

John H Lienhard V

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/3784636/john-h-lienhard-v-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

196
papers

10,357
citations

53
h-index

96
g-index

210
ext. papers

12,272
ext. citations

8.4
avg, IF

7
L-index

#	Paper	IF	Citations
196	Thermodynamics of solvent-driven water extraction from hypersaline brines using dimethyl ether. <i>Chemical Engineering Journal</i> , 2022 , 434, 134391	14.7	0
195	Replacing chloride anions in dyeing enables cheaper effluent concentration and recycling. <i>Desalination</i> , 2022 , 533, 115761	10.3	
194	Reply from the authors: Deformation-induced cleaning of organically fouled membranes. <i>Journal of Membrane Science</i> , 2021 , 642, 119961	9.6	
193	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium Recovery. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 16906-16915	9.5	13
192	Comparative assessment of the effects of 3D printed feed spacers on process performance in MD systems. <i>Desalination</i> , 2021 , 503, 114940	10.3	5
191	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	9.6	6
190	Metals Recovery from Seawater Desalination Brines: Technologies, Opportunities, and Challenges. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 7704-7712	8.3	11
189	Treating Irrigation Water Using High-Performance Membranes for Monovalent Selective Electrodialysis. <i>ACS ES&T Water</i> , 2021 , 1, 117-124		4
188	Desalination of brackish groundwater to improve water quality and water supply 2021 , 559-575		3
187	The Need for Accurate Osmotic Pressure and Mass Transfer Resistances in Modeling Osmotically Driven Membrane Processes. <i>Membranes</i> , 2021 , 11,	3.8	4
186	Monovalent selective electrodialysis: Modelling multi-ionic transport across selective membranes. <i>Water Research</i> , 2021 , 199, 117171	12.5	3
185	Treatment of greenhouse wastewater for reuse or disposal using monovalent selective electrodialysis. <i>Desalination</i> , 2021 , 507, 115037	10.3	7
184	Advances and challenges in metal ion separation from water. <i>Trends in Chemistry</i> , 2021 , 3, 819-831	14.8	2
183	Cost effectiveness of conventionally and solar powered monovalent selective electrodialysis for seawater desalination in greenhouses. <i>Applied Energy</i> , 2021 , 301, 117425	10.7	2
182	Multicomponent Fickian solution-diffusion model for osmotic transport through membranes. <i>Journal of Membrane Science</i> , 2021 , 640, 119819	9.6	1
181	Impact of salt retention on true batch reverse osmosis energy consumption: Experiments and model validation. <i>Desalination</i> , 2020 , 479, 114177	10.3	15
180	Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. <i>Energy and Environmental Science</i> , 2020 , 13, 830-839	35.4	153

179	Brackish water desalination for greenhouses: Improving groundwater quality for irrigation using monovalent selective electro dialysis reversal. <i>Journal of Membrane Science</i> , 2020 , 610, 118072	9.6	17
178	Heat Transfer in Flat-Plate Boundary Layers: A Correlation for Laminar, Transitional, and Turbulent Flow. <i>Journal of Heat Transfer</i> , 2020 , 142,	1.8	9
177	Metrics Matter: Accurately Defining Energy Efficiency in Desalination. <i>Journal of Heat Transfer</i> , 2020 , 142,	1.8	4
176	Brackish water desalination for greenhouse agriculture: Comparing the costs of RO, CCRO, EDR, and monovalent-selective EDR. <i>Desalination</i> , 2020 , 475, 114188	10.3	22
175	Multistage pressure-retarded osmosis configurations: A unifying framework and thermodynamic analysis. <i>Desalination</i> , 2020 , 476, 114230	10.3	5
174	On the presence of solute-solvent transport coupling in reverse osmosis. <i>Journal of Membrane Science</i> , 2020 , 611, 118272	9.6	5
173	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	3.7	7
172	How RO membrane permeability and other performance factors affect process cost and energy use: A review. <i>Desalination</i> , 2019 , 470, 114064	10.3	61
171	Practical aspects of batch RO design for energy-efficient seawater desalination. <i>Desalination</i> , 2019 , 470, 114097	10.3	21
170	Factors contributing to the change in permeate quality upon temperature variation in nanofiltration. <i>Desalination</i> , 2019 , 455, 58-70	10.3	9
169	Cost and energy requirements of hybrid RO and ED brine concentration systems for salt production. <i>Desalination</i> , 2019 , 456, 97-120	10.3	44
168	A framework to analyze sulfate versus chloride selectivity in nanofiltration. <i>Environmental Science: Water Research and Technology</i> , 2019 , 5, 585-598	4.2	5
167	Primary energy and exergy of desalination technologies in a power-water cogeneration scheme. <i>Applied Energy</i> , 2019 , 252, 113319	10.7	32
166	Lithium Recovery from Oil and Gas Produced Water: A Need for a Growing Energy Industry. <i>ACS Energy Letters</i> , 2019 , 4, 1471-1474	20.1	34
165	On the electrical operation of batch electro dialysis for reduced energy consumption. <i>Environmental Science: Water Research and Technology</i> , 2019 , 5, 1172-1182	4.2	8
164	Humidification-Dehumidification Desalination 2019 , 387-446		
163	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 6502-6511	16.4	10
162	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. <i>Angewandte Chemie</i> , 2019 , 131, 6570-6579	3.6	6

161	Cost and energy needs of RO-ED-crystallizer systems for zero brine discharge seawater desalination. <i>Desalination</i> , 2019 , 457, 115-132	10.3	28
160	Energy Savings in Desalination Technologies: Reducing Entropy Generation by Transport Processes. <i>Journal of Heat Transfer</i> , 2019 , 141,	1.8	6
159	Techno-economic analysis of ion concentration polarization desalination for high salinity desalination applications. <i>Water Research</i> , 2019 , 155, 162-174	12.5	10
158	Exterior Shape Factors From Interior Shape Factors. <i>Journal of Heat Transfer</i> , 2019 , 141,	1.8	2
157	Direct electrosynthesis of sodium hydroxide and hydrochloric acid from brine streams. <i>Nature Catalysis</i> , 2019 , 2, 106-113	36.5	36
156	Linearization of Nongray Radiation Exchange: The Internal Fractional Function Reconsidered. <i>Journal of Heat Transfer</i> , 2019 , 141,	1.8	1
155	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	9.6	34
154	Sodium Hydroxide Production from Seawater Desalination Brine: Process Design and Energy Efficiency. <i>Environmental Science & Technology</i> , 2018 , 52, 5949-5958	10.3	52
153	On the merits of using multi-stage and counterflow electrodialysis for reduced energy consumption. <i>Desalination</i> , 2018 , 439, 1-16	10.3	38
152	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	12.5	19
151	Inorganic fouling mitigation by salinity cycling in batch reverse osmosis. <i>Water Research</i> , 2018 , 137, 384-394	12.5	47
150	Design and modeling of novel low-pressure nanofiltration hollow fiber modules for water softening and desalination pretreatment. <i>Desalination</i> , 2018 , 439, 58-72	10.3	16
149	Comparison of fouling propensity between reverse osmosis, forward osmosis, and membrane distillation. <i>Journal of Membrane Science</i> , 2018 , 556, 352-364	9.6	70
148	Wetting phenomena in membrane distillation: Mechanisms, reversal, and prevention. <i>Water Research</i> , 2018 , 139, 329-352	12.5	299
147	Comprehensive condensation flow regimes in air gap membrane distillation: Visualization and energy efficiency. <i>Journal of Membrane Science</i> , 2018 , 555, 517-528	9.6	16
146	Design and operation of membrane distillation with feed recirculation for high recovery brine concentration. <i>Desalination</i> , 2018 , 445, 51-62	10.3	19
145	Effect of fouling on performance of pressure retarded osmosis (PRO) and forward osmosis (FO). <i>Journal of Membrane Science</i> , 2018 , 565, 450-462	9.6	20
144	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	10.7	79

143	Entropy Generation Minimization for Energy-Efficient Desalination 2018 ,		1
142	Computational fluid dynamics modeling for performance assessment of permeate gap membrane distillation. <i>Journal of Membrane Science</i> , 2018 , 568, 55-66	9.6	11
141	Economic framework for net power density and levelized cost of electricity in pressure-retarded osmosis. <i>Desalination</i> , 2018 , 448, 13-20	10.3	18
140	Split-feed counterflow reverse osmosis for brine concentration. <i>Desalination</i> , 2018 , 445, 280-291	10.3	30
139	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	9.6	57
138	The ins and outs of microorganism-electrode electron transfer reactions. <i>Nature Reviews Chemistry</i> , 2017 , 1,	34.6	276
137	On the present and future economic viability of stand-alone pressure-retarded osmosis. <i>Desalination</i> , 2017 , 408, 133-144	10.3	27
136	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	9.6	82
135	Water-Energy Nexus in Saudi Arabia. <i>Energy Procedia</i> , 2017 , 105, 3837-3843	2.3	23
134	Saving energy with an optimized two-stage reverse osmosis system. <i>Environmental Science: Water Research and Technology</i> , 2017 , 3, 659-670	4.2	36
133	Next-generation HVAC: Prospects for and limitations of desiccant and membrane-based dehumidification and cooling. <i>Applied Energy</i> , 2017 , 200, 330-346	10.7	57
132	Entropy generation analysis of electrodialysis. <i>Desalination</i> , 2017 , 413, 184-198	10.3	30
131	The effect of increased top brine temperature on the performance and design of OT-MSF using a case study. <i>Desalination</i> , 2017 , 412, 32-38	10.3	15
130	Unpacking compaction: Effect of hydraulic pressure on alginate fouling. <i>Journal of Membrane Science</i> , 2017 , 544, 221-233	9.6	19
129	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	4.2	40
128	Optimal design and operation of electrodialysis for brackish-water desalination and for high-salinity brine concentration. <i>Desalination</i> , 2017 , 420, 167-182	10.3	62
127	Effect of temperature on ion transport in nanofiltration membranes: Diffusion, convection and electromigration. <i>Desalination</i> , 2017 , 420, 241-257	10.3	82
126	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	8.3	48

125	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	9.6	81
124	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	9.6	34
123	Thermodynamic analysis of brine management methods: Zero-discharge desalination and salinity-gradient power production. <i>Desalination</i> , 2017 , 404, 291-303	10.3	48
122	Thermodynamics, Exergy, and Energy Efficiency in Desalination Systems 2017 , 127-206		6
121	A new vacuum membrane distillation system using an aspirator: concept modeling and optimization. <i>Desalination and Water Treatment</i> , 2016 , 57, 12915-12928		9
120	A review of polymeric membranes and processes for potable water reuse. <i>Progress in Polymer Science</i> , 2016 , 81, 209-237	29.6	304
119	The reversed chemical engine cycle with application to desalination processes. <i>Desalination</i> , 2016 , 398, 256-264	10.3	3
118	In situ visualization of organic fouling and cleaning mechanisms in reverse osmosis and forward osmosis. <i>Desalination</i> , 2016 , 399, 138-147	10.3	30
117	Membrane distillation model based on heat exchanger theory and configuration comparison. <i>Applied Energy</i> , 2016 , 184, 491-505	10.7	71
116	Simple method for balancing direct contact membrane distillation. <i>Desalination</i> , 2016 , 383, 53-59	10.3	26
115	Energy efficiency of permeate gap and novel conductive gap membrane distillation. <i>Journal of Membrane Science</i> , 2016 , 502, 171-178	9.6	95
114	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	4.9	7
113	Combining air recharging and membrane superhydrophobicity for fouling prevention in membrane distillation. <i>Journal of Membrane Science</i> , 2016 , 505, 241-252	9.6	66
112	Multistage vacuum membrane distillation (MSVMD) systems for high salinity applications. <i>Journal of Membrane Science</i> , 2016 , 497, 128-141	9.6	79
111	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	9.6	16
110	An Effectiveness-Number of Transfer Units Relationship for Evaporators With Non-negligible Boiling Point Elevation Increases. <i>Journal of Heat Transfer</i> , 2016 , 138,	1.8	4
109	Quantifying osmotic membrane fouling to enable comparisons across diverse processes. <i>Journal of Membrane Science</i> , 2016 , 511, 92-107	9.6	26
108	Thermophysical properties of seawater: A review and new correlations that include pressure dependence. <i>Desalination</i> , 2016 , 390, 1-24	10.3	240

107	Modeling reverse osmosis element design using superposition and an analogy to convective heat transfer. <i>Journal of Membrane Science</i> , 2016 , 512, 38-49	9.6	4
106	Mechanical vapor compression Membrane distillation hybrids for reduced specific energy consumption. <i>Desalination and Water Treatment</i> , 2016 , 57, 26507-26517		18
105	On the asymptotic flux of ultrapermeable seawater reverse osmosis membranes due to concentration polarisation. <i>Journal of Membrane Science</i> , 2016 , 520, 560-565	9.6	27
104	Energy efficiency of batch and semi-batch (CCRO) reverse osmosis desalination. <i>Water Research</i> , 2016 , 106, 272-282	12.5	87
103	A new reverse electrodialysis design strategy which significantly reduces the levelized cost of electricity. <i>Journal of Membrane Science</i> , 2015 , 493, 605-614	9.6	42
102	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	9.6	41
101	Superhydrophobic condenser surfaces for air gap membrane distillation. <i>Journal of Membrane Science</i> , 2015 , 492, 578-587	9.6	46
100	Thermodynamic balancing of a fixed-size two-stage humidification dehumidification desalination system. <i>Desalination</i> , 2015 , 369, 125-139	10.3	48
99	Increasing the power density and reducing the levelized cost of electricity of a reverse electrodialysis stack through blending. <i>Desalination</i> , 2015 , 369, 140-148	10.3	28
98	Raising forward osmosis brine concentration efficiency through flow rate optimization. <i>Desalination</i> , 2015 , 366, 71-79	10.3	34
97	Design of Plate-Fin Tube Dehumidifiers for Humidification Dehumidification Desalination Systems. <i>Heat Transfer Engineering</i> , 2015 , 36, 223-243	1.7	11
96	Scaling and fouling in membrane distillation for desalination applications: A review. <i>Desalination</i> , 2015 , 356, 294-313	10.3	435
95	Entropy Generation of Desalination Powered by Variable Temperature Waste Heat. <i>Entropy</i> , 2015 , 17, 7530-7566	2.8	52
94	Energy consumption in desalinating produced water from shale oil and gas extraction. <i>Desalination</i> , 2015 , 366, 94-112	10.3	156
93	An Analysis of Likely Scalants in the Treatment of Produced Water From Nova Scotia. <i>Heat Transfer Engineering</i> , 2015 , 36, 652-662	1.7	7
92	Quantifying the potential of ultra-permeable membranes for water desalination. <i>Energy and Environmental Science</i> , 2014 , 7, 1134-1141	35.4	227
91	The benefits of hybridising electrodialysis with reverse osmosis. <i>Journal of Membrane Science</i> , 2014 , 469, 326-335	9.6	49
90	Heat transfer to a horizontal cylinder in a shallow bubble column. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 79, 353-361	4.9	11

89	On the cost of electrodialysis for the desalination of high salinity feeds. <i>Applied Energy</i> , 2014 , 136, 649-661.7	109
88	The cost effectiveness of electrodialysis for diverse salinity applications. <i>Desalination</i> , 2014 , 348, 57-65	10.3 60
87	Humidification Dehumidification Desalination 2014 , 425-472	3
86	On the potential of forward osmosis to energetically outperform reverse osmosis desalination. <i>Journal of Membrane Science</i> , 2014 , 469, 245-250	9.6 169
85	Experiments and modeling of bubble column dehumidifier performance. <i>International Journal of Thermal Sciences</i> , 2014 , 80, 65-75	4.1 31
84	Effectiveness-mass transfer units (EMTU) model of a reverse osmosis membrane mass exchanger. <i>Journal of Membrane Science</i> , 2014 , 458, 189-198	9.6 31
83	Treating produced water from hydraulic fracturing: Composition effects on scale formation and desalination system selection. <i>Desalination</i> , 2014 , 346, 54-69	10.3 61
82	Limits of power production due to finite membrane area in pressure retarded osmosis. <i>Journal of Membrane Science</i> , 2014 , 468, 81-89	9.6 55
81	Hybrid electrodialysis 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	23
80	Thermodynamic equipartition for increased second law efficiency. <i>Applied Energy</i> , 2014 , 118, 292-299	10.7 39
79	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	4.9 52
78	Three dimensionless parameters influencing the optimal membrane orientation for forward osmosis. <i>Journal of Membrane Science</i> , 2014 , 458, 104-110	9.6 14
77	A Numerical Solution Algorithm for a Heat and Mass Transfer Model of a Desalination System Based on Packed-Bed Humidification and Bubble Column dehumidification 2014 ,	2
76	Effect of Module Inclination Angle on Air Gap Membrane Distillation 2014 ,	10
75	Measurements of Heat Transfer Coefficients to Cylinders in Shallow Bubble Columns 2014 ,	2
74	Impact of extraction on a humidification-dehumidification desalination system. <i>Desalination</i> , 2013 , 313, 87-96	10.3 37
73	Thermal design of the humidification dehumidification desalination system: An experimental investigation. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 58, 740-748	4.9 87
72	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	10.3 47

71	Effectiveness of mass transfer units (MTU) model of an ideal pressure retarded osmosis membrane mass exchanger. <i>Journal of Membrane Science</i> , 2013 , 445, 211-219	9.6	37
70	Effect of mass extractions and injections on the performance of a fixed-size humidification-dehumidification desalination system. <i>Desalination</i> , 2013 , 314, 50-58	10.3	20
69	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	4.9	71
68	Bubble columns for condensation at high concentrations of noncondensable gas: Heat-transfer model and experiments. <i>AIChE Journal</i> , 2013 , 59, 1780-1790	3.6	31
67	Costs for water supply, treatment, end-use and reclamation. <i>Desalination and Water Treatment</i> , 2013 , 51, 200-232		51
66	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	10.3	44
65	A novel solar-driven air gap membrane distillation system. <i>Desalination and Water Treatment</i> , 2013 , 51, 1344-1351		22
64	Performance limits of zero and single extraction humidification-dehumidification desalination systems. <i>Applied Energy</i> , 2013 , 102, 1081-1090	10.7	87
63	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	10.7	37
62	Design of Flat-Plate Dehumidifiers for Humidification-Dehumidification Desalination Systems. <i>Heat Transfer Engineering</i> , 2013 , 34, 543-561	1.7	25
61	Analytical Modeling of a Bubble Column Dehumidifier 2013 ,		4
60	An Economics-Based Second Law Efficiency. <i>Entropy</i> , 2013 , 15, 2736-2765	2.8	22
59	Effect of Nonideal Solution Behavior on Desalination of a Sodium Chloride Solution and Comparison to Seawater. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2013 , 135,	2.6	24
58	Sol-Gel Synthesis of Au/Cu-TiO_2 Nanocomposite and Their Morphological and Optical Properties. <i>IEEE Photonics Journal</i> , 2013 , 5, 2201908-2201908	1.8	14
57	An improved model for multiple effect distillation. <i>Desalination and Water Treatment</i> , 2013 , 51, 807-821		61
56	Generalized Least Energy of Separation for Desalination and Other Chemical Separation Processes. <i>Entropy</i> , 2013 , 15, 2046-2080	2.8	73
55	Plasmon Resonance Enhanced Photocatalysis Under Visible Light with Au/Cu TiO_2 Nanoparticles: Removal Cr (VI) from Water as a Case of Study. <i>Science of Advanced Materials</i> , 2013 , 5, 2007-2014	2.3	11
54	Technical evaluation of stand-alone solar powered membrane distillation systems. <i>Desalination</i> , 2012 , 286, 332-341	10.3	109

53	Energy efficiency comparison of single-stage membrane distillation (MD) desalination cycles in different configurations. <i>Desalination</i> , 2012 , 290, 54-66	10.3	151
52	Analysis of reversible ejectors and definition of an ejector efficiency. <i>International Journal of Thermal Sciences</i> , 2012 , 54, 153-166	4.1	32
51	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	7.9	59
50	Energy requirements for water production, treatment, end use, reclamation, and disposal. <i>Renewable and Sustainable Energy Reviews</i> , 2012 , 16, 4818-4848	16.2	378
49	Economic evaluation of stand-alone solar powered membrane distillation systems. <i>Desalination</i> , 2012 , 299, 55-62	10.3	94
48	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	6.8	77
47	Effects of membrane properties on water production cost in small scale membrane distillation systems. <i>Desalination</i> , 2012 , 306, 60-71	10.3	66
46	Rebuttal to Discussion of Second law analysis of reverse osmosis desalination plants: An alternative design using pressure retarded osmosis [Energy 2011] 36: 6617-6626 [Energy, 2012 , 46, 691-693	7.9	8
45	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	4.9	45
44	Thermodynamic Analysis of a Reverse Osmosis Desalination System Using Forward Osmosis for Energy Recovery 2012 ,		3
43	Thermal Design of Humidification-Dehumidification Systems for Affordable Small-Scale Desalination. <i>IDA Journal of Desalination and Water Reuse</i> , 2012 , 4, 24-34		15
42	Effect of Nonideal Solution Behavior on Desalination of a Sodium Chloride (NaCl) Solution and Comparison to Seawater 2012 ,		2
41	SOLAR DESALINATION. <i>Annual Review of Heat Transfer</i> , 2012 , 15, 277-347	2.7	66
40	Variable Pressure Humidification Dehumidification Desalination System 2011 ,		7
39	Second law analysis of reverse osmosis desalination plants: An alternative design using pressure retarded osmosis. <i>Energy</i> , 2011 , 36, 6617-6626	7.9	109
38	Entropy Generation Analysis of Desalination Technologies. <i>Entropy</i> , 2011 , 13, 1829-1864	2.8	191
37	On exergy calculations of seawater with applications in desalination systems. <i>International Journal of Thermal Sciences</i> , 2011 , 50, 187-196	4.1	108
36	Optimal operating conditions and configurations for humidification-dehumidification desalination cycles. <i>International Journal of Thermal Sciences</i> , 2011 , 50, 779-789	4.1	69

35	Helium as a Carrier Gas in Humidification Dehumidification Desalination Systems 2011 ,		5
34	On Thermal Performance of Seawater Cooling Towers. <i>Journal of Engineering for Gas Turbines and Power</i> , 2011 , 133,	1.7	21
33	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2011 , 133,	2.3	14
32	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems 2010 ,		4
31	Thermodynamic analysis of humidification dehumidification desalination cycles. <i>Desalination and Water Treatment</i> , 2010 , 16, 339-353		198
30	Thermophysical properties of seawater: a review of existing correlations and data. <i>Desalination and Water Treatment</i> , 2010 , 16, 354-380		825
29	Formulation of Seawater Flow Exergy Using Accurate Thermodynamic Data 2010 ,		8
28	On Thermal Performance of Seawater Cooling Towers 2010 ,		3
27	Entropy generation minimization of combined heat and mass transfer devices. <i>International Journal of Thermal Sciences</i> , 2010 , 49, 2057-2066	4.1	105
26	The potential of solar-driven humidification-dehumidification desalination for small-scale decentralized water production. <i>Renewable and Sustainable Energy Reviews</i> , 2010 , 14, 1187-1201	16.2	251
25	Effect of entropy generation on the performance of humidification-dehumidification desalination cycles. <i>International Journal of Thermal Sciences</i> , 2010 , 49, 1837-1847	4.1	108
24	ENERGY EFFECTIVENESS OF SIMULTANEOUS HEAT AND MASS EXCHANGE DEVICES. <i>Frontiers in Heat and Mass Transfer</i> , 2010 , 1,		43
23	Thermal Control Architecture for a Planetary and Lunar Surface Exploration Micro-Robot. <i>AIP Conference Proceedings</i> , 2007 ,	0	1
22	Active Thermal Control of Distributed Parameter Systems Excited at Multiple Frequencies. <i>Journal of Heat Transfer</i> , 2006 , 128, 93-99	1.8	1
21	Active Thermal Control of Distributed Parameter Systems With Application to Testing of Packaged IC Devices. <i>Journal of Heat Transfer</i> , 2003 , 125, 164-174	1.8	3
20	Boiling and Evaporation in Small Diameter Channels. <i>Heat Transfer Engineering</i> , 2003 , 24, 18-40	1.7	133
19	A History of the MIT Heat Transfer Laboratory. <i>Heat Transfer Engineering</i> , 2003 , 24, 3-17	1.7	482
18	Evaporative cooling of continuously drawn glass fibers by water sprays. <i>International Journal of Heat and Mass Transfer</i> , 2000 , 43, 777-790	4.9	17

17	Thermal Management and Control in Testing Packaged Integrated Circuit (IC) Devices 1999 ,		2
16	Liquid jet-array cooling modules for high heat fluxes. <i>AIChE Journal</i> , 1998 , 44, 769-779	3.6	19
15	Experiments on jet array cooling modules for high heat flux removal 1997 , 3151, 6		2
14	Large-area jet-array cooling modules for high heat fluxes 1996 ,		3
13	LIQUID JET IMPINGEMENT. <i>Annual Review of Heat Transfer</i> , 1995 , 6, 199-270	2.7	46
12	Splattering During Turbulent Liquid Jet Impingement on Solid Targets. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1994 , 116, 338-344	2.1	28
11	Surface Disturbance Evolution and the Splattering of Turbulent Liquid Jets. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1994 , 116, 721-727	2.1	15
10	Stagnation-Point Heat Transfer During Impingement of Laminar Liquid Jets: Analysis Including Surface Tension. <i>Journal of Heat Transfer</i> , 1993 , 115, 99-105	1.8	59
9	The hydraulic jump in circular jet impingement and in other thin liquid films. <i>Experiments in Fluids</i> , 1993 , 15, 108-116	2.5	80
8	M.I.T. Stirling-Cycle Heat Transfer Apparatus 1992 ,		2
7	Thermal Radiation in Rayleigh-Benard Instability. <i>Journal of Heat Transfer</i> , 1990 , 112, 100-109	1.8	9
6	An experimental analysis of fluctuating temperature measurements using hot-wires at different overheats. <i>Experiments in Fluids</i> , 1989 , 7, 265-270	2.5	13
5	A low-cost, high-performance DC cold-wire bridge. <i>Journal of Physics E: Scientific Instruments</i> , 1988 , 21, 167-170		11
4	An Improved Approach to Conductive Boundary Conditions for the Rayleigh-Benard Instability. <i>Journal of Heat Transfer</i> , 1987 , 109, 378-387	1.8	16
3	Velocity Coefficients For Free Jets From Sharp-Edged Orifices. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1984 , 106, 13-17	2.1	30
2	Thermal Stability of Two Fluid Layers Separated by a Solid Interlayer of Finite Thickness and Thermal Conductivity. <i>Journal of Heat Transfer</i> , 1984 , 106, 605-612	1.8	20
1	Caustic Soda Production, Energy Efficiency, and Electrolyzers. <i>ACS Energy Letters</i> , 3563-3566	20.1	5