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List of Publications by Year
in descending order

56 papers	4,712 citations	147801 31 h-index	149698 56 g-index
57 all docs	57 docs citations	57 times ranked	2588 citing authors

#	Article	IF	Citations
1	CFD modeling of droplet permeability in fluidized beds. International Journal of Multiphase Flow, 2022, 152, 104069.	3.4	5
2	CFD-DEM simulations of riser geometry effect and cluster phenomena. Advanced Powder Technology, 2021, 32, 3234-3247.	4.1	7
3	Scaling method of CFD-DEM simulations for gas-solid flows in risers. Chemical Engineering Science: X, 2020, 6, 100054.	1.5	7
4	CFD modeling of multiphase flow in an alkaline water electrolyzer. Chemical Engineering Science, 2020, 227, 115926.	3.8	31
5	DNS of droplet impact on a solid particle: Effect of wettability on solid conjugate heat transfer. International Journal of Heat and Mass Transfer, 2020, 158, 119859.	4.8	4
6	Trajectory integrated smoothening of exchange fields for discrete phase simulations. Computers and Fluids, 2019, 186, 15-23.	2.5	4
7	Experimental study on orientation and de-mixing phenomena of elongated particles in gas-fluidized beds. Powder Technology, 2018, 329, 332-344.	4.2	27
8	A combined experimental and simulation study of fluid-particle heat transfer in dense arrays of stationary particles. Chemical Engineering Science, 2017, 169, 310-320.	3.8	10
9	Effect of operating pressure on particle temperature distribution in a fluidized bed with heat production. Chemical Engineering Science, 2017, 169, 299-309.	3.8	16
10	Cutting bubbles with a single wire. Chemical Engineering Science, 2017, 157, 138-146.	3.8	16
11	A numerical study of cutting bubbles with a wire mesh. Chemical Engineering Science, 2017, 165, 25-32.	3.8	16
12	Experimental and simulation study of heat transfer in fluidized beds with heat production. Chemical Engineering Journal, 2017, 317, 242-257.	12.7	45
13	Direct numerical simulation of effective drag in dense gasâ€“liquidâ€“solid three-phase flows. Chemical Engineering Science, 2017, 158, 561-568.	3.8	26
14	On an efficient hybrid soft and hard sphere collision integration scheme for DEM. Chemical Engineering Science, 2016, 153, 363-373.	3.8	20
15	Effect of superficial gas velocity on the particle temperature distribution in a fluidized bed with heat production. Chemical Engineering Science, 2016, 140, 279-290.	3.8	30
16	Direct numerical simulations and experiments of a pseudo-2D gas-fluidized bed. Chemical Engineering Science, 2016, 143, 166-180.	3.8	52
17	Scale-Adaptive Simulation of a square cross-sectional bubble column. Chemical Engineering Science, 2015, 131, 101-108.	3.8	40
18	A study of heat transfer in fluidized beds using an integrated DIA/PIV/IR technique. Chemical Engineering Journal, 2015, 259, 90-106.	12.7	78

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19	Simulation of particle mixing and segregation in bidisperse gas fluidized beds. Chemical Engineering Science, 2014, 108, 258-269.	3.8	45
20	Numerical study of bubble break-up in bubbly flows using a deterministic Eulerâ€“Lagrange framework. Chemical Engineering Science, 2014, 108, 9-22.	3.8	60
21	Direct Numerical Simulation (DNS) of mass, momentum and heat transfer in dense fluid-particle systems. Current Opinion in Chemical Engineering, 2014, 5, 84-89.	7.8	35
22	Lagrangian modelling of dilute granular flowâ€”modified stochastic DSMC versus deterministic DPM. Chemical Engineering Science, 2014, 105, 132-142.	3.8	23
23	A critical comparison of surface tension models for the volume of fluid method. Chemical Engineering Science, 2014, 109, 65-74.	3.8	53
24	Segregation dynamics in dense polydisperse gas-fluidized beds. Powder Technology, 2013, 246, 695-706.	4.2	31
25	Improved digital image analysis technique for the evaluation of segregation in pseudo-2D beds. Powder Technology, 2013, 244, 61-74.	4.2	33
26	Development of an image measurement technique for size distribution in dense bubbly flows. Chemical Engineering Science, 2013, 94, 20-29.	3.8	148
27	Experimental study of monodisperse granular flow through an inclined rotating chute. Powder Technology, 2013, 246, 235-246.	4.2	22
28	Direct Numerical Simulations of gasâ€“liquidâ€“solid three phase flows. Chemical Engineering Science, 2013, 100, 293-299.	3.8	25
29	Experimental study of the bubble size distribution in a pseudo-2D bubble column. Chemical Engineering Science, 2013, 98, 203-211.	3.8	74
30	Development and validation of a novel Digital Image Analysis method for fluidized bed Particle Image Velocimetry. Powder Technology, 2012, 230, 193-202.	4.2	48
31	Numerical and experimental study on spout elevation in spoutâ€fluidized beds. AICHE Journal, 2012, 58, 2524-2535.	3.6	40
32	Numerical investigation of the drag closure for bubbles in bubble swarms. Chemical Engineering Science, 2011, 66, 3309-3316.	3.8	29
33	On the drag force of bubbles in bubble swarms at intermediate and high Reynolds numbers. Chemical Engineering Science, 2011, 66, 3204-3211.	3.8	132
34	Use of Particle Imaging Velocimetry to measure liquid velocity profiles in liquid and liquid/gas flows through spacer filled channels. Journal of Membrane Science, 2010, 362, 143-153.	8.2	41
35	Bubbles in spacers: Direct observation of bubble behavior in spacer filled membrane channels. Journal of Membrane Science, 2009, 333, 38-44.	8.2	34
36	Numerical study of homogeneous bubbly flow: Influence of the inlet conditions to the hydrodynamic behavior. International Journal of Multiphase Flow, 2009, 35, 1077-1099.	3.4	24

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37	Comparison of fibre optical measurements and discrete element simulations for the study of granulation in a spout fluidized bed. Powder Technology, 2009, 189, 202-217.	4.2	59
38	Characterization of the pneumatic behavior of a novel spouted bed apparatus with two adjustable gas inlets. Chemical Engineering Science, 2008, 63, 791-814.	3.8	46
39	One-equation sub-grid scale (SGS) modelling for Eulerâ€“Euler large eddy simulation (EELES) of dispersed bubbly flow. Chemical Engineering Science, 2008, 63, 3923-3931.	3.8	66
40	On the relationship between operating pressure and granular temperature: A discrete particle simulation study. Powder Technology, 2008, 182, 250-256.	4.2	30
41	Experimental and numerical study of wall-induced granular convection. Powder Technology, 2008, 184, 166-176.	4.2	29
42	Numerical Simulation of Dense Gas-Solid Fluidized Beds: A Multiscale Modeling Strategy. Annual Review of Fluid Mechanics, 2008, 40, 47-70.	25.0	517
43	Chapter 23 Multi-level computational fluid dynamics models for the description of particle mixing and granulation in fluidized beds. Handbook of Powder Technology, 2007, 11, 1071-1107.	0.1	3
44	Review of discrete particle modeling of fluidized beds. Chemical Engineering Science, 2007, 62, 28-44.	3.8	796
45	Discrete element study of granulation in a spout-fluidized bed. Chemical Engineering Science, 2007, 62, 195-207.	3.8	77
46	Detailed modelling of hydrodynamics, mass transfer and chemical reactions in a bubble column using a discrete bubble model: Chemisorption of <mml:math altimg="si53.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xml	3.8	112
47	Detailed computational and experimental fluid dynamics of fluidized beds. Applied Mathematical Modelling, 2006, 30, 1459-1471.	4.2	27
48	Numerical simulation of the dynamic flow behavior in a bubble column: A study of closures for turbulence and interface forces. Chemical Engineering Science, 2006, 61, 7593-7608.	3.8	228
49	Parallelization of an Eulerâ€“Lagrange model using mixed domain decomposition and a mirror domain technique: Application to dispersed gasâ€“liquid two-phase flow. Journal of Computational Physics, 2006, 220, 216-248.	3.8	105
50	Detailed modeling of hydrodynamics, mass transfer and chemical reactions in a bubble column using a discrete bubble model. Chemical Engineering Science, 2005, 60, 3383-3404.	3.8	130
51	Numerical simulation of gas bubbles behaviour using a three-dimensional volume of fluid method. Chemical Engineering Science, 2005, 60, 2999-3011.	3.8	313
52	Numerical investigation of closures for interface forces acting on single air-bubbles in water using Volume of Fluid and Front Tracking models. Chemical Engineering Science, 2005, 60, 6169-6175.	3.8	40
53	Numerical simulation of gasâ€“liquidâ€“solid flows using a combined front tracking and discrete particle method. Chemical Engineering Science, 2005, 60, 6188-6198.	3.8	73
54	Flow regimes in a spoutâ€“fluid bed: A combined experimental and simulation study. Chemical Engineering Science, 2005, 60, 3425-3442.	3.8	270

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55	Multi-scale modeling of dispersed gasâ€“liquid two-phase flow. Chemical Engineering Science, 2004, 59, 1853-1861.	3.8	145
56	Large eddy simulation of the Gasâ€“Liquid flow in a square cross-sectioned bubble column. Chemical Engineering Science, 2001, 56, 6341-6349.	3.8	296