

# Lifeng Zhang

## List of Publications by Year in descending order

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58  
papers

1,014  
citations

430874

18  
h-index

454955

30  
g-index

59  
all docs

59  
docs citations

59  
times ranked

778  
citing authors

#	ARTICLE	IF	CITATIONS
1	A critical review of two-phase flow in gas flow channels of proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2010, 195, 4531-4553.	7.8	241
2	Gas-liquid two-phase flow patterns in parallel channels for fuel cells. <i>Journal of Power Sources</i> , 2008, 183, 643-650.	7.8	61
3	Gas-liquid two-phase flow distributions in parallel channels for fuel cells. <i>Journal of Power Sources</i> , 2009, 189, 1023-1031.	7.8	40
4	Thermal and Kinetic Studies on Biomass Degradation via Thermogravimetric Analysis: A Combination of Model-Fitting and Model-Free Approach. <i>ACS Omega</i> , 2021, 6, 22233-22247.	3.5	39
5	Residence Time Distribution in a Multistage Agitated Contactor with Newtonian Fluids: A CFD Prediction and Experimental Validation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 3538-3546.	3.7	32
6	Simulations of two-phase flow distribution in communicating parallel channels for a PEM fuel cell. <i>International Journal of Multiphase Flow</i> , 2013, 52, 35-45.	3.4	32
7	Fluidization characteristics and charging behavior of fly ash in a vibro-fluidized bed. <i>Powder Technology</i> , 2012, 215-216, 235-241.	4.2	30
8	Investigation of time dependent water droplet dynamics on porous fuel cell material via synchrotron based X-ray imaging technique. <i>Experimental Thermal and Fluid Science</i> , 2018, 97, 237-245.	2.7	28
9	Gas-liquid two-phase flow behavior in minichannels bounded with a permeable wall. <i>Chemical Engineering Science</i> , 2011, 66, 3377-3385.	3.8	27
10	Fischer-Tropsch Synthesis for Light Olefins from Syngas: A Review of Catalyst Development. <i>Reactions</i> , 2021, 2, 227-257.	2.1	27
11	Facile biosynthesis of SnO <sub>2</sub> /ZnO nanocomposite using <i>Acroptilon repens</i> flower extract and evaluation of their photocatalytic activity. <i>Ceramics International</i> , 2021, 47, 29303-29308.	4.8	25
12	Numerical investigation of particle mixing and segregation in spouted beds with binary mixtures of particles. <i>Powder Technology</i> , 2016, 301, 1159-1171.	4.2	24
13	Advanced understanding of local wetting behaviour in gas-liquid-solid packed beds using CFD with a volume of fluid (VOF) method. <i>Chemical Engineering Science</i> , 2017, 170, 378-392.	3.8	23
14	Development of two-phase flow regime specific pressure drop models for proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1173-1185.	7.1	22
15	Flow regime transition and hydrodynamics of spouted beds with binary mixtures. <i>Powder Technology</i> , 2015, 281, 138-150.	4.2	21
16	Experimental studies on the effect of moisture content and volume resistivity on electrostatic behaviour of pharmaceutical powders. <i>International Journal of Pharmaceutics</i> , 2017, 519, 98-103.	5.2	21
17	Investigating effect of different gas diffusion layers on water droplet characteristics for proton exchange membrane (PEM) fuel cells. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 18340-18350.	7.1	20
18	Triboelectric charging behavior of wood particles during pellet handling processes. <i>Journal of Loss Prevention in the Process Industries</i> , 2013, 26, 1328-1334.	3.3	18

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19	Experimental and statistical analysis of the void size distribution and pressure drop validations in packed beds. <i>Chemical Engineering Research and Design</i> , 2016, 106, 115-125.	5.6	18
20	Investigation on drying kinetics and tribocharging behaviour of pharmaceutical granules in a fluidized bed dryer. <i>Powder Technology</i> , 2017, 316, 171-180.	4.2	18
21	Liquid phase mixing and gas hold-up in a multistage-agitated contactor with co-current upflow of air/viscous fluids. <i>Chemical Engineering Science</i> , 2006, 61, 6189-6198.	3.8	17
22	Two-phase flow pressure drop hysteresis in parallel channels of a proton exchange membrane fuel cell. <i>Journal of Power Sources</i> , 2010, 195, 4168-4176.	7.8	17
23	Pressure drop and pressure fluctuations in spouted beds with binary mixtures of particles. <i>Powder Technology</i> , 2015, 276, 134-143.	4.2	16
24	Mixing and segregation of binary mixtures of biomass and silica sand in a fluidized bed. <i>Particuology</i> , 2021, 58, 58-73.	3.6	15
25	Gas flow rate distributions in parallel minichannels for polymer electrolyte membrane fuel cells: Experiments and theoretical analysis. <i>Journal of Power Sources</i> , 2010, 195, 3231-3239.	7.8	13
26	Measurements of Electrostatic Charging of Powder Mixtures in a Free-fall Test Device. <i>Procedia Engineering</i> , 2015, 102, 295-304.	1.2	13
27	Numerical study of liquid coverage in a gas-liquid-solid packed bed. <i>Particuology</i> , 2015, 23, 90-99.	3.6	12
28	Electrostatic beneficiation of fly ash in a free-falling system. <i>Particuology</i> , 2012, 10, 154-160.	3.6	11
29	Investigating the effect of operating temperature on dynamic behavior of droplets for proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 14145-14155.	7.1	11
30	Predictions of flow regimes in proton exchange membrane fuel cells: An analytical approach. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 4679-4689.	7.1	10
31	Transient, spatially resolved desaturation of gas diffusion layers measured via synchrotron visualization. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 11234-11243.	7.1	9
32	Numerical studies on heat coupling and configuration optimization in an industrial hydrogen production reformer. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 15704-15720.	7.1	9
33	Effect of Pore Shape and Spacing on Water Droplet Dynamics in Flow Channels of Proton Exchange Membrane Fuel Cells. <i>Energies</i> , 2021, 14, 1250.	3.1	9
34	Liquid Backmixing and Phase Holdup in a Gas-Liquid Multistage Agitated Contactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 5304-5311.	3.7	8
35	Imaging of the desaturation of gas diffusion layers by synchrotron computed tomography. <i>Journal of Power Sources</i> , 2019, 416, 155-162.	7.8	8
36	Characterization of electrical current and liquid droplets deposition area in a capillary electrospray. <i>Results in Engineering</i> , 2021, 9, 100206.	5.1	8

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37	Experimental investigation of wet pharmaceutical granulation using in-situ synchrotron X-ray imaging. <i>Powder Technology</i> , 2021, 378, 65-75.	4.2	7
38	Optimization of carbon nanotube growth via response surface methodology for Fischer-Tropsch synthesis over Fe/CNT catalyst. <i>Catalysis Today</i> , 2022, 404, 117-131.	4.4	7
39	Gas-Liquid Two-Phase Flow in Minichannels with Liquid Side Introduction. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 6709-6721.	3.7	6
40	Synchrotron-based X-ray in-situ imaging techniques for advancing the understanding of pharmaceutical granulation. <i>International Journal of Pharmaceutics</i> , 2019, 572, 118797.	5.2	6
41	Hydrogenation of nitrile butadiene rubber in a multistage agitated contactor: Experiments and numerical simulation. <i>Chemical Engineering Science</i> , 2010, 65, 2027-2036.	3.8	4
42	Two-Phase Flow Pressure Drop Hysteresis under Typical Operating Conditions for a Proton Exchange Membrane Fuel Cell. <i>ECS Transactions</i> , 2010, 28, 127-137.	0.5	4
43	Quantifying Cathode Water Transport via Anode Relative Humidity Measurements in a Polymer Electrolyte Membrane Fuel Cell. <i>Energies</i> , 2017, 10, 1222.	3.1	4
44	Two-Dimensional Simulations of Gas-Liquid Two-Phase Flow in Mini channels of PEM Fuel Cell Flow Field. <i>International Journal of Chemical Reactor Engineering</i> , 2010, 8, .	1.1	3
45	Characterisation of engineered water nanostructures (EWNS) and evaluation of their efficacy in inactivating <i>Escherichia coli</i> at conditions relevant to livestock operations. <i>Biosystems Engineering</i> , 2021, 212, 431-441.	4.3	3
46	Reduction of airborne particulate matter from pig and poultry rearing facilities using engineered water nanostructures. <i>Biosystems Engineering</i> , 2022, 218, 1-9.	4.3	3
47	Experimental investigation on drying performance of pharmaceutical granules in a pulsation-assisted fluidized bed dryer. <i>Canadian Journal of Chemical Engineering</i> , 2022, 100, 2608-2622.	1.7	3
48	Modeling and Simulation of a Multistage Agitated Contactor for Hydrogenation of Nitrile Butadiene Rubber. <i>International Journal of Chemical Reactor Engineering</i> , 2005, 3, .	1.1	2
49	Equilibrium Study and Analysis of Site Energy Distribution of Butanol Sorption on a Biosorbent. <i>Energy &amp; Fuels</i> , 2021, 35, 6681-6690.	5.1	2
50	Imaging of desaturation of the frozen gas diffusion layers by synchrotron X-ray radiography. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 17897-17908.	7.1	2
51	Effects of Operating Parameters on the Efficacy of Engineered Water Nanostructures (EWNS) in Inactivating <i>Escherichia coli</i> on Stainless-Steel Surfaces. <i>Transactions of the ASABE</i> , 2021, 64, 1913-1920.	1.1	2
52	Bifurcation analysis and multiplicity of steady states in a multistage agitated contactor for gas-liquid processes. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 1891-1901.	1.7	1
53	Research Note: Evaluation of the efficacy of engineered water nanostructures in inactivating airborne bacteria in poultry houses. <i>Poultry Science</i> , 2022, 101, 101580.	3.4	1
54	Triboelectrostatic charging behavior of pulse particles in a vortex flow tribocharger. <i>Food Research International</i> , 2022, 157, 111438.	6.2	1

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55	An Analysis of Two-Phase Flow Pressure Drop in Operating Proton Exchange Membrane Fuel Cell Channels With the Lockhart-Martinelli Approach. , 2014, , .		0
56	An Updated Two-Phase Flow Regime Map in Active PEM Fuel Cells Based on a Force Balance Approach. , 2015, , .		0
57	Investigation of Water Transport Within a Proton Exchange Membrane Fuel Cell by Diffusion Layer Saturation Analysis. , 2016, , .		0
58	Visualizing Water Desaturation in Frozen Gas Diffusion Layers With Flow Field Segmentation via Synchrotron X-Ray Radiography. Frontiers in Energy Research, 2021, 9, .	2.3	0