# Li-Zhi Zhang

List of Publications by Year
in descending order

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| 203 | 7,858 | 34076 | 66879 |
|---|---|---|---|
| papers | citations | 52 h-index | 78 g-index |

| 203 | 203 | 203 | 3794 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Performance comparisons of desiccant wheels for air dehumidification and enthalpy recovery. Applied Thermal Engineering, 2002, 22, 1347-1367. | 3.0 | 223 |
| 2 | Energy savings potential of chilled-ceiling combined with desiccant cooling in hot and humid climates. Energy and Buildings, 2002, 34, 487-495. | 3.1 | 223 |
| 3 | Membrane-based Enthalpy Exchanger: material considerations and clarification of moisture resistance. Journal of Membrane Science, 2001, 189, 179-191. | 4.1 | 159 |
| 4 | Synthesis and characterization of a PVA/LiCl blend membrane for air dehumidification. Journal of Membrane Science, 2008, 308, 198-206. | 4.1 | 144 |
| 5 | Progress on heat and moisture recovery with membranes: From fundamentals to engineering applications. Energy Conversion and Management, 2012, 63, 173-195. | 4.4 | 143 |
| 6 | Design and testing of an automobile waste heat adsorption cooling system. Applied Thermal Engineering, 2000, 20, 103-114. | 3.0 | 141 |
| 7 | Energy performance of independent air dehumidification systems with energy recovery measures. Energy, 2006, 31, 1228-1242. | 4.5 | 138 |
| 8 | Indoor humidity behaviors associated with decoupled cooling in hot and humid climates. Building and Environment, 2003, 38, 99-107. | 3.0 | 131 |
| 9 | Coupled heat and mass transfer in a counter flow hollow fiber membrane module for air humidification. International Journal of Heat and Mass Transfer, 2011, 54, 1055-1063. | 2.5 | 131 |
| 10 | Energy requirements for conditioning fresh air and the long-term savings with a membrane-based energy recovery ventilator in Hong Kong. Energy, 2001, 26, 119-135. | 4.5 | 123 |
| 11 | Experimental investigation of the anti-dust effect of transparent hydrophobic coatings applied for solar cell covering glass. Solar Energy Materials and Solar Cells, 2017, 160, 382-389. | 3.0 | 122 |
| 12 | Effectiveness Correlations for Heat and Moisture Transfer Processes in an Enthalpy Exchanger With Membrane Cores. Journal of Heat Transfer, 2002, 124, 922-929. | 1.2 | 114 |
| 13 | A review of liquid desiccant air dehumidification: From system to material manipulations. Energy and Buildings, 2020, 215, 109897. | 3.1 | 112 |
| 14 | Heat and mass transfer in a membrane-based energy recovery ventilator. Journal of Membrane Science, 1999, 163, 29-38. | 4.1 | 110 |
| 15 | Titanium carbide Ti3C2Tx (MXene) enhanced PAN nanofiber membrane for air purification. Journal of Membrane Science, 2019, 586, 162-169. | 4.1 | 110 |
| 16 | An Analytical Solution to Heat and Mass Transfer in Hollow Fiber Membrane Contactors for Liquid Desiccant Air Dehumidification. Journal of Heat Transfer, 2011, 133, . | 1.2 | 107 |
| 17 | Self-cleaning of Surfaces: the Role of Surface Wettability and Dust Types. Scientific Reports, 2016, 6, 38239. | 1.6 | 105 |
| 18 | Coupled heat and mass transfer in an application-scale cross-flow hollow fiber membrane module for air humidification. International Journal of Heat and Mass Transfer, 2012, 55, 5861-5869. | 2.5 | 101 |

| # | Article | IF | Citations |
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| 19 | Heat and mass transfer in a randomly packed hollow fiber membrane module: A fractal model approach. International Journal of Heat and Mass Transfer, 2011, 54, 2921-2931. | 2.5 | 99 |
| 20 | Fluid flow and heat mass transfer in membrane parallel-plates channels used for liquid desiccant air dehumidification. International Journal of Heat and Mass Transfer, 2012, 55, 2571-2580. | 2.5 | 98 |
| 21 | Researches and trends in membrane-based liquid desiccant air dehumidification. Renewable and Sustainable Energy Reviews, 2013, 28, 425-440. | 8.2 | 96 |
| 22 | Durable superhydrophobic surface with highly antireflective and self-cleaning properties for the glass covers of solar cells. Applied Surface Science, 2018, 454, 239-248. | 3.1 | 95 |
| 23 | Thermodynamic modeling of a novel air dehumidification system. Energy and Buildings, 2005, 37, 279-286. | 3.1 | 92 |
| 24 | Conjugate heat and mass transfer in a hollow fiber membrane module for liquid desiccant air dehumidification: A free surface model approach. International Journal of Heat and Mass Transfer, 2012, 55, 3789-3799. | 2.5 | 92 |
| 25 | Heat and mass transfer in a cross-flow membrane-based enthalpy exchanger under naturally formed boundary conditions. International Journal of Heat and Mass Transfer, 2007, 50, 151-162. | 2.5 | 88 |
| 26 | Heat and mass transfer in a quasi-counter flow membrane-based total heat exchanger. International Journal of Heat and Mass Transfer, 2010, 53, 5478-5486. | 2.5 | 87 |
| 27 | Mechanical durability of superhydrophobic surfaces: The role of surface modification technologies. Applied Surface Science, 2017, 392, 286-296. | 3.1 | 87 |
| 28 | Experimental investigation of dust deposition reduction on solar cell covering glass by different self-cleaning coatings. Energy, 2019, 181, 645-653. | 4.5 | 87 |
| 29 | A heat pump driven and hollow fiber membrane-based liquid desiccant air dehumidification system: Modeling and experimental validation. Energy, 2014, 65, 441-451. | 4.5 | 86 |
| 30 | Effects of wall thickness on the heat and moisture transfers in desiccant wheels for air dehumidification and enthalpy recovery. International Communications in Heat and Mass Transfer, 2002, 29, 255-268. | 2.9 | 84 |
| 31 | Conjugate heat and mass transfer in membrane-formed channels in all entry regions. International Journal of Heat and Mass Transfer, 2010, 53, 815-824. | 2.5 | 81 |
| 32 | Effects of coupled heat and mass transfers in adsorbent on the performance of a waste heat adsorption cooling unit. Applied Thermal Engineering, 1999, 19, 195-215. | 3.0 | 78 |
| 33 | Performance estimation of an adsorption cooling system for automobile waste heat recovery. Applied Thermal Engineering, 1997, 17, 1127-1139. | 3.0 | 77 |
| 34 | One-step fabrication and analysis of an asymmetric cellulose acetate membrane for heat and moisture recovery. Journal of Membrane Science, 2011, 366, 158-165. | 4.1 | 77 |
| 35 | Heat and moisture transfer in application scale parallel-plates enthalpy exchangers with novel membrane materials. Journal of Membrane Science, 2008, 325, 672-682. | 4.1 | 76 |
| 36 | Fabrication of a lithium chloride solution based composite supported liquid membrane and its moisture permeation analysis. Journal of Membrane Science, 2006, 276, 91-100. | 4.1 | 74 |

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| 37 | A fractal model for gas permeation through porous membranes. International Journal of Heat and Mass Transfer, 2008, 51, 5288-5295. | 2.5 | 73 |
| 38 | Conjugate heat and mass transfer in a cross-flow hollow fiber membrane contactor for liquid desiccant air dehumidification. International Journal of Heat and Mass Transfer, 2012, 55, 8061-8072. | 2.5 | 72 |
| 39 | Modeling VOCs emissions in a room with a single-zone multi-component multi-layer technique. Building and Environment, 2004, 39, 523-531. | 3.0 | 71 |
| 40 | Investigation of a solar energy driven and hollow fiber membrane-based humidificationâ€“dehumidification desalination system. Applied Energy, 2016, 177, 393-408. | 5.1 | 70 |
| 41 | A three-dimensional non-equilibrium model for an intermittent adsorption cooling system. Solar Energy, 2000, 69, 27-35. | 2.9 | 66 |
| 42 | Heat and mass transfer in plate-fin enthalpy exchangers with different plate and fin materials. International Journal of Heat and Mass Transfer, 2009, 52, 2704-2713. | 2.5 | 66 |
| 43 | Experimental investigation on deposition reduction of different types of dust on solar PV cells by self-cleaning coatings. Solar Energy, 2020, 206, 365-373. | 2.9 | 66 |
| 44 | Convective heat transfer in cross-corrugated triangular ducts under uniform heat flux boundary conditions. International Journal of Heat and Mass Transfer, 2011, 54, 597-605. | 2.5 | 64 |
| 45 | Performance study of a heat pump driven and hollow fiber membrane-based two-stage liquid desiccant air dehumidification system. Applied Energy, 2016, 179, 727-737. | 5.1 | 64 |
| 46 | Independent air dehumidification with membrane-based total heat recovery: Modeling and experimental validation. International Journal of Refrigeration, 2010, 33, 398-408. | 1.8 | 63 |
| 47 | Flow maldistribution and thermal performance deterioration in a cross-flow air to air heat exchanger with plate-fin cores. International Journal of Heat and Mass Transfer, 2009, 52, 4500-4509. | 2.5 | 62 |
| 48 | Laminar flow and heat transfer in plate-fin triangular ducts in thermally developing entry region. International Journal of Heat and Mass Transfer, 2007, 50, 1637-1640. | 2.5 | 61 |
| 49 | Heat transfer and friction coefficients in corrugated ducts confined by sinusoidal and arc curves. International Journal of Heat and Mass Transfer, 2002, 45, 571-578. | 2.5 | 60 |
| 50 | Numerical Study of Periodically Fully Developed Flow and Heat Transfer in Cross-Corrugated Triangular Channels in Transitional Flow Regime. Numerical Heat Transfer; Part A: Applications, 2005, 48, 387-405. | 1.2 | 56 |
| 51 | Energy and economic analysis of a hollow fiber membrane-based desalination system driven by solar energy. Desalination, 2017, 404, 200-214. | 4.0 | 55 |
| 52 | Performance analysis of a direct expansion air dehumidification system combined with membrane-based total heat recovery. Energy, 2010, 35, 3891-3901. | 4.5 | 54 |
| 53 | Performance comparisons of honeycomb-type adsorbent beds (wheels) for air dehumidification with various desiccant wall materials. Energy, 2014, 65, 430-440. | 4.5 | 54 |
| 54 | Indoor experiments of dust deposition reduction on solar cell covering glass by transparent super-hydrophobic coating with different tilt angles. Solar Energy, 2019, 188, 1146-1155. | 2.9 | 54 |

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| 55 | Fabrication and performance of a stable micro/nano composite electret filter for effective PM2.5 capture. Science of the Total Environment, 2020, 725, 138297. | 3.9 | 54 |
| 56 | Heat and mass transfer in plate-fin sinusoidal passages with vapor-permeable wall materials. International Journal of Heat and Mass Transfer, 2008, 51, 618-629. | 2.5 | 53 |
| 57 | Analysis of thermal performance and energy savings of membrane based heat recovery ventilator. Energy, 2000, 25, 515-527. | 4.5 | 49 |
| 58 | Convective mass transport in cross-corrugated membrane exchangers. Journal of Membrane Science, 2005, 260, 75-83. | 4.1 | 49 |
| 59 | Simultaneous heat and moisture transfer through a composite supported liquid membrane. International Journal of Heat and Mass Transfer, 2008, 51, 2179-2189. | 2.5 | 48 |
| 60 | PM collection performance of electret filters electrospun with different dielectric materials-a numerical modeling and experimental study. Building and Environment, 2018, 131, 210-219. | 3.0 | 48 |
| 61 | Laminar fluid flow and mass transfer in a standard field and laboratory emission cell. International Journal of Heat and Mass Transfer, 2003, 46, 91-100. | 2.5 | 47 |
| 62 | Selective permeation of moisture and VOCs through polymer membranes used in total heat exchangers for indoor air ventilation. Indoor Air, 2012, 22, 321-330. | 2.0 | 47 |
| 63 | Numerical and Analytical Study of The Impinging and Bouncing Phenomena of Droplets on Superhydrophobic Surfaces with Microtextured Structures. Langmuir, 2014, 30, 11640-11649. | 1.6 | 47 |
| 64 | A pre-cooling Munters environmental control desiccant cooling cycle in combination with chilled-ceiling panels. Energy, 2003, 28, 275-292. | 4.5 | 45 |
| 65 | Momentum and heat transfer in the adsorbent of a waste-heat adsorption cooling system. Energy, 1999, 24, 605-624. | 4.5 | 44 |
| 66 | A physically-based model for prediction of VOCs emissions from paint applied to an absorptive substrate. Building and Environment, 2006, 41, 1317-1325. | 3.0 | 42 |
| 67 | An analytical solution for heat mass transfer in a hollow fiber membrane based air-to-air heat mass exchanger. Journal of Membrane Science, 2010, 360, 217-225. | 4.1 | 42 |
| 68 | Fouling resistance improvement with a new superhydrophobic electrospun PVDF membrane for seawater desalination. Desalination, 2020, 476, 114246. | 4.0 | 42 |
| 69 | Turbulent Three-Dimensional Air Flow and Heat Transfer in a Cross-Corrugated Triangular Duct. Journal of Heat Transfer, 2005, 127, 1151-1158. | 1.2 | 41 |
| 70 | Conjugate heat and mass transfer in membrane parallel-plates ducts for liquid desiccant air dehumidification: Effects of the developing entrances. Journal of Membrane Science, 2013, 437, 82-89. | 4.1 | 41 |
| 71 | Flow maldistribution and performance deteriorations in a cross flow hollow fiber membrane module for air humidification. Journal of Membrane Science, 2013, 427, 1-9. | 4.1 | 41 |
| 72 | Performance investigation on polymeric electrolyte membrane-based electrochemical air dehumidification system. Applied Energy, 2017, 208, 1174-1183. | 5.1 | 39 |

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| 73 | Turbulent heat and mass transfer across a hollow fiber membrane bundle considering interactions between neighboring fibers. International Journal of Heat and Mass Transfer, 2013, 64, 162-172. | 2.5 | 38 |
| 74 | Lattice Boltzmann Simulation of Droplets Impacting on Superhydrophobic Surfaces with Randomly Distributed Rough Structures. Langmuir, 2017, 33, 820-829. | 1.6 | 38 |
| 75 | A heat pump driven and hollow fiber membrane-based liquid desiccant air dehumidification system: A transient performance study. International Journal of Refrigeration, 2016, 67, 143-156. | 1.8 | 37 |
| 76 | Flow maldistribution and performance deteriorations in a counter flow hollow fiber membrane module for air humidification/dehumidification. International Journal of Heat and Mass Transfer, 2014, 74, 421-430. | 2.5 | 35 |
| 77 | Conjugate heat and mass transfer in a total heat exchanger with cross-corrugated triangular ducts and one-step made asymmetric membranes. International Journal of Heat and Mass Transfer, 2015, 84, 390-400. | 2.5 | 35 |
| 78 | Experimental study of a membrane-based dehumidification cooling system. Applied Thermal Engineering, 2017, 115, 1315-1321. | 3.0 | 35 |
| 79 | Mass transfer of volatile organic compounds from painting material in a standard field and laboratory emission cell. International Journal of Heat and Mass Transfer, 2003, 46, 2415-2423. | 2.5 | 34 |
| 80 | Influences of dust deposition on ground-mounted solar photovoltaic arrays: A CFD simulation study. Renewable Energy, 2019, 135, 21-31. | 4.3 | 34 |
| 81 | Evaluation of moisture diffusivity in hydrophilic polymer membranes: A new approach. Journal of Membrane Science, 2006, 269, 75-83. | 4.1 | 33 |
| 82 | Coupled heat and mass transfer through asymmetric porous membranes with finger-like macrovoids structure. International Journal of Heat and Mass Transfer, 2009, 52, 751-759. | 2.5 | 33 |
| 83 | Computer Simulations on a pH-Responsive Anticancer Drug Delivery System Using Zwitterion-Grafted Polyamidoamine Dendrimer Unimolecular Micelles. Langmuir, 2021, 37, 1225-1234. | 1.6 | 33 |
| 84 | Effects of substrate parameters on the emissions of volatile organic compounds from wet coating materials. Building and Environment, 2003, 38, 939-946. | 3.0 | 32 |
| 85 | Turbulent Heat and Mass Transfer Across a Hollow Fiber Membrane Tube Bank in Liquid Desiccant Air Dehumidification. Journal of Heat Transfer, 2012, 134, . | 1.2 | 32 |
| 86 | Preparation and properties of Ag-coated activated carbon nanocomposites for indoor air quality control. Building and Environment, 2013, 63, 108-113. | 3.0 | 32 |
| 87 | Module scale-up and performance evaluation of thin film composite hollow fiber membranes for pressure retarded osmosis. Journal of Membrane Science, 2018, 548, 398-407. | 4.1 | 32 |
| 88 | Numerical study of dry deposition of monodisperse and polydisperse dust on building-mounted solar photovoltaic panels with different roof inclinations. Solar Energy, 2018, 176, 535-544. | 2.9 | 32 |
| 89 | Durable superhydrophobic surfaces made by intensely connecting a bipolar top layer to the substrate with a middle connecting layer. Scientific Reports, 2017, 7, 9946. | 1.6 | 31 |
| 90 | Membrane-based humidity pump: performance and limitations. Journal of Membrane Science, 2000, 171, 207-216. | 4.1 | 30 |

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| 91 | Facile fabrication of superhydrophobic films with fractal structures using epoxy resin microspheres. Applied Surface Science, 2014, 292, 44-54. | 3.1 | 29 |
| 92 | Wettability and performance enhancement with durable super-hydrophilic surfaces for plastic liquid desiccant dehumidification systems. Energy and Buildings, 2019, 187, 77-85. | 3.1 | 29 |
| 93 | Fabrication and analysis of a highly hydrophobic and permeable block GO-PVP/PVDF membrane for membrane humidification-dehumidification desalination. Journal of Membrane Science, 2019, 582, 367-380. | 4.1 | 29 |
| 94 | A dual-scale analysis of a desiccant wheel with a novel organicâ€“inorganic hybrid adsorbent for energy recovery. Applied Energy, 2016, 163, 167-179. | 5.1 | 27 |
| 95 | Heat and Mass Transfer in a Total Heat Exchanger: Cross-Corrugated Triangular Ducts with Composite Supported Liquid Membrane. Numerical Heat Transfer; Part A: Applications, 2008, 53, 1195-1210. | 1.2 | 26 |
| 96 | Conjugate heat conduction in filled composite materials considering interactions between the filler and base materials. International Journal of Heat and Mass Transfer, 2013, 64, 735-742. | 2.5 | 26 |
| 97 | Performance study of a solar-assisted hollow-fiber-membrane-based air humidification-dehumidification desalination system: Effects of membrane properties. Chemical Engineering Science, 2019, 206, 164-179. | 1.9 | 26 |
| 98 | Transport Phenomena in a Cross-Flow Hollow Fibre Membrane Bundle Used for Liquid Desiccant Air Dehumidification. Indoor and Built Environment, 2013, 22, 559-574. | 1.5 | 25 |
| 99 | Conjugate heat and mass transfer in a skewed flow hollow fiber membrane bank used for liquid desiccant air dehumidification. International Journal of Heat and Mass Transfer, 2016, 93, 23-40. | 2.5 | 25 |
| 100 | Performance manipulations of a composite membrane of low thermal conductivity for seawater desalination. Chemical Engineering Science, 2018, 192, 61-73. | 1.9 | 25 |
| 101 | A lattice <scp>B</scp>oltzmann simulation of mass transport through composite membranes. AICHE Journal, 2014, 60, 3925-3938. | 1.8 | 24 |
| 102 | Modeling of dynamic deposition and filtration processes of airborne particles by a single fiber with a coupled lattice Boltzmann and discrete element method. Building and Environment, 2016, 106, 274-285. | 3.0 | 24 |
| 103 | Laminar flow and conjugate heat and mass transfer in a hollow fiber membrane bundle used for seawater desalination. International Journal of Heat and Mass Transfer, 2017, 111, 123-137. | 2.5 | 24 |
| 104 | A lattice Boltzmann simulation of coalescence-induced droplet jumping on superhydrophobic surfaces with randomly distributed structures. Applied Surface Science, 2018, 436, 172-182. | 3.1 | 24 |
| 105 | Numerical study of heat and mass transfer in an enthalpy exchanger with a hydrophobic-hydrophilic composite membrane core. Numerical Heat Transfer; Part A: Applications, 2007, 51, 697-714. | 1.2 | 22 |
| 106 | Convective mass transfer and pressure drop correlations for cross-flow structured hollow fiber membrane bundles under low Reynolds numbers but with turbulent flow behaviors. Journal of Membrane Science, 2013, 434, 65-73. | 4.1 | 22 |
| 107 | Development of a MXene-based membrane with excellent anti-fouling for air humidification-dehumidification type desalination. Journal of Membrane Science, 2022, 641, 119907. | 4.1 | 22 |
| 108 | A hydrophobic-hydrophilic MXene/PVDF composite hollow fiber membrane with enhanced antifouling properties for seawater desalination. Journal of Membrane Science, 2022, 644, 120146. | 4.1 | 22 |

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| 109 | Investigation of moisture transfer effectiveness through a hydrophilic polymer membrane with a field and laboratory emission cell. International Journal of Heat and Mass Transfer, 2006, 49, 1176-1184. | 2.5 | 21 |
| 110 | A self-healing PVDF-ZnO/MXene membrane with universal fouling resistance for real seawater desalination. Water Research, 2022, 216, 118349. | 5.3 | 21 |
| 111 | Thermal conductivity augmentation of composite polymer materials with artificially controlled filler shapes. Journal of Applied Polymer Science, 2014, 131, . | 1.3 | 20 |
| 112 | Transient and conjugate heat and mass transfer in hexagonal ducts with adsorbent walls. International Journal of Heat and Mass Transfer, 2015, 84, 271-281. | 2.5 | 20 |
| 113 | Thermally Developing Forced Convection and Heat Transfer in Rectangular Plate-Fin Passages Under Uniform Plate Temperature. Numerical Heat Transfer; Part A: Applications, 2007, 52, 549-564. | 1.2 | 19 |
| 114 | Conjugate heat and mass transfer in a cross-flow hollow fiber membrane bundle used for seawater desalination considering air side turbulence. Journal of Membrane Science, 2017, 533, 321-335. | 4.1 | 19 |
| 115 | Pinningâ€“Depinning Mechanisms of the Contact Line during Evaporation of Microdroplets on Rough Surfaces: A Lattice Boltzmann Simulation. Langmuir, 2018, 34, 7906-7915. | 1.6 | 19 |
| 116 | Performance enhancement of solar-assisted liquid desiccant dehumidifiers using super-hydrophilic surface. Energy and Buildings, 2019, 199, 461-471. | 3.1 | 19 |
| 117 | Wave-wise falling film in liquid desiccant dehumidification systems: Model development and time-series parameter analysis. International Journal of Heat and Mass Transfer, 2019, 132, 96-106. | 2.5 | 19 |
| 118 | Durability analysis and degradation mechanism for an electrolytic air dehumidifier based on PEM. International Journal of Hydrogen Energy, 2020, 45, 3971-3985. | 3.8 | 19 |
| 119 | Flow Maldistribution and Performance Deteriorations in Membrane-Based Heat and Mass Exchangers. Journal of Heat Transfer, 2009, 131, . | 1.2 | 18 |
| 120 | Heat and mass transfer in a polymeric electrolyte membrane-based electrochemical air dehumidification system: Model development and performance analysis. International Journal of Heat and Mass Transfer, 2018, 126, 888-898. | 2.5 | 18 |
| 121 | System-scale modeling and membrane structure parameter optimization for solar-powered sweeping gas membrane distillation desalination system. Journal of Cleaner Production, 2020, 253, 119968. | 4.6 | 18 |
| 122 | A NUMERICAL STUDY OF LAMINAR FORCED CONVECTION IN SINUSOIDAL DUCTS WITH ARC LOWER BOUNDARIES UNDER UNIFORM WALL TEMPERATURE. Numerical Heat Transfer; Part A: Applications, 2001, 40, 55-72. | 1.2 | 17 |
| 123 | Performance Deteriorations from Flow Maldistribution in Air-to-Air Heat Exchangers: A Parallel-Plates Membrane Core Case. Numerical Heat Transfer; Part A: Applications, 2009, 56, 746-763. | 1.2 | 17 |
| 124 | Fluid Flow and Heat Transfer in Plate-Fin and Tube Heat Exchangers in a Transitional Flow Regime. Numerical Heat Transfer; Part A: Applications, 2011, 60, 766-784. | 1.2 | 17 |
| 125 | A reliability-based optimization of membrane-type total heat exchangers under uncertain design parameters. Energy, 2016, 101, 390-401. | 4.5 | 17 |
| 126 | Enhanced thermal conductivity of <scp>PLA</scp>â€based nanocomposites by incorporation of graphite nanoplatelets functionalized by tannic acid. Journal of Applied Polymer Science, 2018, 135, 46397. | 1.3 | 17 |

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| 127 | Electrochemical impedance spectroscopy analysis of Vâ€“I characteristics and a fast prediction model for PEM-based electrolytic air dehumidification. International Journal of Hydrogen Energy, 2019, 44, 19533-19546. | 3.8 | 17 |
| 128 | Evaluation the effect of fiber alignment on particle collection performance of mechanical/electret filters based on Voronoi tessellations. Chemical Engineering Science, 2019, 197, 109-119. | 1.9 | 16 |
| 129 | Nonlinear programming optimization of filler shapes for composite materials with inverse problem technique to maximize heat conductivity. International Journal of Heat and Mass Transfer, 2012, 55, 7287-7296. | 2.5 | 15 |
| 130 | Oblique fluid flow and convective heat transfer across a tube bank under uniform wall heat flux boundary conditions. International Journal of Heat and Mass Transfer, 2015, 91, 1259-1272. | 2.5 | 15 |
| 131 | Performance prediction of PM 2.5 removal of real fibrous filters with a novel model considering rebound effect. Applied Thermal Engineering, 2017, 111, 1536-1547. | 3.0 | 15 |
| 132 | Transient split features of slug flow at an impacting micro-T-junction: A numerical study. International Journal of Heat and Mass Transfer, 2017, 112, 318-332. | 2.5 | 14 |
| 133 | Development of liquid-air mass transfer correlations for liquid desiccant dehumidification considering the liquid/air contact and film instability. International Journal of Heat and Mass Transfer, 2019, 141, 491-502. | 2.5 | 14 |
| 134 | Molecular simulations on the hydration and underwater oleophobicity of zwitterionic selfâ€assembled monolayers. AICHE Journal, 2021, 67, e17103. | 1.8 | 14 |
| 135 | DEVELOPMENT OF FRACTAL ULTRA-HYDROPHOBIC COATING FILMS TO PREVENT WATER VAPOR DEWING AND TO DELAY FROSTING. Fractals, 2014, 22, 1440002. | 1.8 | 13 |
| 136 | Heat and mass transfer in PEM-based electrolytic air dehumidification element with an optimized anode-side electrochemical model. International Journal of Heat and Mass Transfer, 2019, 135, 1152-1166. | 2.5 | 13 |
| 137 | Molecular-level evaluation and manipulation of thermal conductivity, moisture diffusivity and hydrophobicity of a GO-PVP/PVDF composite membrane. International Journal of Heat and Mass Transfer, 2020, 152, 119508. | 2.5 | 13 |
| 138 | Mechanisms of performance degradation and efficiency improvement of electret filters during neutral particle loading. Powder Technology, 2021, 382, 133-143. | 2.1 | 13 |
| 139 | Three-dimensional turbulent flow and conjugate heat and mass transfer in a cross-flow hollow fiber membrane bundle for seawater desalination. International Journal of Heat and Mass Transfer, 2018, 120, 328-341. | 2.5 | 12 |
| 140 | Fluid flow and mass transfer in an industrial-scale hollow fiber membrane contactor scaled up with small elements. International Journal of Heat and Mass Transfer, 2018, 127, 289-301. | 2.5 | 12 |
| 141 | A molecular level performance manipulation of thermal conductivity and moisture diffusivity through a composite membrane considering interfacial resistance. Journal of Membrane Science, 2019, 583, 231-247. | 4.1 | 12 |
| 142 | Computer simulations on double hydrophobic PS-b-PMMA porous membrane by non-solvent induced phase separation. Fluid Phase Equilibria, 2020, 523, 112784. | 1.4 | 12 |
| 143 | Preparation and characterization of porous poly(vinylidene fluoride) membranes for dehumidification with poly(ethylene glycol) as an additive. Journal of Applied Polymer Science, 2010, 118, 2696-2703. | 1.3 | 11 |
| 144 | Selective adsorption of a novel high selective desiccant for prospective use in heat and moisture recovery for buildings. Building and Environment, 2012, 49, 124-128. | 3.0 | 11 |

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| 145 | Effects of material properties on heat and mass transfer in honeycomb-type adsorbent wheels for total heat recovery. Applied Thermal Engineering, 2017, 118, 345-356. | 3.0 | 11 |
| 146 | Effect of groove configuration on two-phase flow instability for Ultra-Thin Looped Heat Pipes in thermal management system. International Journal of Thermal Sciences, 2017, 121, 369-380. | 2.6 | 11 |
| 147 | Fluid flow and heat transfer of cross flow hollow fiber membrane contactors with randomly distributed fibers: A topological study. International Journal of Heat and Mass Transfer, 2019, 135, 186-198. | 2.5 | 11 |
| 148 | Research progress on the cleaning and regeneration of PM2.5 filter media. Particuology, 2021, 57, 28-44. | 2.0 | 11 |
| 149 | Drift-flux correlation for upward two-phase flow in inclined pipes. Chemical Engineering Science, 2020, 213, 115395. | 1.9 | 10 |
| 150 | Computer simulation of zwitterionic polymer brush grafted silica nanoparticles to modify polyvinylidene fluoride membrane. Journal of Colloid and Interface Science, 2021, 587, 173-182. | 5.0 | 10 |
| 151 | Simulated preparation and hydration property of a new-generation zwitterionic modified PVDF membrane. Journal of Membrane Science, 2022, 652, 120498. | 4.1 | 10 |
| 152 | Sorption, permeation and selective transport of moisture/VOCs through a CA membrane for total heat recovery. International Journal of Low-Carbon Technologies, 2013, 8, 64-69. | 1.2 | 9 |
| 153 | Visualization research on confined bubble growth feature and heat transfer characteristic in ultra-shallow micro channel. International Journal of Heat and Mass Transfer, 2016, 103, 847-854. | 2.5 | 9 |
| 154 | Flow and heat transfer for a two-phase slug flow in horizontal pipes: A mechanistic model. Physics of Fluids, 2021, 33, . | 1.6 | 9 |
| 155 | Numerical methodology for simulating particle deposition on superhydrophobic surfaces with randomly distributed rough structures. Applied Surface Science, 2021, 568, 150872. | 3.1 | 9 |
| 156 | Mechanistic modeling of flow and heat transfer in vertical upward two-phase slug flows. Physics of Fluids, 2022, 34, 013309. | 1.6 | 9 |
| 157 | Effects of Membrane Parameters on Performance of Vapor Permeation through a Composite Supported Liquid Membrane. Separation Science and Technology, 2006, 41, 3517-3538. | 1.3 | 8 |
| 158 | Preparation and selective adsorption of coreâ€“shell desiccant for heat and moisture recovery. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 406, 68-74. | 2.3 | 8 |
| 159 | Performance improvement of electrolytic air dehumidification systems with highâ€waterâ€uptake polymer electrolyte membranes. Journal of Applied Polymer Science, 2019, 136, 47676. | 1.3 | 8 |
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