Mingyan Liu

List of Publications by Year in descending order

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59 papers	984 citations	18 h-index	501076 28 g-index
65	65	65	801 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Gas–liquid mass transfer in the gas–liquid–solid mini fluidized beds. Particuology, 2022, 69, 22-30.	2.0	2
2	Mesoscale model of radial hydrodynamics for fluidizing small particles with low solid holdup in gas-liquid-solid circulating fluidized bed. Chemical Engineering Science, 2022, 250, 117413.	1.9	2
3	Measurements of Local Flow Characteristics in a Gas–Liquid–Solid Circulating Fluidized Bed with Immersed Telocentric Photography. Industrial & Engineering Chemistry Research, 2022, 61, 3137-3153.	1.8	2
4	Characteristics of flow fields in the gas–liquid miniâ€bubble columns with particle image velocimetry measurements. AICHE Journal, 2022, 68, .	1.8	6
5	New measurements on hydrodynamics in a gas–liquid–solid expanded bed. Particuology, 2021, 58, 276-284.	2.0	5
6	CFD-PBM simulations on hydrodynamics and gas-liquid mass transfer in a gas-liquid-solid circulating fluidized bed. Powder Technology, 2020, 362, 57-74.	2.1	18
7	Chaotic vibration characters of a graphite tube with an internal vapor-liquid-solid flow boiling. Powder Technology, 2020, 371, 74-82.	2.1	7
8	The axial and radial phase holdup distribution of bubble-induced three-phase inverse fluidized bed. Chemical Engineering Science, 2020, 219, 115586.	1.9	6
9	Corrosion behaviors of hybrid ultrasonic phosphating coatings on carbon steel in simulated 150 °C hot-dry-rock fluids. Geothermics, 2020, 86, 101807.	1.5	7
10	VOF-DEM simulation of single bubble behavior in gas–liquid–solid mini-fluidized bed. Chemical Engineering Research and Design, 2020, 155, 108-122.	2.7	12
11	Axial meso-scale modeling of gas-liquid-solid circulating fluidized beds. Chemical Engineering Science, 2019, 208, 115139.	1.9	7
12	Photocatalytic enhancement mechanism of direct Z-scheme heterojunction O-g-C3N4@Fe-TiO2 under visible-light irradiation. Applied Surface Science, 2019, 485, 353-360.	3.1	23
13	Catalytic oxidation of crotonaldehyde to crotonic acid in a gas-liquid-solid mini-fluidized bed. Powder Technology, 2019, 352, 32-41.	2.1	9
14	Corrosion and fouling behaviors of phosphatized Q235 carbon steel coated with fluorinated polysiloxane coating. Progress in Organic Coatings, 2019, 134, 177-188.	1.9	20
15	Axial meso-scale modeling of gas-liquid-solid fluidized beds. Chemical Engineering Science, 2019, 196, 188-201.	1.9	6
16	A novel chitosan based adsorbent for boron separation. Separation and Purification Technology, 2019, 211, 162-169.	3.9	32
17	Coupled model based on radiation transfer and reaction kinetics of gas–liquid–solid photocatalytic mini-fluidized bed. Chemical Engineering Research and Design, 2018, 134, 172-185.	2.7	13
18	Experiment study and modeling of novel mini-bubble column photocatalytic reactor with multiple micro-bubbles. Chemical Engineering and Processing: Process Intensification, 2018, 124, 269-281.	1.8	5

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19	An improved meso-scale flow model of gas-liquid-solid fluidized beds. Chemical Engineering Science, 2018, 179, 243-256.	1.9	13
20	Antifouling and anticorrosion behaviors of modified heat transfer surfaces with coatings in simulated hot-dry-rock geothermal water. Applied Thermal Engineering, 2018, 132, 740-759.	3.0	16
21	Flow regimes in gas-liquid-solid mini-fluidized beds with single gas orifice. Powder Technology, 2018, 333, 293-303.	2.1	8
22	Hydrodynamic behavior of liquid–solid micro-fluidized beds determined from bed expansion. Particuology, 2018, 38, 103-112.	2.0	16
23	Corrosion and Fouling Behaviors on Modified Stainless Steel Surfaces in Simulated Oilfield Geothermal Water. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 526-535.	0.3	13
24	Experiments and meso-scale modeling of phase holdups and bubble behavior in gas-liquid-solid mini-fluidized beds. Chemical Engineering Science, 2018, 192, 725-738.	1.9	16
25	Nonlinear behaviors of vibration acceleration signals in a graphite tube with vapor-liquid-solid boiling flows. Powder Technology, 2017, 316, 315-328.	2.1	11
26	Experimental investigation of collision behavior of fluidized solid particles on the tube wall of a graphite evaporator by vibration signal analysis. Powder Technology, 2017, 316, 303-314.	2.1	20
27	Novel methods of oil fouling inhibition on surface of plate heat exchanger in simulated oilfield geothermal water. International Journal of Heat and Mass Transfer, 2017, 113, 961-974.	2.5	5
28	Corrosion behaviors of polysiloxane-ferroferric oxide coating coated on carbon steel in NaCl solution and geothermal water. Geothermics, 2017, 70, 339-350.	1.5	12
29	Bed expansion and multi-bubble behavior of gas-liquid-solid micro-fluidized beds in sub-millimeter capillary. Chemical Engineering Journal, 2017, 328, 1122-1138.	6.6	18
30	Modified metal mesh with bipolar wettability for rapid and gravity-driven oil-water separation and oil collection. Surface and Coatings Technology, 2017, 325, 661-672.	2.2	15
31	Minimum fluidization velocity in gasâ€iquidâ€solid minifluidized beds. AICHE Journal, 2016, 62, 1940-1957.	1.8	16
32	Performance of a Metal Ionâ€Doped Titaniaâ€Coated Planar Photocatalytic Microreactor. Chemical Engineering and Technology, 2016, 39, 88-96.	0.9	11
33	Soiling and corrosion behaviors on fluorinated anodized TiO2 surface infused by perfluoropolyether. Surface and Coatings Technology, 2016, 307, 332-344.	2.2	18
34	Single bubble behavior in gas–liquid–solid mini-fluidized beds. Chemical Engineering Journal, 2016, 286, 497-507.	6.6	27
35	Multi-scale vibration behavior of a graphite tube with an internal vapor–liquid–solid boiling flow. Powder Technology, 2016, 291, 201-213.	2.1	19
36	Effects of fluidized solid particles on vibration behaviors of a graphite tube evaporator with an internal vapor–liquid flow. Applied Thermal Engineering, 2016, 100, 1229-1244.	3.0	12

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37	Photocatalytic activity and scale-up effect in liquid–solid mini-fluidized bed reactor. Chemical Engineering Journal, 2016, 291, 254-268.	6.6	30
38	Experimental investigation of hydrodynamics of liquid–solid mini-fluidized beds. Particuology, 2016, 27, 102-109.	2.0	25
39	Fouling Resistance on Chemically Etched Hydrophobic Surfaces in Nucleate Pool Boiling. Chemical Engineering and Technology, 2015, 38, 416-422.	0.9	9
40	Onset velocity of circulating fluidization and particle residence time distribution: A CFD–DEM study. Particuology, 2015, 21, 187-195.	2.0	30
41	Corrosion properties of sol–gel silica coatings on phosphated carbon steel in sodium chloride solution. Journal of Sol-Gel Science and Technology, 2015, 76, 358-371.	1.1	6
42	Ionâ€exchange adsorption of calcium ions from water and geothermal water with modified zeolite A. AICHE Journal, 2015, 61, 640-654.	1.8	24
43	Observations and Mechanism of CaSO ₄ Fouling on Hydrophobic Surfaces. Industrial & amp; Engineering Chemistry Research, 2014, 53, 3509-3527.	1.8	24
44	Analysis Tools of Time Series Data. SpringerBriefs in Applied Sciences and Technology, 2014, , 13-18.	0.2	0
45	Three-dimensional CFD–VOF–DPM simulations of effects of low-holdup particles on single-nozzle bubbling behavior in gas–liquid–solid systems. Chemical Engineering Journal, 2013, 222, 292-306.	6.6	55
46	Fractal Structure in Gas–Liquid–Solid Circulating Fluidized Beds with Low Solid Holdups of Macroporous Resin Particles. Industrial & Engineering Chemistry Research, 2013, 52, 11404-11413.	1.8	3
47	<scp>CaCO₃</scp> fouling on microscale–nanoscale hydrophobic titania–fluoroalkylsilane films in pool boiling. AICHE Journal, 2013, 59, 2662-2678.	1.8	33
48	Corrosion behavior of titania films coated by liquidâ€phase deposition on AISI304 stainless steel substrates. AICHE Journal, 2012, 58, 1907-1920.	1.8	23
49	Two-dimensional volume of fluid simulation studies on single bubble formation and dynamics in bubble columns. Chemical Engineering Science, 2012, 72, 61-77.	1.9	100
50	Clustering behaviour in gas–liquid–solid circulating fluidized beds with low solid holdups of resin particles. Canadian Journal of Chemical Engineering, 2010, 88, 586-600.	0.9	3
51	Enhancing flow boiling and antifouling with nanometer titanium dioxide coating surfaces. AICHE Journal, 2007, 53, 1075-1085.	1.8	24
52	Antifouling and enhancing pool boiling by TiO ₂ coating surface in nanometer scale thickness. AICHE Journal, 2007, 53, 3062-3076.	1.8	45
53	Clustering behavior of solid particles in two-dimensional liquid–solid fluidized-beds. Particuology: Science and Technology of Particles, 2007, 5, 305-311.	0.4	18
54	Chaotic forecasting of time series of heat-transfer coefficient for an evaporator with a two-phase flow. Chemical Engineering Science, 2005, 60, 883-895.	1.9	10

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55	Studies on the Hydrodynamics of Chaotic Bubbling in a Gas-Liquid Bubble Column with a Single Nozzle. Chemical Engineering and Technology, 2004, 27, 537-547.	0.9	22
56	Nonlinear Bubbling Hydrodynamics in a Gas-Liquid Bubble Column with a Single Nozzle. International Journal of Chemical Reactor Engineering, 2003, 1 , .	0.6	3
57	Application of the energy-minimization multi-scale method to gas–liquid–solid fluidized beds. Chemical Engineering Science, 2001, 56, 6805-6812.	1.9	45
58	Industrial Applications of Fluidized Bed Evaporator in Evaporating Concentration of Extract Solutions. Heat Transfer Engineering, 0 , $1-13$.	1.2	0
59	Method to Concurrently Measure Local Gas and Solid Holdups Visually with Higher Precision in Circulating Fluidized Bed. AICHE Journal, 0, , e17510.	1.8	3