Jamal Chaouki

List of Publications by Year
in descending order

274	7,960	43973 48	85405 71
papers	citations	h-index	g-index

280	280	280	4776
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Noninvasive Tomographic and Velocimetric Monitoring of Multiphase Flows. Industrial & Engineering Chemistry Research, 1997, 36, 4476-4503.	1.8	250
2	Effect of interparticle forces on the hydrodynamic behaviour of fluidized aerogels. Powder Technology, 1985, 43, 117-125.	2.1	205
3	Experimental methods in chemical engineering: Thermogravimetric analysisâ€"TGA. Canadian Journal of Chemical Engineering, 2020, 98, 34-43.	0.9	146
4	Biomass gasification in a bubbling fluidized bed reactor: Experiments and modeling. AICHE Journal, 2006, 52, 4258-4272.	1.8	145
5	Extraction of phenols from lignin microwave-pyrolysis oil using a switchable hydrophilicity solvent. Bioresource Technology, 2014, 154, 101-108.	4.8	144
6	Local solid mixing in gasâ€“solid fluidized beds. Powder Technology, 2001, 114, 23-31.	2.1	132
7	Characterization of dynamic gasâ€“solid distribution in fluidized beds. Chemical Engineering Journal, 2000, 79, 133-143.	6.6	126
8	Axial dispersion in the three-dimensional mixing of particles in a rotating drum reactor. Chemical Engineering Science, 2003, 58, 401-415.	1.9	125
9	A Î³-ray detection system for 3-D particle tracking in multiphase reactors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 338, 568-576.	0.7	115
10	Scaling considerations for circulating fluidized bed risers. Powder Technology, 1992, 72, 31-37.	2.1	114
11	Large-scale numerical investigation of solids mixing in a V-blender using the discrete element method. Powder Technology, 2008, 181, 205-216.	2.1	114
12	Phosphorous modified ZSM-5: Deactivation and product distribution for MTO. Chemical Engineering Science, 2007, 62, 5527-5532.	1.9	111
13	Comparative study of the mixing of free-flowing particles in a V-blender and a bin-blender. Chemical Engineering Science, 2007, 62, 1783-1802.	1.9	97
14	A unified lumped approach in kinetic modeling of biomass pyrolysis. Fuel, 2006, 85, 1211-1220.	3.4	92
15	Temperature profile prediction within selected materials heated by microwaves at 2.45GHz. Applied Thermal Engineering, 2012, 36, 360-369.	3.0	85
16	Simulation of circulating fluidized bed reactors using ASPEN PLUS. Fuel, 1998, 77, 327-337.	3.4	84
17	Dynamics of non-spherical particles in a rotating drum. Chemical Engineering Science, 2013, 101, 486-502.	1.9	83
18	Comparison of DEM results and Lagrangian experimental data for the flow and mixing of granules in a rotating drum. AICHE Journal, 2014, 60, 60-75.	1.8	83

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19	Characterization of Mixing and Size Segregation in a Rotating Drum by a Particle Tracking Method. AICHE Journal, 2013, 59, 1894-1905.	1.8	82
20	Catalytic storage of hydrogen: Hydrogenation of toluene over a nickel/silica aerogel catalyst in integral flow conditions. Applied Catalysis, 1988, 42, 121-130.	1.1	81
21	Multiscale multiphase phenomena in bubble column reactors: A review. Renewable Energy, 2019, 141, 613-631.	4.3	81
22	Characterization of solids mixing patterns in bubbling fluidized beds. Chemical Engineering Research and Design, 2011, 89, 817-826.	2.7	79
23	Characterization of the Flow Transition between Bubbling and Turbulent Fluidization. Industrial & Engineering Chemistry Research, 1994, 33, 1889-1896.	1.8	76
24	Flow structure of the solids in gasâ€“solid fluidized beds. Chemical Engineering Science, 2004, 59, 4217-4227.	1.9	75
25	Detailed compositional analysis and structural investigation of a bio-oil from microwave pyrolysis of kraft lignin. Journal of Analytical and Applied Pyrolysis, 2014, 109, 249-257.	2.6	75
26	Effects of temperature, pressure, and interparticle forces on the hydrodynamics of a gas-solid fluidized bed. Chemical Engineering Journal, 2017, 313, 580-590.	6.6	74
27	Gas phase hydrodynamics in the riser of a circulating fluidized bed. Chemical Engineering Science, 1993, 48, 3195-3205.	1.9	73
28	3-D mapping of solids flow fields in multiphase reactors with RPT. AICHE Journal, 1995, 41, 439-443.	1.8	73
29	A study of solid behavior in spouted beds using 3â€Ð particle tracking. Canadian Journal of Chemical Engineering, 1994, 72, 945-952.	0.9	72
30	Hydrodynamics of a gasâ€“solid fluidized bed with thermally induced interparticle forces. Chemical Engineering Journal, 2015, 259, 135-152.	6.6	69
31	Heat transfer from a circulating fluidized bed to membrane waterwall surfaces. AICHE Journal, 1987, 33, 1888-1893.	1.8	68
32	Lumped Approach in Kinetic Modeling of Microwave Pyrolysis of Kraft Lignin. Energy & Fuels, 2014, 28, 1406-1417.	2.5	68
33	Modeling the catalytic oxidation of n-butane to maleic anhydride in a circulating fluidized bed reactor. Industrial & Engineering Chemistry Research, 1992, 31, 2652-2660.	1.8	66
34	Sand-assisted fluidization of large cylindrical and spherical biomass particles: Experiments and simulation. Chemical Engineering Science, 2015, 126, 543-559.	1.9	66
35	Traveling column for comparison of invasive and non-invasive fluidization voidage measurement techniques. Powder Technology, 2013, 235, 203-220.	2.1	65
36	From sol-gel to aerogels and cryogels. Journal of Non-Crystalline Solids, 1990, 121, 66-67.	1.5	60

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37	Gas phase hydrodynamics of a gas-solid turbulent fluidized bed reactor. Chemical Engineering Science, 1996, 51, 713-723.	1.9	59
38	Kinetic Modeling of Methanol-to-Olefin Reaction over ZSM-5 in Fluid Bed. Industrial & Engineering Chemistry Research, 2010, 49, 29-38.	1.8	59
39	Fabrication of mullite-bonded porous SiC ceramics via a solâ€“gel assisted in situ reaction bonding. Journal of the European Ceramic Society, 2014, 34, 237-247.	2.8	59
40	Combustion of methane over La0.66Sr0.34Ni0.3Co0.7O3 and La0.4Sr0.6Fe0.4Co0.6O3 prepared by freeze-drying. Applied Catalysis A: General, 1994, 109, 181-193.	2.2	58
41	A Comparison of Two- and Single-Phase Models for Fluidized-Bed Reactors. Industrial & Engineering Chemistry Research, 2001, 40, 5526-5532.	1.8	57
42	Verification of fluidized bed electrical capacitance tomography measurements with a fibre optic probe. Chemical Engineering Science, 2003, 58, 3923-3934.	1.9	57
43	Evaluation of some cobalt and nickel based perovskites prepared by freeze-drying as combustion catalysts. Catalysis Letters, 1993, 21, 77-87.	1.4	56
44	Experimental Characterization of the Solid Phase Chaotic Dynamics in Three-Phase Fluidization. Industrial & Engineering Chemistry Research, 1995, 34, 2971-2980.	1.8	54
45	Distribution of large biomass particles in a sandâ€biomass fluidized bed: Experiments and modeling. AICHE Journal, 2014, 60, 869-880.	1.8	53
46	Major trends and roadblocks in CFD-aided process intensification of biomass pyrolysis. Chemical Engineering and Processing: Process Intensification, 2018, 127, 206-212.	1.8	52
47	Electrification of materials processing via microwave irradiation: A review of mechanism and applications. Applied Thermal Engineering, 2021, 193, 117003.	3.0	50
48	Flow structure of the solids in a 3-D gasâ€“liquidâ€“solid fluidized bed. AICHE Journal, 1996, 42, 2439-2452.	1.8	49
49	Gas and solids between dynamic bubble and emulsion in gas-fluidized beds. Powder Technology, 2001, 120, 12-20.	2.1	49
50	On the Axial Movement of Solids in Gas-Solid Fluidized Beds. Chemical Engineering Research and Design, 2000, 78, 911-920.	2.7	48
51	An extended radioactive particle tracking method for systems with irregular moving boundaries. Powder Technology, 2008, 181, 195-204.	2.1	45
52	The effect of biomass particles on the gas distribution and dilute phase characteristics of sandâ€“biomass mixtures fluidized in the bubbling regime. Chemical Engineering Science, 2013, 102, 129-138.	1.9	45
53	Investigation of particle velocity in FCC gas-fluidized beds based on different measurement techniques. Chemical Engineering Science, 2015, 127, 310-322.	1.9	45
54	Experimental Methods in Chemical Engineering: Discrete Element Methodâ€”DEM. Canadian Journal of Chemical Engineering, 2019, 97, 1964-1973.	0.9	44

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55	Economics evaluation for on-site pyrolysis of kraft lignin to value-added chemicals. Bioresource Technology, 2015, 175, 254-261.	4.8	42
56	Upgrading of Oils from Biomass and Waste: Catalytic Hydrodeoxygenation. Catalysts, 2020, 10, 1381.	1.6	42
57	The effects of liquid phase rheology on the hydrodynamics of a gasâ€“liquid bubble column reactor. Chemical Engineering Science, 2015, 129, 193-207.	1.9	41
58	Fluidization characteristics of a bubbling gasâ€“solid fluidized bed at high temperature in the presence of interparticle forces. Chemical Engineering Journal, 2016, 288, 344-358.	6.6	40
59	Microwave Heating-Assisted Catalytic Dry Reforming of Methane to Syngas. Scientific Reports, 2018, 8, 8940.	1.6	40
60	Fast Pyrolysis of Lignocellulosic Biomass for the Production of Energy and Chemicals: A Critical Review. Current Organic Chemistry, 2016, 20, 2458-2479.	0.9	40
61	On-line flow visualization in multiphase reactors using neural networks. Applied Radiation and Isotopes, 1997, 48, 225-235.	0.7	39
62	Update on Spent Potliners Treatments:â€‰ Kinetics of Cyanides Destruction at High Temperature. Industrial & Engineering Chemistry Research, 2004, 43, 5828-5837.	1.8	39
63	An experimental investigation of effusivity as an indicator of powder blend uniformity. Powder Technology, 2008, 181, 149-159.	2.1	39
64	Investigating the dynamics of cylindrical particles in a rotating drum using multiple radioactive particle tracking. AIChE Journal, 2016, 62, 2622-2634.	1.8	39
65	Local characterization of a gasâ€“solid fluidized bed in the presence of thermally induced interparticle forces. Chemical Engineering Science, 2014, 119, 261-273.	1.9	38
66	A modified microwave thermo-gravimetric-analyzer for kineticÂpurposes. Applied Thermal Engineering, 2015, 75, 65-72.	3.0	38
67	Impact of the heating mechanism on the yield and composition of bio-oil from pyrolysis of kraft lignin. Biomass and Bioenergy, 2016, 95, 344-353.	2.9	38
68	Development of a microwave thermogravimetric analyzer and its application on polystyrene microwave pyrolysis kinetics. Journal of Analytical and Applied Pyrolysis, 2018, 130, 209-215.	2.6	38
69	Prediction of effective drag coefficient in fluidized beds. Chemical Engineering Science, 1999, 54, 851-858.	1.9	37
70	Experimental investigation on solid dispersion, power consumption and scale-up in moderate to dense solidâ€“liquid suspensions. Chemical Engineering Research and Design, 2012, 90, 201-212.	2.7	37
71	Mixing and circulation of solids in spouted beds: particle tracking and Monte Carlo emulation of the gross flow pattern. Chemical Engineering Science, 2003, 58, 1497-1507.	1.9	36
72	Separation of Radioactive Elements from Rare Earth Element-Bearing Minerals. Metals, 2020, 10, 1524.	1.0	36

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73	Two-phase model for a catalytic turbulent fluidized-bed reactor: Application to ethylene synthesis. Chemical Engineering Science, 1999, 54, 2039-2045.	1.9	35
74	An investigation of magnesium stearate mixing in a V-blender through gamma-ray detection. Powder Technology, 2010, 200, 234-245.	2.1	35
75	Distributed Microwave Pyrolysis of Domestic Waste. Waste and Biomass Valorization, 2014, 5, 1-10.	1.8	35
76	A CPFD model for a bubbly biomassâ€“sand fluidized bed. Powder Technology, 2015, 275, 39-50.	2.1	35
77	New technique for simultaneous measurement of the local solid and gas holdup by using optical fiber probes in the slurry bubble column. Chemical Engineering Journal, 2019, 358, 831-841.	6.6	35
78	Fiber-supported perovskites for catalytic combustion of natural gas. Catalysis Today, 1999, 47, 115-121.	2.2	34
79	Spent potliner treatment process optimization using a MADS algorithm. Optimization and Engineering, 2008, 9, 143-160.	1.3	34
80	Discrete element simulation of particle mixing and segregation in a tetrapodal blender. Computers and Chemical Engineering, 2014, 64, 1-12.	2.0	34
81	Effect of microwave heating on the performance of catalytic oxidation of n-butane in a gas-solid fluidized bed reactor. Chemical Engineering Science, 2018, 192, 1177-1188.	1.9	34
82	Position and velocity of a large particle in a gas/solid riser using the radioactive particle tracking technique. Canadian Journal of Chemical Engineering, 1999, 77, 253-261.	0.9	33
83	Development of a fluidized bed thermogravimetric analyzer. AICHE Journal, 2015, 61, 84-89.	1.8	33
84	Influence of interparticle forces on solids motion in a bubbling gas-solid fluidized bed. Powder Technology, 2016, 299, 98-106.	2.1	33
85	Fluidization of cryogels in a conical column. Powder Technology, 1996, 89, 179-186.	2.1	32
86	A multiscale model for the simulation of granulation in rotor-based equipment. Chemical Engineering Science, 2012, 81, 106-117.	1.9	31
87	A novel induction heating fluidized bed reactor: Its design and applications in high temperature screening tests with solid feedstocks and prediction of defluidization state. AICHE Journal, 2015, 61, 1507-1523.	1.8	31
88	Development of a multiscale model for the design and scale-up of gas/liquid stirred tank reactors. Chemical Engineering Journal, 2016, 297, 277-294.	6.6	31
89	Effets de differents parametres sur les vitesses de transition de la fluidisation en regime turbulent. Canadian Journal of Chemical Engineering, 1995, 73, 41-50.	0.9	30
90	Effects of temperature on local two-phase flow structure in bubbling and turbulent fluidized beds of FCC particles. Chemical Engineering Science, 2004, 59, 3413-3422.	1.9	30

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91	New description of fluidization regimes. AICHE Journal, 2005, 51, 1125-1130.	1.8	30
92	Behavior of Sulfur during the Pyrolysis of Tires. Energy & Fuels, 2015, 29, 763-774.	2.5	30
93	A multiple radioactive particle tracking technique to investigate particulate flows. AICHE Journal, 2015, 61, 384-394.	1.8	30
94	Combustion of Methane in a Cyclic Catalytic Reactor. Industrial & Engineering Chemistry Research, 1994, 33, 2957-2963.	1.8	29
95	Solids mixing in gas-liquid-solid fluidized beds: Experiments and modelling. Chemical Engineering Science, 1996, 51, 2011-2020.	1.9	29
96	Effective drag coefficient investigation in the acceleration zone of an upward gasâ€“solid flow. Chemical Engineering Science, 2007, 62, 318-327.	1.9	29
97	Investigation of turbulent fluid flows in stirred tanks using a non-intrusive particle tracking technique. Chemical Engineering Science, 2016, 140, 233-251.	1.9	29
98	Improvement of the fluidisability of Ni/SiO2 aerogels by reducing interparticle forces. Powder Technology, 1991, 65, 461-468.	2.1	28
99	A measure of mixing from Lagrangian tracking and its application to granular and fluid flow systems. Chemical Engineering Research and Design, 2008, 86, 1313-1321.	2.7	28
100	TGA and kinetic modelling of Co, Mn and Cu oxides for chemical looping gasification (CLG). Canadian Journal of Chemical Engineering, 2014, 92, 1903-1910.	0.9	28
101	Effect of solid particles on the volumetric gas liquid mass transfer coefficient in slurry bubble column reactors. Chemical Engineering Science, 2020, 227, 115912.	1.9	28
102	CATALYTIC COMBUSTION OF NATURAL GAS IN A FIXED BED REACTOR WITH FLOW REVERSAL. Chemical Engineering Communications, 1993, 125, 171-186.	1.5	27
103	Characterization of Minimum Impeller Speed for Suspension of Solids in Liquid at High Solid Concentration, Using Gamma-Ray Densitometry. International Journal of Chemical Engineering, 2012, 2012, 1-15.	1.4	27
104	Solids dynamics from experimental trajectory time-series of a single particle motion in gas-spouted beds. Chemical Engineering Science, 1999, 54, 2545-2554.	1.9	26
105	Modeling of the mixing of monodisperse particles using a stationary DEM-based Markov process. Computers and Chemical Engineering, 2008, 32, 1334-1341.	2.0	26
106	Conical spouted bed drying of Baker's yeast: Experimentation and multi-modeling. Food Research International, 2014, 62, 137-150.	2.9	26
107	Hydrodynamic behaviour of aerogel powders in high-velocity fluidized beds. Powder Technology, 1990, 60, 121-129.	2.1	25
108	Radial Hydrodynamics in Risers. Industrial & Engineering Chemistry Research, 1999, 38, 81-89.	1.8	25

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109	High temperature fluidized bed reactor: measurements, hydrodynamics and simulation. Chemical Engineering Science, 2003, 58, 1071-1077.	1.9	25
110	Preparation and characterization of alumina and chromia cryogel-based catalysts. Applied Catalysis A: General, 2000, 196, 191-198.	2.2	24
111	Development of a granular normal contact force model based on a non-Newtonian liquid filled dashpot. Powder Technology, 2013, 237, 202-212.	2.1	24
112	Co-combustion of coal and waste in pulverized coal boiler. Energy, 2016, 94, 742-754.	4.5	24
113	Simultaneous effect of particle size and solid concentration on the hydrodynamics of slurry bubble column reactors. AICHE Journal, 2020, 66, e16813.	1.8	24
114	Dehydrogenation of methylcyclohexane in a reactor coupled to a hydrogen engine. International Journal of Hydrogen Energy, 1991, 16, 55-60.	3.8	23
115	Technoâ€Economic Comparison of a 7â€MW_{th} Biomass Chemical Looping Gasification Unit with Conventional Systems. Chemical Engineering and Technology, 2015, 38, 867-878.	0.9	23
116	Preparation of supported La_{0.66}Sr_{0.34}Ni_{0.3}Co_{0.7}O₃ perovskite catalysts and their performance in methane and odorized natural gas combustion. Canadian Journal of Chemical Engineering, 1997, 75, 509-519.	0.9	22
117	Behaviors of the bubble, cloud, and emulsion phases in a fluidized bed. AICHE Journal, 2008, 54, 406-414.	1.8	22
118	Optimization of detector positioning in the radioactive particle tracking technique. Applied Radiation and Isotopes, 2014, 89, 109-124.	0.7	22
119	Effect of elevated pressure on the hydrodynamic aspects of a pilot-scale bubble column reactor operating with non-Newtonian liquids. Chemical Engineering Journal, 2016, 288, 377-389.	6.6	21
120	Size segregation of bidisperse granular mixtures in rotating drum. Powder Technology, 2020, 374, 172-184.	2.1	21
121	Metal and sulfur removal from petroleum oil using a novel demetallization-desulfurization agent and process. Journal of Cleaner Production, 2020, 275, 124177.	4.6	21
122	Diffusional effects for the oxidation of SiC powders in thermogravimetric analysis experiments. Journal of Materials Science, 2013, 48, 4396-4407.	1.7	20
123	Compartmental modelling of turbulent fluid flow for the scaleâ€up of stirred tanks. Canadian Journal of Chemical Engineering, 2014, 92, 1070-1081.	0.9	20
124	Lethe: An open-source parallel high-order adaptative CFD solver for incompressible flows. SoftwareX, 2020, 12, 100579.	1.2	20
125	<scp>CFDâ€DEM</scp> analysis of the spouted fluidized bed with nonâ€spherical particles. Canadian Journal of Chemical Engineering, 2021, 99, 2303-2319.	0.9	20
126	Flow Structure of the Solids in a Three-Dimensional Liquid Fluidized Bed. Industrial & Engineering Chemistry Research, 1997, 36, 4695-4704.	1.8	19

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127	Hydrodynamic characteristics of gasâ€“solid fluidization at high temperature. Canadian Journal of Chemical Engineering, 2010, 88, 1-11.	0.9	19
128	Experimental investigation of solid particles flow in a conical spouted bed using radioactive particle tracking. AICHE Journal, 2016, 62, 26-37.	1.8	19
129	Trajectory length and residence-time distributions of the solids in three-phase fluidized beds. Chemical Engineering Science, 1997, 52, 3931-3939.	1.9	18
130	Experimental investigation of particle contact time at the wall of gas fluidized beds. Chemical Engineering Science, 2005, 60, 4349-4357.	1.9	18
131	Comparison of particle velocity measurement techniques in a fluidized bed operating in the square-nosed slugging flow regime. Powder Technology, 2016, 296, 45-52.	2.1	18
132	De-agglomeration of nanoparticles in a jet impactor-assisted fluidized bed. Powder Technology, 2017, 316, 455-461.	2.1	18
133	A simple and robust approach for early detection of defluidization. Chemical Engineering Journal, 2017, 313, 144-156.	6.6	18
134	The development of industrial (thermal) processes in the context of sustainability: The case for microwave heating. Canadian Journal of Chemical Engineering, 2020, 98, 832-847.	0.9	18
135	Flow regime transition pointers in three-phase fluidized beds inferred from a solid tracer trajectory. Chemical Engineering and Processing: Process Intensification, 2006, 45, 350-358.	1.8	17
136	An evaluation of the solid holdâ€up distribution in a fluidized bed of nanoparticles using radioactive densitometry and fibre optics. Canadian Journal of Chemical Engineering, 2008, 86, 543-552.	0.9	17
137	Control of particle cohesion with a polymer coating and temperature adjustment. AICHE Journal, 2012, 58, 3685-3696.	1.8	17
138	Discrete element investigation of flow patterns and segregation in a spheronizer. Computers and Chemical Engineering, 2013, 49, 170-182.	2.0	17
139	Local hydrodynamic parameters of bubble column reactors operating with nonâ€Newtonian liquids: Experiments and models development. AICHE Journal, 2016, 62, 1382-1396.	1.8	17
140	Influence of the deactivation of an industrial Pt-Sn/Al2O3 catalyst on the performance of the dehydrogenation reactor. Chemical Engineering Science, 1994, 49, 4639-4646.	1.9	16
141	Experimental characterization of the chaotic dynamics of cohesionless particles: application to a V-blender. Granular Matter, 2008, 10, 133-138.	1.1	16
142	Trickle-Bed Laboratory Reactors for Kinetic Studies. International Journal of Chemical Reactor Engineering, 2009, 7, .	0.6	16
143	Thermal behavior of an engineered fuel and its constituents for a large range of heating rates with emphasis on heat transfer limitations. Thermochimica Acta, 2015, 601, 54-62.	1.2	16
144	Kinetics of calcination of natural carbonate minerals. Minerals Engineering, 2020, 150, 106279.	1.8	16

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145	Circulating fluidized bed reactor design and operation. Sadhana - Academy Proceedings in Engineering Sciences, 1987, 10, 35-48.	0.8	15
146	Natural gas combustion in a turbulent fluidized bed of inert particles. Chemical Engineering Science, 1999, 54, 2029-2037.	1.9	15
147	Catalytic ash free coal gasification in a fluidized bed thermogravimetric analyzer. Powder Technology, 2017, 316, 551-559.	2.1	15
148	Development and confirmation of a simple procedure to measure solids distribution in fluidized beds using tracer particles. Chemical Engineering Science, 2020, 217, 115501.	1.9	15
149	Microwave-assisted catalytic pyrolysis of paraffin wax. Fuel, 2022, 320, 123886.	3.4	15
150	Catalytic Combustion: New Catalysts for New Technologies. Combustion Science and Technology, 1996, 121, 51-65.	1.2	14
151	Mean and Turbulent Particle Velocity in the Fully Developed Region of a Three-Phase Fluidized Bed. Chemical Engineering and Technology, 1999, 22, 683-689.	0.9	14
152	Generalized Model of Pentachlorophenol Distribution in Amended Soil-Water Systems. Water Environment Research, 2001, 73, 110-117.	1.3	14
153	Interparticle forces in high temperature fluidization of geldart a particles. Particuology: Science and Technology of Particles, 2004, 2, 113-118.	0.4	14
154	MeOH to DME in bubbling fluidized bed: Experimental and modelling. Canadian Journal of Chemical Engineering, 2011, 89, 274-283.	0.9	14
155	From complex feedstocks to new processes: The role of the newly developed micro-reactors. Chemical Engineering and Processing: Process Intensification, 2018, 131, 92-105.	1.8	14
156	Impact of granular segregation on heat transfer in horizontal drums. Chemical Engineering Journal, 2021, 409, 128039.	6.6	14
157	Kinetics of the selective hydrogenation of cyclopentadiene on a CuAl2O3 aerogel catalyst in an integral plug flow reactor. Applied Catalysis, 1986, 21, 187-199.	1.1	13
158	Analysis and modeling of particleâ€“wall contact time in gas fluidized beds. Chemical Engineering Science, 2007, 62, 4573-4578.	1.9	13
159	Wall surface effects on particleâ€“wall friction factor in upward gasâ€“solid flows. Powder Technology, 2008, 186, 80-88.	2.1	13
160	Characterization of the upward motion of an object immersed in a bubbling fluidized bed of fine particles. Chemical Engineering Journal, 2015, 280, 26-35.	6.6	13
161	Solids flux measurements via alternate techniques in a gas-fluidized bed. Chemical Engineering Journal, 2016, 306, 306-321.	6.6	13
162	Effect of interparticle force on gas dynamics in a bubbling gasâ€“solid fluidized bed: A CFD-DEM study. Chemical Engineering Research and Design, 2019, 152, 348-362.	2.7	13

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163	Numerical and experimental comparison of tracer particle and averaging techniques for particle velocities in a fluidized bed. Chemical Engineering Science, 2019, 195, 356-366.	1.9	13
164	Impact of surface roughness on heat transfer through spherical particle packed beds. Chemical Engineering Science, 2021, 231, 116256.	1.9	13
165	Superior performance of quaternary NC/GO/Al/KClO4 nanothermite for high speed impulse small-scale propulsion applications. Combustion and Flame, 2021, 232, 111527.	2.8	13
166	Using particle trajectory for determining the fluidization regime in gasâ€“solid fluidized beds. Advanced Powder Technology, 2012, 23, 349-351.	2.0	12
167	Experimental investigation of solid mixing and segregation in a tetrapodal blender. Chemical Engineering Science, 2013, 97, 354-365.	1.9	12
168	Gas jet penetration lengths from upward and downward nozzles in dense gasâ€“solid fluidized beds. Powder Technology, 2013, 235, 42-54.	2.1	12
169	Gas residence time distribution in a conical spouted bed. Powder Technology, 2016, 290, 62-71.	2.1	12
170	Coal pyrolysis and gasification in a fluidized bed thermogravimetric analyzer. Canadian Journal of Chemical Engineering, 2018, 96, 2144-2154.	0.9	12
171	Mass transfer in the homogeneous flow regime of a bubble column. Chemical Engineering and Processing: Process Intensification, 2019, 144, 107647.	1.8	12
172	Continuous aerosol photopolymerization to coat de-agglomerated nanoparticles. Chemical Engineering Journal, 2020, 390, 124526.	6.6	12
173	Scale Effects on Fluidized Bed Hydrodynamics. International Journal of Chemical Reactor Engineering, 2005, 3, .	0.6	11
174	Polymerization Compounding on the Surface of Zirconia Nanoparticles. Macromolecular Symposia, 2006, 243, 268-276.	0.4	11
175	An experimental study of non-premixed combustion in a turbulent fluidized-bed reactor. Fuel Processing Technology, 2007, 88, 847-858.	3.7	11
176	Encapsulation of nanoparticles by polymerization compounding in a gas/solid fluidized bed reactor. AICHE Journal, 2009, 55, 2271-2278.	1.8	11
177	Novel approach in k-NAA for highly concentrated REE Samples. Talanta, 2018, 180, 403-409.	2.9	11
178	Simulations of vibrated fine powders. Powder Technology, 1998, 100, 211-222.	2.1	10
179	Selective and complete catalytic oxidation of natural gas in Turbulent Fluidized Beds. Korean Journal of Chemical Engineering, 1999, 16, 494-500.	1.2	10
180	An investigation of heat transfer from a vertical tube in a spouted bed. Canadian Journal of Chemical Engineering, 1999, 77, 45-53.	0.9	10

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181	Exit effect on hydrodynamics of the internal circulating fluidized bed riser. Powder Technology, 2008, 182, 406-414.	2.1	10
182	A Comprehensive Review of Just Suspended Speed in Liquid-Solid and Gas-Liquid-Solid Stirred Tank Reactors. International Journal of Chemical Reactor Engineering, 2012, 10, .	0.6	10
183	Nanoparticle encapsulation by a polymer via in situ polymerization in supercritical conditions. Polymer Engineering and Science, 2012, 52, 637-642.	1.5	10
184	Experimental investigation of the effect of particle cohesion on the flow dynamics in a spheronizer. AICHE Journal, 2013, 59, 1491-1501.	1.8	10
185	Application of Temperature and Pressure Signals for Early Detection of Defluidization Conditions. Procedia Engineering, 2015, 102, 1006-1015.	1.2	10
186	The separation of the main combustible components of municipal solid waste through a dry step-wise process. Powder Technology, 2015, 278, 118-129.	2.1	10
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