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 all docs	210 docs citations	210 times ranked	9064 citing authors

#	Article	IF	Citations
1	Reply from the authors: Deformation-induced cleaning of organically fouled membranes. Journal of Membrane Science, 2022, 642, 119961.	4.1	0
2	Thermodynamics of solvent-driven water extraction from hypersaline brines using dimethyl ether. Chemical Engineering Journal, 2022, 434, 134391.	6.6	17
3	Revisiting the Schrage Equation for Kinetically Limited Evaporation and Condensation. Journal of Heat Transfer, 2022, 144, .	1.2	12
4	Replacing chloride anions in dyeing enables cheaper effluent concentration and recycling. Desalination, 2022, 533, 115761.	4.0	0
5	Enhancing the Permselectivity of Thin-Film Composite Membranes Interlayered with MoS₂ Nanosheets via Precise Thickness Control. Environmental Science & Technology, 2022, 56, 8807-8818.	4.6	27
6	Energy and water without carbon: Integrated desalination and nuclear power at Diablo Canyon. Applied Energy, 2022, 323, 119612.	5.1	4
7	Treating Irrigation Water Using High-Performance Membranes for Monovalent Selective Electrodialysis. ACS ES&T Water, 2021, 1, 117-124.	2.3	19
8	Desalination of brackish groundwater to improve water quality and water supply. , 2021, , 559-575.		9
9	The Need for Accurate Osmotic Pressure and Mass Transfer Resistances in Modeling Osmotically Driven Membrane Processes. Membranes, 2021, 11, 128.	1.4	12
10	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium Recovery. ACS Applied Materials & Interfaces, 2021, 13, 16906-16915.	4.0	70
11	Comparative assessment of the effects of 3D printed feed spacers on process performance in MD systems. Desalination, 2021, 503, 114940.	4.0	17
12	Deformation-induced cleaning of organically fouled membranes: Fundamentals and techno-economic assessment for spiral-wound membranes. Journal of Membrane Science, 2021, 626, 119169.	4.1	13
13	Metals Recovery from Seawater Desalination Brines: Technologies, Opportunities, and Challenges. ACS Sustainable Chemistry and Engineering, 2021, 9, 7704-7712.	3.2	60
14	Monovalent selective electrodialysis: Modelling multi-ionic transport across selective membranes. Water Research, 2021, 199, 117171.	5.3	16
15	Treatment of greenhouse wastewater for reuse or disposal using monovalent selective electrodialysis. Desalination, 2021, 507, 115037.	4.0	18
16	Caustic Soda Production, Energy Efficiency, and Electrolyzers. ACS Energy Letters, 2021, 6, 3563-3566.	8.8	21
17	Advances and challenges in metal ion separation from water. Trends in Chemistry, 2021, 3, 819-831.	4.4	14
18	Cost effectiveness of conventionally and solar powered monovalent selective electrodialysis for seawater desalination in greenhouses. Applied Energy, 2021, 301, 117425.	5.1	18

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19	Multicomponent Fickian solution-diffusion model for osmotic transport through membranes. Journal of Membrane Science, 2021, 640, 119819.	4.1	7
20	Brackish water desalination for greenhouse agriculture: Comparing the costs of RO, CCRO, EDR, and monovalent-selective EDR. Desalination, 2020, 475, 114188.	4.0	36
21	Multistage pressure-retarded osmosis configurations: A unifying framework and thermodynamic analysis. Desalination, 2020, 476, 114230.	4.0	18
22	On the presence of solute-solvent transport coupling in reverse osmosis. Journal of Membrane Science, 2020, 611, 118272.	4.1	7
23	Solute displacement in the aqueous phase of waterâ€"NaClâ€"organic ternary mixtures relevant to solvent-driven water treatment. RSC Advances, 2020, 10, 29516-29527.	1.7	18
24	Impact of salt retention on true batch reverse osmosis energy consumption: Experiments and model validation. Desalination, 2020, 479, 114177.	4.0	34
25	Ultrahigh-efficiency desalination via a thermally-localized multistage solar still. Energy and Environmental Science, 2020, 13, 830-839.	15.6	317
26	Brackish water desalination for greenhouses: Improving groundwater quality for irrigation using monovalent selective electrodialysis reversal. Journal of Membrane Science, 2020, 610, 118072.	4.1	43
27	Heat Transfer in Flat-Plate Boundary Layers: A Correlation for Laminar, Transitional, and Turbulent Flow. Journal of Heat Transfer, 2020, 142, .	1.2	27
28	Metrics Matter: Accurately Defining Energy Efficiency in Desalination. Journal of Heat Transfer, 2020, 142, .	1.2	7
29	Energy Savings in Desalination Technologies: Reducing Entropy Generation by Transport Processes. Journal of Heat Transfer, 2019, 141, .	1.2	10
30	How RO membrane permeability and other performance factors affect process cost and energy use: A review. Desalination, 2019, 470, 114064.	4.0	119
31	Practical aspects of batch RO design for energy-efficient seawater desalination. Desalination, 2019, 470, 114097.	4.0	28
32	Factors contributing to the change in permeate quality upon temperature variation in nanofiltration. Desalination, 2019, 455, 58-70.	4.0	13
33	Cost and energy requirements of hybrid RO and ED brine concentration systems for salt production. Desalination, 2019, 456, 97-120.	4.0	69
34	A framework to analyze sulfate versus chloride selectivity in nanofiltration. Environmental Science: Water Research and Technology, 2019, 5, 585-598.	1.2	8
35	Primary energy and exergy of desalination technologies in a power-water cogeneration scheme. Applied Energy, 2019, 252, 113319.	5.1	53
36	Lithium Recovery from Oil and Gas Produced Water: A Need for a Growing Energy Industry. ACS Energy Letters, 2019, 4, 1471-1474.	8.8	92

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37	On the electrical operation of batch electrodialysis for reduced energy consumption. Environmental Science: Water Research and Technology, 2019, 5, 1172-1182.	1.2	14
38	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. Angewandte Chemie - International Edition, 2019, 58, 6502-6511.	7.2	30
39	Integrated Valorization of Desalination Brine through NaOH Recovery: Opportunities and Challenges. Angewandte Chemie, 2019, 131, 6570-6579.	1.6	8
40	Cost and energy needs of RO-ED-crystallizer systems for zero brine discharge seawater desalination. Desalination, 2019, 457, 115-132.	4.0	44
41	Techno-economic analysis of ion concentration polarization desalination for high salinity desalination applications. Water Research, 2019, 155, 162-174.	5.3	20
42	Exterior Shape Factors From Interior Shape Factors. Journal of Heat Transfer, 2019, 141, .	1.2	7
43	Direct electrosynthesis of sodium hydroxide and hydrochloric acid from brine streams. Nature Catalysis, 2019, 2, 106-113.	16.1	65
44	Linearization of Nongray Radiation Exchange: The Internal Fractional Function Reconsidered. Journal of Heat Transfer, 2019, 141, .	1.2	1
45	Relating transport modeling to nanofiltration membrane fabrication: Navigating the permeability-selectivity trade-off in desalination pretreatment. Journal of Membrane Science, 2018, 554, 26-38.	4.1	52
46	Sodium Hydroxide Production from Seawater Desalination Brine: Process Design and Energy Efficiency. Environmental Science & Technology, 2018, 52, 5949-5958.	4.6	94
47	On the merits of using multi-stage and counterflow electrodialysis for reduced energy consumption. Desalination, 2018, 439, 1-16.	4.0	48
48	Minimum energy requirements for desalination of brackish groundwater in the United States with comparison to international datasets. Water Research, 2018, 141, 387-404.	5.3	31
49	A review of polymeric membranes and processes for potable water reuse. Progress in Polymer Science, 2018, 81, 209-237.	11.8	483
50	Inorganic fouling mitigation by salinity cycling in batch reverse osmosis. Water Research, 2018, 137, 384-394.	5.3	73
51	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
52	Comparison of fouling propensity between reverse osmosis, forward osmosis, and membrane distillation. Journal of Membrane Science, 2018, 556, 352-364.	4.1	101
53	Wetting phenomena in membrane distillation: Mechanisms, reversal, and prevention. Water Research, 2018, 139, 329-352.	5.3	498
54	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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55	Energy efficiency of membrane distillation up to high salinity: Evaluating critical system size and optimal membrane thickness. Applied Energy, 2018, 211, 715-734.	5.1	129
56	Non-Gray Radiation Exchange: The Internal Fractional Function Reconsidered. , 2018, , .		0
57	Entropy Generation Minimization for Energy-Efficient Desalination. , 2018, , .		2
58	Computational fluid dynamics modeling for performance assessment of permeate gap membrane distillation. Journal of Membrane Science, 2018, 568, 55-66.	4.1	17
59	Economic framework for net power density and levelized cost of electricity in pressure-retarded osmosis. Desalination, 2018, 448, 13-20.	4.0	27
60	Split-feed counterflow reverse osmosis for brine concentration. Desalination, 2018, 445, 280-291.	4.0	50
61	Design and operation of membrane distillation with feed recirculation for high recovery brine concentration. Desalination, 2018, 445, 51-62.	4.0	33
62	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
63	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
64	The ins and outs of microorganismâ€"electrode electron transfer reactions. Nature Reviews Chemistry, 2017, 1, .	13.8	385
65	On the present and future economic viability of stand-alone pressure-retarded osmosis. Desalination, 2017, 408, 133-144.	4.0	37
66	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
67	Water-Energy Nexus in Saudi Arabia. Energy Procedia, 2017, 105, 3837-3843.	1.8	41
68	Saving energy with an optimized two-stage reverse osmosis system. Environmental Science: Water Research and Technology, 2017, 3, 659-670.	1.2	45
69	Next-generation HVAC: Prospects for and limitations of desiccant and membrane-based dehumidification and cooling. Applied Energy, 2017, 200, 330-346.	5.1	83
70	Entropy generation analysis of electrodialysis. Desalination, 2017, 413, 184-198.	4.0	38
71	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
72	Unpacking compaction: Effect of hydraulic pressure on alginate fouling. Journal of Membrane Science, 2017, 544, 221-233.	4.1	25

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73	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
74	Optimal design and operation of electrodialysis for brackish-water desalination and for high-salinity brine concentration. Desalination, 2017, 420, 167-182.	4.0	75
75	Effect of temperature on ion transport in nanofiltration membranes: Diffusion, convection and electromigration. Desalination, 2017, 420, 241-257.	4.0	134
76	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.	3.2	79
77	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.	4.1	128
78	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
79	Thermodynamic analysis of brine management methods: Zero-discharge desalination and salinity-gradient power production. Desalination, 2017, 404, 291-303.	4.0	64
80	Thermodynamics, Exergy, and Energy Efficiency in Desalination Systems. , 2017, , 127-206.		10
81	Visualization of droplet condensation in membrane distillation desalination with surface modification: hydrophilicity, hydrophobicity, and wicking spacers. , 2017, , .		1
82	An Effectivenessâ€"Number of Transfer Units Relationship for Evaporators With Non-negligible Boiling Point Elevation Increases. Journal of Heat Transfer, 2016, 138, .	1.2	4
83	Quantifying osmotic membrane fouling to enable comparisons across diverse processes. Journal of Membrane Science, 2016, 511, 92-107.	4.1	27
84	Thermophysical properties of seawater: A review and new correlations that include pressure dependence. Desalination, 2016, 390, 1-24.	4.0	370
85	Modeling reverse osmosis element design using superposition and an analogy to convective heat transfer. Journal of Membrane Science, 2016, 512, 38-49.	4.1	8
86	Mechanical vapor compressionâ€"Membrane distillation hybrids for reduced specific energy consumption. Desalination and Water Treatment, 2016, 57, 26507-26517.	1.0	22
87	On the asymptotic flux of ultrapermeable seawater reverse osmosis membranes due to concentration polarisation. Journal of Membrane Science, 2016, 520, 560-565.	4.1	31
88	Energy efficiency of batch and semi-batch (CCRO) reverse osmosis desalination. Water Research, 2016, 106, 272-282.	5.3	136
89	The reversed chemical engine cycle with application to desalination processes. Desalination, 2016, 398, 256-264.	4.0	3
90	In situ visualization of organic fouling and cleaning mechanisms in reverse osmosis and forward osmosis. Desalination, 2016, 399, 138-147.	4.0	34

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91	Membrane distillation model based on heat exchanger theory and configuration comparison. Applied Energy, 2016, 184, 491-505.	5.1	97
92	Simple method for balancing direct contact membrane distillation. Desalination, 2016, 383, 53-59.	4.0	32
93	Energy efficiency of permeate gap and novel conductive gap membrane distillation. Journal of Membrane Science, 2016, 502, 171-178.	4.1	119
94	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.	2.5	14
95	Combining air recharging and membrane superhydrophobicity for fouling prevention in membrane distillation. Journal of Membrane Science, 2016, 505, 241-252.	4.1	87
96	Multistage vacuum membrane distillation (MSVMD) systems for high salinity applications. Journal of Membrane Science, 2016, 497, 128-141.	4.1	92
97	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.	4.1	18
98	A new vacuum membrane distillation system using an aspirator: concept modeling and optimization. Desalination and Water Treatment, 2016, 57, 12915-12928.	1.0	9
99	Entropy Generation of Desalination Powered by Variable Temperature Waste Heat. Entropy, 2015, 17, 7530-7566.	1.1	69
100	Energy consumption in desalinating produced water from shale oil and gas extraction. Desalination, 2015, 366, 94-112.	4.0	190
101	An Analysis of Likely Scalants in the Treatment of Produced Water From Nova Scotia. Heat Transfer Engineering, 2015, 36, 652-662.	1.2	10
102	A new reverse electrodialysis design strategy which significantly reduces the levelized cost of electricity. Journal of Membrane Science, 2015, 493, 605-614.	4.1	45
103	Modeling of flat-sheet and spiral-wound nanofiltration configurations and its application in seawater nanofiltration. Journal of Membrane Science, 2015, 493, 360-372.	4.1	53
104	Superhydrophobic condenser surfaces for air gap membrane distillation. Journal of Membrane Science, 2015, 492, 578-587.	4.1	61
105	Thermodynamic balancing of a fixed-size two-stage humidification dehumidification desalination system. Desalination, 2015, 369, 125-139.	4.0	64
106	Increasing the power density and reducing the levelized cost of electricity of a reverse electrodialysis stack through blending. Desalination, 2015, 369, 140-148.	4.0	34
107	Raising forward osmosis brine concentration efficiency through flow rate optimization. Desalination, 2015, 366, 71-79.	4.0	37
108	Design of Plate-Fin Tube Dehumidifiers for Humidificationâ€"Dehumidification Desalination Systems. Heat Transfer Engineering, 2015, 36, 223-243.	1.2	13

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109	Scaling and fouling in membrane distillation for desalination applications: A review. Desalination, 2015, 356, 294-313.	4.0	607
110	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
111	Thermodynamic equipartition for increased second law efficiency. Applied Energy, 2014, 118, 292-299.	5.1	45
112	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.	2.5	67
113	Three dimensionless parameters influencing the optimal membrane orientation for forward osmosis. Journal of Membrane Science, 2014, 458, 104-110.	4.1	14
114	Quantifying the potential of ultra-permeable membranes for water desalination. Energy and Environmental Science, 2014, 7, 1134-1141.	15.6	282
115	The benefits of hybridising electrodialysis with reverse osmosis. Journal of Membrane Science, 2014, 469, 326-335.	4.1	55
116	Heat transfer to a horizontal cylinder in a shallow bubble column. International Journal of Heat and Mass Transfer, 2014, 79, 353-361.	2.5	12
117	On the cost of electrodialysis for the desalination of high salinity feeds. Applied Energy, 2014, 136, 649-661.	5.1	143
118	The cost effectiveness of electrodialysis for diverse salinity applications. Desalination, 2014, 348, 57-65.	4.0	73
119	On the potential of forward osmosis to energetically outperform reverse osmosis desalination. Journal of Membrane Science, 2014, 469, 245-250.	4.1	202
120	Experiments and modeling of bubble column dehumidifier performance. International Journal of Thermal Sciences, 2014, 80, 65-75.	2.6	56
121	Effectiveness-mass transfer units (Îµ-MTU) model of a reverse osmosis membrane mass exchanger. Journal of Membrane Science, 2014, 458, 189-198.	4.1	36
122	Treating produced water from hydraulic fracturing: Composition effects on scale formation and desalination system selection. Desalination, 2014, 346, 54-69.	4.0	77
123	Limits of power production due to finite membrane area in pressure retarded osmosis. Journal of Membrane Science, 2014, 468, 81-89.	4.1	59
124	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
125	Effect of Module Inclination Angle on Air Gap Membrane Distillation. , 2014, , .		14
126	Measurements of Heat Transfer Coefficients to Cylinders in Shallow Bubble Columns. , 2014, , .		2

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127	Impact of extraction on a humidificationâ€“dehumidification desalination system. Desalination, 2013, 313, 87-96.	4.0	55
128	Thermal design of the humidification dehumidification desalination system: An experimental investigation. International Journal of Heat and Mass Transfer, 2013, 58, 740-748.	2.5	114
129	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
130	Effectivenessâ€“mass transfer units (Îµâ€“MTU) model of an ideal pressure retarded osmosis membrane mass exchanger. Journal of Membrane Science, 2013, 445, 211-219.	4.1	40
131	Effect of mass extractions and injections on the performance of a fixed-size humidificationâ€“dehumidification desalination system. Desalination, 2013, 314, 50-58.	4.0	26
132	Thermodynamic balancing of the humidification dehumidification desalination system by mass extraction and injection. International Journal of Heat and Mass Transfer, 2013, 57, 756-770.	2.5	95
133	Bubble columns for condensation at high concentrations of noncondensable gas: Heatâ€transfer model and experiments. AICHE Journal, 2013, 59, 1780-1790.	1.8	40
134	Costs for water supply, treatment, end-use and reclamation. Desalination and Water Treatment, 2013, 51, 200-232.	1.0	67
135	Effect of composition and nonideal solution behavior on desalination calculations for mixed electrolyte solutions with comparison to seawater. Desalination, 2013, 318, 34-47.	4.0	53
136	A novel solar-driven air gap membrane distillation system. Desalination and Water Treatment, 2013, 51, 1344-1351.	1.0	31
137	Performance limits of zero and single extraction humidification-dehumidification desalination systems. Applied Energy, 2013, 102, 1081-1090.	5.1	113
138	Exergy analysis of a high-temperature-steam-driven, varied-pressure, humidificationâ€“dehumidification system coupled with reverse osmosis. Applied Energy, 2013, 103, 552-561.	5.1	50
139	Design of Flat-Plate Dehumidifiers for Humidificationâ€“Dehumidification Desalination Systems. Heat Transfer Engineering, 2013, 34, 543-561.	1.2	27
140	Analytical Modeling of a Bubble Column Dehumidifier. , 2013, , .		6
141	An Economics-Based Second Law Efficiency. Entropy, 2013, 15, 2736-2765.	1.1	24
142	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
143	Solâ€“Gel Synthesis of $hbox{Au/Cu-TiO}_{2}$ Nanocomposite and Their Morphological and Optical Properties. IEEE Photonics Journal, 2013, 5, 2201908-2201908.	1.0	18
144	An improved model for multiple effect distillation. Desalination and Water Treatment, 2013, 51, 807-821.	1.0	84

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145	Generalized Least Energy of Separation for Desalination and Other Chemical Separation Processes. Entropy, 2013, 15, 2046-2080.	1.1	93
146	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.	0.1	13
147	Thermodynamic Analysis of a Reverse Osmosis Desalination System Using Forward Osmosis for Energy Recovery. , 2012, , .		4
148	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
149	Effect of Nonideal Solution Behavior on Desalination of a Sodium Chloride (NaCl) Solution and Comparison to Seawater. , 2012, , .		3
150	Energy requirements for water production, treatment, end use, reclamation, and disposal. Renewable and Sustainable Energy Reviews, 2012, 16, 4818-4848.	8.2	468
151	Economic evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 299, 55-62.	4.0	122
152	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.	2.9	90
153	Effects of membrane properties on water production cost in small scale membrane distillation systems. Desalination, 2012, 306, 60-71.	4.0	77
154	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.	4.5	9
155	Professor Warren M. Rohsenow (1921â€"2011). International Journal of Heat and Mass Transfer, 2012, 55, 4938-4940.	2.5	0
156	Entropy generation in condensation in the presence of high concentrations of noncondensable gases. International Journal of Heat and Mass Transfer, 2012, 55, 5133-5147.	2.5	56
157	Technical evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 286, 332-341.	4.0	136
158	Energy efficiency comparison of single-stage membrane distillation (MD) desalination cycles in different configurations. Desalination, 2012, 290, 54-66.	4.0	182
159	Analysis of reversible ejectors and definition of an ejector efficiency. International Journal of Thermal Sciences, 2012, 54, 153-166.	2.6	35
160	High-temperature-steam-driven, varied-pressure, humidification-dehumidification system coupled with reverse osmosis for energy-efficient seawater desalination. Energy, 2012, 37, 482-493.	4.5	77
161	SOLAR DESALINATION. Annual Review of Heat Transfer, 2012, 15, 277-347.	0.3	82
162	Variable Pressure Humidification Dehumidification Desalination System. , 2011, , .		11

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163	Second law analysis of reverse osmosis desalination plants: An alternative design using pressure retarded osmosis. Energy, 2011, 36, 6617-6626.	4.5	142
164	Entropy Generation Analysis of Desalination Technologies. Entropy, 2011, 13, 1829-1864.	1.1	229
165	On exergy calculations of seawater with applications in desalination systems. International Journal of Thermal Sciences, 2011, 50, 187-196.	2.6	137
166	Optimal operating conditions and configurations for humidificationâ€“dehumidification desalination cycles. International Journal of Thermal Sciences, 2011, 50, 779-789.	2.6	86
167	Helium as a Carrier Gas in Humidification Dehumidification Desalination Systems. , 2011, , .		6
168	Thermal Performance Evaluation of Seawater Cooling Towers. , 2011, , .		3
169	On Thermal Performance of Seawater Cooling Towers. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	27
170	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.1	14
171	Formulation of Seawater Flow Exergy Using Accurate Thermodynamic Data. , 2010, , .		9
172	On Thermal Performance of Seawater Cooling Towers. , 2010, , .		6
173	Entropy generation minimization of combined heat and mass transfer devices. International Journal of Thermal Sciences, 2010, 49, 2057-2066.	2.6	132
174	The potential of solar-driven humidificationâ€“dehumidification desalination for small-scale decentralized water production. Renewable and Sustainable Energy Reviews, 2010, 14, 1187-1201.	8.2	332
175	Effect of entropy generation on the performance of humidification-dehumidification desalination cycles. International Journal of Thermal Sciences, 2010, 49, 1837-1847.	2.6	126
176	Air-Heating Solar Collectors for Humidification-Dehumidification Desalination Systems. , 2010, , .		4
177	Thermodynamic analysis of humidification dehumidification desalination cycles. Desalination and Water Treatment, 2010, 16, 339-353.	1.0	274
178	Thermophysical properties of seawater: a review of existing correlations and data. Desalination and Water Treatment, 2010, 16, 354-380.	1.0	1,063
179	ENERGY EFFECTIVENESS OF SIMULTANEOUS HEAT AND MASS EXCHANGE DEVICES. Frontiers in Heat and Mass Transfer, 2010, 1, .	0.1	61
180	A Convection/Radiation Temperature Control System for High Power Density Electronic Device Testing. Journal of Electronic Packaging, Transactions of the ASME, 2008, 130, .	1.2	0

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181	Thermal Control Architecture for a Planetary and Lunar Surface Exploration Micro-Robot. AIP Conference Proceedings, 2007, , .	0.3	2
182	Active Thermal Control of Distributed Parameter Systems Excited at Multiple Frequencies. Journal of Heat Transfer, 2006, 128, 93-99.	1.2	3
183	Boiling and Evaporation in Small Diameter Channels. Heat Transfer Engineering, 2003, 24, 18-40.	1.2	164
184	A History of the MIT Heat Transfer Laboratory. Heat Transfer Engineering, 2003, 24, 3-17.	1.2	539
185	Active Thermal Control of Distributed Parameter Systems With Application to Testing of Packaged IC Devices. Journal of Heat Transfer, 2003, 125, 164-174.	1.2	9
186	Evaporative cooling of continuously drawn glass fibers by water sprays. International Journal of Heat and Mass Transfer, 2000, 43, 777-790.	2.5	19
187	High Heat Flux Cooling by Liquid Jet-Array Modules. Chemical Engineering and Technology, 1999, 22, 967.	0.9	11
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