Luca Mazzei

List of Publications by Year
in descending order

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Version: 2024-02-01

38	860	471509	477307
papers	citations	17	29
		h-index	g-index

39	39	39	942
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	CFD modeling of binary-fluidized suspensions and investigation of role of particle-particle drag on mixing and segregation. AICHE Journal, 2007, 53, 1924-1940.	3.6	68
2	Continuous-Flow Sonocrystallization in Droplet-Based Microfluidics. Crystal Growth and Design, 2015, 15, 5519-5529.	3.0	64
3	Synthesis of silver nanoparticles in a microfluidic coaxial flow reactor. RSC Advances, 2015, 5, 95585-95591.	3.6	61
4	A drag force closure for uniformly dispersed fluidized suspensions. Chemical Engineering Science, 2007, 62, 6129-6142.	3.8	60
5	CFD simulations of segregating fluidized bidisperse mixtures of particles differing in size. Chemical Engineering Journal, 2010, 156, 432-445.	12.7	51
6	An engineering approach to synthesis of gold and silver nanoparticles by controlling hydrodynamics and mixing based on a coaxial flow reactor. Nanoscale, 2017, 9, 14149-14161.	5.6	48
7	Investigation of the Effect of Ultrasound Parameters on Continuous Sonocrystallization in a Millifluidic Device. Crystal Growth and Design, 2016, 16, 4607-4619.	3.0	47
8	CFD simulation of bubbling fluidized bidisperse mixtures: Effect of integration methods and restitution coefficient. Chemical Engineering Science, 2013, 102, 324-334.	3.8	41
9	New quadratureâ€based moment method for the mixing of inert polydisperse fluidized powders in commercial CFD codes. AICHE Journal, 2012, 58, 3054-3069.	3.6	37
10	CFD simulations of expanding/contracting homogeneous fluidized beds and their transition to bubbling. Chemical Engineering Science, 2008, 63, 5831-5847.	3.8	33
11	Adipic Acid Primary Nucleation Kinetics from Probability Distributions in Droplet-Based Systems under Stagnant and Flow Conditions. Crystal Growth and Design, 2015, 15, 1784-1791.	3.0	31
12	Challenges and Issues on the CFD Modeling of Fluidized Beds: A Review. Journal of Computational Multiphase Flows, 2009, 1, 83-131.	0.8	28
13	Direct Quadrature Method of Moments for the Mixing of Inert Polydisperse Fluidized Powders and the Role of Numerical Diffusion. Industrial & Engineering Chemistry Research, 2010, 49, 5141-5152.	3.7	27
14	Photobioreactors for microalgal cultures: A Lagrangian model coupling hydrodynamics and kinetics. Biotechnology Progress, 2015, 31, 1259-1272.	2.6	27
15	Lateral solid mixing in gas-fluidized beds: CFD and DEM studies. Chemical Engineering Research and Design, 2016, 114, 148-161.	5.6	21
16	An investigation on the mechanics of homogeneous expansion in gas-fluidized beds. Chemical Engineering Science, 2015, 127, 95-105.	3.8	20
17	Computational fluid dynamic studies of mixers for highly viscous shear thinning fluids and PIV validation. Chemical Engineering Science, 2018, 179, 133-149.	3.8	20
18	Mathematical modelling of water absorption and evaporation in a pharmaceutical tablet during film coating. Chemical Engineering Science, 2018, 175, 40-55.	3.8	18

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19	Effect of acoustic streaming on continuous flow sonocrystallization in millifluidic channels. Chemical Engineering Journal, 2020, 379, 122221.	12.7	18
20	Segregation dynamics of dense polydisperse fluidized suspensions modeled using a novel formulation of the direct quadrature method of moments. Chemical Engineering Science, 2013, 101, 565-576.	3.8	15
21	New insight into the effect of mass transfer on the synthesis of silver and gold nanoparticles. CrystEngComm, 2018, 20, 7082-7093.	2.6	15
22	A revised mono-dimensional particle bed model for fluidized beds. Chemical Engineering Science, 2006, 61, 1958-1972.	3.8	14
23	Applicability of a drift-flux model of aerosol deposition in a test tunnel and an indoor heritage environment. Building and Environment, 2016, 106, 78-90.	6.9	13
24	Experimental and numerical studies on the flow characteristics and separation properties of dispersed liquid-liquid flows. Physics of Fluids, 2019, 31, .	4.0	12
25	On the closure problem of the effective stress in the Eulerian-Eulerian and mixture modeling approaches for the simulation of liquid-particle suspensions. Physics of Fluids, 2019, 31, .	4.0	11
26	Investigation of the swollen state of Carbopol molecules in non-aqueous solvents through rheological characterization. Soft Matter, 2020, 16, 9799-9815.	2.7	11
27	Viscoelastic flow instabilities in static mixers: Onset and effect on the mixing efficiency. Physics of Fluids, 2021, 33, .	4.0	9
28	Gelation kinetics of non-aqueous Carbopol dispersions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 577, 84-95.	4.7	8
29	New Perspectives on the Study of Particulate Matter Deposition within Historic Interiors. Studies in Conservation, 2019, 64, 193-202.	1.1	6
30	Mathematical Modeling of Spray Impingement and Film Formation on Pharmaceutical Tablets during Coating. Chemical Engineering Research and Design, 2020, 153, 768-788.	5.6	5
31	A model for the fluid dynamic behavior of a film coating suspension during tablet coating. Chemical Engineering Research and Design, 2020, 160, 301-320.	5.6	5
32	CFD-PBE coupled model for size-driven segregation in polydisperse granular flows. Chemical Engineering Science, 2022, 247, 117065.	3.8	4
33	Experimental investigation of the solid-liquid separation in a stirred tank owing to viscoelasticity. Physical Review Fluids, 2020, 5, .	2.5	4
34	Eulerian-Eulerian Simulations of Segregating Binary Gas-Solid Fluidized Beds. International Journal of Nonlinear Sciences and Numerical Simulation, 2012, 13, .	1.0	3
35	The Influence of Water Activity and Air Movement in Preventing Mould in Historic Materials. Studies in Conservation, 2018, 63, 348-350.	1.1	2
36	Effect of D-Mannitol on the Microstructure and Rheology of Non-Aqueous Carbopol Microgels. Materials, 2021, 14, 1782.	2.9	1

#	Article	IF	Citations
37	Continuous synthesis of gold nanoparticles in micro- and millifluidic systems. ChemistrySelect, 2021, 6, .	1.5	1
38	Roles of solid effective stress and fluid-particle interaction force in modeling shear-induced particle migration in non-Brownian suspensions. Physical Review Fluids, 2021, 6, .	2.5	0