

# John H Lienhard V

## List of Publications by Year in descending order

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203  
papers

14,374  
citations

18465

62  
h-index

22147

113  
g-index

210  
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210  
docs citations

210  
times ranked

9064  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermophysical properties of seawater: a review of existing correlations and data. <i>Desalination and Water Treatment</i> , 2010, 16, 354-380.	1.0	1,063
2	Scaling and fouling in membrane distillation for desalination applications: A review. <i>Desalination</i> , 2015, 356, 294-313.	4.0	607
3	A History of the MIT Heat Transfer Laboratory. <i>Heat Transfer Engineering</i> , 2003, 24, 3-17.	1.2	539
4	Wetting phenomena in membrane distillation: Mechanisms, reversal, and prevention. <i>Water Research</i> , 2018, 139, 329-352.	5.3	498
5	A review of polymeric membranes and processes for potable water reuse. <i>Progress in Polymer Science</i> , 2018, 81, 209-237.	11.8	483
6	Energy requirements for water production, treatment, end use, reclamation, and disposal. <i>Renewable and Sustainable Energy Reviews</i> , 2012, 16, 4818-4848.	8.2	468
7	The ins and outs of microorganismâ€“electrode electron transfer reactions. <i>Nature Reviews Chemistry</i> , 2017, 1, .	13.8	385
8	Thermophysical properties of seawater: A review and new correlations that include pressure dependence. <i>Desalination</i> , 2016, 390, 1-24.	4.0	370
9	The potential of solar-driven humidificationâ€“dehumidification desalination for small-scale decentralized water production. <i>Renewable and Sustainable Energy Reviews</i> , 2010, 14, 1187-1201.	8.2	332
10	Ultrahigh-efficiency desalination <i>via</i> a thermally-localized multistage solar still. <i>Energy and Environmental Science</i> , 2020, 13, 830-839.	15.6	317
11	Quantifying the potential of ultra-permeable membranes for water desalination. <i>Energy and Environmental Science</i> , 2014, 7, 1134-1141.	15.6	282
12	Thermodynamic analysis of humidification dehumidification desalination cycles. <i>Desalination and Water Treatment</i> , 2010, 16, 339-353.	1.0	274
13	Entropy Generation Analysis of Desalination Technologies. <i>Entropy</i> , 2011, 13, 1829-1864.	1.1	229
14	On the potential of forward osmosis to energetically outperform reverse osmosis desalination. <i>Journal of Membrane Science</i> , 2014, 469, 245-250.	4.1	202
15	Energy consumption in desalinating produced water from shale oil and gas extraction. <i>Desalination</i> , 2015, 366, 94-112.	4.0	190
16	Energy efficiency comparison of single-stage membrane distillation (MD) desalination cycles in different configurations. <i>Desalination</i> , 2012, 290, 54-66.	4.0	182
17	Boiling and Evaporation in Small Diameter Channels. <i>Heat Transfer Engineering</i> , 2003, 24, 18-40.	1.2	164
18	On the cost of electrodialysis for the desalination of high salinity feeds. <i>Applied Energy</i> , 2014, 136, 649-661.	5.1	143

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19	Second law analysis of reverse osmosis desalination plants: An alternative design using pressure retarded osmosis. <i>Energy</i> , 2011, 36, 6617-6626.	4.5	142
20	On exergy calculations of seawater with applications in desalination systems. <i>International Journal of Thermal Sciences</i> , 2011, 50, 187-196.	2.6	137
21	Technical evaluation of stand-alone solar powered membrane distillation systems. <i>Desalination</i> , 2012, 286, 332-341.	4.0	136
22	Energy efficiency of batch and semi-batch (CCRO) reverse osmosis desalination. <i>Water Research</i> , 2016, 106, 272-282.	5.3	136
23	Effect of temperature on ion transport in nanofiltration membranes: Diffusion, convection and electromigration. <i>Desalination</i> , 2017, 420, 241-257.	4.0	134
24	Entropy generation minimization of combined heat and mass transfer devices. <i>International Journal of Thermal Sciences</i> , 2010, 49, 2057-2066.	2.6	132
25	Energy efficiency of membrane distillation up to high salinity: Evaluating critical system size and optimal membrane thickness. <i>Applied Energy</i> , 2018, 211, 715-734.	5.1	129
26	Fundamentals of low-pressure nanofiltration: Membrane characterization, modeling, and understanding the multi-ionic interactions in water softening. <i>Journal of Membrane Science</i> , 2017, 521, 18-32.	4.1	128
27	Effect of entropy generation on the performance of humidification-dehumidification desalination cycles. <i>International Journal of Thermal Sciences</i> , 2010, 49, 1837-1847.	2.6	126
28	Economic evaluation of stand-alone solar powered membrane distillation systems. <i>Desalination</i> , 2012, 299, 55-62.	4.0	122
29	Energy efficiency of permeate gap and novel conductive gap membrane distillation. <i>Journal of Membrane Science</i> , 2016, 502, 171-178.	4.1	119
30	How RO membrane permeability and other performance factors affect process cost and energy use: A review. <i>Desalination</i> , 2019, 470, 114064.	4.0	119
31	Thermal design of the humidification dehumidification desalination system: An experimental investigation. <i>International Journal of Heat and Mass Transfer</i> , 2013, 58, 740-748.	2.5	114
32	Performance limits of zero and single extraction humidification-dehumidification desalination systems. <i>Applied Energy</i> , 2013, 102, 1081-1090.	5.1	113
33	Wetting prevention in membrane distillation through superhydrophobicity and recharging an air layer on the membrane surface. <i>Journal of Membrane Science</i> , 2017, 530, 42-52.	4.1	110
34	The hydraulic jump in circular jet impingement and in other thin liquid films. <i>Experiments in Fluids</i> , 1993, 15, 108-116.	1.1	105
35	Comparison of fouling propensity between reverse osmosis, forward osmosis, and membrane distillation. <i>Journal of Membrane Science</i> , 2018, 556, 352-364.	4.1	101
36	Membrane distillation model based on heat exchanger theory and configuration comparison. <i>Applied Energy</i> , 2016, 184, 491-505.	5.1	97

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37	Thermodynamic balancing of the humidification dehumidification desalination system by mass extraction and injection. <i>International Journal of Heat and Mass Transfer</i> , 2013, 57, 756-770.	2.5	95
38	Sodium Hydroxide Production from Seawater Desalination Brine: Process Design and Energy Efficiency. <i>Environmental Science &amp; Technology</i> , 2018, 52, 5949-5958.	4.6	94
39	Generalized Least Energy of Separation for Desalination and Other Chemical Separation Processes. <i>Entropy</i> , 2013, 15, 2046-2080.	1.1	93
40	Multistage vacuum membrane distillation (MSVMD) systems for high salinity applications. <i>Journal of Membrane Science</i> , 2016, 497, 128-141.	4.1	92
41	Lithium Recovery from Oil and Gas Produced Water: A Need for a Growing Energy Industry. <i>ACS Energy Letters</i> , 2019, 4, 1471-1474.	8.8	92
42	Design and optimization of an air heating solar collector with integrated phase change material energy storage for use in humidification-dehumidification desalination. <i>Solar Energy</i> , 2012, 86, 3417-3429.	2.9	90
43	Combining air recharging and membrane superhydrophobicity for fouling prevention in membrane distillation. <i>Journal of Membrane Science</i> , 2016, 505, 241-252.	4.1	87
44	Optimal operating conditions and configurations for humidification-dehumidification desalination cycles. <i>International Journal of Thermal Sciences</i> , 2011, 50, 779-789.	2.6	86
45	An improved model for multiple effect distillation. <i>Desalination and Water Treatment</i> , 2013, 51, 807-821.	1.0	84
46	Next-generation HVAC: Prospects for and limitations of desiccant and membrane-based dehumidification and cooling. <i>Applied Energy</i> , 2017, 200, 330-346.	5.1	83
47	SOLAR DESALINATION. <i>Annual Review of Heat Transfer</i> , 2012, 15, 277-347.	0.3	82
48	Stagnation-Point Heat Transfer During Impingement of Laminar Liquid Jets: Analysis Including Surface Tension. <i>Journal of Heat Transfer</i> , 1993, 115, 99-105.	1.2	81
49	Utilization of Desalination Brine for Sodium Hydroxide Production: Technologies, Engineering Principles, Recovery Limits, and Future Directions. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11147-11162.	3.2	79
50	Theoretical framework for predicting inorganic fouling in membrane distillation and experimental validation with calcium sulfate. <i>Journal of Membrane Science</i> , 2017, 528, 381-390.	4.1	78
51	Effects of membrane properties on water production cost in small scale membrane distillation systems. <i>Desalination</i> , 2012, 306, 60-71.	4.0	77
52	High-temperature-steam-driven, varied-pressure, humidification-dehumidification system coupled with reverse osmosis for energy-efficient seawater desalination. <i>Energy</i> , 2012, 37, 482-493.	4.5	77
53	Treating produced water from hydraulic fracturing: Composition effects on scale formation and desalination system selection. <i>Desalination</i> , 2014, 346, 54-69.	4.0	77
54	Optimal design and operation of electrodialysis for brackish-water desalination and for high-salinity brine concentration. <i>Desalination</i> , 2017, 420, 167-182.	4.0	75

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55	The cost effectiveness of electrodialysis for diverse salinity applications. <i>Desalination</i> , 2014, 348, 57-65.	4.0	73
56	Inorganic fouling mitigation by salinity cycling in batch reverse osmosis. <i>Water Research</i> , 2018, 137, 384-394.	5.3	73
57	LIQUID JET IMPINGEMENT. <i>Annual Review of Heat Transfer</i> , 1995, 6, 199-270.	0.3	71
58	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium Recovery. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 16906-16915.	4.0	70
59	Entropy Generation of Desalination Powered by Variable Temperature Waste Heat. <i>Entropy</i> , 2015, 17, 7530-7566.	1.1	69
60	Cost and energy requirements of hybrid RO and ED brine concentration systems for salt production. <i>Desalination</i> , 2019, 456, 97-120.	4.0	69
61	Costs for water supply, treatment, end-use and reclamation. <i>Desalination and Water Treatment</i> , 2013, 51, 200-232.	1.0	67
62	Use of multiple extractions and injections to thermodynamically balance the humidification dehumidification desalination system. <i>International Journal of Heat and Mass Transfer</i> , 2014, 68, 422-434.	2.5	67
63	Experimental study of thermal performance in air gap membrane distillation systems, including the direct solar heating of membranes. <i>Desalination</i> , 2013, 330, 100-111.	4.0	66
64	Direct electrosynthesis of sodium hydroxide and hydrochloric acid from brine streams. <i>Nature Catalysis</i> , 2019, 2, 106-113.	16.1	65
65	Thermodynamic balancing of a fixed-size two-stage humidification dehumidification desalination system. <i>Desalination</i> , 2015, 369, 125-139.	4.0	64
66	Thermodynamic analysis of brine management methods: Zero-discharge desalination and salinity-gradient power production. <i>Desalination</i> , 2017, 404, 291-303.	4.0	64
67	Superhydrophobic condenser surfaces for air gap membrane distillation. <i>Journal of Membrane Science</i> , 2015, 492, 578-587.	4.1	61
68	ENERGY EFFECTIVENESS OF SIMULTANEOUS HEAT AND MASS EXCHANGE DEVICES. <i>Frontiers in Heat and Mass Transfer</i> , 2010, 1, .	0.1	61
69	Metals Recovery from Seawater Desalination Brines: Technologies, Opportunities, and Challenges. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 7704-7712.	3.2	60
70	Limits of power production due to finite membrane area in pressure retarded osmosis. <i>Journal of Membrane Science</i> , 2014, 468, 81-89.	4.1	59
71	Entropy generation in condensation in the presence of high concentrations of noncondensable gases. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 5133-5147.	2.5	56
72	Experiments and modeling of bubble column dehumidifier performance. <i>International Journal of Thermal Sciences</i> , 2014, 80, 65-75.	2.6	56

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73	Impact of extraction on a humidification–dehumidification desalination system. <i>Desalination</i> , 2013, 313, 87-96.	4.0	55
74	The benefits of hybridising electrodialysis with reverse osmosis. <i>Journal of Membrane Science</i> , 2014, 469, 326-335.	4.1	55
75	Effect of composition and nonideal solution behavior on desalination calculations for mixed electrolyte solutions with comparison to seawater. <i>Desalination</i> , 2013, 318, 34-47.	4.0	53
76	Modeling of flat-sheet and spiral-wound nanofiltration configurations and its application in seawater nanofiltration. <i>Journal of Membrane Science</i> , 2015, 493, 360-372.	4.1	53
77	Primary energy and exergy of desalination technologies in a power-water cogeneration scheme. <i>Applied Energy</i> , 2019, 252, 113319.	5.1	53
78	Relating transport modeling to nanofiltration membrane fabrication: Navigating the permeability-selectivity trade-off in desalination pretreatment. <i>Journal of Membrane Science</i> , 2018, 554, 26-38.	4.1	52
79	Exergy analysis of a high-temperature-steam-driven, varied-pressure, humidification–dehumidification system coupled with reverse osmosis. <i>Applied Energy</i> , 2013, 103, 552-561.	5.1	50
80	Split-feed counterflow reverse osmosis for brine concentration. <i>Desalination</i> , 2018, 445, 280-291.	4.0	50
81	On the merits of using multi-stage and counterflow electrodialysis for reduced energy consumption. <i>Desalination</i> , 2018, 439, 1-16.	4.0	48
82	Reversing membrane wetting in membrane distillation: comparing dryout to backwashing with pressurized air. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 930-939.	1.2	47
83	Thermodynamic equipartition for increased second law efficiency. <i>Applied Energy</i> , 2014, 118, 292-299.	5.1	45
84	A new reverse electrodialysis design strategy which significantly reduces the levelized cost of electricity. <i>Journal of Membrane Science</i> , 2015, 493, 605-614.	4.1	45
85	Saving energy with an optimized two-stage reverse osmosis system. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 659-670.	1.2	45
86	Cost and energy needs of RO-ED-crystallizer systems for zero brine discharge seawater desalination. <i>Desalination</i> , 2019, 457, 115-132.	4.0	44
87	The effects of iCVD film thickness and conformality on the permeability and wetting of MD membranes. <i>Journal of Membrane Science</i> , 2017, 523, 470-479.	4.1	43
88	Brackish water desalination for greenhouses: Improving groundwater quality for irrigation using monovalent selective electrodialysis reversal. <i>Journal of Membrane Science</i> , 2020, 610, 118072.	4.1	43
89	Water-Energy Nexus in Saudi Arabia. <i>Energy Procedia</i> , 2017, 105, 3837-3843.	1.8	41
90	Effectiveness–mass transfer units ( $\mu$ -MTU) model of an ideal pressure retarded osmosis membrane mass exchanger. <i>Journal of Membrane Science</i> , 2013, 445, 211-219.	4.1	40

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91	Bubble columns for condensation at high concentrations of noncondensable gas: Heat transfer model and experiments. <i>AIChE Journal</i> , 2013, 59, 1780-1790.	1.8	40
92	Velocity Coefficients For Free Jets From Sharp-Edged Orifices. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1984, 106, 13-17.	0.8	39
93	Entropy generation analysis of electro dialysis. <i>Desalination</i> , 2017, 413, 184-198.	4.0	38
94	Raising forward osmosis brine concentration efficiency through flow rate optimization. <i>Desalination</i> , 2015, 366, 71-79.	4.0	37
95	On the present and future economic viability of stand-alone pressure-retarded osmosis. <i>Desalination</i> , 2017, 408, 133-144.	4.0	37
96	Splattering During Turbulent Liquid Jet Impingement on Solid Targets. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1994, 116, 338-344.	0.8	36
97	Effectiveness-mass transfer units ( $\hat{U}$ -MTU) model of a reverse osmosis membrane mass exchanger. <i>Journal of Membrane Science</i> , 2014, 458, 189-198.	4.1	36
98	Brackish water desalination for greenhouse agriculture: Comparing the costs of RO, CCRO, EDR, and monovalent-selective EDR. <i>Desalination</i> , 2020, 475, 114188.	4.0	36
99	Analysis of reversible ejectors and definition of an ejector efficiency. <i>International Journal of Thermal Sciences</i> , 2012, 54, 153-166.	2.6	35
100	Increasing the power density and reducing the levelized cost of electricity of a reverse electro dialysis stack through blending. <i>Desalination</i> , 2015, 369, 140-148.	4.0	34
101	In situ visualization of organic fouling and cleaning mechanisms in reverse osmosis and forward osmosis. <i>Desalination</i> , 2016, 399, 138-147.	4.0	34
102	Impact of salt retention on true batch reverse osmosis energy consumption: Experiments and model validation. <i>Desalination</i> , 2020, 479, 114177.	4.0	34
103	Hybrid electro dialysis reverse osmosis system design and its optimization for treatment of highly saline brines. <i>IDA Journal of Desalination and Water Reuse</i> , 2014, 6, 15-23.	0.4	33
104	Design and operation of membrane distillation with feed recirculation for high recovery brine concentration. <i>Desalination</i> , 2018, 445, 51-62.	4.0	33
105	Simple method for balancing direct contact membrane distillation. <i>Desalination</i> , 2016, 383, 53-59.	4.0	32
106	A novel solar-driven air gap membrane distillation system. <i>Desalination and Water Treatment</i> , 2013, 51, 1344-1351.	1.0	31
107	On the asymptotic flux of ultrapermeable seawater reverse osmosis membranes due to concentration polarisation. <i>Journal of Membrane Science</i> , 2016, 520, 560-565.	4.1	31
108	Minimum energy requirements for desalination of brackish groundwater in the United States with comparison to international datasets. <i>Water Research</i> , 2018, 141, 387-404.	5.3	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.	4.1	31
110	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. Angewandte Chemie - International Edition, 2019, 58, 6502-6511.	7.2	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.	4.0	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, .	1.4	28
113	Practical aspects of batch RO design for energy-efficient seawater desalination. Desalination, 2019, 470, 114097.	4.0	28
114	On Thermal Performance of Seawater Cooling Towers. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	27
115	Design of Flat-Plate Dehumidifiers for Humidification-Dehumidification Desalination Systems. Heat Transfer Engineering, 2013, 34, 543-561.	1.2	27
116	Quantifying osmotic membrane fouling to enable comparisons across diverse processes. Journal of Membrane Science, 2016, 511, 92-107.	4.1	27
117	Design and modeling of novel low-pressure nanofiltration hollow fiber modules for water softening and desalination pretreatment. Desalination, 2018, 439, 58-72.	4.0	27
118	Economic framework for net power density and levelized cost of electricity in pressure-retarded osmosis. Desalination, 2018, 448, 13-20.	4.0	27
119	Heat Transfer in Flat-Plate Boundary Layers: A Correlation for Laminar, Transitional, and Turbulent Flow. Journal of Heat Transfer, 2020, 142, .	1.2	27
120	Enhancing the Permselectivity of Thin-Film Composite Membranes Interlayered with MoS <sub>2</sub> Nanosheets via Precise Thickness Control. Environmental Science & Technology, 2022, 56, 8807-8818.	4.6	27
121	Effect of mass extractions and injections on the performance of a fixed-size humidification-dehumidification desalination system. Desalination, 2013, 314, 50-58.	4.0	26
122	Liquid jet-array cooling modules for high heat fluxes. AIChE Journal, 1998, 44, 769-779.	1.8	25
123	Unpacking compaction: Effect of hydraulic pressure on alginate fouling. Journal of Membrane Science, 2017, 544, 221-233.	4.1	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.	1.2	24
125	An Economics-Based Second Law Efficiency. Entropy, 2013, 15, 2736-2765.	1.1	24
126	Comprehensive condensation flow regimes in air gap membrane distillation: Visualization and energy efficiency. Journal of Membrane Science, 2018, 555, 517-528.	4.1	24



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127	Mechanical vapor compression Membrane distillation hybrids for reduced specific energy consumption. <i>Desalination and Water Treatment</i> , 2016, 57, 26507-26517.	1.0	22
128	Caustic Soda Production, Energy Efficiency, and Electrolyzers. <i>ACS Energy Letters</i> , 2021, 6, 3563-3566.	8.8	21
129	Techno-economic analysis of ion concentration polarization desalination for high salinity desalination applications. <i>Water Research</i> , 2019, 155, 162-174.	5.3	20
130	Evaporative cooling of continuously drawn glass fibers by water sprays. <i>International Journal of Heat and Mass Transfer</i> , 2000, 43, 777-790.	2.5	19
131	Treating Irrigation Water Using High-Performance Membranes for Monovalent Selective Electrodialysis. <i>ACS ES&amp;T Water</i> , 2021, 1, 117-124.	2.3	19
132	An experimental analysis of fluctuating temperature measurements using hot-wires at different overheats. <i>Experiments in Fluids</i> , 1989, 7, 265-270.	1.1	18
133	Sol-Gel Synthesis of $\text{Au/Cu-TiO}_2$ Nanocomposite and Their Morphological and Optical Properties. <i>IEEE Photonics Journal</i> , 2013, 5, 2201908-2201908.	1.0	18
134	System scale analytical modeling of forward and assisted forward osmosis mass exchangers with a case study on fertigation. <i>Journal of Membrane Science</i> , 2016, 510, 533-545.	4.1	18
135	Multistage pressure-retarded osmosis configurations: A unifying framework and thermodynamic analysis. <i>Desalination</i> , 2020, 476, 114230.	4.0	18
136	Solute displacement in the aqueous phase of water NaCl organic ternary mixtures relevant to solvent-driven water treatment. <i>RSC Advances</i> , 2020, 10, 29516-29527.	1.7	18
137	Treatment of greenhouse wastewater for reuse or disposal using monovalent selective electrodialysis. <i>Desalination</i> , 2021, 507, 115037.	4.0	18
138	Cost effectiveness of conventionally and solar powered monovalent selective electrodialysis for seawater desalination in greenhouses. <i>Applied Energy</i> , 2021, 301, 117425.	5.1	18
139	An Improved Approach to Conductive Boundary Conditions for the Rayleigh-BeÁnard Instability. <i>Journal of Heat Transfer</i> , 1987, 109, 378-387.	1.2	17
140	Surface Disturbance Evolution and the Splattering of Turbulent Liquid Jets. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1994, 116, 721-727.	0.8	17
141	Computational fluid dynamics modeling for performance assessment of permeate gap membrane distillation. <i>Journal of Membrane Science</i> , 2018, 568, 55-66.	4.1	17
142	Comparative assessment of the effects of 3D printed feed spacers on process performance in MD systems. <i>Desalination</i> , 2021, 503, 114940.	4.0	17
143	Thermodynamics of solvent-driven water extraction from hypersaline brines using dimethyl ether. <i>Chemical Engineering Journal</i> , 2022, 434, 134391.	6.6	17
144	Monovalent selective electrodialysis: Modelling multi-ionic transport across selective membranes. <i>Water Research</i> , 2021, 199, 117171.	5.3	16

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145	Thermal Design of Humidification–Dehumidification Systems for Affordable Small-Scale Desalination. <i>IDA Journal of Desalination and Water Reuse</i> , 2012, 4, 24-34.	0.4	15
146	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2011, 133, .	1.1	14
147	Three dimensionless parameters influencing the optimal membrane orientation for forward osmosis. <i>Journal of Membrane Science</i> , 2014, 458, 104-110.	4.1	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. <i>International Journal of Heat and Mass Transfer</i> , 2016, 97, 842-852.	2.5	14
149	On the electrical operation of batch electrodialysis for reduced energy consumption. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1172-1182.	1.2	14
150	Advances and challenges in metal ion separation from water. <i>Trends in Chemistry</i> , 2021, 3, 819-831.	4.4	14
151	Effect of Module Inclination Angle on Air Gap Membrane Distillation. , 2014, , .		14
152	Design of Plate-Fin Tube Dehumidifiers for Humidification–Dehumidification Desalination Systems. <i>Heat Transfer Engineering</i> , 2015, 36, 223-243.	1.2	13
153	Factors contributing to the change in permeate quality upon temperature variation in nanofiltration. <i>Desalination</i> , 2019, 455, 58-70.	4.0	13
154	Deformation-induced cleaning of organically fouled membranes: Fundamentals and techno-economic assessment for spiral-wound membranes. <i>Journal of Membrane Science</i> , 2021, 626, 119169.	4.1	13
155	Plasmon Resonance Enhanced Photocatalysis Under Visible Light with Au/Cu–TiO <sub>2</sub> Nanoparticles: Removal Cr (VI) from Water as a Case of Study. <i>Science of Advanced Materials</i> , 2013, 5, 2007-2014.	0.1	13
156	Heat transfer to a horizontal cylinder in a shallow bubble column. <i>International Journal of Heat and Mass Transfer</i> , 2014, 79, 353-361.	2.5	12
157	The Need for Accurate Osmotic Pressure and Mass Transfer Resistances in Modeling Osmotically Driven Membrane Processes. <i>Membranes</i> , 2021, 11, 128.	1.4	12
158	Revisiting the Schrage Equation for Kinetically Limited Evaporation and Condensation. <i>Journal of Heat Transfer</i> , 2022, 144, .	1.2	12
159	A low-cost, high-performance DC cold-wire bridge. <i>Journal of Physics E: Scientific Instruments</i> , 1988, 21, 167-170.	0.7	11
160	Thermal Radiation in Rayleigh-Benard Instability. <i>Journal of Heat Transfer</i> , 1990, 112, 100-109.	1.2	11
161	High Heat Flux Cooling by Liquid Jet-Array Modules. <i>Chemical Engineering and Technology</i> , 1999, 22, 967.	0.9	11
162	Variable Pressure Humidification Dehumidification Desalination System. , 2011, , .		11

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164	Thermodynamics, Exergy, and Energy Efficiency in Desalination Systems. , 2017, , 127-206.		10
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