

Li-Zhi Zhang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/367641/li-zhi-zhang-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.

199
papers

6,145
citations

48
h-index

69
g-index

203
ext. papers

6,974
ext. citations

5.6
avg. IF

6.81
L-index

#	Paper	IF	Citations
199	Mechanistic modeling of flow and heat transfer in vertical upward two-phase slug flows. <i>Physics of Fluids</i> , 2022 , 34, 013309	4.4	1
198	A hydrophobic-hydrophilic MXene/PVDF composite hollow fiber membrane with enhanced antifouling properties for seawater desalination. <i>Journal of Membrane Science</i> , 2022 , 644, 120146	9.6	3
197	Microstructure investigation on catalyst layer of electrolytic dehumidifier for performance improvement: Multi-scale modelling simplification and parameter analysis. <i>Chemical Engineering Science</i> , 2022 , 247, 116927	4.4	1
196	Development of a MXene-based membrane with excellent anti-fouling for air humidification-dehumidification type desalination. <i>Journal of Membrane Science</i> , 2022 , 641, 119907	9.6	3
195	Dual-responsive zwitterion-modified nanopores: a mesoscopic simulation study.. <i>Journal of Materials Chemistry B</i> , 2022 ,	7.3	1
194	A self-healing PVDF-ZnO/MXene membrane with universal fouling resistance for real seawater desalination.. <i>Water Research</i> , 2022 , 216, 118349	12.5	1
193	Simulated preparation and hydration property of a new-generation zwitterionic modified PVDF membrane. <i>Journal of Membrane Science</i> , 2022 , 652, 120498	9.6	1
192	Modeling and prediction of loading characteristics of electret filter media for PM2.5. <i>Building and Environment</i> , 2021 , 108554	6.5	0
191	Modelling and experiments of falling film break-up characteristics considering mass transfer for liquid desiccant dehumidification. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 181, 122027	4.9	1
190	Flow and heat transfer for a two-phase slug flow in horizontal pipes: A mechanistic model. <i>Physics of Fluids</i> , 2021 , 33, 034117	4.4	3
189	Computer simulation of zwitterionic polymer brush grafted silica nanoparticles to modify polyvinylidene fluoride membrane. <i>Journal of Colloid and Interface Science</i> , 2021 , 587, 173-182	9.3	4
188	Mechanisms of performance degradation and efficiency improvement of electret filters during neutral particle loading. <i>Powder Technology</i> , 2021 , 382, 133-143	5.2	3
187	The measurement of permeate flux based on a noninvasive method for membrane distillation: Experiment and model validation. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 164, 120482	4.9	2
186	Molecular simulations on the hydration and underwater oleophobicity of zwitterionic self-assembled monolayers. <i>AIChE Journal</i> , 2021 , 67, e17103	3.6	6
185	Development of structurally modified OER catalysts with enhanced performance and longevity for PEM-based electrolytic air dehumidification. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 9267-9279	6.7	3
184	Mechanistic modeling of flow and heat transfer in turbulent/laminar/turbulent gas/liquid stratified flow. <i>Physics of Fluids</i> , 2021 , 33, 073313	4.4	3
183	Research progress on the cleaning and regeneration of PM2.5 filter media. <i>Particuology</i> , 2021 , 57, 28-44	2.8	2

182	3-D multiphysics simulation on electrolyte membrane dehumidification considering the real air channel and collection layer structures. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 176, 121297	4.9	0
181	A coarse-grained simulation of heat and mass transfer through a graphene oxide-based composite membrane. <i>Chemical Engineering Science</i> , 2021 , 243, 116692	4.4	5
180	Multi-scale modelling on PEM-based electrolyte dehumidifier: Transient heat and mass transfer in anode catalyst layer with microstructures. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 179, 121720	4.9	1
179	Numerical methodology for simulating particle deposition on superhydrophobic surfaces with randomly distributed rough structures. <i>Applied Surface Science</i> , 2021 , 568, 150872	6.7	3
178	Computer Simulations on a pH-Responsive Anticancer Drug Delivery System Using Zwitterion-Grafted Polyamidoamine Dendrimer Unimolecular Micelles. <i>Langmuir</i> , 2021 , 37, 1225-1234	4	12
177	A new approach for air dehumidification at refrigerator temperatures: Electrolytic vapor dehumidifier with Proton Exchange Membrane (PEM). <i>International Journal of Refrigeration</i> , 2020 , 118, 453-461	3.8	3
176	Experimental investigation on deposition reduction of different types of dust on solar PV cells by self-cleaning coatings. <i>Solar Energy</i> , 2020 , 206, 365-373	6.8	19
175	Molecular-level evaluation and manipulation of thermal conductivity, moisture diffusivity and hydrophobicity of a GO-PVP/PVDF composite membrane. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 152, 119508	4.9	6
174	A review of liquid desiccant air dehumidification: From system to material manipulations. <i>Energy and Buildings</i> , 2020 , 215, 109897	7	61
173	System-scale modeling and membrane structure parameter optimization for solar-powered sweeping gas membrane distillation desalination system. <i>Journal of Cleaner Production</i> , 2020 , 253, 119968	10.3	9
172	Analysis and optimization of material physical characteristics for electrolytic air dehumidifier with a PEM. <i>Applied Thermal Engineering</i> , 2020 , 169, 114929	5.8	6
171	Fabrication and performance of a stable micro/nano composite electret filter for effective PM capture. <i>Science of the Total Environment</i> , 2020 , 725, 138297	10.2	24
170	Experimental Investigation of Dust Particle Deposition Reduction in Solar Cell Covering Glass by Super-Hydrophobic Coatings. <i>Environmental Science and Engineering</i> , 2020 , 827-834	0.2	1
169	Numerical investigation on thermophoretic deposition of particles in turbulent duct flow with conjugate heat transfer: Analysis of influencing factors. <i>Building Simulation</i> , 2020 , 13, 387-399	3.9	
168	Cross flow and heat transfer of hollow-fiber tube banks with complex distribution patterns and various baffle designs. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 147, 118937	4.9	4
167	Durability analysis and degradation mechanism for an electrolytic air dehumidifier based on PEM. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 3971-3985	6.7	11
166	Modelling on space-domain surface waves of vertical low-Re falling film and the enhancement on mass transfer in halide-solution/air absorption. <i>Chemical Engineering Science</i> , 2020 , 215, 115459	4.4	6
165	Falling film liquid desiccant air dehumidification. <i>Experimental and Computational Multiphase Flow</i> , 2020 , 2, 187-198	4.2	3

164	Drift-flux correlation for upward two-phase flow in inclined pipes. <i>Chemical Engineering Science</i> , 2020 , 213, 115395	4.4	3
163	Fouling resistance improvement with a new superhydrophobic electrospun PVDF membrane for seawater desalination. <i>Desalination</i> , 2020 , 476, 114246	10.3	23
162	Computer simulations on double hydrophobic PS-b-PMMA porous membrane by non-solvent induced phase separation. <i>Fluid Phase Equilibria</i> , 2020 , 523, 112784	2.5	5
161	Wettability and performance enhancement with durable super-hydrophilic surfaces for plastic liquid desiccant dehumidification systems. <i>Energy and Buildings</i> , 2019 , 187, 77-85	7	18
160	Particle Deposition Characteristics and Efficiency in Duct Air Flow over a Backward-Facing Step: Analysis of Influencing Factors. <i>Sustainability</i> , 2019 , 11, 751	3.6	0
159	Titanium carbide Ti ₃ C ₂ T _x (MXene) enhanced PAN nanofiber membrane for air purification. <i>Journal of Membrane Science</i> , 2019 , 586, 162-169	9.6	63
158	Electrochemical impedance spectroscopy analysis of V _{OC} characteristics and a fast prediction model for PEM-based electrolytic air dehumidification. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 19533-19546	6.7	13
157	Experimental investigation of dust deposition reduction on solar cell covering glass by different self-cleaning coatings. <i>Energy</i> , 2019 , 181, 645-653	7.9	47
156	Effects of blockage ratio and Reynolds number on particle deposition in duct airflow over a forward-facing step. <i>Building Simulation</i> , 2019 , 12, 1119-1129	3.9	1
155	Performance study of a solar-assisted hollow-fiber-membrane-based air humidification-dehumidification desalination system: Effects of membrane properties. <i>Chemical Engineering Science</i> , 2019 , 206, 164-179	4.4	15
154	A molecular level performance manipulation of thermal conductivity and moisture diffusivity through a composite membrane considering interfacial resistance. <i>Journal of Membrane Science</i> , 2019 , 583, 231-247	9.6	5
153	Fabrication and analysis of a highly hydrophobic and permeable block GO-PVP/PVDF membrane for membrane humidification-dehumidification desalination. <i>Journal of Membrane Science</i> , 2019 , 582, 367-380	8.6	20
152	Performance improvement of electrolytic air dehumidification systems with high-water-uptake polymer electrolyte membranes. <i>Journal of Applied Polymer Science</i> , 2019 , 136, 47676	2.9	6
151	Heat and mass transfer in PEM-based electrolytic air dehumidification element with an optimized anode-side electrochemical model. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 135, 1152-1166	4.9	10
150	Fluid flow and heat transfer of cross flow hollow fiber membrane contactors with randomly distributed fibers: A topological study. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 135, 186-198	4.9	5
149	Performance enhancement of solar-assisted liquid desiccant dehumidifiers using super-hydrophilic surface. <i>Energy and Buildings</i> , 2019 , 199, 461-471	7	10
148	Indoor experiments of dust deposition reduction on solar cell covering glass by transparent super-hydrophobic coating with different tilt angles. <i>Solar Energy</i> , 2019 , 188, 1146-1155	6.8	26
147	Development of liquid-air mass transfer correlations for liquid desiccant dehumidification considering the liquid/air contact and film instability. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 141, 491-502	4.9	8

146	Experimental measurement and Numerical Simulation of Particle Deposition on superhydrophobic surface. <i>E3S Web of Conferences</i> , 2019 , 128, 06009	0.5	
145	Evaluation the effect of fiber alignment on particle collection performance of mechanical/electret filters based on Voronoi tessellations. <i>Chemical Engineering Science</i> , 2019 , 197, 109-119	4.4	9
144	Wave-wise falling film in liquid desiccant dehumidification systems: Model development and time-series parameter analysis. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 132, 96-106	4.9	13
143	Influences of dust deposition on ground-mounted solar photovoltaic arrays: A CFD simulation study. <i>Renewable Energy</i> , 2019 , 135, 21-31	8.1	20
142	PM collection performance of electret filters electrospun with different dielectric materials-a numerical modeling and experimental study. <i>Building and Environment</i> , 2018 , 131, 210-219	6.5	31
141	Three-dimensional turbulent flow and conjugate heat and mass transfer in a cross-flow hollow fiber membrane bundle for seawater desalination. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 120, 328-341	4.9	7
140	Enhanced thermal conductivity of PLA-based nanocomposites by incorporation of graphite nanoplatelets functionalized by tannic acid. <i>Journal of Applied Polymer Science</i> , 2018 , 135, 46397	2.9	13
139	Performance manipulations of a composite membrane of low thermal conductivity for seawater desalination. <i>Chemical Engineering Science</i> , 2018 , 192, 61-73	4.4	19
138	Fluid flow and mass transfer in an industrial-scale hollow fiber membrane contactor scaled up with small elements. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 127, 289-301	4.9	7
137	Pinning-Depinning Mechanisms of the Contact Line during Evaporation of Microdroplets on Rough Surfaces: A Lattice Boltzmann Simulation. <i>Langmuir</i> , 2018 , 34, 7906-7915	4	14
136	A lattice Boltzmann simulation of coalescence-induced droplet jumping on superhydrophobic surfaces with randomly distributed structures. <i>Applied Surface Science</i> , 2018 , 436, 172-182	6.7	16
135	Module scale-up and performance evaluation of thin film composite hollow fiber membranes for pressure retarded osmosis. <i>Journal of Membrane Science</i> , 2018 , 548, 398-407	9.6	21
134	Recent Developments in Heat Transfer and Energy Conservation: A Review of the Selected Papers from ISHTEC2016. <i>Heat Transfer Engineering</i> , 2018 , 39, 1483-1486	1.7	
133	Numerical study of dry deposition of monodisperse and polydisperse dust on building-mounted solar photovoltaic panels with different roof inclinations. <i>Solar Energy</i> , 2018 , 176, 535-544	6.8	15
132	Durable superhydrophobic surface with highly antireflective and self-cleaning properties for the glass covers of solar cells. <i>Applied Surface Science</i> , 2018 , 454, 239-248	6.7	62
131	Heat and mass transfer in a polymeric electrolyte membrane-based electrochemical air dehumidification system: Model development and performance analysis. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 126, 888-898	4.9	12
130	Effects of material properties on heat and mass transfer in honeycomb-type adsorbent wheels for total heat recovery. <i>Applied Thermal Engineering</i> , 2017 , 118, 345-356	5.8	9
129	Transient split features of slug flow at an impacting micro-T-junction: A numerical study. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 112, 318-332	4.9	9

128	Laminar flow and conjugate heat and mass transfer in a hollow fiber membrane bundle used for seawater desalination. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 111, 123-137	4.9	13
127	Conjugate heat and mass transfer in a cross-flow hollow fiber membrane bundle used for seawater desalination considering air side turbulence. <i>Journal of Membrane Science</i> , 2017 , 533, 321-335	9.6	11
126	Lattice Boltzmann Simulation of Droplets Impacting on Superhydrophobic Surfaces with Randomly Distributed Rough Structures. <i>Langmuir</i> , 2017 , 33, 820-829	4	26
125	Effect of groove configuration on two-phase flow instability for Ultra-Thin Looped Heat Pipes in thermal management system. <i>International Journal of Thermal Sciences</i> , 2017 , 121, 369-380	4.1	7
124	Performance investigation on polymeric electrolyte membrane-based electrochemical air dehumidification system. <i>Applied Energy</i> , 2017 , 208, 1174-1183	10.7	32
123	Durable superhydrophobic surfaces made by intensely connecting a bipolar top layer to the substrate with a middle connecting layer. <i>Scientific Reports</i> , 2017 , 7, 9946	4.9	19
122	Experimental investigation of the anti-dust effect of transparent hydrophobic coatings applied for solar cell covering glass. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 160, 382-389	6.4	76
121	Energy and economic analysis of a hollow fiber membrane-based desalination system driven by solar energy. <i>Desalination</i> , 2017 , 404, 200-214	10.3	30
120	Experimental study of a membrane-based dehumidification cooling system. <i>Applied Thermal Engineering</i> , 2017 , 115, 1315-1321	5.8	27
119	Performance prediction of PM 2.5 removal of real fibrous filters with a novel model considering rebound effect. <i>Applied Thermal Engineering</i> , 2017 , 111, 1536-1547	5.8	12
118	Three-dimensional pore-scale flow and mass transport through composite asymmetric membranes. <i>Science and Technology for the Built Environment</i> , 2017 , 23, 60-71	1.8	2
117	Mechanical durability of superhydrophobic surfaces: The role of surface modification technologies. <i>Applied Surface Science</i> , 2017 , 392, 286-296	6.7	63
116	Experimental investigation on membrane-based electrolytic dehumidification for air-conditioning systems. <i>Procedia Engineering</i> , 2017 , 205, 3194-3198		3
115	Visualization research on confined bubble growth feature and heat transfer characteristic in ultra-shallow micro channel. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 103, 847-854	4.9	6
114	A reliability-based optimization of membrane-type total heat exchangers under uncertain design parameters. <i>Energy</i> , 2016 , 101, 390-401	7.9	16
113	A heat pump driven and hollow fiber membrane-based liquid desiccant air dehumidification system: A transient performance study. <i>International Journal of Refrigeration</i> , 2016 , 67, 143-156	3.8	27
112	Moisture transport through asymmetric porous membranes with finger-like holes for indoor humidity control: A lattice Boltzmann simulation approach. <i>Indoor and Built Environment</i> , 2016 , 25, 151-168	1.8	4
111	A dual-scale analysis of a desiccant wheel with a novel organic-inorganic hybrid adsorbent for energy recovery. <i>Applied Energy</i> , 2016 , 163, 167-179	10.7	25

110	Conjugate heat and mass transfer in a skewed flow hollow fiber membrane bank used for liquid desiccant air dehumidification. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 93, 23-40	4.9	20
109	Modeling of dynamic deposition and filtration processes of airborne particles by a single fiber with a coupled lattice Boltzmann and discrete element method. <i>Building and Environment</i> , 2016 , 106, 274-285	6.5	17
108	Self-cleaning of Surfaces: the Role of Surface Wettability and Dust Types. <i>Scientific Reports</i> , 2016 , 6, 38239	4.9	68
107	Investigation of a solar energy driven and hollow fiber membrane-based humidification-dehumidification desalination system. <i>Applied Energy</i> , 2016 , 177, 393-408	10.7	47
106	Performance study of a heat pump driven and hollow fiber membrane-based two-stage liquid desiccant air dehumidification system. <i>Applied Energy</i> , 2016 , 179, 727-737	10.7	50
105	Transient and conjugate heat and mass transfer in hexagonal ducts with adsorbent walls. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 84, 271-281	4.9	14
104	Transport behavior of R134a refrigerant through rubber composites. <i>Journal of Polymer Research</i> , 2015 , 22, 1	2.7	
103	Oblique fluid flow and convective heat transfer across a tube bank under uniform wall heat flux boundary conditions. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 91, 1259-1272	4.9	13
102	A Randomly Distributed Filler Model for Heat Conductivity Prediction in Filled Composite Materials Considering Fillers Aggregation. <i>Heat Transfer Engineering</i> , 2015 , 36, 929-936	1.7	7
101	Conjugate heat and mass transfer in a total heat exchanger with cross-corrugated triangular ducts and one-step made asymmetric membranes. <i>International Journal of Heat and Mass Transfer</i> , 2015 , 84, 390-400	4.9	28
100	Thermal conductivity augmentation of composite polymer materials with artificially controlled filler shapes. <i>Journal of Applied Polymer Science</i> , 2014 , 131, n/a-n/a	2.9	11
99	A heat pump driven and hollow fiber membrane-based liquid desiccant air dehumidification system: Modeling and experimental validation. <i>Energy</i> , 2014 , 65, 441-451	7.9	71
98	Facile fabrication of superhydrophobic films with fractal structures using epoxy resin microspheres. <i>Applied Surface Science</i> , 2014 , 292, 44-54	6.7	20
97	A lattice Boltzmann simulation of mass transport through composite membranes. <i>AIChE Journal</i> , 2014 , 60, 3925-3938	3.6	23
96	Numerical and analytical study of the impinging and bouncing phenomena of droplets on superhydrophobic surfaces with microtextured structures. <i>Langmuir</i> , 2014 , 30, 11640-9	4	33
95	Oblique fluid flow and heat transfer across a hollow fiber membrane bank under uniform temperature conditions. <i>Journal of Membrane Science</i> , 2014 , 470, 524-534	9.6	5
94	DEVELOPMENT OF FRACTAL ULTRA-HYDROPHOBIC COATING FILMS TO PREVENT WATER VAPOR DEWING AND TO DELAY FROSTING. <i>Fractals</i> , 2014 , 22, 1440002	3.2	11
93	Flow maldistribution and performance deteriorations in a counter flow hollow fiber membrane module for air humidification/dehumidification. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 74, 421-430	4.9	27

92	Performance comparisons of honeycomb-type adsorbent beds (wheels) for air dehumidification with various desiccant wall materials. <i>Energy</i> , 2014 , 65, 430-440	7.9	41
91	Conjugate heat and mass transfer in membrane parallel-plates ducts for liquid desiccant air dehumidification: Effects of the developing entrances. <i>Journal of Membrane Science</i> , 2013 , 437, 82-89	9.6	39
90	Conjugate Heat Transfer in Plate-Fin and Tube Heat Exchangers 2013 , 255-274		
89	Conjugate heat conduction in filled composite materials considering interactions between the filler and base materials. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 64, 735-742	4.9	21
88	Researches and trends in membrane-based liquid desiccant air dehumidification. <i>Renewable and Sustainable Energy Reviews</i> , 2013 , 28, 425-440	16.2	82
87	Effectiveness-NTU Methods for Heat and Mass Transfer Processes 2013 , 309-334		1
86	Novel Materials for Heat and Mass Exchangers 2013 , 335-369		
85	Heat and Mass Transfer in Hollow Fiber Membrane Bundles with Randomly Distributed Fibers 2013 , 233-254		1
84	Heat and Mass Transfer Across a Hollow Fiber Membrane Bundle 2013 , 181-232		3
83	Flow maldistribution and performance deteriorations in a cross flow hollow fiber membrane module for air humidification. <i>Journal of Membrane Science</i> , 2013 , 427, 1-9	9.6	34
82	Transport Phenomena in a Cross-Flow Hollow Fibre Membrane Bundle Used for Liquid Desiccant Air Dehumidification. <i>Indoor and Built Environment</i> , 2013 , 22, 559-574	1.8	24
81	Turbulent heat and mass transfer across a hollow fiber membrane bundle considering interactions between neighboring fibers. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 64, 162-172	4.9	32
80	Heat and Mass Transfer in Air-to-Air Parallel-Plate Membrane Ducts 2013 , 93-124		
79	Convective mass transfer and pressure drop correlations for cross-flow structured hollow fiber membrane bundles under low Reynolds numbers but with turbulent flow behaviors. <i>Journal of Membrane Science</i> , 2013 , 434, 65-73	9.6	21
78	Preparation and properties of Ag-coated activated carbon nanocomposites for indoor air quality control. <i>Building and Environment</i> , 2013 , 63, 108-113	6.5	25
77	Investigating the impacts of included angles on flow and heat transfer in cross-corrugated triangular ducts with field synergy principle. <i>Thermal Science</i> , 2013 , 17, 823-832	1.2	2
76	Exchanger Structure-Induced Flow Maldistribution and Performance Deterioration 2013 , 275-307		
75	Sorption, permeation and selective transport of moisture/VOCs through a CA membrane for total heat recovery. <i>International Journal of Low-Carbon Technologies</i> , 2013 , 8, 64-69	2.8	5

74	An Introduction to Conjugate Heat and Mass Transfer in Ducts 2013 , 1-20		
73	Conjugate Heat and Mass Transfer in Adsorbent Ducts 2013 , 21-74		6
72	Heat and Mass Transfer in Plate-Fin Membrane Ducts 2013 , 125-156		
71	Heat and Mass Transfer in Liquid-to-Air Parallel-Plate Membrane Ducts 2013 , 157-180		
70	Nonlinear programming optimization of filler shapes for composite materials with inverse problem technique to maximize heat conductivity. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 7287-7296	4.9	12
69	Conjugate heat and mass transfer in a cross-flow hollow fiber membrane contactor for liquid desiccant air dehumidification. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 8061-8072	4.9	59
68	Coupled heat and mass transfer in an application-scale cross-flow hollow fiber membrane module for air humidification. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 5861-5869	4.9	86
67	Preparation and selective adsorption of core-shell desiccant for heat and moisture recovery. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012 , 406, 68-74	5.1	8
66	Progress on heat and moisture recovery with membranes: From fundamentals to engineering applications. <i>Energy Conversion and Management</i> , 2012 , 63, 173-195	10.6	121
65	Selective permeation of moisture and VOCs through polymer membranes used in total heat exchangers for indoor air ventilation. <i>Indoor Air</i> , 2012 , 22, 321-30	5.4	37
64	Selective adsorption of a novel high selective desiccant for prospective use in heat and moisture recovery for buildings. <i>Building and Environment</i> , 2012 , 49, 124-128	6.5	11
63	Fluid flow and heat mass transfer in membrane parallel-plates channels used for liquid desiccant air dehumidification. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 2571-2580	4.9	93
62	Conjugate heat and mass transfer in a hollow fiber membrane module for liquid desiccant air dehumidification: A free surface model approach. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 3789-3799	4.9	78
61	Turbulent Heat and Mass Transfer Across a Hollow Fiber Membrane Tube Bank in Liquid Desiccant Air Dehumidification. <i>Journal of Heat Transfer</i> , 2012 , 134,	1.8	32
60	Fluid Flow and Heat Transfer in Plate-Fin and Tube Heat Exchangers in a Transitional Flow Regime. <i>Numerical Heat Transfer; Part A: Applications</i> , 2011 , 60, 766-784	2.3	16
59	An Analytical Solution to Heat and Mass Transfer in Hollow Fiber Membrane Contactors for Liquid Desiccant Air Dehumidification. <i>Journal of Heat Transfer</i> , 2011 , 133,	1.8	94
58	One-step fabrication and analysis of an asymmetric cellulose acetate membrane for heat and moisture recovery. <i>Journal of Membrane Science</i> , 2011 , 366, 158-165	9.6	65
57	Convective heat transfer in cross-corrugated triangular ducts under uniform heat flux boundary conditions. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 597-605	4.9	55

56	Coupled heat and mass transfer in a counter flow hollow fiber membrane module for air humidification. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 1055-1063	4.9	102
55	Heat and mass transfer in a randomly packed hollow fiber membrane module: A fractal model approach. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 2921-2931	4.9	86
54	Preparation and characterization of porous poly(vinylidene fluoride) membranes for dehumidification with poly(ethylene glycol) as an additive. <i>Journal of Applied Polymer Science</i> , 2010 , 118, 2696-2703	2.9	10
53	An analytical solution for heat mass transfer in a hollow fiber membrane based air-to-air heat mass exchanger. <i>Journal of Membrane Science</i> , 2010 , 360, 217-225	9.6	35
52	Conjugate heat and mass transfer in membrane-formed channels in all entry regions. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 815-824	4.9	69
51	Heat and mass transfer in a quasi-counter flow membrane-based total heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 5478-5486	4.9	72
50	Independent air dehumidification with membrane-based total heat recovery: Modeling and experimental validation. <i>International Journal of Refrigeration</i> , 2010 , 33, 398-408	3.8	54
49	Performance analysis of a direct expansion air dehumidification system combined with membrane-based total heat recovery. <i>Energy</i> , 2010 , 35, 3891-3901	7.9	48
48	Coupled heat and mass transfer through asymmetric porous membranes with finger-like macrovoids structure. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 751-759	4.9	33
47	Heat and mass transfer in plate-fin enthalpy exchangers with different plate and fin materials. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 2704-2713	4.9	59
46	Flow maldistribution and thermal performance deterioration in a cross-flow air to air heat exchanger with plate-fin cores. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 4500-4509	4.9	56
45	Performance Deteriorations from Flow Maldistribution in Air-to-Air Heat Exchangers: A Parallel-Plates Membrane Core Case. <i>Numerical Heat Transfer; Part A: Applications</i> , 2009 , 56, 746-763	2.3	16
44	Flow Maldistribution and Performance Deteriorations in Membrane-Based Heat and Mass Exchangers. <i>Journal of Heat Transfer</i> , 2009 , 131,	1.8	17
43	Heat and Mass Transfer in a Total Heat Exchanger: Cross-Corrugated Triangular Ducts with Composite Supported Liquid Membrane. <i>Numerical Heat Transfer; Part A: Applications</i> , 2008 , 53, 1195-1210	2.3	23
42	Heat and moisture transfer in application scale parallel-plates enthalpy exchangers with novel membrane materials. <i>Journal of Membrane Science</i> , 2008 , 325, 672-682	9.6	61
41	Heat and mass transfer in plate-fin sinusoidal passages with vapor-permeable wall materials. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 618-629	4.9	48
40	Simultaneous heat and moisture transfer through a composite supported liquid membrane. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 2179-2189	4.9	41
39	A fractal model for gas permeation through porous membranes. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 5288-5295	4.9	66

38	Synthesis and characterization of a PVA/LiCl blend membrane for air dehumidification. <i>Journal of Membrane Science</i> , 2008 , 308, 198-206	9.6	124
37	Thermally Developing Forced Convection and Heat Transfer in Rectangular Plate-Fin Passages Under Uniform Plate Temperature. <i>Numerical Heat Transfer; Part A: Applications</i> , 2007 , 52, 549-564	2.3	19
36	Laminar flow and heat transfer in plate-fin triangular ducts in thermally developing entry region. <i>International Journal of Heat and Mass Transfer</i> , 2007 , 50, 1637-1640	4.9	56
35	Heat and mass transfer in a cross-flow membrane-based enthalpy exchanger under naturally formed boundary conditions. <i>International Journal of Heat and Mass Transfer</i> , 2007 , 50, 151-162	4.9	85
34	Numerical study of heat and mass transfer in an enthalpy exchanger with a hydrophobic-hydrophilic composite membrane core. <i>Numerical Heat Transfer; Part A: Applications</i> , 2007 , 51, 697-714	2.3	19
33	A physically-based model for prediction of VOCs emissions from paint applied to an absorptive substrate. <i>Building and Environment</i> , 2006 , 41, 1317-1325	6.5	34
32	Evaluation of moisture diffusivity in hydrophilic polymer membranes: A new approach. <i>Journal of Membrane Science</i> , 2006 , 269, 75-83	9.6	29
31	Investigation of moisture transfer effectiveness through a hydrophilic polymer membrane with a field and laboratory emission cell. <i>International Journal of Heat and Mass Transfer</i> , 2006 , 49, 1176-1184	4.9	19
30	Effects of Membrane Parameters on Performance of Vapor Permeation through a Composite Supported Liquid Membrane. <i>Separation Science and Technology</i> , 2006 , 41, 3517-3538	2.5	8
29	Energy performance of independent air dehumidification systems with energy recovery measures. <i>Energy</i> , 2006 , 31, 1228-1242	7.9	117
28	Fabrication of a lithium chloride solution based composite supported liquid membrane and its moisture permeation analysis. <i>Journal of Membrane Science</i> , 2006 , 276, 91-100	9.6	67
27	Numerical Study of Periodically Fully Developed Flow and Heat Transfer in Cross-Corrugated Triangular Channels in Transitional Flow Regime. <i>Numerical Heat Transfer; Part A: Applications</i> , 2005 , 48, 387-405	2.3	48
26	Turbulent Three-Dimensional Air Flow and Heat Transfer in a Cross-Corrugated Triangular Duct. <i>Journal of Heat Transfer</i> , 2005 , 127, 1151-1158	1.8	35
25	Thermodynamic modeling of a novel air dehumidification system. <i>Energy and Buildings</i> , 2005 , 37, 279-286		79
24	Convective mass transport in cross-corrugated membrane exchangers. <i>Journal of Membrane Science</i> , 2005 , 260, 75-83	9.6	43
23	Modeling VOCs emissions in a room with a single-zone multi-component multi-layer technique. <i>Building and Environment</i> , 2004 , 39, 523-531	6.5	60
22	Laminar fluid flow and mass transfer in a standard field and laboratory emission cell. <i>International Journal of Heat and Mass Transfer</i> , 2003 , 46, 91-100	4.9	43
21	Mass transfer of volatile organic compounds from painting material in a standard field and laboratory emission cell. <i>International Journal of Heat and Mass Transfer</i> , 2003 , 46, 2415-2423	4.9	30

20	Indoor humidity behaviors associated with decoupled cooling in hot and humid climates. <i>Building and Environment</i> , 2003 , 38, 99-107	6.5	111
19	Effects of substrate parameters on the emissions of volatile organic compounds from wet coating materials. <i>Building and Environment</i> , 2003 , 38, 939-946	6.5	27
18	A pre-cooling Munters environmental control desiccant cooling cycle in combination with chilled-ceiling panels. <i>Energy</i> , 2003 , 28, 275-292	7.9	41
17	Performance comparisons of desiccant wheels for air dehumidification and enthalpy recovery. <i>Applied Thermal Engineering</i> , 2002 , 22, 1347-1367	5.8	199
16	Energy savings potential of chilled-ceiling combined with desiccant cooling in hot and humid climates. <i>Energy and Buildings</i> , 2002 , 34, 487-495	7	196
15	Effects of wall thickness on the heat and moisture transfers in desiccant wheels for air dehumidification and enthalpy recovery. <i>International Communications in Heat and Mass Transfer</i> , 2002 , 29, 255-268	5.8	74
14	Heat transfer and friction coefficients in corrugated ducts confined by sinusoidal and arc curves. <i>International Journal of Heat and Mass Transfer</i> , 2002 , 45, 571-578	4.9	53
13	Effectiveness Correlations for Heat and Moisture Transfer Processes in an Enthalpy Exchanger With Membrane Cores. <i>Journal of Heat Transfer</i> , 2002 , 124, 922-929	1.8	102
12	Energy requirements for conditioning fresh air and the long-term savings with a membrane-based energy recovery ventilator in Hong Kong. <i>Energy</i> , 2001 , 26, 119-135	7.9	106
11	Membrane-based Enthalpy Exchanger: material considerations and clarification of moisture resistance. <i>Journal of Membrane Science</i> , 2001 , 189, 179-191	9.6	137
10	A NUMERICAL STUDY OF LAMINAR FORCED CONVECTION IN SINUSOIDAL DUCTS WITH ARC LOWER BOUNDARIES UNDER UNIFORM WALL TEMPERATURE. <i>Numerical Heat Transfer; Part A: Applications</i> , 2001 , 40, 55-72	2.3	17
9	Design and testing of an automobile waste heat adsorption cooling system. <i>Applied Thermal Engineering</i> , 2000 , 20, 103-114	5.8	120
8	Analysis of thermal performance and energy savings of membrane based heat recovery ventilator. <i>Energy</i> , 2000 , 25, 515-527	7.9	43
7	Membrane-based humidity pump: performance and limitations. <i>Journal of Membrane Science</i> , 2000 , 171, 207-216	9.6	26
6	A three-dimensional non-equilibrium model for an intermittent adsorption cooling system. <i>Solar Energy</i> , 2000 , 69, 27-35	6.8	59
5	Momentum and heat transfer in the adsorbent of a waste-heat adsorption cooling system. <i>Energy</i> , 1999 , 24, 605-624	7.9	44
4	Heat and mass transfer in a membrane-based energy recovery ventilator. <i>Journal of Membrane Science</i> , 1999 , 163, 29-38	9.6	99
3	Effects of coupled heat and mass transfers in adsorbent on the performance of a waste heat adsorption cooling unit. <i>Applied Thermal Engineering</i> , 1999 , 19, 195-215	5.8	67

- | | | | |
|---|---|-----|----|
| 2 | Performance estimation of an adsorption cooling system for automobile waste heat recovery. <i>Applied Thermal Engineering</i> , 1997 , 17, 1127-1139 | 5.8 | 71 |
| 1 | Simulated synthesis of silica nanowires by lyotropic liquid crystal template method. <i>Molecular Simulation</i> , 1-11 | 2 | |