integrated phase change material energy storage for use in humidificationâ€“dehumidification desalination. Solar Energy, 2012, 86, 3417-3429.	6.1	90
43	Combining air recharging and membrane superhydrophobicity for fouling prevention in membrane distillation. Journal of Membrane Science, 2016, 505, 241-252.	8.2	87
44	Optimal operating conditions and configurations for humidificationâ€“dehumidification desalination cycles. International Journal of Thermal Sciences, 2011, 50, 779-789.	4.9	86
45	An improved model for multiple effect distillation. Desalination and Water Treatment, 2013, 51, 807-821.	1.0	84
46	Next-generation HVAC: Prospects for and limitations of desiccant and membrane-based dehumidification and cooling. Applied Energy, 2017, 200, 330-346.	10.1	83
47	SOLAR DESALINATION. Annual Review of Heat Transfer, 2012, 15, 277-347.	1.0	82
48	Stagnation-Point Heat Transfer During Impingement of Laminar Liquid Jets: Analysis Including Surface Tension. Journal of Heat Transfer, 1993, 115, 99-105.	2.1	81
49	Utilization of Desalination Brine for Sodium Hydroxide Production: Technologies, Engineering Principles, Recovery Limits, and Future Directions. ACS Sustainable Chemistry and Engineering, 2017, 5, 11147-11162.	6.7	79
50	Theoretical framework for predicting inorganic fouling in membrane distillation and experimental validation with calcium sulfate. Journal of Membrane Science, 2017, 528, 381-390.	8.2	78
51	Effects of membrane properties on water production cost in small scale membrane distillation systems. Desalination, 2012, 306, 60-71.	8.2	77
52	High-temperature-steam-driven, varied-pressure, humidification-dehumidification system coupled with reverse osmosis for energy-efficient seawater desalination. Energy, 2012, 37, 482-493.	8.8	77
53	Treating produced water from hydraulic fracturing: Composition effects on scale formation and desalination system selection. Desalination, 2014, 346, 54-69.	8.2	77
54	Optimal design and operation of electrodialysis for brackish-water desalination and for high-salinity brine concentration. Desalination, 2017, 420, 167-182.	8.2	75

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55	The cost effectiveness of electrodialysis for diverse salinity applications. Desalination, 2014, 348, 57-65.	8.2	73
56	Inorganic fouling mitigation by salinity cycling in batch reverse osmosis. Water Research, 2018, 137, 384-394.	11.3	73
57	LIQUID JET IMPINGEMENT. Annual Review of Heat Transfer, 1995, 6, 199-270.	1.0	71
58	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium Recovery. ACS Applied Materials & Interfaces, 2021, 13, 16906-16915.	8.0	70
59	Entropy Generation of Desalination Powered by Variable Temperature Waste Heat. Entropy, 2015, 17, 7530-7566.	2.2	69
60	Cost and energy requirements of hybrid RO and ED brine concentration systems for salt production. Desalination, 2019, 456, 97-120.	8.2	69
61	Costs for water supply, treatment, end-use and reclamation. Desalination and Water Treatment, 2013, 51, 200-232.	1.0	67
62	Use of multiple extractions and injections to thermodynamically balance the humidification dehumidification desalination system. International Journal of Heat and Mass Transfer, 2014, 68, 422-434.	4.8	67
63	Experimental study of thermal performance in air gap membrane distillation systems, including the direct solar heating of membranes. Desalination, 2013, 330, 100-111.	8.2	66
64	Direct electrosynthesis of sodium hydroxide and hydrochloric acid from brine streams. Nature Catalysis, 2019, 2, 106-113.	34.4	65
65	Thermodynamic balancing of a fixed-size two-stage humidification dehumidification desalination system. Desalination, 2015, 369, 125-139.	8.2	64
66	Thermodynamic analysis of brine management methods: Zero-discharge desalination and salinity-gradient power production. Desalination, 2017, 404, 291-303.	8.2	64
67	Superhydrophobic condenser surfaces for air gap membrane distillation. Journal of Membrane Science, 2015, 492, 578-587.	8.2	61
68	ENERGY EFFECTIVENESS OF SIMULTANEOUS HEAT AND MASS EXCHANGE DEVICES. Frontiers in Heat and Mass Transfer, 2010, 1, .	0.2	61
69	Metals Recovery from Seawater Desalination Brines: Technologies, Opportunities, and Challenges. ACS Sustainable Chemistry and Engineering, 2021, 9, 7704-7712.	6.7	60
70	Limits of power production due to finite membrane area in pressure retarded osmosis. Journal of Membrane Science, 2014, 468, 81-89.	8.2	59
71	Entropy generation in condensation in the presence of high concentrations of noncondensable gases. International Journal of Heat and Mass Transfer, 2012, 55, 5133-5147.	4.8	56
72	Experiments and modeling of bubble column dehumidifier performance. International Journal of Thermal Sciences, 2014, 80, 65-75.	4.9	56

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73	Impact of extraction on a humidificationâ€“dehumidification desalination system. Desalination, 2013, 313, 87-96.	8.2	55
74	The benefits of hybridising electrodialysis with reverse osmosis. Journal of Membrane Science, 2014, 469, 326-335.	8.2	55
75	Effect of composition and nonideal solution behavior on desalination calculations for mixed electrolyte solutions with comparison to seawater. Desalination, 2013, 318, 34-47.	8.2	53
76	Modeling of flat-sheet and spiral-wound nanofiltration configurations and its application in seawater nanofiltration. Journal of Membrane Science, 2015, 493, 360-372.	8.2	53
77	Primary energy and exergy of desalination technologies in a power-water cogeneration scheme. Applied Energy, 2019, 252, 113319.	10.1	53
78	Relating transport modeling to nanofiltration membrane fabrication: Navigating the permeability-selectivity trade-off in desalination pretreatment. Journal of Membrane Science, 2018, 554, 26-38.	8.2	52
79	Exergy analysis of a high-temperature-steam-driven, varied-pressure, humidificationâ€“dehumidification system coupled with reverse osmosis. Applied Energy, 2013, 103, 552-561.	10.1	50
80	Split-feed counterflow reverse osmosis for brine concentration. Desalination, 2018, 445, 280-291.	8.2	50
81	On the merits of using multi-stage and counterflow electrodialysis for reduced energy consumption. Desalination, 2018, 439, 1-16.	8.2	48
82	Reversing membrane wetting in membrane distillation: comparing dryout to backwashing with pressurized air. Environmental Science: Water Research and Technology, 2017, 3, 930-939.	2.4	47
83	Thermodynamic equipartition for increased second law efficiency. Applied Energy, 2014, 118, 292-299.	10.1	45
84	A new reverse electrodialysis design strategy which significantly reduces the levelized cost of electricity. Journal of Membrane Science, 2015, 493, 605-614.	8.2	45
85	Saving energy with an optimized two-stage reverse osmosis system. Environmental Science: Water Research and Technology, 2017, 3, 659-670.	2.4	45
86	Cost and energy needs of RO-ED-crystallizer systems for zero brine discharge seawater desalination. Desalination, 2019, 457, 115-132.	8.2	44
87	The effects of iCVD film thickness and conformality on the permeability and wetting of MD membranes. Journal of Membrane Science, 2017, 523, 470-479.	8.2	43
88	Brackish water desalination for greenhouses: Improving groundwater quality for irrigation using monovalent selective electrodialysis reversal. Journal of Membrane Science, 2020, 610, 118072.	8.2	43
89	Water-Energy Nexus in Saudi Arabia. Energy Procedia, 2017, 105, 3837-3843.	1.8	41
90	Effectivenessâ€“mass transfer units (Îµâ€“MTU) model of an ideal pressure retarded osmosis membrane mass exchanger. Journal of Membrane Science, 2013, 445, 211-219.	8.2	40

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91	Bubble columns for condensation at high concentrations of noncondensable gas: Heatâ€transfer model and experiments. AICHE Journal, 2013, 59, 1780-1790.	3.6	40
92	Velocity Coefficients For Free Jets From Sharp-Edged Orifices. Journal of Fluids Engineering, Transactions of the ASME, 1984, 106, 13-17.	1.5	39
93	Entropy generation analysis of electrodialysis. Desalination, 2017, 413, 184-198.	8.2	38
94	Raising forward osmosis brine concentration efficiency through flow rate optimization. Desalination, 2015, 366, 71-79.	8.2	37
95	On the present and future economic viability of stand-alone pressure-retarded osmosis. Desalination, 2017, 408, 133-144.	8.2	37
96	Splattering During Turbulent Liquid Jet Impingement on Solid Targets. Journal of Fluids Engineering, Transactions of the ASME, 1994, 116, 338-344.	1.5	36
97	Effectiveness-mass transfer units (Îµ-MTU) model of a reverse osmosis membrane mass exchanger. Journal of Membrane Science, 2014, 458, 189-198.	8.2	36
98	Brackish water desalination for greenhouse agriculture: Comparing the costs of RO, CCRO, EDR, and monovalent-selective EDR. Desalination, 2020, 475, 114188.	8.2	36
99	Analysis of reversible ejectors and definition of an ejector efficiency. International Journal of Thermal Sciences, 2012, 54, 153-166.	4.9	35
100	Increasing the power density and reducing the levelized cost of electricity of a reverse electrodialysis stack through blending. Desalination, 2015, 369, 140-148.	8.2	34
101	In situ visualization of organic fouling and cleaning mechanisms in reverse osmosis and forward osmosis. Desalination, 2016, 399, 138-147.	8.2	34
102	Impact of salt retention on true batch reverse osmosis energy consumption: Experiments and model validation. Desalination, 2020, 479, 114177.	8.2	34
103	Hybrid electrodialysis reverse osmosis system design and its optimization for treatment of highly saline brines. IDA Journal of Desalination and Water Reuse, 2014, 6, 15-23.	0.4	33
104	Design and operation of membrane distillation with feed recirculation for high recovery brine concentration. Desalination, 2018, 445, 51-62.	8.2	33
105	Simple method for balancing direct contact membrane distillation. Desalination, 2016, 383, 53-59.	8.2	32
106	A novel solar-driven air gap membrane distillation system. Desalination and Water Treatment, 2013, 51, 1344-1351.	1.0	31
107	On the asymptotic flux of ultrapermeable seawater reverse osmosis membranes due to concentration polarisation. Journal of Membrane Science, 2016, 520, 560-565.	8.2	31
108	Minimum energy requirements for desalination of brackish groundwater in the United States with comparison to international datasets. Water Research, 2018, 141, 387-404.	11.3	31

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109	Effect of fouling on performance of pressure retarded osmosis (PRO) and forward osmosis (FO). Journal of Membrane Science, 2018, 565, 450-462.	8.2	31
110	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. Angewandte Chemie - International Edition, 2019, 58, 6502-6511.	13.8	30
111	The effect of increased top brine temperature on the performance and design of OT-MSF using a case study. Desalination, 2017, 412, 32-38.	8.2	29
112	Effect of Nonideal Solution Behavior on Desalination of a Sodium Chloride Solution and Comparison to Seawater. Journal of Energy Resources Technology, Transactions of the ASME, 2013, 135, .	2.3	28
113	Practical aspects of batch RO design for energy-efficient seawater desalination. Desalination, 2019, 470, 114097.	8.2	28
114	On Thermal Performance of Seawater Cooling Towers. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	27
115	Design of Flat-Plate Dehumidifiers for Humidificationâ€“Dehumidification Desalination Systems. Heat Transfer Engineering, 2013, 34, 543-561.	1.9	27
116	Quantifying osmotic membrane fouling to enable comparisons across diverse processes. Journal of Membrane Science, 2016, 511, 92-107.	8.2	27
117	Design and modeling of novel low-pressure nanofiltration hollow fiber modules for water softening and desalination pretreatment. Desalination, 2018, 439, 58-72.	8.2	27
118	Economic framework for net power density and levelized cost of electricity in pressure-retarded osmosis. Desalination, 2018, 448, 13-20.	8.2	27
119	Heat Transfer in Flat-Plate Boundary Layers: A Correlation for Laminar, Transitional, and Turbulent Flow. Journal of Heat Transfer, 2020, 142, .	2.1	27
120	Enhancing the Permselectivity of Thin-Film Composite Membranes Interlayered with MoS₂ Nanosheets via Precise Thickness Control. Environmental Science & Technology, 2022, 56, 8807-8818.	10.0	27
121	Effect of mass extractions and injections on the performance of a fixed-size humidificationâ€“dehumidification desalination system. Desalination, 2013, 314, 50-58.	8.2	26
122	Liquid jet-array cooling modules for high heat fluxes. AICHE Journal, 1998, 44, 769-779.	3.6	25
123	Unpacking compaction: Effect of hydraulic pressure on alginate fouling. Journal of Membrane Science, 2017, 544, 221-233.	8.2	25
124	Thermal Stability of Two Fluid Layers Separated by a Solid Interlayer of Finite Thickness and Thermal Conductivity. Journal of Heat Transfer, 1984, 106, 605-612.	2.1	24
125	An Economics-Based Second Law Efficiency. Entropy, 2013, 15, 2736-2765.	2.2	24
126	Comprehensive condensation flow regimes in air gap membrane distillation: Visualization and energy efficiency. Journal of Membrane Science, 2018, 555, 517-528.	8.2	24

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127	Mechanical vapor compressionâ€"Membrane distillation hybrids for reduced specific energy consumption. Desalination and Water Treatment, 2016, 57, 26507-26517.	1.0	22
128	Caustic Soda Production, Energy Efficiency, and Electrolyzers. ACS Energy Letters, 2021, 6, 3563-3566.	17.4	21
129	Techno-economic analysis of ion concentration polarization desalination for high salinity desalination applications. Water Research, 2019, 155, 162-174.	11.3	20
130	Evaporative cooling of continuously drawn glass fibers by water sprays. International Journal of Heat and Mass Transfer, 2000, 43, 777-790.	4.8	19
131	Treating Irrigation Water Using High-Performance Membranes for Monovalent Selective Electrodialysis. ACS ES&T Water, 2021, 1, 117-124.	4.6	19
132	An experimental analysis of fluctuating temperature measurements using hot-wires at different overheats. Experiments in Fluids, 1989, 7, 265-270.	2.4	18
133	Solâ€"Gel Synthesis of $hbox{Au/Cu-TiO}_{2}$ Nanocomposite and Their Morphological and Optical Properties. IEEE Photonics Journal, 2013, 5, 2201908-2201908.	2.0	18
134	System scale analytical modeling of forward and assisted forward osmosis mass exchangers with a case study on fertigation. Journal of Membrane Science, 2016, 510, 533-545.	8.2	18
135	Multistage pressure-retarded osmosis configurations: A unifying framework and thermodynamic analysis. Desalination, 2020, 476, 114230.	8.2	18
136	Solute displacement in the aqueous phase of waterâ€"NaClâ€"organic ternary mixtures relevant to solvent-driven water treatment. RSC Advances, 2020, 10, 29516-29527.	3.6	18
137	Treatment of greenhouse wastewater for reuse or disposal using monovalent selective electrodialysis. Desalination, 2021, 507, 115037.	8.2	18
138	Cost effectiveness of conventionally and solar powered monovalent selective electrodialysis for seawater desalination in greenhouses. Applied Energy, 2021, 301, 117425.	10.1	18
139	An Improved Approach to Conductive Boundary Conditions for the Rayleigh-BeÂ´nard Instability. Journal of Heat Transfer, 1987, 109, 378-387.	2.1	17
140	Surface Disturbance Evolution and the Splattering of Turbulent Liquid Jets. Journal of Fluids Engineering, Transactions of the ASME, 1994, 116, 721-727.	1.5	17
141	Computational fluid dynamics modeling for performance assessment of permeate gap membrane distillation. Journal of Membrane Science, 2018, 568, 55-66.	8.2	17
142	Comparative assessment of the effects of 3D printed feed spacers on process performance in MD systems. Desalination, 2021, 503, 114940.	8.2	17
143	Thermodynamics of solvent-driven water extraction from hypersaline brines using dimethyl ether. Chemical Engineering Journal, 2022, 434, 134391.	12.7	17
144	Monovalent selective electrodialysis: Modelling multi-ionic transport across selective membranes. Water Research, 2021, 199, 117171.	11.3	16

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145	Thermal Design of Humidificationâ€“ Dehumidification Systems for Affordable Small-Scale Desalination. IDA Journal of Desalination and Water Reuse, 2012, 4, 24-34.	0.4	15
146	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.8	14
147	Three dimensionless parameters influencing the optimal membrane orientation for forward osmosis. Journal of Membrane Science, 2014, 458, 104-110.	8.2	14
148	Entrance length effects on Graetz number scaling in laminar duct flows with periodic obstructions: Transport number correlations for spacer-filled membrane channel flows. International Journal of Heat and Mass Transfer, 2016, 97, 842-852.	4.8	14
149	On the electrical operation of batch electrodialysis for reduced energy consumption. Environmental Science: Water Research and Technology, 2019, 5, 1172-1182.	2.4	14
150	Advances and challenges in metal ion separation from water. Trends in Chemistry, 2021, 3, 819-831.	8.5	14
151	Effect of Module Inclination Angle on Air Gap Membrane Distillation. , 2014, , .		14
152	Design of Plate-Fin Tube Dehumidifiers for Humidificationâ€“Dehumidification Desalination Systems. Heat Transfer Engineering, 2015, 36, 223-243.	1.9	13
153	Factors contributing to the change in permeate quality upon temperature variation in nanofiltration. Desalination, 2019, 455, 58-70.	8.2	13
154	Deformation-induced cleaning of organically fouled membranes: Fundamentals and techno-economic assessment for spiral-wound membranes. Journal of Membrane Science, 2021, 626, 119169.	8.2	13
155	Plasmon Resonance Enhanced Photocatalysis Under Visible Light with Au/Cuâ€“TiO₂ Nanoparticles: Removal Cr (VI) from Water as a Case of Study. Science of Advanced Materials, 2013, 5, 2007-2014.	0.7	13
156	Heat transfer to a horizontal cylinder in a shallow bubble column. International Journal of Heat and Mass Transfer, 2014, 79, 353-361.	4.8	12
157	The Need for Accurate Osmotic Pressure and Mass Transfer Resistances in Modeling Osmotically Driven Membrane Processes. Membranes, 2021, 11, 128.	3.0	12
158	Revisiting the Schrage Equation for Kinetically Limited Evaporation and Condensation. Journal of Heat Transfer, 2022, 144, .	2.1	12
159	A low-cost, high-performance DC cold-wire bridge. Journal of Physics E: Scientific Instruments, 1988, 21, 167-170.	0.7	11
160	Thermal Radiation in Rayleigh-BeÂ´nard Instability. Journal of Heat Transfer, 1990, 112, 100-109.	2.1	11
161	High Heat Flux Cooling by Liquid Jet-Array Modules. Chemical Engineering and Technology, 1999, 22, 967.	1.5	11
162	Variable Pressure Humidification Dehumidification Desalination System. , 2011, , .		11

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163	An Analysis of Likely Scalants in the Treatment of Produced Water From Nova Scotia. Heat Transfer Engineering, 2015, 36, 652-662.	1.9	10
164	Thermodynamics, Exergy, and Energy Efficiency in Desalination Systems. , 2017, , 127-206.		10
165	Energy Savings in Desalination Technologies: Reducing Entropy Generation by Transport Processes. Journal of Heat Transfer, 2019, 141, .	2.1	10
166	Active Thermal Control of Distributed Parameter Systems With Application to Testing of Packaged IC Devices. Journal of Heat Transfer, 2003, 125, 164-174.	2.1	9
167	Formulation of Seawater Flow Exergy Using Accurate Thermodynamic Data. , 2010, , .		9
168	Rebuttal to â€œDiscussion of â€˜Second law analysis of reverse osmosis desalination plants: An alternative design using pressure retarded osmosisâ€™ [Energy 2011] 36: 6617â€“6626]â€• Energy, 2012, 46, 691-693.	8.8	9
169	A new vacuum membrane distillation system using an aspirator: concept modeling and optimization. Desalination and Water Treatment, 2016, 57, 12915-12928.	1.0	9
170	Desalination of brackish groundwater to improve water quality and water supply. , 2021, , 559-575.		9
171	Modeling reverse osmosis element design using superposition and an analogy to convective heat transfer. Journal of Membrane Science, 2016, 512, 38-49.	8.2	8
172	A framework to analyze sulfate versus chloride selectivity in nanofiltration. Environmental Science: Water Research and Technology, 2019, 5, 585-598.	2.4	8
173	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. Angewandte Chemie, 2019, 131, 6570-6579.	2.0	8
174	Exterior Shape Factors From Interior Shape Factors. Journal of Heat Transfer, 2019, 141, .	2.1	7
175	On the presence of solute-solvent transport coupling in reverse osmosis. Journal of Membrane Science, 2020, 611, 118272.	8.2	7
176	Multicomponent Fickian solution-diffusion model for osmotic transport through membranes. Journal of Membrane Science, 2021, 640, 119819.	8.2	7
177	Metrics Matter: Accurately Defining Energy Efficiency in Desalination. Journal of Heat Transfer, 2020, 142, .	2.1	7
178	<title>Large-area jet-array cooling modules for high heat fluxes</title>. , 1996, , .		6
179	Thermal Management and Control in Testing Packaged Integrated Circuit (IC) Devices. , 0, , .		6
180	On Thermal Performance of Seawater Cooling Towers. , 2010, , .		6

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181	Helium as a Carrier Gas in Humidification Dehumidification Desalination Systems. , 2011, , .		6
182	Analytical Modeling of a Bubble Column Dehumidifier. , 2013, , .		6
183	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems. , 2010, , .		4
184	Thermodynamic Analysis of a Reverse Osmosis Desalination System Using Forward Osmosis for Energy Recovery. , 2012, , .		4
185	An Effectivenessâ€“Number of Transfer Units Relationship for Evaporators With Non-negligible Boiling Point Elevation Increases. Journal of Heat Transfer, 2016, 138, .	2.1	4
186	Energy and water without carbon: Integrated desalination and nuclear power at Diablo Canyon. Applied Energy, 2022, 323, 119612.	10.1	4
187	<title>Experiments on jet array cooling modules for high heat flux removal</title>. , 1997, 3151, 6.		3
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