

Mingyan Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8307439/publications.pdf>

Version: 2024-02-01

59
papers

984
citations

430754

18
h-index

501076

28
g-index

65
all docs

65
docs citations

65
times ranked

801
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-dimensional volume of fluid simulation studies on single bubble formation and dynamics in bubble columns. <i>Chemical Engineering Science</i> , 2012, 72, 61-77.	1.9	100
2	Three-dimensional CFD-VOF-DPM simulations of effects of low-holdup particles on single-nozzle bubbling behavior in gas-liquid-solid systems. <i>Chemical Engineering Journal</i> , 2013, 222, 292-306.	6.6	55
3	Application of the energy-minimization multi-scale method to gas-liquid-solid fluidized beds. <i>Chemical Engineering Science</i> , 2001, 56, 6805-6812.	1.9	45
4	Antifouling and enhancing pool boiling by TiO ₂ coating surface in nanometer scale thickness. <i>AIChE Journal</i> , 2007, 53, 3062-3076.	1.8	45
5	CaCO ₃ fouling on microscale-nanoscale hydrophobic titania-fluoroalkylsilane films in pool boiling. <i>AIChE Journal</i> , 2013, 59, 2662-2678.	1.8	33
6	A novel chitosan based adsorbent for boron separation. <i>Separation and Purification Technology</i> , 2019, 211, 162-169.	3.9	32
7	Onset velocity of circulating fluidization and particle residence time distribution: A CFD-DEM study. <i>Particuology</i> , 2015, 21, 187-195.	2.0	30
8	Photocatalytic activity and scale-up effect in liquid-solid mini-fluidized bed reactor. <i>Chemical Engineering Journal</i> , 2016, 291, 254-268.	6.6	30
9	Single bubble behavior in gas-liquid-solid mini-fluidized beds. <i>Chemical Engineering Journal</i> , 2016, 286, 497-507.	6.6	27
10	Experimental investigation of hydrodynamics of liquid-solid mini-fluidized beds. <i>Particuology</i> , 2016, 27, 102-109.	2.0	25
11	Enhancing flow boiling and antifouling with nanometer titanium dioxide coating surfaces. <i>AIChE Journal</i> , 2007, 53, 1075-1085.	1.8	24
12	Observations and Mechanism of CaSO ₄ Fouling on Hydrophobic Surfaces. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 3509-3527.	1.8	24
13	Ion-exchange adsorption of calcium ions from water and geothermal water with modified zeolite A. <i>AIChE Journal</i> , 2015, 61, 640-654.	1.8	24
14	Corrosion behavior of titania films coated by liquid-phase deposition on AISI304 stainless steel substrates. <i>AIChE Journal</i> , 2012, 58, 1907-1920.	1.8	23
15	Photocatalytic enhancement mechanism of direct Z-scheme heterojunction O-g-C ₃ N ₄ @Fe-TiO ₂ under visible-light irradiation. <i>Applied Surface Science</i> , 2019, 485, 353-360.	3.1	23
16	Studies on the Hydrodynamics of Chaotic Bubbling in a Gas-Liquid Bubble Column with a Single Nozzle. <i>Chemical Engineering and Technology</i> , 2004, 27, 537-547.	0.9	22
17	Experimental investigation of collision behavior of fluidized solid particles on the tube wall of a graphite evaporator by vibration signal analysis. <i>Powder Technology</i> , 2017, 316, 303-314.	2.1	20
18	Corrosion and fouling behaviors of phosphatized Q235 carbon steel coated with fluorinated polysiloxane coating. <i>Progress in Organic Coatings</i> , 2019, 134, 177-188.	1.9	20

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Soiling and corrosion behaviors on fluorinated anodized TiO ₂ surface infused by perfluoropolyether. Surface and Coatings Technology, 2016, 307, 332-344.	2.2	18
22	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
23	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
24	Minimum fluidization velocity in gas-liquid-solid minifluidized beds. AIChE Journal, 2016, 62, 1940-1957.	1.8	16
25	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
26	Hydrodynamic behavior of liquid-solid micro-fluidized beds determined from bed expansion. Particuology, 2018, 38, 103-112.	2.0	16
27	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
28	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
29	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
30	An improved meso-scale flow model of gas-liquid-solid fluidized beds. Chemical Engineering Science, 2018, 179, 243-256.	1.9	13
31	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
32	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
33	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
34	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
35	Performance of a Metal Ion-Doped Titania-Coated Planar Photocatalytic Microreactor. Chemical Engineering and Technology, 2016, 39, 88-96.	0.9	11
36	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

#	ARTICLE	IF	CITATIONS
37	Chaotic forecasting of time series of heat-transfer coefficient for an evaporator with a two-phase flow. <i>Chemical Engineering Science</i> , 2005, 60, 883-895.	1.9	10
38	Fouling Resistance on Chemically Etched Hydrophobic Surfaces in Nucleate Pool Boiling. <i>Chemical Engineering and Technology</i> , 2015, 38, 416-422.	0.9	9
39	Catalytic oxidation of crotonaldehyde to crotonic acid in a gas-liquid-solid mini-fluidized bed. <i>Powder Technology</i> , 2019, 352, 32-41.	2.1	9
40	Flow regimes in gas-liquid-solid mini-fluidized beds with single gas orifice. <i>Powder Technology</i> , 2018, 333, 293-303.	2.1	8
41	Axial meso-scale modeling of gas-liquid-solid circulating fluidized beds. <i>Chemical Engineering Science</i> , 2019, 208, 115139.	1.9	7
42	Chaotic vibration characters of a graphite tube with an internal vapor-liquid-solid flow boiling. <i>Powder Technology</i> , 2020, 371, 74-82.	2.1	7
43	Corrosion behaviors of hybrid ultrasonic phosphating coatings on carbon steel in simulated 150 Å°C hot-dry-rock fluids. <i>Geothermics</i> , 2020, 86, 101807.	1.5	7
44	Corrosion properties of sol-gel silica coatings on phosphated carbon steel in sodium chloride solution. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 76, 358-371.	1.1	6
45	Axial meso-scale modeling of gas-liquid-solid fluidized beds. <i>Chemical Engineering Science</i> , 2019, 196, 188-201.	1.9	6
46	The axial and radial phase holdup distribution of bubble-induced three-phase inverse fluidized bed. <i>Chemical Engineering Science</i> , 2020, 219, 115586.	1.9	6
47	Characteristics of flow fields in the gas-liquid mini-bubble columns with particle image velocimetry measurements. <i>AIChE Journal</i> , 2022, 68, .	1.8	6
48	Novel methods of oil fouling inhibition on surface of plate heat exchanger in simulated oilfield geothermal water. <i>International Journal of Heat and Mass Transfer</i> , 2017, 113, 961-974.	2.5	5
49	Experiment study and modeling of novel mini-bubble column photocatalytic reactor with multiple micro-bubbles. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 124, 269-281.	1.8	5
50	New measurements on hydrodynamics in a gas-liquid-solid expanded bed. <i>Particuology</i> , 2021, 58, 276-284.	2.0	5
51	Nonlinear Bubbling Hydrodynamics in a Gas-Liquid Bubble Column with a Single Nozzle. <i>International Journal of Chemical Reactor Engineering</i> , 2003, 1, .	0.6	3
52	Clustering behaviour in gas-liquid-solid circulating fluidized beds with low solid holdups of resin particles. <i>Canadian Journal of Chemical Engineering</i> , 2010, 88, 586-600.	0.9	3
53	Fractal Structure in Gas-Liquid-Solid Circulating Fluidized Beds with Low Solid Holdups of Macroporous Resin Particles. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 11404-11413.	1.8	3
54	Method to Concurrently Measure Local Gas and Solid Holdups Visually with Higher Precision in Circulating Fluidized Bed. <i>AIChE Journal</i> , 0, , e17510.	1.8	3

#	ARTICLE	IF	CITATIONS
55	Gas-liquid mass transfer in the gas-liquid-solid mini fluidized beds. <i>Particuology</i> , 2022, 69, 22-30.	2.0	2
56	Mesoscale model of radial hydrodynamics for fluidizing small particles with low solid holdup in gas-liquid-solid circulating fluidized bed. <i>Chemical Engineering Science</i> , 2022, 250, 117413.	1.9	2
57	Measurements of Local Flow Characteristics in a Gas-Liquid-Solid Circulating Fluidized Bed with Immersed Telocentric Photography. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3137-3153.	1.8	2
58	Industrial Applications of Fluidized Bed Evaporator in Evaporating Concentration of Extract Solutions. <i>Heat Transfer Engineering</i> , 0, , 1-13.	1.2	0
59	Analysis Tools of Time Series Data. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2014, , 13-18.	0.2	0