Discrete particle simulation of particulate systems: The

Citation Report

#	Article	IF	Citations
2	A direct simulation method for particle–fluid systems. Engineering Computations, 2004, 21, 151-168.	0.7	156
3	Discrete Particle Simulation of Particle Flow in the IsaMill Process. Industrial & Engineering Chemistry Research, 2006, 45, 6349-6359.	1.8	44
4	DEM-CFD Simulations of Fluidized Beds with Application in Mixing Dynamics. KONA Powder and Particle Journal, 2007, 25, 205-216.	0.9	11
5	A new point-locating algorithm under three-dimensional hybrid meshes. International Journal of Multiphase Flow, 2008, 34, 1023-1030.	1.6	33
6	Suppressing the segregation of granular mixtures in rotating tumblers. AICHE Journal, 2008, 54, 3124-3132.	1.8	21
7	DEM simulation of the mixing equilibrium in fluidized beds of two solids differing in density. Powder Technology, 2008, 184, 214-223.	2.1	68
8	Discrete particle simulation of gas–solid flow in a blast furnace. Computers and Chemical Engineering, 2008, 32, 1760-1772.	2.0	85
9	Finite element modeling of the transient heat conduction between colliding particles. Chemical Engineering Journal, 2008, 139, 510-516.	6.6	48
10	Discrete particle simulation of particulate systems: A review of major applications and findings. Chemical Engineering Science, 2008, 63, 5728-5770.	1.9	1,172
11	Simulation of liquid–solid flow in a coal distributor. Minerals Engineering, 2008, 21, 789-796.	1.8	18
12	Computational Investigation of Horizontal Slug Flow in Pneumatic Conveying. Industrial & Engineering Chemistry Research, 2008, 47, 470-480.	1.8	109
13	Numerical Simulation of the Gas–Solid Flow in Three-Dimensional Pneumatic Conveying Bends. Industrial & Engineering Chemistry Research, 2008, 47, 7058-7071.	1.8	71
14	Effects of friction and disorder on the quasistatic response of granular solids to a localized force. Physical Review E, 2008, 77, 041303.	0.8	29
15	Three-dimensional simulations of a vertically vibrated granular bed including interstitial air. Physical Review E, 2009, 79, 051301.	0.8	8
16	Computer Simulation of Particle Segregation Process Using 3D Discrete Element Method. , 2009, , .		0
17	Simulation of the Flow and Segregation of Particle Mixtures in Liquid Fluidization. , 2009, , .		15
18	DEM simulation of cake formation in sedimentation and filtration. Minerals Engineering, 2009, 22, 921-930.	1.8	53
19	DEM simulation of particle flow on a multi-deck banana screen. Minerals Engineering, 2009, 22, 910-920.	1.8	130

#	Article	IF	Citations
20	CFDâ€"DEM study of the effect of particle density distribution on the multiphase flow and performance of dense medium cyclone. Minerals Engineering, 2009, 22, 893-909.	1.8	103
21	Effect of slurry properties on particle motion in IsaMills. Minerals Engineering, 2009, 22, 886-892.	1.8	35
22	Particle scale study of heat transfer in packed and bubbling fluidized beds. AICHE Journal, 2009, 55, 868-884.	1.8	261
23	Process Modeling in the Pharmaceutical Industry using the Discrete Element Method. Journal of Pharmaceutical Sciences, 2009, 98, 442-470.	1.6	180
24	Stress fields of solid flow in a model blast furnace. Granular Matter, 2009, 11, 269-280.	1.1	15
25	Effects of blade rake angle and gap on particle mixing in a cylindrical mixer. Powder Technology, 2009, 193, 303-311.	2.1	73
26	Discrete particle simulations for flow of binary particle mixture in a bubbling fluidized bed with a transport energy weighted averaging scheme. Chemical Engineering Science, 2009, 64, 1707-1718.	1.9	15
27	Numerical analysis of the heterogeneous gasâ€"solid flow in fluidized beds. Journal of the Taiwan Institute of Chemical Engineers, 2009, 40, 645-653.	2.7	3
28	CFD-DEM modelling of multiphase flow in dense medium cyclones. Powder Technology, 2009, 193, 235-247.	2.1	225
29	Size segregation of spherical nickel pellets in the surface flow of a packed bed: Experiments and Discrete Element Method simulations. Powder Technology, 2009, 196, 298-308.	2.1	14
30	Three-dimensional discrete element models for the granular statics and dynamics of powders in cavity filling. Journal of the Mechanics and Physics of Solids, 2009, 57, 10-31.	2.3	145
31	Methodology of developing optimal nanotechnologies. Theoretical Foundations of Chemical Engineering, 2009, 43, 606-616.	0.2	1
32	Computational Study of Flow Regimes in Vertical Pneumatic Conveying. Industrial & Engineering Chemistry Research, 2009, 48, 6846-6858.	1.8	72
33	A Review of Eulerian Simulation of Geldart A Particles in Gas-Fluidized Beds. Industrial & Engineering Chemistry Research, 2009, 48, 5567-5577.	1.8	112
34	Numerical study of the force network ensemble. Molecular Simulation, 2009, 35, 1168-1184.	0.9	6
35	Discrete Element Methods for Large Scale Particle/Fluid Simulations. , 2009, , .		1
36	Coupled Discrete Element (DEM)â€"Continuous Fluid (CFD) Method for the Application of Pneumatic Conveyed Granular Media. , 2009, , .		1
37	Modelling the Multiphase Flow in Dense Medium Cyclones. Journal of Computational Multiphase Flows, 2010, 2, 249-272.	0.8	8

#	Article	IF	Citations
38	Dynamics of sheared inelastic dumbbells. Journal of Fluid Mechanics, 2010, 660, 475-498.	1.4	14
39	Discrete Element Method-Computational Fluid Dynamic Simulation of the Materials Flow in an Iron-making Blast Furnace. ISIJ International, 2010, 50, 954-961.	0.6	49
40	Numerical Investigation of the Transient Multiphase Flow in an Ironmaking Blast Furnace. ISIJ International, 2010, 50, 515-523.	0.6	56
41	The problem of optimal technologies for functional materials. Theoretical Foundations of Chemical Engineering, 2010, 44, 829-837.	0.2	3
42	Mixing of particles and powders: Where next?. Particuology, 2010, 8, 563-567.	2.0	41
43	Numerical simulation of the in-line pressure jig unit in coal preparation. Minerals Engineering, 2010, 23, 301-312.	1.8	22
44	Numerical simulation of hydrodynamics in downers using a CFD–DEM coupled approach. Powder Technology, 2010, 199, 2-12.	2.1	69
45	A new computational method for studying heat transfer in fluid bed reactors. Powder Technology, 2010, 197, 102-110.	2.1	120
46	Modelling of multiple intra-time step collisions in the hard-sphere discrete element method. Powder Technology, 2010, 199, 120-130.	2.1	10
47	Mixing characteristics of wet granular matter in a bladed mixer. Powder Technology, 2010, 200, 171-189.	2.1	115
48	Effects of disc rotation speed and media loading on particle flow and grinding performance in a horizontal stirred mill. International Journal of Mineral Processing, 2010, 96, 27-35.	2.6	49
49	A study on adjusted contact force laws for accelerated large scale discrete element simulations. Particuology, 2010, 8, 161-175.	2.0	36
50	Modeling and simulation of chemically reacting flows in gas–solid catalytic and non-catalytic processes. Particuology, 2010, 8, 525-530.	2.0	9
51	Statistical analysis of packed beds, the origin of short-range disorder, and its impact on eddy dispersion. Journal of Chromatography A, 2010, 1217, 4713-4722.	1.8	114
52	Numerical study of the effects of particle size and polydispersity on the agglomerate dispersion in a cyclonic flow. Chemical Engineering Journal, 2010, 164, 432-441.	6.6	77
53	Development of a single-use microbioreactor for cultivation of microorganisms. Chemical Engineering Journal, 2010, 160, 891-898.	6.6	42
54	Numerical simulation on dense phase pneumatic conveying of pulverized coal in horizontal pipe at high pressure. Chemical Engineering Science, 2010, 65, 2500-2512.	1.9	49
55	Flow of gas and particles in a bubbling fluidized bed with a filtered two-fluid model. Chemical Engineering Science, 2010, 65, 2664-2679.	1.9	18

#	ARTICLE	IF	CITATIONS
56	CFD study of the minimum bubbling velocity of Geldart A particles in gas-fluidized beds. Chemical Engineering Science, 2010, 65, 3772-3785.	1.9	99
57	Experiments and simulations of cohesionless particles with varying roughness in a bladed mixer. Chemical Engineering Science, 2010, 65, 4557-4571.	1.9	76
58	Development and testing of an interconnected multiphase CFD-model for chemical looping combustion. Chemical Engineering Science, 2010, 65, 4732-4745.	1.9	74
59	Discrete particle simulation of particle–fluid flow: model formulations and their applicability. Journal of Fluid Mechanics, 2010, 661, 482-510.	1.4	605
60	Effect of Blade Speed on Granular Flow and Mixing in a Cylindrical Mixer. Industrial & Engineering Chemistry Research, 2010, 49, 5467-5478.	1.8	49
61	The role of geometric constraints in random packing of non-spherical particles. Europhysics Letters, 2010, 92, 68005.	0.7	16
62	Investigation of Heat Transfer in Bubbling Fluidization with an Immersed Tube. , 2010, , .		2
63	Evaluation of Interaction Forces between Nanoparticles by Molecular Dynamics Simulation. Industrial & Engineering Chemistry Research, 2010, 49, 12793-12797.	1.8	28
64	Verification of Continuum Models for Solids Momentum Transfer by Means of Discrete Element Method. Industrial & Engineering Chemistry Research, 2010, 49, 5270-5278.	1.8	11
65	Effect of Bed Thickness on the Segregation Behavior of Particle Mixtures in a Gas Fluidized Bed. Industrial & Engineering Chemistry Research, 2010, 49, 3459-3468.	1.8	51
66	Microstructure evolution in density relaxation by tapping. Physical Review E, 2010, 81, 061301.	0.8	25
67	Development of a simple model device for in vitro gastric digestion investigation. Food and Function, 2011, 2, 174.	2.1	61
68	Novel approaches to multiscale modelling in materials science. International Materials Reviews, 2011, 56, 207-225.	9.4	107
69	Direct Numerical Simulation of Incipient Sediment Motion and Hydraulic Conveying. Industrial & Engineering Chemistry Research, 2011, 50, 630-638.	1.8	17
70	Dynamic Simulation of the Packing of Ellipsoidal Particles. Industrial & Engineering Chemistry Research, 2011, 50, 9787-9798.	1.8	178
72	Coordination Number of the Packing of Ternary Mixtures of Spheres: DEM Simulations versus Measurements. Industrial & Engineering Chemistry Research, 2011, 50, 8773-8785.	1.8	63
73	Discrete element simulations of granular pile formation. Engineering Computations, 2011, 28, 314-339.	0.7	33
74	Computational Fluid Dynamics (CFD)–Discrete Element Method (DEM) Simulation of Gas–Solid Turbulent Flow in a Cylindrical Spouted Bed with a Conical Base. Energy & Fuels, 2011, 25, 4095-4105.	2.5	53

#	Article	IF	Citations
75	A Three-Dimensional Model Frame for Modelling Combustion and Gasification in Circulating Fluidized Bed Furnaces. International Journal of Chemical Reactor Engineering, 2011, 9, .	0.6	23
76	Modelling pellet flow in single extrusion with DEM. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2011, 225, 255-268.	1.4	8
77	Radial transport processes as a precursor to particle deposition in drinking water distribution systems. Water Research, 2011, 45, 1807-1817.	5.3	31
78	Linking discrete particle simulation to continuum process modelling for granular matter: Theory and application. Particuology, 2011, 9, 342-357.	2.0	29
79	DEM simulation of influence of parameters on energy and degree of mixing. Particuology, 2011, 9, 406-413.	2.0	3
80	A new method for analyzing the local structures of disordered systems. Europhysics Letters, 2011, 96, 36001.	0.7	102
81	Algorithms in a Robust Hybrid CFD-DEM Solver for Particle-Laden Flows. Communications in Computational Physics, 2011, 9, 297-323.	0.7	81
82	Acoustic emissions simulation of tumbling mills using charge dynamics. Minerals Engineering, 2011, 24, 1440-1447.	1.8	14
83	Prediction of the disc wear in a model IsaMill and its effect on the flow of grinding media. Minerals Engineering, 2011, 24, 1586-1594.	1.8	16
84	Simulation of the screening process on a circularly vibrating screen using 3D-DEM. Mining Science and Technology, 2011, 21, 677-680.	0.3	45
85	An integrated Quality by Design (QbD) approach towards design space definition of a blending unit operation by Discrete Element Method (DEM) simulation. European Journal of Pharmaceutical Sciences, 2011, 42, 106-115.	1.9	88
86	Enforcing mass conservation in DPM-CFD models of dense particulate flows. Chemical Engineering Journal, 2011, 174, 475-481.	6.6	28
87	Validation and experimental calibration of 3D discrete element models for the simulation of the discharge flow in silos. Chemical Engineering Science, 2011, 66, 5116-5126.	1.9	161
88	Discrete element simulation of particle flow in arbitrarily complex geometries. Chemical Engineering Science, 2011, 66, 6069-6088.	1.9	61
89	Discrete particle simulation of gas fluidization of ellipsoidal particles. Chemical Engineering Science, 2011, 66, 6128-6145.	1.9	198
90	Investigation of rice grain flow by multi-sphere particle model with rolling resistance. Granular Matter, 2011, 13, 143-148.	1.1	91
91	Percolationâ€"tunneling modeling for the study of the electric conductivity in LiFePO4 based Li-ion battery cathodes. Journal of Power Sources, 2011, 196, 405-411.	4.0	45
92	An extended DEMâ€"CFD model for char combustion in a bubbling fluidized bed combustor of inert sand. Chemical Engineering Science, 2011, 66, 207-219.	1.9	63

#	Article	IF	Citations
93	Finite element analysis of the rolling friction of a viscous particle on a rigid plane. Powder Technology, 2011, 207, 401-406.	2.1	47
94	Numerical simulation of the liquid-induced erosion in a weakly bonded sand assembly. Powder Technology, 2011, 211, 237-249.	2.1	32
95	Micromechanic modeling and analysis of the flow regimes in horizontal pneumatic conveying. AICHE Journal, 2011, 57, 2708-2725.	1.8	68
98	Discrete element method–based models for the consolidation of particle packings in paper–coating applications. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 44-54.	0.8	0
99	Modeling of Gas–Particle Turbulent Flow in Spout–Fluid Bed by Computational Fluid Dynamics with Discrete Element Method. Chemical Engineering and Technology, 2011, 34, 2059-2068.	0.9	25
100	CFD–DEM simulation of the gas–solid flow in a cyclone separator. Chemical Engineering Science, 2011, 66, 834-847.	1.9	244
101	Polydisperse granular flows in a bladed mixer: Experiments and simulations of cohesionless spheres. Chemical Engineering Science, 2011, 66, 1811-1824.	1.9	93
102	Simulation of the layer inversion phenomenon in binary liquid--fluidized beds by DEM–CFD with a drag law for polydisperse systems. Chemical Engineering Science, 2011, 66, 2945-2958.	1.9	66
103	The role of scale resolution versus inter-particle cohesive forces in two-fluid modeling of bubbling fluidization of Geldart A particles. Chemical Engineering Science, 2011, 66, 4229-4240.	1.9	34
104	Mesoscale simulations of particulate flows with parallel distributed Lagrange multiplier technique. Computers and Fluids, 2011, 48, 16-29.	1.3	14
105	Mechanistic analysis and computer simulation of the aerodynamic dispersion of loose aggregates. Chemical Engineering Research and Design, 2011, 89, 519-525.	2.7	33
106	Numerical simulations of granular dynamics: I. Hard-sphere discrete element method and tests. Icarus, 2011, 212, 427-437.	1.1	61
107	Modeling the motion and orientation of various pharmaceutical tablet shapes in a film coating pan using DEM. International Journal of Pharmaceutics, 2011, 409, 137-149.	2.6	89
108	Analysis and DEM simulation of granular material flow patterns in hopper models of different shapes. Advanced Powder Technology, 2011, 22, 226-235.	2.0	87
109	Gas–solid flow in an ironmaking blast furnace-II: Discrete particle simulation. Powder Technology, 2011, 208, 72-85.	2.1	78
110	Effect of blade angle and particle size on powder mixing performance in a rectangular box. Powder Technology, 2011, 211, 100-113.	2.1	53
111	Investigation into calibration of discrete element model parameters for scale-up and validation of particle–structure interactions under impact conditions. Powder Technology, 2011, 212, 198-209.	2.1	89
112	Simulation of particle mixing in turbulent channel flow due to intrinsic fluid velocity fluctuation. Physical Review E, 2011, 83, 066301.	0.8	3

#	ARTICLE	IF	CITATIONS
113	Particle-Based Discrete Element Modeling: Geomechanics Perspective. International Journal of Geomechanics, 2011, 11, 449-464.	1.3	166
114	Study on Impact of Vibration Direction on Linear Vibration Screening Effect. Applied Mechanics and Materials, 0, 226-228, 186-190.	0.2	0
115	DEM for Modeling Cracks Propagation in Rocks under Uniaxial Compression Tests. Advanced Materials Research, 2012, 433-440, 4788-4793.	0.3	0
116	A DEM-FEM Coupling Approach for the Direct Numerical Simulation of 3D Particulate Flows. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	54
117	Force Propagation of Flow of Granular Materials through an Orifice in Start up Stage. Applied Mechanics and Materials, 2012, 249-250, 807-811.	0.2	0
118	An investigation of nonlinear tangential contact behaviour of a spherical particle under varying loading. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2012, 60, 265-278.	0.8	5
119	Clustering of inelastic soft spheres in homogeneous turbulence. Physical Review E, 2012, 86, 036321.	0.8	1
120	Particle and particle pair dispersion in turbulence modeled with spatially and temporally correlated stochastic processes. Physical Review E, 2012, 86, 046308.	0.8	2
121	Dynamics of the wet granular Leidenfrost phenomenon. Physical Review E, 2012, 86, 021301.	0.8	5
122	Path-dependent analysis of elastic sphere contact subjected to tangential loading with varying directions. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2012, 226, 678-686.	1.0	1
123	Evaluation of Sand Screen Performance using a Discrete Element Model. , 2012, , .		7
124	Flow properties of particles in a model annular shear cell. Physics of Fluids, 2012, 24, .	1.6	18
125	Experimental and numerical investigation of the bulk behavior of wood pellets on a model type grate. Granular Matter, 2012, 14, 681-693.	1.1	24
126	Micromechanical modeling and analysis of different flow regimes in gas fluidization. Chemical Engineering Science, 2012, 84, 449-468.	1.9	106
127	Mathematical Simulation of Burden Distribution in COREX Melter Gasifier by Discrete Element Method. Journal of Iron and Steel Research International, 2012, 19, 36-42.	1.4	30
128	Simulation von Kraftwerken und Feuerungen. , 2012, , .		13
129	Models, algorithms and validation for opensource DEM and CFD-DEM. Progress in Computational Fluid Dynamics, 2012, 12, 140.	0.1	1,226
130	Discrete Particle Simulation of Particle Flow in a Stirred Mill: Effect of Mill Properties and Geometry. Industrial & Engineering Chemistry Research, 2012, 51, 1050-1061.	1.8	26

#	ARTICLE	IF	CITATIONS
131	A 3D Mesoscale Model of the Collector-Electrode Interface in Li-Ion Batteries. Journal of the Electrochemical Society, 2012, 159, A798-A808.	1.3	21
132	A 2D DEMâ€"LBM study on soil behaviour due to locally injected fluid. Particuology, 2012, 10, 242-252.	2.0	45
133	Transition dynamics and magic-number-like behavior of frictional granular clusters. Physical Review E, 2012, 86, 011306.	0.8	37
134	Effect of the size of media on grinding performance in stirred mills. Minerals Engineering, 2012, 33, 66-71.	1.8	51
135	Particle scale modelling of the multiphase flow in a dense medium cyclone: Effect of fluctuation of solids flowrate. Minerals Engineering, 2012, 33, 34-45.	1.8	39
136	A DEM study of the mixing of particles induced by a flat blade. Chemical Engineering Science, 2012, 79, 54-74.	1.9	56
137	Critical assessment of two approaches for evaluating contacts between super-quadric shaped particles in DEM simulations. Chemical Engineering Science, 2012, 78, 226-235.	1.9	102
138	Multi-dimensional population balance modeling and experimental validation of continuous powder mixing processes. Chemical Engineering Science, 2012, 80, 349-360.	1.9	48
139	A comprehensive frictional-kinetic model for gasâ€"particle flows: Analysis of fluidized and moving bed regimes. Chemical Engineering Science, 2012, 80, 279-292.	1.9	111
140	Gasâ€"Solid Flow and Energy Dissipation in Inclined Pneumatic Conveying. Industrial & Engineering Chemistry Research, 2012, 51, 14289-14302.	1.8	53
141	CFD-DEM simulation of spouting of corn-shaped particles. Particuology, 2012, 10, 562-572.	2.0	100
142	Influence of rolling friction on single spout fluidized bed simulation. Particuology, 2012, 10, 582-591.	2.0	399
143	Mixing of powders and granular materials by mechanical meansâ€"A perspective. Particuology, 2012, 10, 397-427.	2.0	165
144	Effect of rolling friction on wall pressure, discharge velocity and outflow of granular material from a flat-bottomed bin. Particuology, 2012, 10, 672-682.	2.0	37
145	Numerical and experimental study of granular mixes for asphalts. Powder Technology, 2012, 232, 31-40.	2.1	56
146	Towards unified drag laws for inertial flow through fibrous materials. Chemical Engineering Journal, 2012, 207-208, 35-48.	6.6	38
147	Computational Study of the Effects of Material Properties on Heat Transfer in Gas Fluidization. Industrial & Engineering Chemistry Research, 2012, 51, 11572-11586.	1.8	53
148	COMPARISON STUDY OF SPHERICAL AND MULTI-SPHERICAL PARTICLES UNDER CYCLIC UNIAXIAL COMPRESSION. Journal of Civil Engineering and Management, 2012, 18, 537-545.	1.9	13

#	Article	IF	Citations
149	Statistical inference for disordered sphere packings. Statistics Surveys, 2012, 6, .	7.3	8
150	Effect of Particle Size of Foam Mat Dried Tomato Juice Powder on Various Physical and Sensory Attributes. , 2012, , .		0
151	A particleâ€scale index in the quantification of mixing of particles. AICHE Journal, 2012, 58, 1099-1118.	1.8	90
152	Computational study of heat transfer in a bubbling fluidized bed with a horizontal tube. AICHE Journal, 2012, 58, 1422-1434.	1.8	113
153	Wet granular flows in a bladed mixer: Experiments and simulations of monodisperse spheres. AICHE Journal, 2012, 58, 3354-3369.	1.8	52
154	DEMâ€simulation of the magnetic field enhanced cake filtration. AICHE Journal, 2012, 58, 3633-3644.	1.8	5
155	Control of particle cohesion with a polymer coating and temperature adjustment. AICHE Journal, 2012, 58, 3685-3696.	1.8	17
156	Microdynamic analysis of solid flow in a shear cell. Granular Matter, 2012, 14, 411-421.	1.1	10
157	Effect of grain roughness on strength, volume changes, elastic and dissipated energies during quasi-static homogeneous triaxial compression using DEM. Granular Matter, 2012, 14, 457-468.	1.1	66
158	Exploring dendrite coherency with the discrete element method. Acta Materialia, 2012, 60, 1334-1345.	3.8	43
159	The use of computational approaches in inhaler development. Advanced Drug Delivery Reviews, 2012, 64, 312-322.	6.6	69
160	Computational study of the multiphase flow in a dense medium cyclone: Effect of particle density. Chemical Engineering Science, 2012, 73, 123-139.	1.9	53
161	Contact drying: A review of experimental and mechanistic modeling approaches. International Journal of Pharmaceutics, 2012, 434, 334-348.	2.6	38
162	Microstructural characterization of fresh cement paste via random packing of ellipsoidal cement particles. Materials Characterization, 2012, 66, 16-23.	1.9	37
163	Numerical simulation of the particle flow and sieving behaviour on sieve bend/low head screen combination. Minerals Engineering, 2012, 31, 2-9.	1.8	58
164	Particle scale modelling of the multiphase flow in a dense medium cyclone: Effect of vortex finder outlet pressure. Minerals Engineering, 2012, 31, 46-58.	1.8	30
165	Numerical study of liquidâ€"gasâ€"solid flow in classifying hydrocyclones: Effect of feed solids concentration. Minerals Engineering, 2012, 31, 17-31.	1.8	112
166	DEM investigation of energy distribution and particle breakage in tumbling ball mills. Powder Technology, 2012, 223, 83-91.	2.1	91

#	ARTICLE	IF	CITATIONS
167	CFD modeling of gas–solid flow in an internally circulating fluidized bed. Powder Technology, 2012, 219, 78-85.	2.1	49
168	Boundary structure in dense random packing of monosize spherical particles. Powder Technology, 2012, 219, 118-127.	2.1	20
169	Investigation of mixing behaviors in a spouted bed with different density particles using discrete element method. Powder Technology, 2012, 222, 85-94.	2.1	46
170	Simulation of flow behavior of liquid and particles in a liquid–solid fluidized bed. Powder Technology, 2012, 224, 365-373.	2.1	54
171	Finite element analysis of the contact forces between a viscoelastic sphere and rigid plane. Powder Technology, 2012, 226, 130-142.	2.1	63
172	Flow and mixing of granular material over a single blade. Powder Technology, 2012, 226, 199-212.	2.1	26
173	CFD–DEM simulation of particle transport and deposition in pulmonary airway. Powder Technology, 2012, 228, 309-318.	2.1	82
174	Numerical Simulation of Flow and Particle Collision in a Rotating‐Drum Bioreactor. Chemical Engineering and Technology, 2012, 35, 287-293.	0.9	6
175	Lattice-Boltzmann simulation of fluid flow through packed beds of uniform spheres: Effect of porosity. Chemical Engineering Science, 2013, 99, 44-58.	1.9	198
176	Improvement, validation and application of CFD/DEM model to dense gas–solid flow in a fluidized bed. Particuology, 2013, 11, 514-526.	2.0	50
177	Application of periodic boundary conditions to CFD-DEM simulation of gas–solid flow in pneumatic conveying. Chemical Engineering Science, 2013, 93, 214-228.	1.9	78
178	Numerical simulation of 3D sloshing in a liquid–solid mixture using particle methods. International Journal for Numerical Methods in Engineering, 2013, 95, 771-790.	1.5	8
179	Granular materials composed of shape-anisotropic grains. Soft Matter, 2013, 9, 7401.	1.2	116
180	Mixing and segregation of solid mixtures in bubbling fluidized beds under conditions pertinent to the fuel reactor of a chemical looping system. Powder Technology, 2013, 235, 823-837.	2.1	65
181	Rheology of weakly wetted granular materials: a comparison of experimental and numerical data. Granular Matter, 2013, 15, 455-465.	1.1	37
182	Lattice Boltzmann based discrete simulation for gas–solid fluidization. Chemical Engineering Science, 2013, 101, 228-239.	1.9	44
183	Particle Dispersion and Circulation Patterns in a 3D Spouted Bed with or without Draft Tube. Industrial & Engineering Chemistry Research, 2013, 52, 9620-9631.	1.8	44
184	Coupled CFD–DEM simulation of fluid–particle interaction in geomechanics. Powder Technology, 2013, 239, 248-258.	2.1	316

#	Article	IF	Citations
185	Theoretical analysis on the applicability of traditional SPH method. Science Bulletin, 2013, 58, 2970-2978.	1.7	3
186	Packing of fine particles in an electrical field. Granular Matter, 2013, 15, 467-476.	1.1	24
187	Comparison of methods for computing the concentration field of a particulate flow. International Journal of Multiphase Flow, 2013, 56, 4-14.	1.6	23
188	Discrete element analysis of experiments on mixing and bulk transport of wood pellets on a forward acting grate in discontinuous operation. Chemical Engineering Science, 2013, 92, 105-117.	1.9	16
189	An experimental investigation of mixing of wood pellets on a forward acting grate in discontinuous operation. Powder Technology, 2013, 233, 261-277.	2.1	10
190	Three-dimensional discrete element modeling of micromechanical bending tests of ceramic–polymer composite materials. Powder Technology, 2013, 248, 77-83.	2.1	17
191	Regime transitions of granular flow in a shear cell: A micromechanical study. Physical Review E, 2013, 88, 032203.	0.8	14
192	The contribution of DEM to the science of comminution. Powder Technology, 2013, 248, 3-24.	2.1	261
193	Revisiting localized deformation in sand with complex systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120606.	1.0	33
194	Reduced-order discrete element method modeling. Chemical Engineering Science, 2013, 95, 12-26.	1.9	46
195	Computational Study of the Multiphase Flow and Performance of Hydrocyclones: Effects of Cyclone Size and Spigot Diameter. Industrial & Engineering Chemistry Research, 2013, 52, 16019-16031.	1.8	61
196	Euler–Euler modeling of a gas–solid bubbling fluidized bed with kinetic theory of rough particles. Chemical Engineering Science, 2013, 104, 767-779.	1.9	25
197	Computer Simulation of Porous Layers Based on the Method of Discrete Elements. Journal of Engineering Physics and Thermophysics, 2013, 86, 1315-1327.	0.2	4
198	Experimental investigation of the effect of particle cohesion on the flow dynamics in a spheronizer. AIChE Journal, 2013, 59, 1491-1501.	1.8	10
199	Determination of the normal spring stiffness coefficient in the linear spring–dashpot contact model of discrete element method. Powder Technology, 2013, 246, 707-722.	2.1	55
200	Numerical Triaxial Apparatus and Application. Applied Mechanics and Materials, 2013, 353-356, 3251-3255.	0.2	2
201	Extended CFD/DEM model for the simulation of circulating fluidized bed. Advanced Powder Technology, 2013, 24, 403-415.	2.0	83
202	Physical properties of pharmaceutical pellets. Chemical Engineering Science, 2013, 86, 50-60.	1.9	16

#	Article	IF	Citations
203	Study of hydrodynamic characteristics of particles in liquidâ€"solid fluidized bed with uniform transverse magnetic field. Powder Technology, 2013, 245, 314-323.	2.1	25
204	Numerical simulation of pore fluid characteristic effect on the volume change behavior of montmorillonite clays. Computers and Geotechnics, 2013, 48, 146-155.	2.3	28
205	Simulation of flow behavior of particles in liquidâ€"solid fluidized bed with uniform magnetic field. Powder Technology, 2013, 237, 314-325.	2.1	36
206	Contact forces between viscoelastic ellipsoidal particles. Powder Technology, 2013, 248, 25-33.	2.1	75
207	CFD-DEM investigation of the dispersion mechanisms in commercial dry powder inhalers. Powder Technology, 2013, 240, 19-24.	2.1	97
208	GPU-based discrete element simulation on a tote blender for performance improvement. Powder Technology, 2013, 239, 348-357.	2.1	27
209	Acceleration of coupled granular flow and fluid flow simulations in pebble bed energy systems. Nuclear Engineering and Design, 2013, 258, 275-283.	0.8	18
210	Discrete particle simulation of jet-induced cratering of a granular bed. Powder Technology, 2013, 239, 319-336.	2.1	42
211	Discrete element simulation of the hydrodynamics in a 3D spouted bed: Influence of tube configuration. Powder Technology, 2013, 243, 85-95.	2.1	46
212	The use of computational fluid dynamics in inhaler design. Expert Opinion on Drug Delivery, 2013, 10, 307-323.	2.4	60
213	Experimental and simulated instrumented ball in a tumbling millâ€"A comparison. Minerals Engineering, 2013, 43-44, 79-84.	1.8	5
214	On the Common Conceptual and Computational Frameworks for Multiscale Modeling. Industrial & Engineering Chemistry Research, 2013, 52, 11451-11462.	1.8	9
216	Simulation of magnetic suspensions for HGMS using CFD, FEM and DEM modeling. Computers and Chemical Engineering, 2013, 54, 111-121.	2.0	39
217	Evaluation of Mesostructure of Particulate Composites by Quantitative Stereology and Random Sequential Packing Model of Mono-/Polydisperse Convex Polyhedral Particles. Industrial & Engineering Chemistry Research, 2013, 52, 6678-6693.	1.8	32
218	Investigation of segregation of large particles in a pressurized fluidized bed with a high velocity gas: A discrete particle simulation. Powder Technology, 2013, 246, 398-412.	2.1	13
219	Calculation of Normal Contact Forces between Silica Nanospheres. Langmuir, 2013, 29, 7825-7837.	1.6	61
220	Effect of Device Design on the Aerosolization of a Carrier-Based Dry Powder Inhalerâ€"a Case Study on AerolizerÂ® ForadileÂ®. AAPS Journal, 2013, 15, 511-522.	2.2	62
221	Analysis of ball indentation on cohesive powder beds using distinct element modelling. Powder Technology, 2013, 233, 80-90.	2.1	33

#	Article	IF	Citations
222	Numerical simulation on the mixing behavior of corn-shaped particles in a spouted bed. Powder Technology, 2013, 234, 58-66.	2.1	61
223	Modeling of Particle Flow and Sieving Behavior on a Vibrating Screen: From Discrete Particle Simulation to Process Performance Prediction. Industrial & Engineering Chemistry Research, 2013, 52, 11333-11343.	1.8	78
224	Numerical Simulation of Self-Leveling Behavior in Debris Bed by a Hybrid Method. , 2013, , .		2
225	Influence of particle size on physical and sensory attributes of mango pulp powder. International Agrophysics, 2013, 27, 323-328.	0.7	27
226	Reversible simulations of elastic collisions. ACM Transactions on Modeling and Computer Simulation, 2013, 23, 1-25.	0.6	6
227	A Study of the Effect of Mineral Particle Shapes on Breakage Rate in Ball Mill Using DEM. Advanced Materials Research, 0, 658, 198-201.	0.3	0
228	Computational Analysis of Non-Spherical Particle Transport and Deposition in Shear Flow With Application to Lung Aerosol Dynamicsâ€"A Review. Journal of Biomechanical Engineering, 2013, 135, 021008.	0.6	70
229	Dynamic Behavior of Straining in Randomly Packed Beads: Experimental Study. Journal of Environmental Engineering, ASCE, 2013, 139, 692-702.	0.7	0
230	Numerical modeling of fluid-particle interaction in granular media. Theoretical and Applied Mechanics Letters, 2013, 3, 021007.	1.3	13
231	Comparison of Twoâ€Fluid and Discrete Particle Modeling of Dense Gasâ€Particle Flows in Gasâ€Fluidized Beds. Chemie-Ingenieur-Technik, 2013, 85, 290-298.	0.4	26
232	Numerical investigation of granular flow in a shear cell. , 2013, , .		0
233	Grain sedimentation with SPH-DEM and its validation. AIP Conference Proceedings, 2013, , .	0.3	3
234	Pebble Flow and Coolant Flow Analysis Based on a Fully Coupled Multiphysics Model. Nuclear Science and Engineering, 2013, 173, 150-162.	0.5	11
235	Formation of ordered structure and its effect on particle percolation in a vibrated bed. , 2013, , .		0
236	Particle scale modelling of the multiphase flow in a dense medium cyclone: Effect of near gravity material. , 2013, , .		2
237	Effect of cohesive force on the formation of a sandpile. AIP Conference Proceedings, 2013, , .	0.3	4
238	Discrete particle simulation of heat transfer in pressurized fluidized bed with immersed cylinders. , 2013, , .		0
239	Modeling of Particulate Processes for the Continuous Manufacture of Solid-Based Pharmaceutical Dosage Forms. Processes, 2013, 1, 67-127.	1.3	72

#	ARTICLE	IF	CITATIONS
240	Mathematical Development and Comparison of a Hybrid PBM-DEM Description of a Continuous Powder Mixing Process. Journal of Powder Technology, 2013, 2013, 1-11.	0.4	36
241	Uncertainty quantification and granular thermodynamics. , 2013, , .		0
242	Validation and Calibration Approach for Discrete Element Simulation of Burden Charging in Pre-reduction Shaft Furnace of COREX Process. ISIJ International, 2013, 53, 1365-1371.	0.6	55
243	Modeling the Gas-solid Flow in the Reduction Shaft of COREX. ISIJ International, 2014, 54, 1772-1780.	0.6	53
244	Comparison of different capillary bridge models for application in the discrete element method. Granular Matter, 2014, 16, 911-920.	1.1	44
245	Applications of Discrete Element Method in Modeling of Grain Postharvest Operations. Food Engineering Reviews, 2014, 6, 128-149.	3.1	91
246	Experimental and Theoretical Study of Minimum Fluidization Velocity and Void Fraction of a Limestone Based CO_2 Sorbent. Energy Procedia, 2014, 63, 1432-1445.	1.8	7
247	Angle of repose and stress distribution of sandpiles formed with ellipsoidal particles. Granular Matter, 2014, 16, 695-709.	1.1	66
248	An Integral Approach to Multi-physics Application for Packed Bed Reactors. Computer Aided Chemical Engineering, 2014, 33, 913-918.	0.3	0
249	Equivalent Inclusion Method for the Stokes Flow of Drops Moving in a Viscous Fluid. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	1.1	14
250	Validation of a 3D Hybrid CFD-DEM Method Based on a Self-Leveling Experiment. , 2014, , .		0
251	Why Have Continuum Theories Previously Failed to Describe Sandpile Formation?. Physical Review Letters, 2014, 113, 068001.	2.9	38
252	Continuous size-based separation of microparticles in a microchannel with symmetric sharp corner structures. Biomicrofluidics, 2014, 8, 024108.	1.2	19
253	Numerical study of rope formation and dispersion of non-spherical particles during pneumatic conveying in a pipe bend. Powder Technology, 2014, 268, 219-236.	2.1	62
254	Simulation of gasâ€"solid flow in rectangular spouted bed by coupling CFDâ€"DEM and LES. Canadian Journal of Chemical Engineering, 2014, 92, 1488-1494.	0.9	7
255	A Random Pairing Collision Model (RPCM) for Improving the DEM Simulation of Particle-Bed Collisions in Aeolian Sand Transport. Particulate Science and Technology, 2014, 32, 86-93.	1.1	1
256	Rapeseed Proteins for Paperboard Coating. Chemie-Ingenieur-Technik, 2014, 86, 1249-1259.	0.4	5
257	Discrete Element Modelling of uniaxial compression test of hardened concrete. Ã‰pÃtÅ‘anyag: Journal of Silicate Based and Composite Materials, 2014, 66, 113-119.	0.0	5

#	ARTICLE	IF	CITATIONS
258	Implementation of Boundary Conditions in Discrete Element Modeling of Rock Cutting under Pressure. Applied Mechanics and Materials, 2014, 598, 114-118.	0.2	3
259	Distinct element simulation of lugged wheel performance under extraterrestrial environmental effects. Acta Astronautica, 2014, 99, 37-51.	1.7	27
260	Flow characteristics and discharge rate of ellipsoidal particles in a flat bottom hopper. Powder Technology, 2014, 253, 70-79.	2.1	144
261	A design heuristic for optimizing segregation avoidance practices in horizontal drum mixers. Powder Technology, 2014, 253, 107-115.	2.1	11
262	Accelerating CFDâ€"DEM simulation of processes with wide particle size distributions. Particuology, 2014, 12, 113-121.	2.0	43
263	Investigating agglomeration phenomena in an air-polyethylene fluidized bed using DEMâ€"CFD approach. Chemical Engineering Research and Design, 2014, 92, 102-118.	2.7	23
264	CFDâ€"DEM modeling of gasâ€"solid flow and catalytic MTO reaction in a fluidized bed reactor. Computers and Chemical Engineering, 2014, 60, 1-16.	2.0	86
265	Segregation of granular particles by mass, radius, and density in a horizontal rotating drum. AICHE Journal, 2014, 60, 50-59.	1.8	77
266	A linear model of elasto-plastic and adhesive contact deformation. Granular Matter, 2014, 16, 151-162.	1.1	62
267	CFDâ€ĐEM simulation of the spoutâ€"annulus interaction in a 3D spouted bed with a conical base. Canadian Journal of Chemical Engineering, 2014, 92, 1130-1138.	0.9	11
268	Prediction of wear and its effect on the multiphase flow and separation performance of dense medium cyclone. Minerals Engineering, 2014, 56, 91-101.	1.8	53
269	A new drag model for TFM simulation of gasâ€"solid bubbling fluidized beds with Geldart-B particles. Particuology, 2014, 15, 151-159.	2.0	41
270	Numerical and experimental investigation of an â€œS-shapedâ€•circulating fluidized bed. Powder Technology, 2014, 254, 460-469.	2.1	10
271	Numerical simulation of turbulence and sediment transport of medium sand. Journal of Geophysical Research F: Earth Surface, 2014, 119, 1240-1262.	1.0	164
272	Formulation of a physically motivated specific breakage rate parameter for ball milling via the discrete element method. AICHE Journal, 2014, 60, 2404-2415.	1.8	39
273	Discrete simulation and micromechanical analysis of two-dimensional saturated granular media. Particuology, 2014, 15, 138-150.	2.0	20
274	Computational studies on interparticle forces between nanoellipsoids. RSC Advances, 2014, 4, 38505.	1.7	10
275	Particle-Scale Investigation of the Hydrodynamics and Tube Erosion Property in a Three-Dimensional (3-D) Bubbling Fluidized Bed with Immersed Tubes. Industrial & Engineering Chemistry Research, 2014, 53, 6896-6912.	1.8	20

#	Article	IF	Citations
276	Acoustic Analysis of Particleâ€"Wall Interaction and Detection of Particle Mass Flow Rate in Vertical Pneumatic Conveying. Industrial & Engineering Chemistry Research, 2014, 53, 9938-9948.	1.8	31
277	DEM simulation of single bubble flotation: Implications for the hydrophobic force in particleâ€"bubble interactions. Advanced Powder Technology, 2014, 25, 1177-1184.	2.0	18
278	CFDâ€"DEM simulation of the filtration performance for fibrous media based on the mimic structure. Computers and Chemical Engineering, 2014, 71, 478-488.	2.0	62
279	Flow and Mixing of Cohesive Particles in a Vertical Bladed Mixer. Industrial & Engineering Chemistry Research, 2014, 53, 4119-4130.	1.8	36
280	Investigation of fluid flow-induced particle migration in granular filters using a DEM-CFD method. Journal of Hydrodynamics, 2014, 26, 406-415.	1.3	23
281	Effect of particle size distribution on hydrodynamics and solids back-mixing in CFB risers using CPFD simulation. Powder Technology, 2014, 266, 135-143.	2.1	57
282	A LBMâ€"DEM solver for fast discrete particle simulation of particleâ€"fluid flows. Continuum Mechanics and Thermodynamics, 2014, 26, 907-917.	1.4	42
283	Periodic Boundary Conditions for Discrete Element Method Simulation of Particle Flow in Cylindrical Vessels. Industrial & Engineering Chemistry Research, 2014, 53, 8245-8256.	1.8	44
284	Modeling of Screening Processes with the Discrete Element Method Involving Nonâ€Spherical Particles. Chemical Engineering and Technology, 2014, 37, 847-856.	0.9	54
285	Parallel algorithms for CFDâ€"DEM modeling of dense particulate flows. Chemical Engineering Science, 2014, 118, 221-244.	1.9	50
286	Single-blade convective powder mixing: The effect of the blade shape and angle. Powder Technology, 2014, 267, 289-301.	2.1	16
287	A coupled CFD-DEM analysis of granular flow impacting on a water reservoir. Acta Mechanica, 2014, 225, 2449-2470.	1.1	133
288	Numerical investigation on the role of discrete element method in combined LBMâ€"IBMâ€"DEM modeling. Computers and Fluids, 2014, 94, 37-48.	1.3	76
289	DEM/CFD analysis of granular flow in static mixers. Powder Technology, 2014, 266, 240-248.	2.1	44
290	Particleâ€scale investigation of the solid dispersion and residence properties in a 3â€D spoutâ€fluid bed. AICHE Journal, 2014, 60, 2788-2804.	1.8	65
291	Sand production simulation coupling DEM with CFD. European Journal of Environmental and Civil Engineering, 2014, 18, 983-1008.	1.0	49
292	Use of mechanistic simulations as a quantitative risk-ranking tool within the quality by design framework. International Journal of Pharmaceutics, 2014, 475, 245-255.	2.6	13
293	Numerical investigation of mixing and orientation of non-spherical particles in a model type fluidized bed. Powder Technology, 2014, 258, 304-323.	2.1	90

#	Article	IF	Citations
294	Numerical study of horizontal pneumatic conveying: Effect of material properties. Powder Technology, 2014, 251, 15-24.	2.1	69
295	LESâ€"DEM investigation of the solid transportation mechanism in a 3-D bubbling fluidized bed. Part I: hydrodynamics. Powder Technology, 2014, 256, 385-394.	2.1	20
296	Measurement and simulation of micromechanical properties of nanostructured aggregates via nanoindentation and DEM-simulation. Powder Technology, 2014, 259, 1-13.	2.1	41
297	Investigation of borehole stability in poorly cemented granular formations by discrete element method. Journal of Petroleum Science and Engineering, 2014, 113, 23-35.	2.1	23
298	An improved version of RIGID for discrete element simulation of particle flows with arbitrarily complex geometries. Powder Technology, 2014, 253, 393-405.	2.1	16
299	Discrete element modelling of pebble packing in pebble bed reactors. Nuclear Engineering and Design, 2014, 273, 24-32.	0.8	35
300	DEM speedup: Stiffness effects on behavior of bulk material. Particuology, 2014, 12, 107-112.	2.0	152
301	Chute flow as a means of segregation characterization. Powder Technology, 2014, 256, 126-139.	2.1	24
302	Three-dimensional simulation of multilayer particle deposition in an obstructed channel flow. Powder Technology, 2014, 258, 134-143.	2.1	15
303	Numerical investigation into the influence of the punch shape on the mechanical behavior of pharmaceutical powders during compaction. Particuology, 2014, 16, 116-131.	2.0	33
304	A critical validation study on CPFD model in simulating gasâ€"solid bubbling fluidized beds. Powder Technology, 2014, 263, 121-134.	2.1	96
305	DEM study of the flow of cohesive particles in a screw feeder. Powder Technology, 2014, 256, 529-539.	2.1	129
306	Alignment of magnetic uniaxial particles in a magnetic field: Simulation. Journal of Magnetism and Magnetic Materials, 2014, 365, 64-69.	1.0	13
307	Using the DEM-CFD method to predict Brownian particle deposition in a constricted tube. Particuology, 2014, 15, 94-106.	2.0	30
308	Influence of tube configuration on the gasâ€"solid hydrodynamics of an internally circulating fluidized bed: A discrete element study. Chemical Engineering Journal, 2014, 239, 158-170.	6.6	18
309	Granular temperature with discrete element method simulation in a bubbling fluidized bed. Advanced Powder Technology, 2014, 25, 896-903.	2.0	14
310	Lattice-Boltzmann simulation of fluid flow through packed beds of spheres: Effect of particle size distribution. Chemical Engineering Science, 2014, 116, 508-523.	1.9	115
311	Role of particle stiffness and inter-particle sliding friction in milling of particles. Particuology, 2014, 16, 54-59.	2.0	15

#	Article	IF	Citations
312	Simulating macroscopic behavior of self-compacting mixtures with DEM. Cement and Concrete Composites, 2014, 54, 80-88.	4.6	22
313	Modeling effects of interphase transport coefficients on biomass pyrolysis in fluidized beds. Powder Technology, 2014, 262, 96-105.	2.1	74
315	Design of a Transfer Chute for Multiple Operating Conditions. , 2014, , .		3
316	Experimental Study on Restart Performance of Absorber Sphere Pneumatic Conveying. , 2014, , .		1
317	Numerical simulation of a self-leveling experiment using a hybrid method. Mechanical Engineering Journal, 2014, 1, TEP0024-TEP0024.	0.2	4
318	Chapter 3Excel® for Chemical Engineering. , 2014, , 37-104.		0
319	Simulation of dilute pneumatic conveying with different types of bends by CFD-DEM. IOP Conference Series: Earth and Environmental Science, 2014, 22, 052004.	0.2	0
320	Application of DEM modelling to grinding processes. , 2014, , .		0
322	Quantifying Dry Milling in Pharmaceutical Processing: A Review on Experimental and Modeling Approaches. Journal of Pharmaceutical Sciences, 2015, 104, 2401-2413.	1.6	36
323	Evaluation Of Transport Mechanism Of Contaminant Particles In Small Water Systems In Poland. Ecological Chemistry and Engineering S, 2015, 22, 411-423.	0.3	0
324	Investigation of the Motion of Materials in Cross Section of a Specific Rotary Cooler. Advanced Materials Research, 0, 1120-1121, 1345-1349.	0.3	1
325	A minimal coupled fluid-discrete element model for bedload transport. Physics of Fluids, 2015, 27, .	1.6	46
326	Particle Scale Study of Heat Transfer in Packed and Fluidized Beds. Advances in Chemical Engineering, 2015, 46, 193-243.	0.5	4
327	Mesoscale Flow Structures and Fluid–Particle Interactions. Advances in Chemical Engineering, 2015, , 281-354.	0.5	7
328	Towards Simulation of Clogging Effects in Wastewater Pumps: A Review of the State-of-the-Art in Cloth Modelling and Challenges in the Simulation of Clogging Effects. , 2015, , .		1
329	Load and wear experiments on the impact hammer of a vertical shaft impact crusher. IOP Conference Series: Materials Science and Engineering, 2015, 103, 012041.	0.3	2
330	Rebound characteristics for the impact of SiO_2 particle onto a flat surface at different temperatures. Powder Technology, 2015, 284, 418-428.	2.1	18
331	CFD–DEM Study of Heat Transfer in the Reduction Shaft of Corex. Steel Research International, 2015, 86, 626-635.	1.0	40

#	Article	IF	Citations
332	A new methodology to simulate subglacial deformation of water-saturated granular material. Cryosphere, 2015, 9, 2183-2200.	1.5	21
333	Mesoscale Modeling. Advances in Chemical Engineering, 2015, 47, 193-277.	0.5	26
334	Laboratory and 3-D distinct element analysis of the failure mechanism of a slope under external surcharge. Natural Hazards and Earth System Sciences, 2015, 15, 35-43.	1.5	11
335	DEM simulations of amorphous irregular shaped micrometer-sized titania agglomerates at compression. Advanced Powder Technology, 2015, 26, 767-777.	2.0	43
336	Coupled LBMâ€"DEM Micro-scale Simulations of Cohesive Particle Erosion Due to Shear Flows. Transport in Porous Media, 2015, 109, 43-60.	1.2	22
337	Critical Assessment of Visco-elastic Damping Models Used in DEM Simulations. Procedia Engineering, 2015, 102, 1415-1425.	1.2	7
338	Particle scale studies of heat transfer in a moving bed. Powder Technology, 2015, 281, 99-111.	2.1	53
339	Numerical simulation of raceway phenomena in a COREX melterâ€"gasifier. Powder Technology, 2015, 281, 159-166.	2.1	31
340	Computational fluid dynamics (CFD) investigation of the gasâ€"solid flow and performance of Andersen cascade impactor. Powder Technology, 2015, 285, 128-137.	2.1	8
341	Study on particle and photonic flux distributions in a magnetically stirred photocatalytic reactor. Journal of Photonics for Energy, 2015, 5, 052097.	0.8	3
342	Eulerâ€"Lagrange Modeling of the Hydrodynamics of Dense Multiphase Flows. Advances in Chemical Engineering, 2015, 46, 137-191.	0.5	4
343	Prediction of ash-induced agglomeration in biomass-fired fluidized beds by an advanced regression-based approach. Fuel, 2015, 161, 157-167.	3.4	19
344	GPU-accelerated DEM implementation with CUDA. International Journal of Computational Science and Engineering, 2015, 11, 330.	0.4	14
345	DEM Simulation of Solid Flow Including Asymmetric Phenomena in COREX Shaft Furnace. Journal of Iron and Steel Research International, 2015, 22, 1098-1106.	1.4	18
346	Numerical Investigation of the Mixing of Non-spherical Particles in Fluidized Beds and during Pneumatic Conveying. Procedia Engineering, 2015, 102, 976-985.	1.2	32
347	Erosion prediction of liquid-particle two-phase flow in pipeline elbows via CFDâ€"DEM coupling method. Powder Technology, 2015, 275, 182-187.	2.1	90
348	Coupled Computational Fluid Dynamicsâ€"Discrete Element Method Simulations of a Pilot-Scale Batch Crystallizer. Crystal Growth and Design, 2015, 15, 145-155.	1.4	13
349	DEMâ€"CFD modeling of particle systems with longâ€"range electrostatic interactions. AICHE Journal, 2015, 61, 1792-1803.	1.8	37

#	Article	IF	Citations
350	A novel method based on orientation discretization for discrete element modeling of non-spherical particles. Chemical Engineering Science, 2015, 126, 500-516.	1.9	116
351	A comparative analysis of particle tracking in a mixer by discrete element method and positron emission particle tracking. Powder Technology, 2015, 270, 569-574.	2.1	13
352	Multi-Scale Modelling of Powder Dispersion in a Carrier-Based Inhalation System. Pharmaceutical Research, 2015, 32, 2086-2096.	1.7	38
353	An efficient 4 way coupling CFD–DEM model for dense gas–solid particulate flows simulations. Computers and Fluids, 2015, 113, 65-76.	1.3	35
354	CFD–DEM study of mixing and dispersion behaviors of solid phase in a bubbling fluidized bed. Powder Technology, 2015, 274, 482-493.	2.1	54
355	A New Approach for Studying Softening and Melting Behavior of Particles in a Blast Furnace Cohesive Zone. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 977-992.	1.0	26
356	Interaction forces between carbon nanospheres: A molecular dynamics simulation study. Chemical Engineering Science, 2015, 121, 23-31.	1.9	19
357	Eulerian–Eulerian simulation of irregular particles in dense gas–solid fluidized beds. Powder Technology, 2015, 284, 299-311.	2.1	49
358	Simulation of Acoustic Particle Agglomeration in Poly-dispersed Aerosols. Procedia Engineering, 2015, 102, 1218-1225.	1.2	13
359	A Meso-scale Model for Fluid-microstructure Interactions. Procedia Engineering, 2015, 102, 1356-1365.	1.2	2
360	LES-DEM Investigation of Dense Flow in Circulating Fluidized Beds. Procedia Engineering, 2015, 102, 1446-1455.	1.2	6
361	Three-dimensional simulation of gas–solid–liquid flows using the DEM–VOF method. Chemical Engineering Science, 2015, 134, 531-548.	1.9	120
362	An empirical correlation of the longitudinal and transverse dispersion coefficients for flow through random particle packs. Chemical Engineering Science, 2015, 137, 541-547.	1.9	6
363	Numerical investigation of granular flow similarity in rotating drums. Particuology, 2015, 22, 119-127.	2.0	29
364	An accurate force–displacement law for the modelling of elastic–plastic contacts in discrete element simulations. Powder Technology, 2015, 282, 2-9.	2.1	35
365	Simultaneous measurement of 3D velocity and 2D rotation of irregular particle with digital holographic particle tracking velocimetry. Powder Technology, 2015, 284, 371-378.	2.1	19
366	Visualization of cracks by using the local Voronoi decompositions and distributed software. Advances in Engineering Software, 2015, 84, 85-94.	1.8	7
367	Discrete particle simulation of solid flow in a three-dimensional blast furnace sector model. Chemical Engineering Journal, 2015, 278, 339-352.	6.6	57

#	ARTICLE	IF	CITATIONS
368	Numerical particle-based analysis of the effects responsible for acoustic particle agglomeration. Advanced Powder Technology, 2015, 26, 698-704.	2.0	37
369	Lattice–Boltzmann simulation of fluid flow through packed beds of uniform ellipsoids. Powder Technology, 2015, 285, 146-156.	2.1	81
370	Numerical Simulations of Particle-laden jet/spout Flows Using Eulerian-Lagrangian Approach. Procedia Engineering, 2015, 102, 867-876.	1.2	5
371	Numerical analysis of contact electrification of non-spherical particles in a rotating drum. Powder Technology, 2015, 285, 110-122.	2.1	29
372	Reprint of "Erosion prediction of liquid-particle two-phase flow in pipeline elbows via CFD–DEM coupling method". Powder Technology, 2015, 282, 25-31.	2.1	39
373	The comparison of two domain repartitioning methods used for parallel discrete element computations of the hopper discharge. Advances in Engineering Software, 2015, 84, 68-76.	1.8	20
374	Effects of fluid–pebble interactions on mechanics in large-scale pebble-bed reactor cores. International Journal of Multiphase Flow, 2015, 73, 118-129.	1.6	9
375	DEM analysis of the effect of particle–wall impact on the dispersion performance in carrier-based dry powder inhalers. International Journal of Pharmaceutics, 2015, 487, 32-38.	2.6	21
376	CPFD simulation on wear mechanisms in disk–donut FCC strippers. Powder Technology, 2015, 279, 269-281.	2.1	16
377	Particle scale simulation of softening–melting behaviour of multiple layers of particles in a blast furnace cohesive zone. Powder Technology, 2015, 279, 134-145.	2.1	31
378	Simulation of Collapse of Granular Columns Using the Discrete Element Method. International Journal of Geomechanics, 2015, 15, .	1.3	58
379	Predicting abrasive wear with coupled Lagrangian methods. Computational Particle Mechanics, 2015, 2, 51-62.	1.5	8
380	Influence of cohesive zone shape on solid flow in COREX melter gasifier by discrete element method. Journal of Iron and Steel Research International, 2015, 22, 304-310.	1.4	19
381	Challenges and opportunities in modeling pharmaceutical manufacturing processes. Computers and Chemical Engineering, 2015, 81, 32-39.	2.0	55
382	On the use of the method of manufactured solutions for the verification of CFD codes for the volume-averaged Navier–Stokes equations. Computers and Fluids, 2015, 114, 121-129.	1.3	23
383	Comparison of CFD–DEM heat transfer simulations with infrared/visual measurements. Chemical Engineering Journal, 2015, 277, 388-401.	6.6	96
384	A conservative lattice Boltzmann model for the volume-averaged Navier–Stokes equations based on a novel collision operator. Journal of Computational Physics, 2015, 294, 258-273.	1.9	10
385	Direct numerical simulation of low-Reynolds-number flow past arrays of rotating spheres. Journal of Fluid Mechanics, 2015, 765, 396-423.	1.4	62

#	Article	IF	Citations
386	Finite element investigation of the flow and stress patterns in conical hopper during discharge. Chemical Engineering Science, 2015, 129, 49-57.	1.9	56
387	Benchmarking of process models for continuous screening based on discrete element simulations. Minerals Engineering, 2015, 83, 78-96.	1.8	33
388	Numerical and experimental investigation of the pressure drop in packings of spherical and non-spherical particles. AIP Conference Proceedings, 2015, , .	0.3	0
389	Adapting the discrete element method to simulation of acoustic agglomeration of aerosol particles. AIP Conference Proceedings, 2015, , .	0.3	4
390	Electrification of particulate entrained fluid flowsâ€"Mechanisms, applications, and numerical methodology. Physics Reports, 2015, 600, 1-53.	10.3	29
391	Modelling the granular flow in a rotating drum by the Eulerian finite element method. Powder Technology, 2015, 286, 361-370.	2.1	51
392	A particleâ€"grid method for Eulerâ€"Lagrange approach. Powder Technology, 2015, 286, 342-360.	2.1	36
393	Modified screw conveyor-mixers â€" Discrete element modeling approach. Advanced Powder Technology, 2015, 26, 1391-1399.	2.0	51
394	An offset-method for Eulerâ€"Lagrange approach. Chemical Engineering Science, 2015, 138, 173-193.	1.9	40
395	A review on numerical models for granular flow inside hoppers and its applications in PBR. Journal of Nuclear Science and Technology, 2015, 52, 759-768.	0.7	4
396	Review and benchmarking of process models for batch screening based on discrete element simulations. Advanced Powder Technology, 2015, 26, 679-697.	2.0	58
397	Discrete element models for non-spherical particle systems: From theoretical developments to applications. Chemical Engineering Science, 2015, 127, 425-465.	1.9	434
398	On the origin of non-linear breakage kinetics in dry milling. Powder Technology, 2015, 272, 189-203.	2.1	19
399	PIBM: Particulate immersed boundary method for fluidâ€"particle interaction problems. Powder Technology, 2015, 272, 1-13.	2.1	34
400	Numerical study of a lab-scale double slot-rectangular spouted bed with the parallel CFDâ€"DEM coupling approach. Powder Technology, 2015, 272, 85-99.	2.1	39
401	Pressure drop investigations in packings of arbitrary shaped particles. Powder Technology, 2015, 271, 109-124.	2.1	75
402	Pharmaceutical dry powder blending and scale-up: Maintaining equivalent mixing conditions using a coloured tracer powder. Powder Technology, 2015, 270, 461-469.	2.1	25
403	A micro-mechanical approach for the study of contact erosion. Acta Geotechnica, 2015, 10, 357-368.	2.9	37

#	Article	IF	Citations
404	Engineering molecular dynamics simulation in chemical engineering. Chemical Engineering Science, 2015, 121, 200-216.	1.9	18
405	Pressless process in route of obtaining sintered Nd–Fe–B magnets. Journal of Magnetism and Magnetic Materials, 2015, 383, 226-231.	1.0	4
406	Numerical study of particle segregation in a coal beneficiation fluidized bed by a TFM–DEM hybrid model: Influence of coal particle size and density. Chemical Engineering Journal, 2015, 260, 240-257.	6.6	51
407	Effect of collisions on the particle behavior in a turbulent square duct flow. Powder Technology, 2015, 269, 320-336.	2.1	27
408	A review on the simulation and modeling of magnetorheological fluids. Journal of Intelligent Material Systems and Structures, 2015, 26, 881-904.	1.4	137
409	Discrete Element Method Simulations for Complex Granular Flows. Annual Review of Fluid Mechanics, 2015, 47, 21-46.	10.8	224
410	Particle dispersion in a horizontally vibrating vessel under microgravity. Powder Technology, 2015, 269, 55-65.	2.1	6
411	Quantification of Numerical and Modeling Errors in Simulation of Fluid Flow Through a Fixed Particle Bed. , 2016, , .		0
412	Discrete Element Methods. , 2016, , 213-242.		0
413	Dynamic population balance and flow models for granular solids in a linear vibrating screen. AICHE Journal, 2016, 62, 3889-3898.	1.8	5
414	Discrete particle modeling of lateral jets into a packed bed and micromechanical analysis of the stability of raceways. AICHE Journal, 2016, 62, 4240-4250.	1.8	26
415	The effect of interparticle cohesion on powder mixing in a ribbon mixer. AICHE Journal, 2016, 62, 1023-1037.	1.8	32
416	Numerical Investigation of Third–Body Behavior in Dry and Wet Environments under Plane Shearing. Chemical Engineering and Technology, 2016, 39, 1497-1508.	0.9	3
417	Coupled fluid–particle modeling of a slot die coating system. AICHE Journal, 2016, 62, 1933-1939.	1.8	8
418	DEM/CFD-DEM Modelling of Non-spherical Particulate Systems: Theoretical Developments and Applications. Powder Technology, 2016, 302, 108-152.	2.1	437
419	Performance of drag models for simulation of fluidized beds with Geldart D particles. Advanced Powder Technology, 2016, 27, 2377-2398.	2.0	30
420	A simple hard-particle collision model with a smooth transition to full slip. Journal of Mechanics of Materials and Structures, 2016, 11, 137-155.	0.4	0
421	CFD–DEM modeling of gas fluidization of fine ellipsoidal particles. AICHE Journal, 2016, 62, 62-77.	1.8	67

#	ARTICLE	IF	CITATIONS
422	Investigation and modeling of CPC based tubular photocatalytic reactor for scaled-up hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 16019-16031.	3.8	25
423	Simulation of Forming Process of Powder Bed for Additive Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	52
424	What Kind of Modern â€œGreenâ€•Chemical Engineering is Required for the Design of the â€œFactory of Futureâ€?. Procedia Engineering, 2016, 138, 445-458.	1.2	14
425	CFD simulations of gasâ€"liquidâ€"solid flow in fluidized bed reactors â€" A review. Powder Technology, 2016, 299, 235-258.	2.1	95
426	3D particle-scale modeling of gasâ€"solids flow and heat transfer in fluidized beds with an immersed tube. International Journal of Heat and Mass Transfer, 2016, 97, 521-537.	2.5	62
427	Numerical analysis of mixing of particles in drum mixers using DEM. Advanced Powder Technology, 2016, 27, 531-540.	2.0	59
428	Applicability of a coarse-grained CFDâ€"DEM model on dense medium cyclone. Minerals Engineering, 2016, 90, 43-54.	1.8	150
429	Hydraulic behaviour of parallel fibres under longitudinal flow: a numerical treatment. Canadian Geotechnical Journal, 2016, 53, 1081-1092.	1.4	15
430	Coupled CFD-DEM simulation of hydrodynamic bridging at constrictions. International Journal of Multiphase Flow, 2016, 84, 245-263.	1.6	66
431	Eulerianâ€"Lagrangian study of dense liquidâ€"solid flow in an industrial-scale cylindrical hydrocyclone. International Journal of Mineral Processing, 2016, 151, 40-50.	2.6	49
432	Design optimization of a mine-blast-venting solution for protection of light-tactical-vehicle subjected to shallow-buried underbody mine detonation. Multidiscipline Modeling in Materials and Structures, 2016, 12, 2-32.	0.6	4
433	Ordering and stress transmission in packings of straight and curved spherocylinders. Granular Matter, 2016, 18, 1.	1.1	4
434	Development of an unresolved CFDâ€"DEM model for the flow of viscous suspensions and its application to solidâ€"liquid mixing. Journal of Computational Physics, 2016, 318, 201-221.	1.9	113
435	Direct numerical simulation of coupled fluid flow and heat transfer for single particles and particle packings by a LBM-approach. Powder Technology, 2016, 294, 236-251.	2.1	57
436	Numerical simulation of powder flow in a pharmaceutical tablet press lab-scale gravity feeder. Powder Technology, 2016, 302, 309-327.	2.1	33
437	A model for burden distribution and gas flow distribution of bell-less top blast furnace with parallel hoppers. Applied Mathematical Modelling, 2016, 40, 10254-10273.	2.2	28
438	Segregation phenomena in gravity separators: A combined numerical and experimental study. Powder Technology, 2016, 301, 679-693.	2.1	5
439	Smart Expandable Proppants to Achieve Sustainable Hydraulic Fracturing Treatments. , 2016, , .		10

#	ARTICLE	IF	CITATIONS
440	Laboratory-scale validation of a DEM model of screening processes with circular vibration. Powder Technology, 2016, 303, 269-277.	2.1	61
442	Simulating the DISAMATIC process using the discrete element method â€" a dynamical study of granular flow. Powder Technology, 2016, 303, 228-240.	2.1	7
443	Numerical study of the mixing efficiency of a batch mixer using the discrete element method. Powder Technology, 2016, 301, 815-829.	2.1	37
444	Quantification of the bed load effects on turbulent openâ€channel flows. Journal of Geophysical Research F: Earth Surface, 2016, 121, 767-789.	1.0	27
445	A GPU-based DEM approach for modelling of particulate systems. Powder Technology, 2016, 301, 1172-1182.	2.1	111
446	Voronoi analysis of the packings of non-spherical particles. Chemical Engineering Science, 2016, 153, 330-343.	1.9	43
447	An Efficient RIGID Algorithm and Its Application to the Simulation of Particle Transport in Porous Medium. Transport in Porous Media, 2016, 114, 99-131.	1.2	9
448	Modification of kinetic theory of granular flow for frictional spheres, part II: Model validation. Chemical Engineering Science, 2016, 152, 783-794.	1.9	32
449	Coupled DEM and CFD Simulations of Soil Erosion. , 2016, , .		0
450	Segregation of multi-sized biomass particles in a horizontal stirred bed. Powder Technology, 2016, 303, 130-137.	2.1	3
451	Numerical analysis on the fluidization dynamics of rodlike particles. Advanced Powder Technology, 2016, 27, 2265-2276.	2.0	38
452	DEM simulation on the packing of fine ellipsoids. Chemical Engineering Science, 2016, 156, 64-76.	1.9	72
453	On an efficient hybrid soft and hard sphere collision integration scheme for DEM. Chemical Engineering Science, 2016, 153, 363-373.	1.9	20
455	Digitalizing the Circular Economy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 3194-3220.	1.0	87
456	Numerical simulation of scour infilling in overset grid. , 2016, , .		2
457	Effect of a solid wall on the formation of a porous layer structure. Theoretical Foundations of Chemical Engineering, 2016, 50, 776-779.	0.2	0
458	CFDâ€"DEM investigation into the scaling up of spoutâ€fluid beds via two interconnected chambers. AICHE Journal, 2016, 62, 1898-1916.	1.8	10
459	An adhesive CFDâ€DEM model for simulating nanoparticle agglomerate fluidization. AICHE Journal, 2016, 62, 2259-2270.	1.8	42

#	Article	IF	Citations
460	Calibrating the microscopic properties of quartz sand with coupled CFD-DEM framework. Engineering Computations, 2016, 33, 1141-1160.	0.7	6
461	Understanding the Different Effects of Inhaler Design on the Aerosol Performance of Drug-Only and Carrier-Based DPI Formulations. Part 1: Grid Structure. AAPS Journal, 2016, 18, 1159-1167.	2.2	14
462	Simulation of effect of internals on particulate mixing and heat transfer in downer reactor using discrete element method. Powder Technology, 2016, 297, 89-105.	2.1	11
463	Development and validation of a new drag law using mechanical energy balance approach for DEMâ€"CFD simulation of gasâ€"solid fluidized bed. Chemical Engineering Journal, 2016, 302, 395-405.	6.6	52
464	Numerical and experimental study of tensile stresses of biomass combustion ash with temperature variation. Advanced Powder Technology, 2016, 27, 215-222.	2.0	4
465	Numerical investigation on the effect of draft plates on spouting stability and gasâ€"solid characteristics in a spout-fluid bed. Chemical Engineering Science, 2016, 148, 108-125.	1.9	34
466	A semi-implicit discrete-continuum coupling method for porous media based on the effective stress principle at finite strain. Computer Methods in Applied Mechanics and Engineering, 2016, 304, 546-583.	3.4	62
467	Numerical analysis of enhanced mixing in a Gallay tote blender. Particuology, 2016, 29, 95-102.	2.0	10
468	Modeling and simulation of agglomeration in turbulent particle-laden flows: A comparison between energy-based and momentum-based agglomeration models. Powder Technology, 2016, 294, 373-402.	2.1	45
469	Flow pattern and normal pressure distribution in flat bottom silo discharged using wall outlet. Powder Technology, 2016, 295, 104-114.	2.1	28
470	Advances in shape measurement in the digital world. Particuology, 2016, 26, 19-31.	2.0	34
471	Discrete element investigation of process models for batch screening under altered operational conditions. Powder Technology, 2016, 301, 78-95.	2.1	7
472	Prediction of conductive heating time scales of particles in a rotary drum. Chemical Engineering Science, 2016, 152, 45-54.	1.9	44
473	Coupled bonded particle and lattice Boltzmann method for modelling fluid-solid interaction. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 1383-1401.	1.7	33
474	3D DEM simulations and experiments exploring low-velocity projectile impacts into a granular bed. Powder Technology, 2016, 288, 303-314.	2.1	24
475	Effect of superficial gas velocity on the particle temperature distribution in a fluidized bed with heat production. Chemical Engineering Science, 2016, 140, 279-290.	1.9	30
476	Numerical study of the mixing efficiency of a ribbon mixer using the discrete element method. Powder Technology, 2016, 287, 380-394.	2.1	77
477	Extended CFDâ€"DEM for freeâ€"surface flow with multiâ€"size granules. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 62-79.	1.7	109

#	ARTICLE	IF	CITATIONS
478	DEM/CFD approach for modeling granular flow in the revolving static mixer. Chemical Engineering Research and Design, 2016, 109, 317-326.	2.7	14
479	Coupling of discrete element model (DEM) with computational fluid mechanics (CFD): A validation study. Applied Mathematics and Computation, 2016, 277, 154-163.	1.4	20
480	Experimental and numerical study of fluidization and pressure drop of spherical and non-spherical particles in a model scale fluidized bed. Powder Technology, 2016, 291, 506-521.	2.1	121
481	CFDâ€"DEM investigation of the effect of agglomerateâ€"agglomerate collision on dry powder aerosolisation. Journal of Aerosol Science, 2016, 92, 109-121.	1.8	36
482	Particle scale study of heat transfer in packed and fluidized beds of ellipsoidal particles. Chemical Engineering Science, 2016, 144, 201-215.	1.9	79
483	Discrete element simulation of metal ceramic composite materials with varying metal content. Journal of the European Ceramic Society, 2016, 36, 2245-2253.	2.8	18
484	Numerical modelling of granular flows: a reality check. Computational Particle Mechanics, 2016, 3, 311-332.	1.5	32
485	Influence of operating parameters and flow regime on solid dispersion behavior in a gasâ€"solid spout-fluid bed. Chemical Engineering Science, 2016, 142, 112-125.	1.9	13
486	Assessment of particle-tracking models for dispersed particle-laden flows implemented in OpenFOAM and ANSYS FLUENT. Engineering Applications of Computational Fluid Mechanics, 2016, 10, 30-43.	1.5	80
487	DEM-CFD simulation of a dense fluidized bed: Wall boundary and particle size effects. Powder Technology, 2016, 293, 37-47.	2.1	33
488	Systematic study of effect of particle size distribution in a dense medium cyclone by Johnsonâ€™s SB function. Minerals Engineering, 2016, 91, 16-33.	1.8	20
489	Coupled CFDâ€"DEM of particle-laden flows in a turning flow with a moving wall. Computers and Chemical Engineering, 2016, 86, 184-191.	2.0	17
490	Experimental and numerical investigation into iron ore reduction in packed beds. Chemical Engineering Science, 2016, 140, 189-200.	1.9	22
491	Simulating the Hele-Shaw flow in the presence of various obstacles and moving particles. Meccanica, 2016, 51, 1041-1055.	1.2	7
492	CFD simulation of dense particulate reaction system: Approaches, recent advances and applications. Chemical Engineering Science, 2016, 140, 16-43.	1.9	245
493	Hydrodynamic characteristics of gas-irregular particle two-phase flow in a bubbling fluidized bed: An experimental and numerical study. Powder Technology, 2016, 287, 264-276.	2.1	20
494	Discrete Element Modeling of Solid Dosage Manufacturing Processes. Methods in Pharmacology and Toxicology, 2016, , 105-131.	0.1	0
495	Gasâ€"solid flow and heat transfer in fluidized beds with tubes: Effects of material properties and tube array settings. Powder Technology, 2016, 296, 59-71.	2.1	58

#	Article	IF	Citations
496	A hybrid FEM-DEM approach to the simulation of fluid flow laden with many particles. Computational Particle Mechanics, 2017, 4, 213-227.	1.5	8
497	Discrete particle simulation of solid flow in a melter-gasifier in smelting reduction process. Powder Technology, 2017, 314, 641-648.	2.1	19
498	CFD-DEM simulation of fluidization of rod-like particles in a fluidized bed. Powder Technology, 2017, 314, 355-366.	2.1	87
499	A DEM-based approach for analyzing energy transitions in granular and particle-fluid flows. Chemical Engineering Science, 2017, 161, 67-79.	1.9	23
500	CFD-DEM investigation of viscous solid–liquid mixing: Impact of particle properties and mixer characteristics. Chemical Engineering Research and Design, 2017, 118, 270-285.	2.7	52
501	Optimisation of a circularly vibrating screen based on DEM simulation and Taguchi orthogonal experimental design. Powder Technology, 2017, 310, 307-317.	2.1	83
502	Micromechanical analysis of flow behaviour of fine ellipsoids in gas fluidization. Chemical Engineering Science, 2017, 163, 11-26.	1.9	24
503	The Pharmaceutical Drying Unit Operation: An Industry Perspective on Advancing the Science and Development Approach for Scale-Up and Technology Transfer. Organic Process Research and Development, 2017, 21, 420-429.	1.3	41
504	Peristaltic transport of a particulate suspension in the small intestine. Applied Mathematical Modelling, 2017, 44, 143-159.	2.2	62
505	Numerical modeling of adhesive particle mixing. AICHE Journal, 2017, 63, 2599-2609.	1.8	15
506	CFD-DEM simulations of a fluidized bed crystallizer. Chemical Engineering Science, 2017, 165, 1-13.	1.9	28
507	Effect of particle shape and size on effective thermal conductivity of packed beds. Powder Technology, 2017, 311, 157-166.	2.1	64
508	DEM study of granular discharge rate through a vertical pipe with a bend outlet in small absorber sphere system. Nuclear Engineering and Design, 2017, 314, 1-10.	0.8	16
509	A coupled discrete element model for the simulation of soil and water flow through an orifice. International Journal for Numerical and Analytical Methods in Geomechanics, 2017, 41, 1477-1493.	1.7	42
510	Segregation of granular materials in bounded heap flow: A review. Powder Technology, 2017, 312, 67-88.	2.1	65
511	An investigation on process of seeded granulation in a continuous drum granulator using DEM. Advanced Powder Technology, 2017, 28, 2456-2464.	2.0	48
512	CO_2 Capture with Chemical Looping Combustion of Gaseous Fuels: An Overview. Energy & Fuels, 2017, 31, 3475-3524.	2.5	91
513	Effect of grid type and refinement method on CFD-DEM solution trend with grid size. Powder Technology, 2017, 311, 137-146.	2.1	43

#	ARTICLE	IF	CITATIONS
514	Simulation of solute dispersion in particle packs by the volume averaging method. Computers and Chemical Engineering, 2017, 98, 154-160.	2.0	4
515	Experimental and numerical investigation of liquidâ€"solid binary fluidized beds: Radioactive particle tracking technique and dense discrete phase model simulations. Particuology, 2017, 33, 112-122.	2.0	38
516	Comparison of the implementation of three common types of coupled CFD-DEM model for simulating soil surface erosion. International Journal of Multiphase Flow, 2017, 91, 89-100.	1.6	43
517	Discrete simulation of granular and particle-fluid flows: from fundamental study to engineering application. Reviews in Chemical Engineering, 2017, 33, .	2.3	73
518	Extension of a coarse grained particle method to simulate heat transfer in fluidized beds. International Journal of Heat and Mass Transfer, 2017, 111, 723-735.	2.5	92
519	On the role of forces governing particulate interactions in pharmaceutical systems: A review. International Journal of Pharmaceutics, 2017, 526, 516-537.	2.6	20
520	Discrete particle simulation of particle flow and separation on a vibrating screen: Effect of aperture shape. Powder Technology, 2017, 314, 195-202.	2.1	52
521	Systematic study of the effect of particle density distribution on the flow and performance of a dense medium cyclone. Powder Technology, 2017, 314, 510-523.	2.1	24
522	Efficient implementation of superquadric particles in Discrete Element Method within an open-source framework. Computational Particle Mechanics, 2017, 4, 101-118.	1.5	172
523	A strategy to determine DEM parameters for spherical and non-spherical particles. Granular Matter, 2017, 19, 1.	1.1	35
524	Periodic boundary conditions of discrete element method-lattice Boltzmann method for fluid-particle coupling. Granular Matter, 2017, 19, 1.	1.1	22
525	Design and performance optimization of gravity tables using a combined CFD-DEM framework. Powder Technology, 2017, 318, 423-440.	2.1	7
526	Influence of grid resolution, parcel size and drag models on bubbling fluidized bed simulation. Chemical Engineering Journal, 2017, 326, 627-639.	6.6	69
527	An efficient and reliable predictive method for fluidized bed simulation. AICHE Journal, 2017, 63, 5320-5334.	1.8	30
528	A combined experimental and DEM approach to determine the breakage of particles in an impact mill. Powder Technology, 2017, 318, 543-548.	2.1	21
529	Dynamic multiscale method for gasâ€solid flow via spatiotemporal coupling of twoâ€fluid model and discrete particle model. AICHE Journal, 2017, 63, 3681-3691.	1.8	21
530	Empirical assessment of the critical time increment in explicit particulate discrete element method simulations. Computers and Geotechnics, 2017, 86, 67-79.	2.3	56
531	Numerical simulation of heat transfer in packed pebble beds: CFD-DEM coupled with particle thermal radiation. International Journal of Heat and Mass Transfer, 2017, 110, 393-405.	2.5	130

#	Article	IF	Citations
532	Combined MPM-DEM for Simulating the Interaction Between Solid Elements and Fluid Particles. Communications in Computational Physics, 2017, 21, 1258-1281.	0.7	4
533	A review of bridge scour: mechanism, estimation, monitoring and countermeasures. Natural Hazards, 2017, 87, 1881-1906.	1.6	127
534	Overview of Computational Fluid Dynamics Simulation of Reactor-Scale Biomass Pyrolysis. ACS Sustainable Chemistry and Engineering, 2017, 5, 2783-2798.	3.2	152
535	Numerical simulations on self-leveling behaviors with cylindrical debris bed. Nuclear Engineering and Design, 2017, 315, 61-68.	0.8	13
537	The Effect of Powder Flowability in the Selective Laser Sintering Process. Springer Proceedings in Physics, 2017, , 629-636.	0.1	11
538	A methodical calibration procedure for discrete element models. Powder Technology, 2017, 307, 73-83.	2.1	137
539	Discrete element method simulation of the hulling process of Jatropha curcas L. fruits. Biosystems Engineering, 2017, 155, 55-67.	1.9	17
540	Full‐physics simulations of spray‐particle interaction in a bubbling fluidized bed. AICHE Journal, 2017, 63, 2569-2587.	1.8	23
541	DEM-based virtual experimental blast furnace: A quasi-steady state model. Powder Technology, 2017, 314, 557-566.	2.1	74
542	Coupled gas-particulate discharge from a bucket elevator. Powder Technology, 2017, 314, 203-217.	2.1	3
543	Influence of particle properties on powder bulk behaviour and processability. International Journal of Pharmaceutics, 2017, 518, 138-154.	2.6	66
544	Experimental and numerical study of particle velocity distribution in the vertical pipe after a 90Â° elbow. Powder Technology, 2017, 314, 500-509.	2.1	10
545	Analysis of the incipient motion of spherical particles in an open channel bed, using a coupled computational fluid dynamics–discrete element method model. Biosystems Engineering, 2017, 155, 68-76.	1.9	4
546	Numerical study of particle mixing in a lab-scale screw mixer using the discrete element method. Powder Technology, 2017, 308, 334-345.	2.1	46
547	CFD-DEM Study the Effect of Carrier-Drug Mass Ratio on the Aerosolisation Process in Original and Modified Dry Powder Inhalers. Springer Proceedings in Physics, 2017, , 957-965.	0.1	1
548	Experimental investigation on gas-solid hydrodynamics of coarse particles in a two-dimensional spouted bed. Powder Technology, 2017, 307, 175-183.	2.1	38
549	How Computational Grid Refinement in Three Dimensions Affects CFD-DEM Results for Psuedo-2D Fluidized Gas-Solid Beds. , 2017, , .		2
550	Coupling of Acoustic Cavitation with Dem-Based Particle Solvers for Modeling De-agglomeration of Particle Clusters in Liquid Metals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 5616-5627.	1.1	14

#	Article	IF	Citations
551	A DEM-based approach for evaluating the pore throat size distribution of a filter medium. Powder Technology, 2017, 322, 159-167.	2.1	5
552	Understanding granular media: from fundamentals and simulations to industrial application. Granular Matter, 2017, 19, 1.	1.1	20
553	Numerical Investigations of the Extraction of Submerged Foundations by Coupled CFD-DEM. , 2017, , .		0
554	Friction controls even submerged granular flows. Soft Matter, 2017, 13, 7657-7664.	1.2	23
555	Dynamic and perturbative system analysis of granular material in a vibrating screen. Advanced Powder Technology, 2017, 28, 3257-3264.	2.0	15
556	Numerical analysis of wet separation of particles by density differences. AIP Conference Proceedings, 2017, , .	0.3	0
557	Elastic properties of particle-reinforced composites containing nonspherical particles of high packing density and interphase: DEM–FEM simulation and micromechanical theory. Computer Methods in Applied Mechanics and Engineering, 2017, 326, 122-143.	3.4	46
558	Effects of granular temperature on inter-phase drag in gas-solid flows. Powder Technology, 2017, 321, 435-443.	2.1	42
559	Damping behaviors of granular particles in a vertically vibrated closed container. Powder Technology, 2017, 321, 173-179.	2.1	25
560	Asteroid surface impact sampling: dependence of the cavity morphology and collected mass on projectile shape. Scientific Reports, 2017, 7, 10004.	1.6	10
561	Calibration of DEM parameters on shear test experiments using Kriging method. EPJ Web of Conferences, 2017, 140, 15016.	0.1	6
562	Simulation of bubbly flows with special numerical treatments of the semi-conservative and fully conservative two-fluid model. Chemical Engineering Science, 2017, 174, 25-39.	1.9	33
563	Magnetic particle tracking for nonspherical particles in a cylindrical fluidized bed. AICHE Journal, 2017, 63, 5335-5342.	1.8	40
564	Particles climbing along a vertically vibrating tube: numerical simulation using the Discrete Element Method (DEM). Powder Technology, 2017, 320, 304-312.	2.1	16
565	Understand solids loading effects in a dense medium cyclone: Effect of particle size by a CFD-DEM method. Powder Technology, 2017, 320, 594-609.	2.1	50
566	The angle of repose and size segregation of iron ore granules: DEM analysis and experimental investigation. Powder Technology, 2017, 320, 257-272.	2.1	56
567	Analysis of particle-laden fluid flows, tortuosity and particle-fluid behaviour in metal foam heat exchangers. Chemical Engineering Science, 2017, 172, 677-687.	1.9	27
568	DEM modelling of particle-bubble capture through extended DLVO theory. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 876-885.	2.3	21

#	Article	IF	Citations
569	Interparticle force analysis on the packing of fine ellipsoids. Powder Technology, 2017, 320, 610-624.	2.1	28
570	Dynamic modelling of fluidisation in gas-solid bubbling fluidised beds. Powder Technology, 2017, 322, 461-470.	2.1	8
571	Coupled discrete element and finite volume methods for simulating loaded elastic fishnets in interaction with fluid. Computers and Fluids, 2017, 156, 200-208.	1.3	4
572	Numerical Investigation of the Inner Profiles of Ironmaking Blast Furnaces: Effect of Throat-to-Belly Diameter Ratio. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 602-618.	1.0	19
573	CFD-DEM simulations of early turbulent solid–liquid mixing: Prediction of suspension curve and just-suspended speed. Chemical Engineering Research and Design, 2017, 123, 388-406.	2.7	55
574	DEM–CFD simulation of modular PB-FHR core with two-grid method. Nuclear Science and Techniques/Hewuli, 2017, 28, 1.	1.3	9
575	DEM simulation of flow of black pepper seeds in cryogenic grinding system. Journal of Food Engineering, 2017, 196, 36-51.	2.7	38
576	Numerical studies of multiphase flow and separation performance of natural medium cyclones for recovering waste coal. Powder Technology, 2017, 314, 532-541.	2.1	41
577	CFD–DEM simulation of tube erosion in a fluidized bed. AICHE Journal, 2017, 63, 418-437.	1.8	39
578	Application of particle simulation methods to composite materials: a review. Advanced Composite Materials, 2017, 26, 1-22.	1.0	16
579	Experimental and numerical investigations into hydraulic behaviour of coir fibre drain. Canadian Geotechnical Journal, 2017, 54, 75-87.	1.4	22
580	A coupled FEM/DEM model for pipe conveyor systems: Analysis of the contact forces on belt. Powder Technology, 2017, 314, 480-489.	2.1	29
581	CFD-DEM study of the aerosolisation mechanism of carrier-based formulations with high drug loadings. Powder Technology, 2017, 314, 620-626.	2.1	18
582	Comparative study on mesh-based and mesh-less coupled CFD-DEM methods to model particle-laden flow. Powder Technology, 2017, 305, 78-88.	2.1	40
583	Review of cluster characteristics in circulating fluidized bed (CFB) risers. Chemical Engineering Science, 2017, 158, 70-95.	1.9	88
584	CFD-DEM study on cohesive particles in a spouted bed. Powder Technology, 2017, 314, 377-386.	2.1	78
585	Improving the operational stability of the multi–chamber spout–fluid bed via the insertion of a submerged partition plate. AICHE Journal, 2017, 63, 485-500.	1.8	6
586	Piping flow of cohesive granular materials in silo modelled by finite element method. Granular Matter, 2017, 19, 1.	1.1	15

#	Article	IF	Citations
587	Assessment of polydisperse drag models for the size segregation in a bubbling fluidized bed using discrete particle method. Chemical Engineering Science, 2017, 160, 106-112.	1.9	53
588	Numerical simulation of abutment pressure redistribution during face advance. AIP Conference Proceedings, 2017, , .	0.3	4
589	Sediment behavior controls equilibrium width of subglacial channels. Journal of Glaciology, 2017, 63, 1034-1048.	1.1	13
590	Separation Curves of Screening and Air Classifying Processes at Low Material Loadings. Chemie-Ingenieur-Technik, 2017, 89, 1726-1738.	0.4	3
591	Expandable Diverting Agents to Improve Efficiency of Refracturing Treatments. , 2017, , .		9
592	Effective Thermal Expansion Property of Consolidated Granular Materials. Materials, 2017, 10, 1289.	1.3	0
593	A coupled CFD-DEM model for simulating the rheology of particulate suspensions. Progress in Computational Fluid Dynamics, 2017, 17, 290.	0.1	2
594	Numerical simulation of filtration of mine water from coal slurry particles. Journal of Physics: Conference Series, 2017, 919, 012018.	0.3	0
595	Linear and nonlinear elastic properties of dense granular packings: a DEM exploration. EPJ Web of Conferences, 2017, 140, 15033.	0.1	0
596	A fine LES-DEM coupled simulation of gas-large particle motion in spouted bed using a conservative virtual volume fraction method. Powder Technology, 2018, 330, 174-189.	2.1	24
597	Capturing particle-particle interactions for cylindrical fibrous particles in different flow regimes. Powder Technology, 2018, 330, 418-424.	2.1	3
598	Multiscale investigation of tube erosion in fluidized bed based on CFD-DEM simulation. Chemical Engineering Science, 2018, 183, 60-74.	1.9	29
599	What are the microscopic events of colloidal membrane fouling?. Journal of Membrane Science, 2018, 553, 90-98.	4.1	45
600	Computational Fluid Dynamics. Springer Tracts in Mechanical Engineering, 2018, , 87-204.	0.1	3
601	Variational inequalityâ€‐based framework of discontinuous deformation analysis. International Journal for Numerical Methods in Engineering, 2018, 115, 358-394.	1.5	20
602	A semi-resolved CFD-DEM model for seepage-induced fine particle migration in gap-graded soils. Computers and Geotechnics, 2018, 100, 30-51.	2.3	104
603	Numerical prediction of wear in SAG mills based on DEM simulations. Powder Technology, 2018, 329, 353-363.	2.1	45
604	Modeling breakage and motion of black pepper seeds in cryogenic mill. Advanced Powder Technology, 2018, 29, 1055-1071.	2.0	31

#	Article	IF	Citations
605	Model A vs. Model B in the modelling of particle-fluid flow. Powder Technology, 2018, 329, 47-54.	2.1	24
606	DEM studies of polydisperse wet granular flows. Powder Technology, 2018, 328, 309-317.	2.1	20
607	Graphene levitation and orientation control using a magnetic field. Journal of Applied Physics, 2018, 123, .	1.1	27
608	Color-PTV measurement and CFD-DEM simulation of the dynamics of poly-disperse particle systems in a pseudo-2D fluidized bed. Chemical Engineering Science, 2018, 179, 115-132.	1.9	41
609	Buckling <i>vs.</i> particle desorption in a particle-covered drop subject to compressive surface stresses: a simulation study. Soft Matter, 2018, 14, 711-724.	1.2	17
610	DEM study of the effect of blade-support spokes on mixing performance in a ribbon mixer. Powder Technology, 2018, 326, 123-136.	2.1	32
611	Comparison of breakage models in DEM in simulating impact on particle beds. Advanced Powder Technology, 2018, 29, 692-706.	2.0	91
612	Transport properties of concrete-like granular materials interacted by their microstructures and particle components. International Journal of Modern Physics B, 2018, 32, 1840011.	1.0	31
613	Study of sedimentation of non-cohesive particles via CFD–DEM simulations. Granular Matter, 2018, 20, 1.	1.1	27
614	Fluid dynamic characterization of a fluidized‐bed perfusion bioreactor with CFD–DEM simulation. Journal of Chemical Technology and Biotechnology, 2018, 93, 2316-2330.	1.6	10
615	Development of a DEM–VOF Model for the Turbulent Free-Surface Flows with Particles and Its Application to Stirred Mixing System. Industrial & Engineering Chemistry Research, 2018, 57, 1714-1725.	1.8	62
616	Simulation of particle size segregation in a pharmaceutical tablet press lab-scale gravity feeder. Advanced Powder Technology, 2018, 29, 765-780.	2.0	33
617	A GPU-based DEM for modelling large scale powder compaction with wide size distributions. Powder Technology, 2018, 333, 219-228.	2.1	52
618	Particle-Scale Investigation of Heat Transfer and Erosion Characteristics in a Three-Dimensional Circulating Fluidized Bed. Industrial & Engineering Chemistry Research, 2018, 57, 6774-6789.	1.8	26
619	CFD–DEM simulation and experimental investigation of the flow behavior of lunar regolith JSC-1A. Particuology, 2018, 40, 34-43.	2.0	12
620	Numerical Analysis of the Die Filling Process Within a Pharmaceutical Tableting Machine. Chemie-Ingenieur-Technik, 2018, 90, 483-492.	0.4	10
621	Transient DEM-CFD simulation of solid and fluid flow in a three dimensional blast furnace model. Powder Technology, 2018, 334, 53-64.	2.1	53
622	Frequency–amplitude behavior in the incipient movement of grains under vibration. Particuology, 2018, 40, 1-9.	2.0	8

#	Article	IF	Citations
623	Three-dimensional axial dispersion dynamics of granular flow in the rolling-regime rotating drum. Powder Technology, 2018, 332, 131-138.	2.1	18
624	Investigation on vertical plug formation of coarse particles in a non-mechanical feeder by CFD-DEM coupling method. Powder Technology, 2018, 332, 79-89.	2.1	45
625	The influence of orifice shape on the flow rate: A DEM and experimental research in 3D hopper granular flows. Powder Technology, 2018, 335, 147-155.	2.1	46
626	Research on screening mechanism and parameters optimization of equal thickness screen with variable amplitude based on DEM simulation. Powder Technology, 2018, 331, 296-309.	2.1	48
627	DEM simulation and experimental validation for mechanical response of ellipsoidal particles under confined compression. Advanced Powder Technology, 2018, 29, 1292-1305.	2.0	9
628	Influence of particle shape on the erodibility of non-cohesive soil: Insights from coupled CFD–DEM simulations. Particuology, 2018, 39, 12-24.	2.0	35
629	CFD-DEM combined the fictitious domain method with monte carlo method for studying particle sediment in fluid. Particulate Science and Technology, 2018, 36, 920-933.	1.1	9
630	Understanding heavy mineral enrichment using a three‐dimensional numerical model. Sedimentology, 2018, 65, 561-581.	1.6	8
631	CFD–DEM study of residence time, droplet deposition, and collision velocity for a binary particle mixture in a Wurster fluidized bed coater. Drying Technology, 2018, 36, 638-650.	1.7	32
632	Review on Modeling and Simulation of Blast Furnace. Steel Research International, 2018, 89, 1700071.	1.0	133
633	Modeling the motion of the cooling lubricant in drilling processes using the finite volume and the smoothed particle hydrodynamics methods. Computer Methods in Applied Mechanics and Engineering, 2018, 329, 369-395.	3.4	19
634	A multiscale DEM-VOF method for the simulation of three-phase flows. International Journal of Multiphase Flow, 2018, 99, 186-204.	1.6	70
635	Numerical simulation of scour around a submarine pipeline using computational fluid dynamics and discrete element method. Applied Mathematical Modelling, 2018, 55, 400-416.	2.2	29
636	Discrete particle simulation of food grain drying in a fluidised bed. Powder Technology, 2018, 323, 238-249.	2.1	60
637	Modeling the heat transfer between fluid-granular medium. Applied Thermal Engineering, 2018, 128, 696-705.	3.0	14
638	Validation and application of CPFD models in simulating hydrodynamics and reactions in riser reactor with Geldart A particles. Powder Technology, 2018, 323, 269-283.	2.1	39
639	A pseudo-coupled DEM–non-linear PBM approach for simulating the evolution of particle size during dry milling. Powder Technology, 2018, 323, 374-384.	2.1	21
640	Evaluation of contact force models for discrete modelling of ellipsoidal particles. Chemical Engineering Science, 2018, 177, 1-17.	1.9	29

#	Article	IF	Citations
641	Assessment of CFD-DEM solution error against computational cell size for flows through a fixed-bed of binary-sized particles. Powder Technology, 2018, 325, 519-529.	2.1	16
642	Effects of rotation speed and rice sieve geometry on turbulent motion of particles in a vertical rice mill. Powder Technology, 2018, 325, 429-440.	2.1	29
643	Investigating the settling dynamics of cohesive silt particles with particle-resolving simulations. Advances in Water Resources, 2018, 111, 406-422.	1.7	31
644	Fluidized bed classification of particles of different size and density. Chemical Engineering Science, 2018, 177, 151-162.	1.9	31
645	A revisit of common normal method for discrete modelling of non-spherical particles. Powder Technology, 2018, 326, 1-6.	2.1	17
646	Discrete element method simulation of the mixing process of particles with and without cohesive interparticle forces in a fluidized bed. Powder Technology, 2018, 327, 223-231.	2.1	23
647	Numerical simulation of flow behavior of particles in an inverse liquidâ€"solid fluidized bed with a jet using CFD-DEM. Journal of the Taiwan Institute of Chemical Engineers, 2018, 82, 214-225.	2.7	10
648	Experimental and Numerical Investigation of Sediment Transport in Sewers. , 2018, , .		3
649	Introductory Review on an Engineering Approach for Fastâ€Bed Modeling in Mimic to Bubbling Bed Practice. , 2018, , .		0
650	EVAPORATION FROM SIMULATED SOIL PORES: EFFECTS OF WETTABILITY, LIQUID ISLANDS, AND BREAKUP. Interfacial Phenomena and Heat Transfer, 2018, 6, 391-407.	0.3	3
651	Transient Simulation of Cooling-Lubricant Flow for Deep-Hole Drilling-Processes. Procedia CIRP, 2018, 77, 78-81.	1.0	6
652	Structured Grid-Based Parallel Simulation of a Simple DEM Model on Heterogeneous Systems. , 2018, , .		4
653	Dynamic modelling on the confined crystallization of mono-sized cubic particles under mechanical vibration. European Physical Journal E, 2018, 41, 139.	0.7	10
654	Total Suspended Particle Emissions Modelling in an Industrial Boiler. Energies, 2018, 11, 3097.	1.6	4
655	Self-assembly of granular spheres under one-dimensional vibration. Soft Matter, 2018, 14, 9856-9869.	1.2	28
656	Hydrodynamic Behavior of a 3-D Liquidâ€"Solid Fluidized Bed Operating in the Intermediate Flow Regimeâ€"Application of Stability Analysis, Coupled CFD-DEM, and Tomography. Industrial & Engineering Chemistry Research, 2018, 57, 16944-16957.	1.8	14
657	Effects of the shape and inclination angle of DRI-flaps on DRI distribution in COREX melter gasifiers. Powder Technology, 2018, 339, 854-862.	2.1	5
658	Flow around in-line sphere array at moderate Reynolds number. Physics of Fluids, 2018, 30, .	1.6	19

#	Article	IF	Citations
659	Drag coefficient and averaged Nusselt number of a scalene prolate ellipsoid. Applied Mathematical Modelling, 2018, 64, 556-571.	2.2	23
660	Computer Simulation of the Process of Filtration of Mine Waters on a Layer of Sand. Journal of Engineering Physics and Thermophysics, 2018, 91, 873-878.	0.2	1
661	A New Method for Predicting Erosion Damage of Suddenly Contracted Pipe Impacted by Particle Cluster via CFD-DEM. Materials, 2018, 11, 1858.	1.3	13
662	Simulating direct shear tests with the Bullet physics library: A validation study. PLoS ONE, 2018, 13, e0195073.	1.1	28
663	Study of the critical angles of granular material in rotary drums aimed for fast DEM model calibration. Powder Technology, 2018, 340, 563-569.	2.1	21
664	A Novel Approach to Investigating Transport of Lost Circulation Materials in Rough Fracture. Energies, 2018, 11, 2572.	1.6	25
665	Modified cell-linked list method using dynamic mesh for discrete element method. Powder Technology, 2018, 340, 321-330.	2.1	9
666	Numerical investigation of particle shape on mechanical behaviour of unsaturated granular soils using elliptical particles. Advanced Powder Technology, 2018, 29, 3087-3099.	2.0	8
667	Numerical Simulation of Ripple Evolution under Turbulent Flow Using a Coupled LES and DPM Model. Journal of Hydraulic Engineering, 2018, 144, .	0.7	4
668	Numerical modelling of an optical belt sorter using a DEM–CFD approach coupled with particle tracking and comparison with experiments. Powder Technology, 2018, 340, 181-193.	2.1	18
669	Numerical study of diesel particulate matter distribution in an underground mine isolated zone. Powder Technology, 2018, 339, 947-957.	2.1	36
670	Comprehensive analysis of fluid-particle and particle-particle interactions in a liquid-solid fluidized bed via CFD-DEM coupling and tomography. Powder Technology, 2018, 340, 116-130.	2.1	43
671	A Coupled CFD-DEM Numerical Study of Lost Circulation Material Transport in Actual Rock Fracture Flow Space. , 2018, , .		1
672	Experimental and numerical studies on dense-phase pneumatic conveying of spraying material in venturi. Powder Technology, 2018, 339, 419-433.	2.1	31
673	A computational model for the simulation of dry granular materials. International Journal of Non-Linear Mechanics, 2018, 106, 89-107.	1.4	10
674	The Extented Discrete Element Method (XDEM): An Advanced Approach to Model Blast Furnace. , 0, , .		2
675	Detailed analysis of recent drag models using multiple cases of mono-disperse fluidized beds with Geldart-B and Geldart-D particles. Chemical Engineering Science, 2018, 188, 132-149.	1.9	25
676	Scale-up study of high-shear fluid-particle mixing based on coupled SPH/DEM simulation. Granular Matter, 2018, 20, 1.	1.1	8

#	Article	IF	Citations
677	Investigating the fluidization of disk-like particles in a fluidized bed using CFD-DEM simulation. Advanced Powder Technology, 2018, 29, 2380-2393.	2.0	43
678	Expandable proppants to moderate production drop in hydraulically fractured wells. Journal of Natural Gas Science and Engineering, 2018, 55, 182-190.	2.1	37
679	Modeling the Multiphase Flow in Hydrocyclones Using the Coarse-Grained Volume of Fluidâ€"Discrete Element Method and Mixture-Discrete Element Method Approaches. Industrial & Engineering Chemistry Research, 2018, 57, 9641-9655.	1.8	41
680	DEM simulations of screening processes under the influence of moisture. Chemical Engineering Research and Design, 2018, 136, 593-609.	2.7	18
681	Discrete element model of particle transport and premixing action in modified screw conveyors. Powder Technology, 2018, 336, 255-264.	2.1	23
682	Micromechanical evaluation of rock and fluid interactions. International Journal of Greenhouse Gas Control, 2018, 76, 266-277.	2.3	32
683	A unified CFDâ€DEM approach for modeling of debris flow impacts on flexible barriers. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 1643-1670.	1.7	93
684	Dam-break of mixtures consisting of non-Newtonian liquids and granular particles. Powder Technology, 2018, 338, 493-505.	2.1	64
685	Geometrically exact discrete-element-method (DEM) simulation on the flow and mixing of sphero-cylinders in horizontal drums. Powder Technology, 2018, 336, 415-425.	2.1	23
686	Simulation investigation of drying characteristics of wet filamentous biomass particles in a rotary kiln. Fuel Processing Technology, 2018, 178, 344-352.	3.7	21
687	A Coupled CFDâ€"DEM Simulation of Slurry Infiltration and Filter Cake Formation during Slurry Shield Tunneling. Infrastructures, 2018, 3, 15.	1.4	21
688	Simulation of the granular flow of cylindrical particles in the rotating drum. AICHE Journal, 2018, 64, 3835-3848.	1.8	17
689	A GPU-based coupled SPH-DEM method for particle-fluid flow with free surfaces. Powder Technology, 2018, 338, 548-562.	2.1	70
690	Fluid Force-Induced Detachment Criteria for Nonmetallic Inclusions Adhered to a Refractory/Molten Steel Interface. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1632-1643.	1.0	23
691	The joint mixing action of the static pre-mixer and the rotating drum mixer â€" Discrete element method approach. Advanced Powder Technology, 2018, 29, 1734-1741.	2.0	9
692	A new contact model for the discrete element method simulation of $$\hbox {TiO}_2$$ TiO 2 nanoparticle films under mechanical load. Granular Matter, 2018, 20, 1.	1.1	11
693	Particle scale modeling of heat transfer in granular flows in a double screw reactor. Powder Technology, 2018, 335, 18-34.	2.1	36
694	Validation of the CFD-DPM solver DPMFoam in $$\hbox {OpenFOAM}^\circledR $$ OpenFOAM Â® through analytical, numerical and experimental comparisons. Granular Matter, 2018, 20, 1.	1.1	51

#	ARTICLE	IF	CITATIONS
695	Prediction of hopper discharge rate using combined discrete element method and artificial neural network. Advanced Powder Technology, 2018, 29, 2822-2834.	2.0	33
696	In-plane shear loading of granular membranes modeled as a Lagrangian assembly of rotating elastic particles. Mechanics Research Communications, 2018, 92, 61-66.	1.0	32
697	Numerical simulation of flow behavior of particles in a porous media based on CFD-DEM. Journal of Petroleum Science and Engineering, 2018, 171, 140-152.	2.1	8
698	A laboratory-numerical approach for modelling scale effects in dry granular slides. Landslides, 2018, 15, 2145-2159.	2.7	23
699	Numerical simulation of proppant transport in a planar fracture. A study of perforation placement and injection strategy. International Journal of Multiphase Flow, 2018, 109, 207-218.	1.6	46
700	How Computational Grid Refinement in Three Dimensions Affects Computational Fluid Dynamics-Discrete Element Method Results for Psuedo-Two-Dimensional Fluidized Gasâ€"Solid Beds. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	1
701	Interaction between super-quadric particles and triangular elements andits application to hopper discharge. Powder Technology, 2018, 339, 534-549.	2.1	45
702	Advanced multiphase hybrid model development of fluidized bed wet granulation processes. Computer Aided Chemical Engineering, 2018, 41, 159-187.	0.3	5
703	Mesoscale-structure-based dynamic multiscale method for gas-solid flow. Chemical Engineering Science, 2018, 192, 864-881.	1.9	20
704	Particle scale modelling of solid flow characteristics in liquid fluidizations of ellipsoidal particles. Powder Technology, 2018, 338, 677-691.	2.1	7
705	Granular flow characteristics and heat generation mechanisms in an agitating drum with sphere particles: Numerical modeling and experiments. Powder Technology, 2018, 339, 149-166.	2.1	8
706	Particle scale modelling of bubble properties in central air jet gas-solid fluidized beds. Powder Technology, 2018, 339, 70-80.	2.1	20
707	Simulation study of particleâ€"fluid two-phase coupling flow field and its influencing factors of crystallization process. Chemical Papers, 2018, 72, 3105-3117.	1.0	4
708	The onset of shock-induced particle jetting. Powder Technology, 2018, 336, 220-229.	2.1	2
709	Comparative DEM-CFD study of binary interaction and acoustic agglomeration of aerosol microparticles at low frequencies. Chemical Engineering Research and Design, 2018, 136, 548-563.	2.7	18
710	A discrete element method representation of an anisotropic elastic continuum. Journal of the Mechanics and Physics of Solids, 2018, 121, 363-386.	2.3	9
711	Analysis of surface erosion of cohesionless soils using a three-dimensional coupled computational fluid dynamics â€" discrete element method (CFDâ€"DEM) model. Canadian Geotechnical Journal, 2019, 56, 687-698.	1.4	9
712	Calibration of discrete element model parameters: soybeans. Computational Particle Mechanics, 2019, 6, 3-10.	1.5	57

#	Article	IF	Citations
713	Simulation of spray coating in a spouted bed using recurrence CFD. Particuology, 2019, 42, 92-103.	2.0	37
714	Powder-scale multi-physics modeling of multi-layer multi-track selective laser melting with sharp interface capturing method. Computational Mechanics, 2019, 63, 649-661.	2.2	88
715	Particle shape-induced radial segregation of binary mixtures in a rotating drum. Powder Technology, 2019, 341, 157-166.	2.1	48
716	Effects of underflow orifice diameter on the hydrocyclone separation performance with different feed size distributions. Powder Technology, 2019, 355, 481-494.	2.1	38
717	Computational fluid dynamics. , 2019, , 21-238.		21
718	Bubble dynamics in bubbling fluidized beds of ellipsoidal particles. AICHE Journal, 2019, 65, e16736.	1.8	25
719	Bimodal self-assembly of granular spheres under vertical vibration. Soft Matter, 2019, 15, 5933-5944.	1.2	23
720	CFD-DEM modelling of hydraulic conveying of solid particles in a vertical pipe. Powder Technology, 2019, 354, 893-905.	2.1	97
721	Coupled DEM-SPH simulations of wet continuous screening. Advanced Powder Technology, 2019, 30, 2997-3009.	2.0	24
722	Effects of Coke Charging Pattern on Burden Distribution and Normal Force Distribution in COREX Melter Gasifier. IOP Conference Series: Earth and Environmental Science, 2019, 300, 042099.	0.2	1
723	Crystallization via shaking in a granular gas with van der Waals interactions. Physical Review E, 2019, 100, 042910.	0.8	1
724	Discrete Element Simulation of Factors Affecting the Fluidity of Nylon Powder. Mathematical Problems in Engineering, 2019, 2019, 1-10.	0.6	1
725	Comparative behavior of damping terms of viscoelastic contact force models with consideration on relaxation time. Powder Technology, 2019, 356, 735-749.	2.1	9
726	Collision and breakup of fractal particle agglomerates in a shear flow. Journal of Fluid Mechanics, 2019, 862, 592-623.	1.4	31
727	Numerical Evaluation of CFD-DEM Coupling Applied to Lost Circulation Control: Effects of Particle and Flow Inertia. Mathematical Problems in Engineering, 2019, 2019, 1-13.	0.6	7
728	Application of the Discrete Element Method for Manufacturing Process Simulation in the Pharmaceutical Industry. Pharmaceutics, 2019, 11, 414.	2.0	67
729	Laboratory-scale validation of a DEM model of a toothed double-roll crusher and numerical studies. Powder Technology, 2019, 356, 60-72.	2.1	15
730	A new framework for understanding aggregate structure in asphalt mixtures. International Journal of Pavement Engineering, 2021, 22, 1090-1106.	2.2	27

#	Article	IF	Citations
731	CFD-DEM simulation and optimization of gas-cyclone performance with realistic macroscopic particulate matter. Advanced Powder Technology, 2019, 30, 2686-2702.	2.0	41
732	Computational Study of Gas-Solid Flow in a Horizontal Stepped Pipeline. Mathematical Problems in Engineering, 2019, 2019, 1-15.	0.6	3
733	Radial segregation of binary-sized ellipsoids in a rotating drum. Powder Technology, 2019, 357, 322-330.	2.1	14
734	CPFD simulation on effects of louver baffles in a two-dimensional fluidized bed of Geldart A particles. Advanced Powder Technology, 2019, 30, 2712-2725.	2.0	25
735	Predicting the performance of pressure filtration processes by coupling computational fluid dynamics and discrete element methods. Chemical Engineering Science, 2019, 208, 115162.	1.9	15
736	Discrete element model for ZrB2-SiC ceramic composite sintering. Composite Structures, 2019, 229, 111373.	3.1	15
737	Pneumatic conveying of cohesive dairy powder: Experiments and CFD-DEM simulations. Powder Technology, 2019, 357, 193-213.	2.1	26
738	Analysis of sediment transport in sewer pipes using a coupled CFD-DEM model and experimental work. Urban Water Journal, 2019, 16, 259-268.	1.0	16
739	Fluidisation characteristics of lactose powders in simple turbulent channel flows. Experimental Thermal and Fluid Science, 2019, 103, 201-213.	1.5	11
740	Overtemperature protection systems for spallation target in China initiative accelerator driven sub-critical system. Annals of Nuclear Energy, 2019, 128, 358-365.	0.9	5
741	CFD-DEM modelling of mixing and segregation of binary mixtures of ellipsoidal particles in liquid fluidizations. Journal of Hydrodynamics, 2019, 31, 1190-1203.	1.3	12
742	Simulations of an ASA flow crystallizer with a coupled stochastic-deterministic approach. Computers and Chemical Engineering, 2019, 124, 350-363.	2.0	5
743	A semi-resolved CFD–DEM approach for particulate flows with kernel based approximation and Hilbert curve based searching strategy. Journal of Computational Physics, 2019, 384, 151-169.	1.9	87
744	Pore-scale direct numerical simulation of particle transport in porous media. Chemical Engineering Science, 2019, 199, 613-627.	1.9	50
745	Geotechnical Fundamentals for Addressing New World Challenges. Springer Series in Geomechanics and Geoengineering, 2019, , .	0.0	10
746	Synthetic Packed-Bed Generation for CFD Simulations: Blender vs. STAR-CCM+. ChemEngineering, 2019, 3, 52.	1.0	50
747	Experimental Methods in Chemical Engineering: Discrete Element Method—DEM. Canadian Journal of Chemical Engineering, 2019, 97, 1964-1973.	0.9	44
748	Multiscale and Multiphysics Modeling of Soils. Springer Series in Geomechanics and Geoengineering, 2019, , 141-168.	0.0	1

#	Article	IF	Citations
749	Impact energy dissipation study in a simulated ship loading process. Powder Technology, 2019, 354, 476-484.	2.1	5
750	Numerical Investigation of Sand-Screen Performance in the Presence of Adhesive Effects for Enhanced Sand Control. SPE Journal, 2019, 24, 2195-2208.	1.7	10
751	A velocity corrected unresolved CFD-DEM coupled method to reproduce wake effects at moderate Reynolds number. Engineering Computations, 2019, 36, 2612-2633.	0.7	8
752	How to generate valid local quantities of particleâ€"fluid flows for establishing constitutive relations. AICHE Journal, 2019, 65, e16690.	1.8	21
753	CFDâ€"DEM simulation of pneumatic conveying in a horizontal channel. International Journal of Multiphase Flow, 2019, 118, 64-74.	1.6	33
754	Drag Force Calculations in Polydisperse DEM Simulations with the Coarse-Grid Method: Influence of the Weighting Method and Improved Predictions Through Artificial Neural Networks. Transport in Porous Media, 2019, 129, 837-853.	1.2	12
755	Flow regimes of cohesionless ellipsoidal particles in a rotating drum. Powder Technology, 2019, 354, 174-187.	2.1	26
756	Scale-Up Strategy in Quality by Design Approach for Pharmaceutical Blending Process with Discrete Element Method Simulation. Pharmaceutics, 2019, 11, 264.	2.0	12
757	Random generation of convex granule packing based on weighted Voronoi tessellation and cubic-polynomial-curve fitting. Computers and Geotechnics, 2019, 113, 103088.	2.3	25
758	Effects of Grain Size on Deformation in Porous Media. Transport in Porous Media, 2019, 129, 321-341.	1.2	25
759	Discrete element simulation on mixing of granular materials in rotated container. Engineering Analysis With Boundary Elements, 2019, 106, 20-26.	2.0	11
760	Investigation of modeling non-spherical particles by using spherical discrete element model with rolling friction. Engineering Analysis With Boundary Elements, 2019, 105, 207-220.	2.0	26
761	Study of erosion prediction of turbulent gas-solid flow in plugged tees via CFD-DEM. Powder Technology, 2019, 352, 136-150.	2.1	39
762	A numerical coupling method for particle tracking in electromagnetic fields. European Physical Journal E, 2019, 42, 48.	0.7	1
763	Effect of particle orientation on the drag force in random arrays of prolate ellipsoids in lowâ€Reynoldsâ€number flows. AICHE Journal, 2019, 65, e16621.	1.8	23
764	Numerical modeling of the pattern and wear rate on a structural steel plate using DEM. Minerals Engineering, 2019, 137, 290-302.	1.8	22
767	Design of a CFD-DEM-based method for mechanical stress calculation and its application to glass bead-enhanced cultivations of filamentous Lentzea aerocolonigenes. Biochemical Engineering Journal, 2019, 148, 116-130.	1.8	15
768	Particle rotations and energy dissipation during mechanical compression of granular materials. Journal of the Mechanics and Physics of Solids, 2019, 129, 19-38.	2.3	30

#	Article	IF	Citations
769	Influence of particle size and blender size on blending performance of bi-component granular mixing: A DEM and experimental study. European Journal of Pharmaceutical Sciences, 2019, 134, 205-218.	1.9	10
770	Investigating the effect of particle shape on the charging process in melter gasifiers in COREX. Powder Technology, 2019, 351, 305-313.	2.1	13
771	A nonlinear Lagrangian particle model for grains assemblies including grain relative rotations. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 1051-1079.	1.7	55
772	Particle shape effect on bubble dynamics in central air jet pseudo-2D fluidized beds: A CFD-DEM study. Chemical Engineering Science, 2019, 201, 448-466.	1.9	44
773	Numerical Study on Heat Transfer Performance in Packed Bed. Energies, 2019, 12, 414.	1.6	12
775	CFD simulation of dilute-phase pneumatic conveying of powders. Powder Technology, 2019, 349, 70-83.	2.1	38
776	Dynamics calibration of particle sandpile packing characteristics via discrete element method. Powder Technology, 2019, 347, 220-226.	2.1	19
777	A discrete element cohesive particle collision model for the prediction of ash-induced agglomeration. International Journal of Ambient Energy, 0, , 1-9.	1.4	1
778	Explosively driven hierarchical particle jetting. Chemical Engineering Science, 2019, 202, 250-269.	1.9	8
779	Influence of particle shape on liner wear in tumbling mills: A DEM study. Powder Technology, 2019, 350, 26-35.	2.1	28
780	The influence of cohesiveness on particulate bed segregation and mixing in rotating drum using DEM. Physica A: Statistical Mechanics and Its Applications, 2019, 525, 788-797.	1.2	22
781	Explicit force model for discrete modelling of elliptical particles. Computers and Geotechnics, 2019, 110, 122-131.	2.3	8
782	Obstacles of solar-powered photocatalytic water splitting for hydrogen production: A perspective from energy flow and mass flow. Energy, 2019, 172, 1079-1086.	4.5	99
783	Slurry filtration process and filter cake formation during shield tunnelling: Insight from coupled CFD-DEM simulations of slurry filtration column test. Tunnelling and Underground Space Technology, 2019, 87, 64-77.	3.0	38
784	Energy-minimization multiscale based mesoscale modeling and applications in gas-fluidized catalytic reactors. Reviews in Chemical Engineering, 2019, 35, 879-915.	2.3	23
785	Investigating the jamming of particles in a three-dimensional fluid-driven flow via coupled CFD–DEM simulations. International Journal of Multiphase Flow, 2019, 114, 140-153.	1.6	26
786	Improvement of semi-resolved CFD-DEM model for seepage-induced fine-particle migration: Eliminate limitation on mesh refinement. Computers and Geotechnics, 2019, 110, 1-18.	2.3	29
787	Proppant Placement in Perforation Clusters in Deviated Wellbores. , 2019, , .		7

#	Article	IF	Citations
788	CFD-DEM Modeling and Simulation Coupled to a Global Thermodynamic Analysis Methodology for Evaluating Energy Performance: Biofertilizer Industry. Processes, 2019, 7, 673.	1.3	3
789	Fictitious domain method combined with the DEM for studying particle-particle/particle-wall collision in fluid. Progress in Computational Fluid Dynamics, 2019, 19, 80.	0.1	2
790	Optimizing Proppant Placement in Rough-Walled Rock Fractures. , 2019, , .		7
791	Particle conveying under microgravity in a vibrating vessel. Advanced Powder Technology, 2019, 30, 3163-3170.	2.0	3
792	Flow and force analysis on the formation of expanded beds in gas fluidization of fine ellipsoids. Powder Technology, 2019, 357, 291-304.	2.1	3
793	DEM verification of the damping effect in a freely falling particle motion for quasi- and non-quasi-static conditions. Arabian Journal of Geosciences, 2019, 12, 1.	0.6	3
794	A Novel, Coupled CFD-DEM Model for the Flow Characteristics of Particles Inside a Pipe. Water (Switzerland), 2019, 11, 2381.	1.2	11
795	A Comparative Study of Mixed Resolved–Unresolved CFD-DEM and Unresolved CFD-DEM Methods for the Solution of Particle-Laden Liquid Flows. Archives of Computational Methods in Engineering, 2019, 26, 1239-1254.	6.0	18
796	Extrapolation of DEM simulations to large time scale. Application to the mixing of powder in a conical screw mixer. Chemical Engineering Science, 2019, 197, 223-234.	1.9	24
797	CFD-DEM modeling of rod-like particles in a fluidized bed with complex geometry. Powder Technology, 2019, 344, 673-683.	2.1	40
798	A novel algorithm of immersed moving boundary scheme for fluid–particle interactions in DEM–LBM. Computer Methods in Applied Mechanics and Engineering, 2019, 346, 109-125.	3.4	47
799	XDEM multi-physics and multi-scale simulation technology: Review of DEM–CFD coupling, methodology and engineering applications. Particuology, 2019, 44, 176-193.	2.0	32
800	DEM simulation of heat transfer of binary-sized particles in a horizontal rotating drum. Granular Matter, 2019, 21, 1.	1.1	15
801	Comprehensive assessment of the accuracy of CFD-DEM simulations of bubbling fluidized beds. Powder Technology, 2019, 343, 145-158.	2.1	42
802	Modeling of granular heat transfer in cryogenic grinding system: Black pepper seeds. Chemical Engineering Research and Design, 2019, 141, 302-316.	2.7	13
803	Numerical investigation on the effect of the incident angle on momentum and heat transfer of spheroids in supercritical water. Computers and Fluids, 2019, 179, 533-542.	1.3	45
804	Particle scale modelling of mixing of ellipsoids and spheres in gas-fluidized beds by a modified drag correlation. Powder Technology, 2019, 343, 619-628.	2.1	22
805	Potential and constraints for the application of CFD combined with Lagrangian particle tracking to dry powder inhalers. European Journal of Pharmaceutical Sciences, 2019, 128, 299-324.	1.9	37

#	Article	IF	Citations
806	A DEM model-based study to quantitatively compare the effect of wet and dry binder addition in high-shear wet granulation processes. Chemical Engineering Research and Design, 2019, 142, 307-326.	2.7	17
807	CFD-DEM simulation of heat transfer in fluidized beds: Model verification, validation, and application. Chemical Engineering Science, 2019, 197, 280-295.	1.9	116
808	Multiscale structures in particle–fluid systems: Characterization, modeling, and simulation. Chemical Engineering Science, 2019, 198, 198-223.	1.9	85
809	Extension of process models to predict batch screening results under the influence of moisture based on DEM simulations. Powder Technology, 2019, 342, 698-713.	2.1	7
810	CFD-DEM simulations of particle separation characteristic in centrifugal compounding force field. Powder Technology, 2019, 343, 11-18.	2.1	22
811	Investigation of causes of layer inversion and prediction of inversion velocity in liquid fluidizations of binary particle mixtures. Powder Technology, 2019, 342, 418-432.	2.1	9
812	Effect of lift force and hydrodynamic torque on fluidisation of non-spherical particles. Chemical Engineering Science, 2019, 195, 642-656.	1.9	35
813	Role of the location and size of soluble particles in the mechanical behavior of collapsible granular soil: a DEM simulation. Computational Particle Mechanics, 2019, 6, 327-341.	1.5	12
814	Hydro-mechanical analysis of calcareous sand with a new shape-dependent fluid-particle drag model integrated into CFD-DEM coupling program. Powder Technology, 2019, 344, 108-120.	2.1	31
815	A parallel dual-grid multiscale approach to CFD–DEM couplings. Journal of Computational Physics, 2019, 378, 708-722.	1.9	17
816	CFD-DEM simulation of drying of food grains with particle shrinkage. Powder Technology, 2019, 343, 792-802.	2.1	39
817	An Overview of Numerical Methods for Incompressible Viscous Flow with Moving Particles. Archives of Computational Methods in Engineering, 2019, 26, 1255-1282.	6.0	13
818	A rheometry based calibration of a first-order DEM model to generate virtual avatars of metal Additive Manufacturing (AM) powders. Powder Technology, 2019, 342, 441-456.	2.1	19
819	Prediction on drag force and heat transfer of spheroids in supercritical water: A PR-DNS study. Powder Technology, 2019, 342, 99-107.	2.1	46
820	CFD-DEM simulations of particulate fouling in microchannels. Chemical Engineering Journal, 2019, 358, 91-100.	6.6	31
821	Implementation of an unresolved stabilised FEM–DEM model to solve immersed granular flows. Computational Particle Mechanics, 2019, 6, 213-226.	1.5	10
822	Numerical investigation of the cluster property and flux distribution in three-dimensional full-loop circulating fluidized bed with multiple parallel cyclones. Powder Technology, 2019, 342, 253-266.	2.1	12
823	CFD-DEM study on the mixing characteristics of binary particle systems in a fluidized bed of refuse-derived fuel. Particulate Science and Technology, 2019, 37, 51-59.	1.1	10

#	Article	IF	Citations
824	Evaluation and prediction of powder flowability in pharmaceutical tableting. Pharmaceutical Development and Technology, 2019, 24, 35-47.	1.1	14
825	Advances in fixed-bed reactor modeling using particle-resolved computational fluid dynamics (CFD). Reviews in Chemical Engineering, 2019, 35, 139-190.	2.3	156
826	Effect of packing method on packing formation and the correlation between packing density and interparticle force. Particuology, 2020, 48, 170-181.	2.0	5
827	CFD-DEM modelling and simulation of pneumatic conveying: A review. Powder Technology, 2020, 365, 186-207.	2.1	166
828	Study of the discharge behavior of Rosin-Rammler particle-size distributions from hopper by discrete element method: A systematic analysis of mass flow rate, segregation and velocity profiles. Powder Technology, 2020, 360, 818-834.	2.1	22
829	Effect of adhesion on clogging of microparticles in fiber filtration by DEM-CFD simulation. Powder Technology, 2020, 360, 289-300.	2.1	20
830	CFD-DEM model to assess stress-induced anisotropy in undrained granular material. Computers and Geotechnics, 2020, 119, 103318.	2.3	21
831	Effect of particle size and concentration on the migration behavior in porous media by coupling computational fluid dynamics and discrete element method. Powder Technology, 2020, 360, 704-714.	2.1	48
832	CFD-DEM study of the effects of food grain properties on drying and shrinkage in a fluidised bed. Powder Technology, 2020, 360, 33-42.	2.1	27
833	Promote cohesive solid flow in a screw feeder with new screw designs. Powder Technology, 2020, 361, 248-257.	2.1	15
834	Explicit contact force model for superellipses by Fourier transform and application to superellipse packing. Powder Technology, 2020, 361, 112-123.	2.1	11
835	Soil arching due to leaking of tunnel buried in water-rich sand. Tunnelling and Underground Space Technology, 2020, 95, 103158.	3.0	62
836	Preparation and characterization of wet-milled cyclovirobuxine D nanosuspensions. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1959-1970.	2.0	7
837	Segregation of granular binary mixtures with large particle size ratios during hopper discharging process. Powder Technology, 2020, 361, 435-445.	2.1	23
838	Elucidation of the role of cohesion in the macroscopic behaviour of coarse particulate systems using DEM. Powder Technology, 2020, 361, 374-388.	2.1	11
839	CFD-DEM modelling of mixing of granular materials in multiple jets fluidized beds. Powder Technology, 2020, 361, 315-325.	2.1	18
840	Application of GPU-DEM simulation on large-scale granular handling and processing in ironmaking related industries. Powder Technology, 2020, 361, 258-273.	2.1	25
841	CFD-DEM Simulation of Large-Scale Dilute-Phase Pneumatic Conveying System. Industrial & Engineering Chemistry Research, 2020, 59, 4150-4160.	1.8	34

#	Article	IF	Citations
842	Development and experimental validation of a computational fluid dynamics-discrete element method sand production model. Journal of Natural Gas Science and Engineering, 2020, 73, 103052.	2.1	25
843	Numerical simulation of the effect of fine fraction on the flowability of powders in additive manufacturing. Powder Technology, 2020, 360, 608-621.	2.1	44
844	Experimental and numerical investigation on the packing of binary mixtures of spheres and ellipsoids. Powder Technology, 2020, 360, 1210-1219.	2.1	11
845	Comparison of different effective diameter calculating methods for sphero-cylinders by geometrically exact DEM simulations. Powder Technology, 2020, 360, 1092-1101.	2.1	8
846	Coupled methods. , 2020, , 85-119.		0
848	Analysis and evaluations of four models of thermal radiation for densely packed granular systems. Chemical Engineering Science, 2020, 211, 115309.	1.9	18
849	Synthesis and modification approaches for starch nanoparticles for their emerging food industrial applications: A review. Food Research International, 2020, 128, 108765.	2.9	83
850	Development of a standard calibration procedure for the DEM parameters of cohesionless bulk materials â€" Part II: Efficient optimization-based calibration. Powder Technology, 2020, 360, 967-976.	2.1	43
851	Effect of anisotropic microstructures on fluidâ€"particle drag in lowâ€Reynoldsâ€number monodisperse gasâ€"solid suspensions. AICHE Journal, 2020, 66, e16910.	1.8	16
852	Simulation on hydrodynamics of non-spherical particulate system using a drag coefficient correlation based on artificial neural network. Petroleum Science, 2020, 17, 537-555.	2.4	15
853	Experimental methods in chemical engineering: Unresolved CFDâ€DEM. Canadian Journal of Chemical Engineering, 2020, 98, 424-440.	0.9	41
854	Continuum theory for dense gas-solid flow: A state-of-the-art review. Chemical Engineering Science, 2020, 215, 115428.	1.9	200
855	Flow behaviour of an agitated tubular reactor using a novel dynamic mesh based CFD model. Chemical Engineering Science, 2020, 212, 115333.	1.9	19
856	Effect of van der Waals force on bubble dynamics in bubbling fluidized beds of ellipsoidal particles. Chemical Engineering Science, 2020, 212, 115343.	1.9	19
857	Multi-super-ellipsoid model for non-spherical particles in DEM simulation. Powder Technology, 2020, 361, 190-202.	2.1	42
858	CFD-DEM study of air entrainment in falling particle plumes. Powder Technology, 2020, 361, 836-848.	2.1	18
859	Numerical study on mixed charging process and gas-solid flow in COREX melter gasifier. Powder Technology, 2020, 361, 274-282.	2.1	13
860	Particle shape matters â€" Using 3D printed particles to investigate fundamental particle and packing properties. Powder Technology, 2020, 361, 711-718.	2.1	35

#	Article	IF	Citations
861	Morphodynamics of a dense particulate medium under radial explosion. Soft Matter, 2020, 16, 1498-1517.	1.2	5
862	Investigating particle-level dynamics to understand bulk behavior in a lab-scale Agitated Filter Dryer (AFD) using Discrete Element Method (DEM). Advanced Powder Technology, 2020, 31, 477-492.	2.0	1
863	Characteristics of granulates used as core materials in the overmoulding process of hollow profiles. Journal of Materials Processing Technology, 2020, 279, 116579.	3.1	0
864	Computational modelling of particle-fluid dynamics in comminution and classification: a review. Mineral Processing and Extractive Metallurgy: Transactions of the Institute of Mining and Metallurgy, 2020, 129, 145-156.	0.1	4
865	Graphene Diamagnetism: Levitation, transport, rotation, and orientation alignment of graphene flakes in a magnetic field. IEEE Nanotechnology Magazine, 2020, 14, 14-22.	0.9	14
866	The time and location dependent prediction of crystal caking by a modified crystal bridge growth model and DEM simulation considering particle size and shape. Chemical Engineering Science, 2020, 214, 115419.	1.9	10
867	Effect of swirling flow on large coal particle pneumatic conveying. Powder Technology, 2020, 362, 745-758.	2.1	29
868	Effect of particle motion on the hydraulic collection of coarse spherical particles. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 72-81.	1.5	19
869	Effect of particle spin on the spatio-thermal distribution of incandescent materials released from explosions. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	1
870	A coupled CFD-DEM method with moving mesh for simulating undrained triaxial tests on granular soils. Granular Matter, 2020, 22, 1.	1.1	22
871	An accurate geometric contact force model for super-quadric particles. Computer Methods in Applied Mechanics and Engineering, 2020, 360, 112774.	3.4	20
872	Comparison of computational fluid dynamics–discrete element method and discrete element method simulations for a screw conveyor. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2394.	0.8	5
873	CFD-DEM study of coke combustion in the raceway cavity of an ironmaking blast furnace. Powder Technology, 2020, 362, 539-549.	2.1	54
874	A two-way coupled Euler-Lagrange method for simulating multiphase flows with discontinuous Galerkin schemes on arbitrary curved elements. Journal of Computational Physics, 2020, 405, 109096.	1.9	29
875	CFD-DEM simulation of fluidization of multisphere- modelled cylindrical particles. Powder Technology, 2020, 360, 1017-1027.	2.1	28
876	Wall stress analysis in an unsteady hopper flow with ellipsoidal particles. Powder Technology, 2020, 361, 1-9.	2.1	9
877	Experimental and numerical study of coarse particle conveying in the small absorber sphere system: Overview and some recent CFD-DEM simulations. Nuclear Engineering and Design, 2020, 357, 110420.	0.8	7
878	Validation of CFD–DEM model for iron ore reduction at particle level and parametric study. Particuology, 2020, 51, 163-172.	2.0	18

#	Article	IF	Citations
879	Simulating Fracture Sealing by Granular LCM Particles in Geothermal Drilling. Energies, 2020, 13, 4878.	1.6	17
880	Experimental and Numerical Investigation on the Transport Characteristics of Particle-Fluid Mixture in Y-Shaped Elbow. Journal of Marine Science and Engineering, 2020, 8, 675.	1.2	16
881	CFD-DEM -DDM Model for Spray Coating Process in a Wurster Coater. Journal of Pharmaceutical Sciences, 2020, 109, 3678-3689.	1.6	14
882	Viscosity study of tert-butyl alcohol aqueous solution by Brownian motion and gravimetric capillaries. Journal of Molecular Liquids, 2020, 319, 114170.	2.3	11
883	Numerical Simulation of the Solid Particle Sedimentation and Bed Formation Behaviors Using a Hybrid Method. Energies, 2020, 13, 5018.	1.6	8
884	Development of computational design tools for characterising and modelling cutting in ultra soft solids. Extreme Mechanics Letters, 2020, 40, 100964.	2.0	8
885	Modelling Complex Particleâ€"Fluid Flow with a Discrete Element Method Coupled with Lattice Boltzmann Methods (DEM-LBM). ChemEngineering, 2020, 4, 55.	1.0	11
886	A coupled CFDâ€ĐEM investigation of suffusion of gap graded soil: Coupling effect of confining pressure and fines content. International Journal for Numerical and Analytical Methods in Geomechanics, 2020, 44, 2473-2500.	1.7	52
887	DEM study of dry and wet granular flows in a vertical bladed mixer. Particulate Science and Technology, 2021, 39, 797-808.	1.1	3
888	A Model to Improve Granular Temperature in CFD-DEM Simulations. Energies, 2020, 13, 4730.	1.6	7
889	An improved VOF-DEM model for soil-water interaction with particle size scaling. Computers and Geotechnics, 2020, 128, 103818.	2.3	21
890	A new method for predicting the maximum filler loading of dental resin composites based on DEM simulations and experiments. Dental Materials, 2020, 36, e375-e385.	1.6	10
891	Numerical simulation of the effect of burden profile on gas flow in a COREX shaft furnace. Powder Technology, 2020, 376, 537-548.	2.1	14
892	Compaction effects on permeability of spherical packing. Engineering Computations, 2020, 37, 3079-3096.	0.7	5
893	Turbulent coarse-particle suspension flow: Measurement and modelling. Powder Technology, 2020, 373, 647-659.	2.1	24
894	Modeling and analysis of flow regimes in hydraulic conveying of coarse particles. Powder Technology, 2020, 373, 543-554.	2.1	48
895	Hybrid Particle Cluster CPFD Simulation in the Acceleration and Stabilized Sections of a Downflow Circulating Fluidized Bed. Industrial & Engineering Chemistry Research, 2020, 59, 20325-20336.	1.8	4
896	MUSEN: An open-source framework for GPU-accelerated DEM simulations. SoftwareX, 2020, 12, 100618.	1.2	36

#	Article	IF	Citations
897	Effects of the collision model in interface-resolved simulations of particle-laden turbulent channel flows. Physics of Fluids, 2020, 32, .	1.6	19
898	The Effect Particle Size Distribution of Granular LCM on Fracture Sealing Capability. , 2020, , .		7
899	A computational fluid dynamics-discrete element-immersed boundary method for Cartesian grid simulation of heat transfer in compressible gasâ€"solid flow with complex geometries. Physics of Fluids, 2020, 32, .	1.6	32
900	Fluid forces and torques in suspensions of oblate cylinders with aspect ratio 1:4. International Journal of Multiphase Flow, 2020, 131, 103394.	1.6	9
901	Applications of Discrete Element Method (DEM) in modeling the impact of dynamic and technological parameters on the material movement on the vibrating screen surface. IOP Conference Series: Materials Science and Engineering, 2020, 843, 012024.	0.3	0
902	Characteristic-particle-tracked modeling for CFB boiler: Coal combustion and ultra-low NO emission. Powder Technology, 2020, 374, 632-647.	2.1	11
903	Dust Suppression Analysis of a New Spiral Hopper Using CFD-DEM Simulations and Experiments. Processes, 2020, 8, 783.	1.3	2
904	Numerical study on immersed granular collapse in viscous regime by particle-scale simulation. Physics of Fluids, 2020, 32, .	1.6	22
905	Discrete particle simulation of heterogeneous gas-solid flows in riser and downer reactors. Powder Technology, 2020, 375, 221-232.	2.1	19
906	Granular flow of cylinder-like particles in a cylindrical hopper under external pressure based on DEM simulations. Soft Matter, 2020, 16, 7760-7777.	1.2	10
907	A coupled thermo-mechanical model for the simulation of discrete particle systems. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	2
908	Effects of inlet concentration on the hydrocyclone separation performance with different inlet velocity. Powder Technology, 2020, 375, 337-351.	2.1	35
909	Coupled Flow Modelling in Geotechnical and Ground Engineering: An Overview. International Journal of Geosynthetics and Ground Engineering, 2020, 6, 1.	0.9	12
910	DEM study of particles flow on an industrial-scale roller screen. Advanced Powder Technology, 2020, 31, 4445-4456.	2.0	17
911	CFD-DEM bidirectional coupling simulation and experimental investigation of particle ejections and energy conversion in a spouted bed. Energy, 2020, 211, 118672.	4.5	45
912	Numerical Simulation to Study Scale Formation on SSV Valves. , 2020, , .		3
914	Mechanical Orientation of Fine Magnetic Particles in Powders by an External Magnetic Field: Simulationâ€"Based Optimization. Physica Status Solidi (B): Basic Research, 2020, 257, 2000404.	0.7	1
915	Local Percolation of a Binary Particle Mixture in a Rectangular Hopper with Inclined Bottom during Discharging. ACS Omega, 2020, 5, 20773-20783.	1.6	2

#	ARTICLE	IF	CITATIONS
916	Transition of granular flow patterns in a conical hopper based on superquadric DEM simulations. Granular Matter, 2020, 22, 1.	1.1	15
917	Unresolved CFD and DEM Coupled Solver for Particle-Laden Flow and Its Application to Single Particle Settlement. Journal of Marine Science and Engineering, 2020, 8, 983.	1.2	5
918	Simulation of vorticity wind turbines. Heliyon, 2020, 6, e05155.	1.4	3
919	Current Situation and Prospect of Erosion Wear. Journal of Physics: Conference Series, 2020, 1600, 012015.	0.3	1
920	New Scale Prediction Approach Through Numerical Simulations. , 2020, , .		1
921	Direct numerical simulation of particle pore-scale transport through three-dimensional porous media with arbitrarily polyhedral mesh. Powder Technology, 2020, 367, 576-596.	2.1	17
922	Post-processing and visualization of large-scale DEM simulation data with the open-source VELaSSCo platform. Simulation, 2020, 96, 567-581.	1.1	0
923	Experimentally calibrated CFD-DEM study of air impairment during powder discharge for varying hopper configurations. Powder Technology, 2020, 372, 404-419.	2.1	22
924	Meso-scale drag model designed for coarse-grid Eulerian-Lagrangian simulation of gas-solid flows. Chemical Engineering Science, 2020, 223, 115747.	1.9	19
925	Effects of acoustic fields on the dynamics of micron-sized particles in a fluidized bed. Powder Technology, 2020, 372, 625-637.	2.1	8
926	Modelling the Dynamics of Granular Particle Interactions in a Vortex Reactor using a Coupled DPM-KTGF Model. South African Journal of Chemical Engineering, 2020, 34, 31-46.	1.2	2
927	CFDâ€"DEM simulation of mud cake formation in heterogeneous porous medium for lost circulation control. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	8
928	Fracture plugging zone for lost circulation control in fractured reservoirs: Multiscale structure and structure characterization methods. Powder Technology, 2020, 370, 159-175.	2.1	29
929	A Deep Neural Network Model of Particle Thermal Radiation in Packed Bed. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 1029-1036.	3.6	1
930	Study of particle mass loading effects on sand erosion in a series of fittings. Powder Technology, 2020, 373, 118-141.	2.1	14
931	Influence of contact parameters on Discrete Element method (DEM) simulations of flow from a hopper: Comparison with magnetic resonance imaging (MRI) measurements. Powder Technology, 2020, 372, 671-684.	2.1	16
932	Pressure drop characteristics and minimum pressure drop velocity for pneumatic conveying of polyacrylamide in a horizontal pipe with bends at both ends. Powder Technology, 2020, 372, 192-203.	2.1	13
933	A Coupled CFDâ€"DEM Approach to Examine the Hydraulic Critical State of Soil under Increasing Hydraulic Gradient. International Journal of Geomechanics, 2020, 20, .	1.3	45

#	Article	IF	Citations
934	CFD-DEM simulation of pneumatic conveying in a horizontal pipe. Powder Technology, 2020, 373, 58-72.	2.1	32
935	Numerical investigation of mixed layer effect on permeability in a dynamic blast furnace. Engineering Reports, 2020, 2, e12166.	0.9	6
936	Study on mass at the bottom of the pipe and gas velocity distribution during flow blockage collapsing under pipeâ€rotation mechanism. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2512.	0.8	4
937	Effect of horizontal vibrations on mass flow rate and segregation during hopper discharge: discrete element method approach. Sadhana - Academy Proceedings in Engineering Sciences, 2020, 45, 1.	0.8	7
938	Computational Granular Mechanics and Its Engineering Applications. Springer Tracts in Mechanical Engineering, 2020, , .	0.1	9
939	Three-dimensional full-loop numerical simulation of co-combustion of coal and refuse derived fuel in a pilot-scale circulating fluidized bed boiler. Chemical Engineering Science, 2020, 220, 115612.	1.9	25
940	Study on interaction effects between the hydrocyclone feed flow rate and the feed size distribution. Powder Technology, 2020, 366, 617-628.	2.1	30
942	A Transient Discrete Element Methodâ€Based Virtual Experimental Blast Furnace Model. Steel Research International, 2020, 91, 2000071.	1.0	20
943	High shear seeded granulation: Its preparation mechanism, formulation, process, evaluation, and mathematical simulation. Powder Technology, 2020, 366, 667-688.	2.1	19
944	Influence of particle shape in additive manufacturing: Discrete element simulations of polyamide 11 and polyamide 12. Additive Manufacturing, 2020, 36, 101421.	1.7	7
945	PR-DNS on the momentum and heat transfer of a rotating ellipsoidal particle in a fluid. Powder Technology, 2020, 373, 152-163.	2.1	13
946	Semi-resolved CFDâ€"DEM for thermal particulate flows with applications to fluidized beds. International Journal of Heat and Mass Transfer, 2020, 159, 120150.	2.5	65
947	3D random pore structure modeling and simulation of pressure drop characteristics in fixed-bed contactors. Powder Technology, 2020, 372, 448-454.	2.1	4
948	Simulation of the Formation of a Mixture of Loose Materials. Journal of Engineering Physics and Thermophysics, 2020, 93, 287-290.	0.2	1
949	What are the microscopic events during membrane backwashing?. Journal of Membrane Science, 2020, 602, 117886.	4.1	21
950	A process scaling approach for CFD-DEM modelling of thermochemical behaviours in moving bed reactors. Fuel Processing Technology, 2020, 202, 106369.	3.7	24
951	A review of granular flow in screw feeders and conveyors. Powder Technology, 2020, 366, 369-381.	2.1	39
952	Numerical simulation of proppant transport and tip screen-out in hydraulic fracturing with the extended finite element method. International Journal of Rock Mechanics and Minings Sciences, 2020, 128, 104247.	2.6	13

#	Article	IF	Citations
953	A DEM-based mechanistic model for scale-up of industrial tablet coating processes. Powder Technology, 2020, 364, 698-707.	2.1	15
954	A CFD-DEM-IBM method for Cartesian grid simulation of gas-solid flow in complex geometries. Chemical Engineering Journal, 2020, 389, 124343.	6.6	35
955	A DEM modeling of biomass fast pyrolysis in a double auger reactor. International Journal of Heat and Mass Transfer, 2020, 150, 119308.	2.5	23
956	Numerical modeling of granular flow in star valve type cryogenic precooler. Journal of Food Process Engineering, 2020, 43, e13376.	1.5	0
957	Numerical Simulation of the Fluid–Solid Coupling Mechanism of Internal Erosion in Granular Soil. Water (Switzerland), 2020, 12, 137.	1.2	16
958	Statistical analysis of monodispersed coarse particle motion in a gas-fluidized bed. Powder Technology, 2020, 363, 107-111.	2.1	4
959	Construction of irregular particles with superquadric equation in DEM. Theoretical and Applied Mechanics Letters, 2020, 10, 68-73.	1.3	24
960	A CPU-GPU cross-platform coupled CFD-DEM approach for complex particle-fluid flows. Chemical Engineering Science, 2020, 223, 115712.	1.9	35
961	Studying the orifice jamming of a polydispersed particle system via coupled CFD–DEM simulations. Powder Technology, 2020, 368, 308-322.	2.1	15
962	Numerical simulation of particle motion characteristics in quantitative seed feeding system. Powder Technology, 2020, 367, 643-658.	2.1	37
963	Fluid-driven fractures in granular media: Insights from numerical investigations. Physical Review E, 2020, 101, 042903.	0.8	9
964	Heat transfer modelling in Discrete Element Method (DEM)-based simulations of thermal processes: Theory and model development. Progress in Energy and Combustion Science, 2020, 79, 100847.	15.8	78
965	Numerical study on the erosion process of the low temperature economizer using computational fluid dynamics-discrete particle method. Wear, 2020, 450-451, 203269.	1.5	10
966	DEM simulation for separating coated fuel particles by inclined vibrating plate. Powder Technology, 2020, 366, 261-274.	2.1	8
967	Fluidisation characteristics and inter-phase heat transfer on product yields in bubbling fluidised bed reactor. Fuel, 2020, 273, 117791.	3.4	13
968	Flow characteristics of nonspherical granular materials simulated with multi-superquadric elements. Particuology, 2021, 54, 25-36.	2.0	9
969	Binder jet 3D printing–Process parameters, materials, properties, modeling, and challenges. Progress in Materials Science, 2021, 119, 100707.	16.0	412
970	Discrete element method using cohesive plastic beam for modeling elasto-plastic deformation of ductile materials. Computational Particle Mechanics, 2021, 8, 437-457.	1.5	7

#	ARTICLE	IF	CITATIONS
971	GPU-based Parallel Algorithm for Super-Quadric Discrete Element Method and Its Applications for Non-Spherical Granular Flows. Advances in Engineering Software, 2021, 151, 102931.	1.8	17
972	CFD-DEM modelling of the migration of fines in suspension flow through a solid packed bed. Chemical Engineering Science, 2021, 231, 116261.	1.9	51
973	Three-dimensional CFD simulation and experimental validation of particle segregation in CFB riser. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 1144-1171.	1.6	0
974	CFD-DEM simulations of solid-liquid flow in stirred tanks using a non-inertial frame of reference. Chemical Engineering Science, 2021, 230, 116137.	1.9	19
975	Packing of wet monodisperse spheres. Powder Technology, 2021, 378, 60-64.	2.1	6
976	CFD-DEM study of particle-fluid flow and retention performance of sand screen. Powder Technology, 2021, 378, 410-420.	2.1	33
977	3D DEM simulations of monotonic interface behaviour between cohesionless sand and rigid wall of different roughness. Acta Geotechnica, 2021, 16, 1001-1026.	2.9	24
978	A 2D hysteretic DEM model for arbitrarily shaped polygonal particles. Powder Technology, 2021, 378, 327-338.	2.1	5
979	Comparison of CFD-DEM and TFM approaches for the simulation of the small scale challenge problem 1. Powder Technology, 2021, 378, 85-103.	2.1	32
980	Radial mixing of metallurgical slag particles and steel balls in a horizontally rotating drum: A discussion of particle size distribution and mixing time. Powder Technology, 2021, 378, 441-454.	2.1	13
981	Numerical Study of Three Ventilation Strategies in a prefabricated COVID-19 inpatient ward. Building and Environment, 2021, 188, 107467.	3.0	74
982	An Eulerian-Lagrangian method for wet biomass carbonization in rotary kiln reactors. Renewable and Sustainable Energy Reviews, 2021, 139, 110582.	8.2	14
983	Motion control for uniaxial rotational molding. Journal of Applied Polymer Science, 2021, 138, 49879.	1.3	4
984	Un-resolved CFD-DEM method: An insight into its limitations in the modelling of suffusion in gap-graded soils. Powder Technology, 2021, 381, 520-538.	2.1	17
985	A review of contact force models between nanoparticles in agglomerates, aggregates, and films. Journal of Aerosol Science, 2021, 153, 105719.	1.8	61
986	Large eddy simulation of sediment transport in high flow intensity by discrete particle method. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 605-620.	0.7	3
987	Mathematical model, numerical simulation and optimization of rotating valve feeder in animal feed production. Animal Feed Science and Technology, 2021, 272, 114741.	1.1	3
988	Effect of vibration mode on self-assembly of granular spheres under three-dimensional vibration. Powder Technology, 2021, 380, 47-58.	2.1	8

#	Article	IF	Citations
989	Analysis of flow behavior of size distributed spherical particles in screw feeder. Powder Technology, 2021, 382, 1-22.	2.1	10
990	Validation of a filtered drag model for solid residence time distribution (RTD) prediction in a pilot-scale FCC riser. Powder Technology, 2021, 378, 339-347.	2.1	13
991	Size segregation of granular materials during Paul-Wurth hopper charging and discharging process. Powder Technology, 2021, 378, 497-509.	2.1	5
992	Simulation of air invasion in immersed granular beds with an unresolved FEMâ€"DEM model. Computational Particle Mechanics, 2021, 8, 535-560.	1.5	3
993	Geomechanical Modelling of Railroad Ballast: A Review. Archives of Computational Methods in Engineering, 2021, 28, 815-839.	6.0	23
994	Metamaterial-like aerogels for broadband vibration mitigation. Soft Matter, 2021, 17, 4496-4503.	1.2	6
995	A Novel Modeling Approach for Plastics Melting within a CFD-DEM Framework. Polymers, 2021, 13, 227.	2.0	6
996	Particle velocity profile in an inclined rotating drum. EPJ Web of Conferences, 2021, 249, 14001.	0.1	1
997	Acoustic signals of rotating drums generated based on DEM simulations. EPJ Web of Conferences, 2021, 249, 14019.	0.1	1
998	Machine learning of lubrication correction based on GPR for the coupled DPDâ€"DEM simulation of colloidal suspensions. Soft Matter, 2021, 17, 5682-5699.	1.2	5
999	Numerical study on the influence of center gas supply device on gas-solid residence time distribution in COREX shaft furnace. Particulate Science and Technology, 2021, 39, 887-895.	1.1	5
1000	Discrete element methodâ€"computational fluid dynamics analyses of flexible fibre fluidization. Journal of Fluid Mechanics, 2021, 910, .	1.4	16
1001	DEM Simulation to Determine the Influence on the Experimental Results of Tests of Iron Pellets When the Dimensions of the Test Device Are Varied. International Journal of Modern Nonlinear Theory and Application, 2021, 10, 65-80.	0.1	0
1002	True shape modeling of bio-particulate matter flow in an aero-cyclone separator using CFDâ€"DEM simulation. Computational Particle Mechanics, 2021, 8, 955-971.	1.5	6
1003	A Semi-Automated DEM Parameter Calibration Technique of Powders Based on Different Bulk Responses Extracted from Auger Dosing Experiments. KONA Powder and Particle Journal, 2021, 38, 235-250.	0.9	8
1004	Flow and Particle Modelling of Dry Powder Inhalers: Methodologies, Recent Development and Emerging Applications. Pharmaceutics, 2021, 13, 189.	2.0	19
1005	Numerical Analysis of the Particle Dynamics in a Supersonic Gas Stream with a Modified Point-Particle Eulerâ€"Lagrange Approach. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2021, 52, 1034-1051.	1.0	13
1006	An assessment of the mathematical models for estimating the coordination number of the packing of multisized particles. Powder Technology, 2021, 379, 58-68.	2.1	11

#	ARTICLE	IF	CITATIONS
1007	CFD-DEM simulation of powders clogging in a packed bed with lateral inlet. International Journal of Chemical Reactor Engineering, 2021, 19, 251-259.	0.6	5
1008	A combined data-driven and discrete modelling approach to predict particle flow in rotating drums. Chemical Engineering Science, 2021, 231, 116251.	1.9	13
1009	A kinematics-based model for the settling of gravity-driven arbitrary-shaped particles on a surface. PLoS ONE, 2021, 16, e0243716.	1.1	3
1010	A Review on Detailed Kinetic Modeling and Computational Fluid Dynamics of Thermochemical Processes of Solid Fuels. Energy & Fuels, 2021, 35, 5479-5494.	2.5	7
1011	A Finite Element/Neural Network Framework for Modeling Suspensions of Non-spherical Particles. Vietnam Journal of Mathematics, 2021, 49, 207-235.	0.4	3
1012	Optimization of fresh concrete pumping pressure loss with CFD-DEM approach. Construction and Building Materials, 2021, 276, 122204.	3.2	24
1013	Algorithm design and the development of a discrete element method for simulating particulate flow and heat transfer. Clean Energy, 2021, 5, 141-166.	1.5	0
1014	Semi-coupled resolved CFDâ€“DEM simulation of powder-based selective laser melting for additive manufacturing. Computer Methods in Applied Mechanics and Engineering, 2021, 377, 113707.	3.4	47
1015	Numerical Simulation on the Longitudinal Breach Process of Landslide Dams Using an Improved Coupled DEM-CFD Method. Frontiers in Earth Science, 2021, 9, .	0.8	8
1016	Design modification of iron ore bearing transfer chute using discrete element method. Engineering Computations, 2021, 38, 3590-3607.	0.7	2
1017	Contact model for elastically anisotropic bodies and efficient implementation into the discrete element method. Granular Matter, 2021, 23, 1.	1.1	1
1018	DEM investigation of mixing indices in a ribbon mixer. Particuology, 2022, 60, 37-47.	2.0	20
1019	Theories and Applications of CFDâ€“DEM Coupling Approach for Granular Flow: A Review. Archives of Computational Methods in Engineering, 2021, 28, 4979-5020.	6.0	62
1020	DEM study of segregation degree and velocity of binary granular mixtures subject to vibration. Powder Technology, 2021, 382, 107-117.	2.1	19
1021	Experiments and CFD-DEM simulations of fine kaolinite particle sedimentation dynamic characteristics in a water environment. Powder Technology, 2021, 382, 60-69.	2.1	10
1022	Inertial focusing of neutrally buoyant particles in heterogenous suspensions. Journal of Molecular Liquids, 2021, 328, 115410.	2.3	5
1023	GPU-based DEM simulation for scale-up of bladed mixers. Powder Technology, 2021, 382, 300-317.	2.1	18
1024	Virtual Experiments of Particle Mixing Process with the SPH-DEM Model. Materials, 2021, 14, 2199.	1.3	9

#	Article	IF	Citations
1025	Continuum-Based Approach to Model Particulate Soilâ€"Water Interaction: Model Validation and Insight into Internal Erosion. Processes, 2021, 9, 785.	1.3	5
1026	Gas-solid mixing and heat transfer performance in alternating spout deflection. Chemical Engineering Science, 2021, 234, 116446.	1.9	14
1027	Migration Simulation of Radioactive Soil Particles in the Atmospheric Environment Using CFD-DEM Coupled with Empirical Formulas. Science and Technology of Nuclear Installations, 2021, 2021, 1-10.	0.3	4
1028	Enhanced Processing of Regrind as Recycling Material in Single-Screw Extruders. Polymers, 2021, 13, 1540.	2.0	6
1029	Fluid flow assisted mixing of binary granular beds using CFD-DEM. Powder Technology, 2021, 383, 183-197.	2.1	7
1030	Particle-scale study of gas-solid flows in a bubbling fluidised bed: Effect of drag force and collision models. Powder Technology, 2021, 384, 353-367.	2.1	10
1031	A novel CFD-DEM coarse-graining method based on the Voronoi tessellation. Powder Technology, 2021, 384, 479-493.	2.1	18
1032	Particleâ€"pore scale modelling of particleâ€"fluid flows. Chemical Engineering Science, 2021, 235, 116500.	1.9	9
1033	Simulating Subgrade Soil Fluidization Using LBM-DEM Coupling. International Journal of Geomechanics, 2021, 21, .	1.3	13
1034	Analysis of Gas-Liquid-Solid Three-Phase Flows in Hydrocyclones Through a Coupled Method of VOF and DEM. Journal of Fluids Engineering, Transactions of the ASME, 2021, , .	0.8	7
1035	Heat Transfer and Hydrodynamics in Stirred Tanks with Liquid-Solid Flow Studied by CFDâ€"DEM Method. Processes, 2021, 9, 849.	1.3	12
1036	Investigation of the vibrating feeding system for sphericity separation of coated fuel particles using DEM. Powder Technology, 2021, 383, 131-142.	2.1	6
1037	Effect of Stefan flow on the drag force in flow past random arrays of spheres. Chemical Engineering Journal, 2021, 412, 128691.	6.6	12
1038	On the morphology and pressure-filtration characteristics of filter cake formation: Insight from coupled CFDâ€"DEM simulations. Tunnelling and Underground Space Technology, 2021, 111, 103856.	3.0	15
1039	Investigation of the effect of filling level on the wear and vibration of a SAG mill by DEM. Particuology, 2022, 63, 24-34.	2.0	11
1040	Stability and conductivity of proppant packs during flowback in unconventional reservoirs: A CFDâ€"DEM simulation study. Journal of Petroleum Science and Engineering, 2021, 201, 108381.	2.1	9
1041	Calibration Strategy to Determine the Interaction Properties of Fertilizer Particles Using Two Laboratory Tests and DEM. Agriculture (Switzerland), 2021, 11, 592.	1.4	14
1042	Peridynamics-based discrete element method (PeriDEM) model of granular systems involving breakage of arbitrarily shaped particles. Journal of the Mechanics and Physics of Solids, 2021, 151, 104376.	2.3	19

#	ARTICLE	IF	CITATIONS
1043	Particle movements provoke avalanche-like compaction in soft colloid filter cakes. Scientific Reports, 2021, 11, 12836.	1.6	5
1044	Comprehensive numerical assessment of molten iron–slag trickle flow and gas countercurrent in complex coke bed by Eulerian–Lagrangian approach. Chemical Engineering Journal, 2021, 414, 128606.	6.6	8
1045	Performance evaluation of standard cyclone separators by using CFD–DEM simulation with realistic bio-particulate matter. Powder Technology, 2021, 385, 357-374.	2.1	39
1046	Poly-superquadric model for DEM simulations of asymmetrically shaped particles. Computational Particle Mechanics, 2022, 9, 299-313.	1.5	10
1047	On the treatment of bed-to-wall heat transfer in CFD-DEM simulations of gas-fluidized beds. Chemical Engineering Science, 2021, 236, 116492.	1.9	17
1048	Research on flow boiling in microchannel based on visualized flow patter. IOP Conference Series: Earth and Environmental Science, 2021, 766, 012065.	0.2	0
1049	Numerical investigation on the evolution of landslide-induced river blocking using coupled DEM-CFD. Computers and Geotechnics, 2021, 134, 104101.	2.3	29
1050	CFD–DEM Simulation of Sand-Retention Mechanisms in Slurry Flow. Energies, 2021, 14, 3797.	1.6	15
1051	Coupled CFD-DEM model for dry powder inhalers simulation: Validation and sensitivity analysis for the main model parameters. Powder Technology, 2021, 385, 199-226.	2.1	23
1052	Predictive Approach to Understand and Eliminate Tablet Breakage During Film Coating. AAPS PharmSciTech, 2021, 22, 178.	1.5	8
1053	Critical analysis of velocimetry methods for particulate flows from synthetic data. Chemical Engineering Journal, 2021, 415, 129032.	6.6	3
1054	Influences of buried depth and grain size distribution on seepage erosion in granular soils around tunnel by coupled CFD-DEM approach. Transportation Geotechnics, 2021, 29, 100574.	2.0	29
1055	Experimental and numerical investigations for effective thermal conductivity in packed beds of thermochemical energy storage materials. Applied Thermal Engineering, 2021, 193, 117006.	3.0	14
1056	Which impeller should be chosen for efficient solid–liquid mixing in the laminar and transitional regime?. AICHE Journal, 2021, 67, e17360.	1.8	5
1057	Modeling and Simulation of Hydrodynamics and Filtration in a Membrane–Assisted Stirred Slurry Reactor. Chemical Engineering and Technology, 2021, 44, 1548-1557.	0.9	2
1058	Surface erosion due to particle-surface interactions - A review. Powder Technology, 2021, 387, 527-559.	2.1	54
1059	Effective drag coefficient correlation for coarse coal particle fluidization in transitional flow regime. Chemical Engineering Research and Design, 2021, 172, 109-119.	2.7	7
1060	Shear-induced particle segregation in binary mixtures: Verification of a percolation theory. Particuology, 2021, 57, 214-222.	2.0	5

#	ARTICLE	IF	CITATIONS
1061	CFD-single particle modeling and simulation of the removal of H2S in a packed-bed bioreactor. Journal of Environmental Chemical Engineering, 2021, 9, 105692.	3.3	7
1062	Research on the Influencing Factors and Prediction Model of Impact Airflow in the Process of Unloading of an Ore Pass Based on a Coupled Computational Fluid Dynamics and Discrete Element Method. ACS Omega, 2021, 6, 23100-23109.	1.6	2
1063	Particle-scale study of heat and mass transfer in a bubbling fluidised bed. Chemical Engineering Science, 2021, 240, 116655.	1.9	56
1064	Numerical investigation on effect of particle aspect ratio on the dynamical behaviour of ellipsoidal particle flow. Journal of Physics Condensed Matter, 2021, 33, 455102.	0.7	4
1065	Comparative study of discrete element modeling of tablets using multi-spheres, multi-super-ellipsoids, and polyhedrons. Powder Technology, 2021, 390, 34-49.	2.1	20
1066	Insight on micro bubbling mechanism in a 2D fluidized bed with Group D particles. International Journal of Chemical Reactor Engineering, 2021, .	0.6	0
1067	Macro and micro analysis on coal-bearing soil slopes instability based on CFD-DEM coupling method. PLoS ONE, 2021, 16, e0257362.	1.1	3
1068	Efficient prediction of the packing density of inorganic fillers in dental resin composites for excellent properties. Dental Materials, 2021, 37, 1806-1818.	1.6	3
1069	Eulerian CFD analysis of clustering gas-solid flows in fluidized bed pyrolysis reactors. Journal of Analytical and Applied Pyrolysis, 2021, 158, 105261.	2.6	8
1070	Lagrangian particle tracking with new weighted fraction Monte Carlo method for studying the soot particle size distributions in premixed flames. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, ahead-of-print, .	1.6	3
1071	A Numerical Study of Particle Migration in Porous Media During Produced Water Reinjection. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	1.4	3
1072	Nonequilibrium characteristics and spatiotemporal long-range correlations in dense gas-solid suspensions. International Journal of Multiphase Flow, 2021, 142, 103731.	1.6	6
1073	Statistical foundation of EMMS-based two-fluid models for heterogeneous gas-solid flow. Chemical Engineering Science, 2021, 241, 116678.	1.9	8
1074	Coarse-grained CFD-DEM simulation to determine the multiscale characteristics of the air dense medium fluidized bed. Powder Technology, 2021, 389, 270-277.	2.1	11
1075	Particle-scale modelling of raceway dynamics in a blast furnace using a smoothing method. Powder Technology, 2021, 389, 189-203.	2.1	24
1076	Cutting-fluid flow with chip evacuation during deep-hole drilling with twist drills. European Journal of Mechanics, B/Fluids, 2021, 89, 473-484.	1.2	11
1078	Numerical prediction on the minimum fluidization velocity of a supercritical water fluidized bed reactor: Effect of particle size distributions. Powder Technology, 2021, 389, 119-130.	2.1	25
1079	A resolved CFD-DEM coupling model for modeling two-phase fluids interaction with irregularly shaped particles. Journal of Computational Physics, 2022, 448, 110695.	1.9	29

#	Article	IF	Citations
1081	CFD-DEM modelling of raceway dynamics and coke combustion in an ironmaking blast furnace. Fuel, 2021, 302, 121167.	3.4	49
1082	Computational pharmaceutics - A new paradigm of drug delivery. Journal of Controlled Release, 2021, 338, 119-136.	4.8	75
1083	Continuous mixing technology: Validation of a DEM model. International Journal of Pharmaceutics, 2021, 608, 121065.	2.6	12
1084	Numerical simulation of a 3-D gas-solid fluidized bed: Comparison of TFM and CPFD numerical approaches and experimental validation. Advanced Powder Technology, 2021, 32, 3689-3705.	2.0	13
1085	Entrainment of Sediment Particles in Protection Layers. Journal of Hydraulic Engineering, 2021, 147, .	0.7	2
1086	A novel LBM-DEM based pore-scale thermal-hydro-mechanical model for the fracture propagation process. Computers and Geotechnics, 2021, 139, 104418.	2.3	12
1087	Numerical investigation of the density sorting of grains using water jigging. Powder Technology, 2021, 393, 705-721.	2.1	8
1088	Prediction of random packing density and flowability for non-spherical particles by deep convolutional neural networks and Discrete Element Method simulations. Powder Technology, 2021, 393, 559-581.	2.1	13
1089	CFD-DEM analysis of hydraulic conveying bends: Interaction between pipe orientation and flow regime. Powder Technology, 2021, 392, 619-631.	2.1	35
1090	DEM-CFD modeling and simulations of hydrodynamic characteristics and flow resistance coefficient in fixed-bed reactors. Chemical Engineering Journal Advances, 2021, 8, 100167.	2.4	6
1091	Numerical and experimental investigation into gas flow field and spattering phenomena in laser powder bed fusion processing of Inconel 718. Materials and Design, 2021, 210, 110107.	3.3	11
1092	ANN prediction of particle flow characteristics in a drum based on synthetic acoustic signals from DEM simulations. Chemical Engineering Science, 2021, 246, 117012.	1.9	5
1093	Multi-phase flow simulation of landslide dam formation process based on extended coupled DEM-CFD method. Computers and Geotechnics, 2021, 140, 104438.	2.3	13
1094	Hydrodynamics study of the flow past a cylinder with fine suspensions and evaluation of micropolar parameters. International Journal of Multiphase Flow, 2021, 145, 103832.	1.6	4
1095	Radial segregation of a gaussian-dispersed mixture of superquadric particles in a horizontal rotating drum. Powder Technology, 2021, 394, 813-824.	2.1	14
1096	Effect of fracture roughness on transport of suspended particles in fracture during drilling. Journal of Petroleum Science and Engineering, 2021, 207, 109080.	2.1	6
1097	Investigation the iron ore fine granulation effects and particle adhesion behavior in a horizontal high-shear granulator. Powder Technology, 2021, 394, 162-170.	2.1	11
1098	From melt jet break-up to debris bed formation: A review of melt evolution model during fuel-coolant interaction. Annals of Nuclear Energy, 2022, 165, 108642.	0.9	16

#	Article	IF	Citations
1099	Numerical study of particle separation with standing surface acoustic waves (SSAW). Powder Technology, 2022, 395, 103-110.	2.1	8
1100	Impact energy of particles in ball mills based on DEM simulations and data-driven approach. Powder Technology, 2022, 395, 226-234.	2.1	14
1101	Numerical study on the momentum and heat transfer of porous spheroids under laminar flow. Powder Technology, 2022, 395, 14-25.	2.1	4
1102	Application of Shape Memory Polymers in the Oil & Gas Industry. , 2021, , .		0
1103	Resuspension processes in a wide range of particle sizes. EPJ Web of Conferences, 2021, 249, 01003.	0.1	0
1104	On a simple, stable and efficient bond model for inter-particle adhesion. Computational Particle Mechanics, 2022, 9, 29-44.	1.5	0
1106	Thermo-mechanical Behavior of Confined Granular Systems. Lecture Notes in Applied and Computational Mechanics, 2016, , 41-57.	2.0	1
1107	MercuryDPM: A Fast and Flexible Particle Solver Part A: Technical Advances. Springer Proceedings in Physics, 2017, , 1353-1360.	0.1	8
1108	A multivariate regression parametric study on DEM input parameters of free-flowing and cohesive powders with experimental data-based validation. Computational Particle Mechanics, 2021, 8, 87-111.	1.5	12
1109	Lattice-Boltzmann computation of hydraulic pore-to-pore conductance in packed beds of uniform spheres. Chemical Engineering Science, 2020, 224, 115798.	1.9	8
1110	CFD-DEM investigation of the fluidization of binary mixtures containing rod-like particles and spherical particles in a fluidized bed. Powder Technology, 2018, 336, 533-545.	2.1	47
1111	Simulation of granular flow in a rotating frame of reference using the discrete element method. Powder Technology, 2020, 369, 146-161.	2.1	8
1112	Effects of settling particles on the bubble formation in a gas-liquid-solid flow system studied through a coupled numerical method. Physical Review Fluids, 2020, 5, .	1.0	12
1113	Influence of center gas supply device on gasâ€"solid flow in COREX shaft furnace through DEMâ€"CFD model. International Journal of Chemical Reactor Engineering, 2020, 18, .	0.6	6
1114	Discrete Modelling of Powder Dispersion in Dry Powder Inhalers - A Brief Review. Current Pharmaceutical Design, 2015, 21, 3966-3973.	0.9	25
1115	3D DEM simulations of basic geotechnical tests with early detection of shear localization. Studia Geotechnica Et Mechanica, 2020, 43, 48-64.	0.2	3
1116	Investigation of the Sand Porosity Via Oedometric Testing. Baltic Journal of Road and Bridge Engineering, 2010, 5, 139-147.	0.4	18
1119	Accelerating CFD-DEM simulation of dilute pneumatic conveying with bends. International Journal of Fluid Machinery and Systems, 2015, 8, 84-93.	0.5	5

#	Article	IF	Citations
1120	DYNAMIC DOMAIN DECOMPOSITION APPLIED TO HOPPER DISCHARGE SIMULATION BY DISCRETE ELEMENT METHOD. Information Technology and Control, 2011, 40, .	1.1	4
1121	Particle Scale Simulation of Heat Transfer in Fluid Bed Reactors. , 0, , .		3
1122	EFFICIENT CALIBRATION OF DISCRETE ELEMENT MATERIAL MODEL PARAMETERS USING LATIN HYPERCUBE SAMPLING AND KRIGING. , 2016, , .		6
1123	CFD-DEM Modeling of Dense Sub-Aerial and Submerged Granular Collapses. Water (Switzerland), 2021, 13, 2969.	1.2	6
1124	Improvement of the dust transfer system of an industrial unit using numerical solution. International Journal of Environmental Science and Technology, 0, , 1.	1.8	0
1125	Mixing and dispersion behaviours of ellipsoid particles in a bubbling fluidized bed. Powder Technology, 2022, 396, 210-223.	2.1	11
1126	CFD-DEM study of fluid flow and particle behaviors in a baffled deduster channel. Chemical Engineering Research and Design, 2021, 176, 123-133.	2.7	3
1127	Numerical simulation on segregation process of particles using 3D discrete element method. Wuli Xuebao/Acta Physica Sinica, 2010, 59, 1870.	0.2	13
1129	Granular Mixing Characteristic 2D Simulation in Drum Dryer by DEM. International Journal of Advancements in Computing Technology, 2012, 4, 10-17.	0.1	1
1130	Modeling of sedimentation and filtration layer formation by discrete element method. Computer Research and Modeling, 2012, 4, 105-120.	0.2	1
1132	Enhanced Thermal Process Engineering by the Extended Discrete Element Method (XDEM). Universal Journal of Engineering Science, 2013, 1, 139-145.	0.2	6
1133	Design and Optimization of Chemical Mixing System for Vacuum Chambers: Simulation Results. Transdisciplinary Journal of Engineering & Science, 0, 5, .	0.1	1
1134	Grain Models. , 2014, , 1-2.		0
1136	Particle charging mechanism and numerical methodology for industrial applications. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 168301.	0.2	3
1137	CROSS-PROPERTY CONNECTION BETWEEN HEAT AND FORCE NETWORKS IN THERMALLY-ASSISTED COMPACTION OF GRANULAR MATERIALS. , 2015, , .		0
1138	Design and Optimization of Chemical Mixing System for Vacuum Chambers Base of Simulation Results. International Journal of Automotive Engineering and Technologies, 2015, 4, 23.	0.3	0
1139	Studies of grain segregation patterns on a destoner using a CFDâ€"DEM approach. WIT Transactions on Engineering Sciences, 2015, , .	0.0	0
1140	Multiphase Flows in Pharmaceutical Applications. , 2016, , 1-24.		0

#	Article	IF	Citations
1141	MULTIPLE TIMESCALE MODELLING OF PARTICLE SUSPENSIONS IN METAL MELTS SUBJECTED TO EXTERNAL FORCES. , 2016, , .		0
1142	A review of correlative modeling for transport properties, microstructures, and compositions of granular materials in soft matter. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 178101.	0.2	3
1143	MODELLING OF PARTICLES AGLOMERATION IN THE ACOUSTIC FIELD / DALELIÅ² AGLOMERACIJOS AKUSTINIAME LAUKE MODELIAVIMAS. Science: Future of Lithuania, 2017, 8, 572-576.	0.0	0
1144	An hybrid multiscale model for immersed granular flows. EPJ Web of Conferences, 2017, 140, 09021.	0.1	0
1146	Discrete element analysis of buffering capacity of non-spherical granular materials based on super-quadric method. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 094501.	0.2	2
1148	A fully coupled diffusional-mechanical formulation for growth kinetics of precipitates in laser powder bed fusion process using a phase field approach. , 2019, , .		1
1150	In the Framework of Global Trade, Sustainability and Industry Demand for Innovative Process and Technologies, what kind of Modern â€œGreenâ€•Chemical Engineering is Required for the Design of â€œthe Factory of the Futureâ€?. International Journal of Petroleum Technology, 2019, 6, 7-29.	0.1	1
1151	Application of the discrete element method (DEM) to particle laden multi-phase flows. , 0, , .		0
1152	PARTICLE-SCALE SIMULATION OF THE SEDIMENTATION AND FILTRATION OF DRILLING FLUIDS USING THE DISCRETE ELEMENT METHOD. Brazilian Journal of Petroleum and Gas, 2019, 13, 283-300.	0.1	0
1153	A new method of flow blockage collapsing in the horizontal pipe: the pipe-rotation mechanism. International Journal of Chemical Reactor Engineering, 2020, 18, .	0.6	1
1154	A three-dimensional analysis of drying of a single suspension droplet in high rate evaporation processes. International Journal of Heat and Mass Transfer, 2020, 157, 119791.	2.5	4
1155	Flow behavior of granular material during funnel and mixed flow discharges: A comparative analysis. Powder Technology, 2022, 396, 127-138.	2.1	9
1156	Fluid-Solid Coupling Analysis of Granular Materials. Springer Tracts in Mechanical Engineering, 2020, , 175-210.	0.1	0
1157	Link between packing morphology and the distribution of contact forces and stresses in packings of highly nonconvex particles. Physical Review E, 2020, 102, 062902.	0.8	9
1158	Development of snowYadeFoam solver for snow particles simulation. , 2020, , .		0
1159	Mixing of Particles in a Rotating Drum with Inclined Axis of Rotation. Processes, 2020, 8, 1688.	1.3	5
1160	Numerical investigation of non-uniform sand retention behavior in sand screens. Powder Technology, 2022, 395, 604-617.	2.1	5
1161	Development of a Dynamic-Physical Process Model for Sieving. , 2020, , 141-198.		0

#	ARTICLE	IF	CITATIONS
1163	Discrete Element Methods: Basics and Applications in Engineering. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2020, , 1-30.	0.3	2
1164	Continuous Wet Granulation. AAPS Advances in the Pharmaceutical Sciences Series, 2020, , 269-300.	0.2	1
1165	Hydrodynamic Equations from Kinetic Theory. Advances in Chemical and Materials Engineering Book Series, 0, , 66-101.	0.2	0
1166	Interfacial Interactions. Advances in Chemical and Materials Engineering Book Series, 0, , 128-177.	0.2	0
1167	Discrete element modeling of non-spherical particles using a spherical shape. REM: International Engineering Journal, 2020, 73, 361-369.	0.2	1
1168	A geometric formulation of linear elasticity based on discrete exterior calculus. International Journal of Solids and Structures, 2022, 236-237, 111345.	1.3	6
1169	DEM study of the effect of impeller design on mixing performance in a U-shape ribbon mixer. Advanced Powder Technology, 2022, 33, 103334.	2.0	10
1170	A modified agglomeration kernel model used for particle agglomeration. Advanced Powder Technology, 2022, 33, 103349.	2.0	2
1171	Computational investigation of particle penetration and deposition pattern in a realistic respiratory tract model from different types of dry powder inhalers. International Journal of Pharmaceutics, 2022, 612, 121293.	2.6	9
1172	Scale-up and flow behavior of cohesive granular material in a four-bladed mixer: effect of system and particle size. Advanced Powder Technology, 2021, 32, 4481-4495.	2.0	6
1173	Mixing performance analysis of non-cohesive particles in a double paddle blender using DEM and experiments. Powder Technology, 2022, 397, 117122.	2.1	16
1174	Simulation of underwater concrete movement in flowing water using DEM-CFD coupling method. Construction and Building Materials, 2022, 319, 126134.	3.2	8
1175	Particle shape effect on hydrodynamics and heat transfer in spouted bed: A CFDâ€“DEM study. Particuology, 2022, 69, 10-21.	2.0	16
1176	Discrete element method simulation of binary blend mixing of cohesive particles in a highâ€intensity vibration system. AICHE Journal, 2022, 68, .	1.8	3
1177	Analysis of Fluid Flow and Heat Transfer inside a Batch Reactor for Hydrothermal Carbonization Process of a Biomass. Energies, 2022, 15, 818.	1.6	7
1178	Capillary Interactions, Aggregate Formation, and the Rheology of Particle-Laden Flows: A Lattice Boltzmann Study. Industrial & Engineering Chemistry Research, 2022, 61, 1863-1870.	1.8	2
1179	Sinking dynamics and splitting of a granular droplet. Physical Review Fluids, 2022, 7, .	1.0	2
1180	Variable-Fidelity Eulerâ€“Lagrange Framework for Simulating Particle-Laden High-Speed Flows. AIAA Journal, 2022, 60, 3001-3019.	1.5	8

#	Article	IF	Citations
1181	Computational Methods of Erosion Wear in Centrifugal Pump: A State-of-the-Art Review. Archives of Computational Methods in Engineering, 2022, 29, 3789-3814.	6.0	28
1182	A modified discrete element method for concave granular materials based on energy-conserving contact model. Theoretical and Applied Mechanics Letters, 2022, 12, 100325.	1.3	3
1183	Direct Compaction Drug Product Process Modeling. AAPS PharmSciTech, 2022, 23, 67.	1.5	3
1184	Discrete element method investigation of the milling characteristic in a rice mill. Mechanical Sciences, 2022, 13, 15-22.	0.5	1
1185	Analysis of flow behavior of cohesive monosized spherical and non-spherical particles in screw feeder. Powder Technology, 2022, 398, 117049.	2.1	3
1186	Superquadric DEM-SPH coupling method for interaction between non-spherical granular materials and fluids. Particuology, 2022, 71, 20-33.	2.0	3
1187	Assessment of Lost Circulation Material Particle-Size Distribution on Fracture Sealing: A Numerical Study. SPE Drilling and Completion, 2022, 37, 191-205.	0.9	5
1188	The Development and Application of a TFM for Dense Particle Flow and Mixing in Rotating Drums. Processes, 2022, 10, 234.	1.3	2
1189	DEM study on threshing performance of â€œcompressionâ€"oscillationâ€•thresher. Computational Particle Mechanics, 2022, 9, 1233-1248.	1.5	3
1190	Influence of the contraction angle on the injection of large coal particles. Powder Technology, 2022, 398, 117048.	2.1	5
1191	Dissipation behaviors of suspended granular balls in a vibrated closed container. Powder Technology, 2022, 399, 117158.	2.1	7
1192	Numerical Study on Particle Transport and Placement Behaviors of Ultralow Density Particles in Fracture-Vuggy Reservoirs. SPE Production and Operations, 2022, , 1-14.	0.4	0
1193	Coupling irregular particles and fluid: Complex dynamics of granular flows. Computers and Geotechnics, 2022, 143, 104624.	2.3	20
1194	A computationally efficient model for granular material piling in a container. Computers and Electronics in Agriculture, 2022, 194, 106692.	3.7	2
1195	Discrete particle methods for engineering simulation: Reproducing mesoscale structures in multiphase systems. , 2022, 1, 69-79.		6
1196	Super-quadric CFD-DEM simulation of chip-like particles flow in a fluidized bed. Chemical Engineering Science, 2022, 251, 117431.	1.9	34
1197	Exploring a unified EMMS drag model for gas-solid fluidization. Chemical Engineering Science, 2022, 251, 117444.	1.9	8
1198	A machine learning-based particle-particle collision model for non-spherical particles with arbitrary shape. Chemical Engineering Science, 2022, 251, 117439.	1.9	6

#	ARTICLE	IF	CITATIONS
1199	Fractal Dependence of the Packed Bed Porosity on the Particles Size Distribution. SSRN Electronic Journal, 0, , .	0.4	0
1200	Numerical study on powder fuel injection characteristics of powder fuel scramjet. Powder Technology, 2022, 399, 117169.	2.1	11
1201	Study on Drilling Ground Collapse Induced by Groundwater Flow and Prevention Based on a Coupled CFD-DEM Method. KSCE Journal of Civil Engineering, 2022, 26, 2112-2125.	0.9	5
1202	DEM investigation of the conveyor belt sorting system for coated fuel particles with a large feeding rate. Powder Technology, 2022, 399, 117160.	2.1	4
1203	Numerical simulation on cleaning of clogged pervious concrete pavement. Journal of Cleaner Production, 2022, 341, 130878.	4.6	14
1204	Three-dimensional modelling and optimization of an industrial dual fluidized bed biomass gasification decoupling combustion reactor. Applied Energy, 2022, 311, 118619.	5.1	15
1205	Energy Transfer Mechanisms in Flow-Like Landslide Processes in Deep Valleys. SSRN Electronic Journal, 0, , .	0.4	0
1206	Effect of Nonlinear Blood Viscosity on LDL Transport and Fluid-Structure Interaction Biomechanics of a Multi-stenosis Left Circumflex Coronary Artery. , 2022, , 39-48.		0
1208	The effect of particles on the dynamics of fluid flows around an obstacle. AIP Conference Proceedings, 2022, , .	0.3	1
1209	Euler-Lagrange simulation of dense gas-solid flow with local grid refinement. Powder Technology, 2022, 399, 117199.	2.1	18
1210	CFD-DEM Study of Bridging Mechanism of Particles in Ceramic Membrane Pores under Surface Filtration Conditions. Processes, 2022, 10, 475.	1.3	5
1211	Optimization Research on Screening Parameters of Elliptical Vibrating Screen Based on DEM Theory. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2022, 236, 1992-2000.	1.4	2
1212	Mixing simulation of cohesive particles in a soil mixer. Powder Technology, 2022, 399, 117218.	2.1	9
1213	Cutting fluid behavior under consideration of chip formation during micro single-lip deep hole drilling of Inconel 718. International Journal of Modelling and Simulation, 0, , 1-15.	2.3	3
1214	Use of CFD-DEM to evaluate the effect of intermediate stress ratio on the undrained behaviour of granular materials. Advanced Powder Technology, 2022, 33, 103507.	2.0	6
1215	A comprehensive review of the application of DEM in the investigation of batch solid mixers. Reviews in Chemical Engineering, 2023, 39, 729-764.	2.3	9
1216	Computer simulation of the packing of nanoparticles. Powder Technology, 2022, 401, 117317.	2.1	4
1217	A Review on Discrete Element Method Simulation in Laser Powder Bed Fusion Additive Manufacturing. , 2022, 1, 100017.		8

#	Article	IF	Citations
1218	High-resolution fluid–particle interactions: a machine learning approach. Journal of Fluid Mechanics, 2022, 938, .	1.4	6
1219	Automatic determination of coupling time step and region in unresolved DEM-CFD. Powder Technology, 2022, 400, 117267.	2.1	13
1220	Study of free‐surface and solids suspension in top‐sealed tanks stirred by pitched blade turbine impellers through DEM‐VOF method. Asia-Pacific Journal of Chemical Engineering, 2022, 17, .	0.8	3
1221	CFD-DEM coupling with multi-sphere particles and application in predicting dynamic behaviors of drifting boats. Ocean Engineering, 2022, 247, 110368.	1.9	12
1222	Dense <scp>non‐Newtonian</scp> suspension flow: Effect of solids properties and pipe size. AICHE Journal, 0, , .	1.8	3
1223	CFD-DEM simulation research on optimization of spatial attitude of concrete pumping boom based on evaluation of minimum pressure loss. Powder Technology, 2022, 403, 117365.	2.1	9
1224	DEM study and machine learning model of particle percolation under vibration. Advanced Powder Technology, 2022, 33, 103551.	2.0	12
1225	Fluid-particle interaction regimes during the evolution of turbidity currents from a coupled LES/DEM model. Advances in Water Resources, 2022, 163, 104171.	1.7	9
1226	Compaction and restraining effects of insoluble sediments in underground energy storage salt caverns. Energy, 2022, 249, 123752.	4.5	12
1227	Dissipation behaviors of granular balls in a shaken closed container. Mechanical Systems and Signal Processing, 2022, 172, 108986.	4.4	13
1228	Seepage effect on failure mechanisms of the underwater tunnel face via CFD–DEM coupling. Computers and Geotechnics, 2022, 146, 104591.	2.3	27
1229	Forecasting nonlinear vibrations of patches of granular materials by elastic interactions between spheres. Mechanics Research Communications, 2022, 122, 103879.	1.0	3
1230	Progress in CFD Simulations of Fluidized Beds for Chemical and Energy Process Engineering. Progress in Energy and Combustion Science, 2022, 91, 100930.	15.8	77
1231	CFD Modeling of Pulverized Coal Feeding Pipeline in Powder System. , 2021, , .		0
1232	Scaling up studies for mixing of granular materials in rotating drums. Powder Technology, 2022, 403, 117408.	2.1	7
1233	Predicting liner wear of ball mills using discrete element method and artificial neural network. Chemical Engineering Research and Design, 2022, 182, 438-447.	2.7	2
1234	Detailed biomass fast pyrolysis kinetics integrated to computational fluid dynamic (CFD) and discrete element modeling framework: Predicting product yields at the bench-scale. Chemical Engineering Journal, 2022, 444, 136419.	6.6	10
1235	CFD–DEM simulation of wet granular-fluid flows and heat transfer in an integral multi-jet spout-fluidized bed. Powder Technology, 2022, 403, 117384.	2.1	17

#	Article	IF	Citations
1237	Modelling Fluidized Beds using Coupled Discrete Element Modelling with Computational Fluid Dynamics. , 0, , .		0
1238	A CFD-DEM-Wear Coupling Method for Stone Chip Resistance of Automotive Coatings with a Rigid Connection Particle Method for Non-Spherical Particles. CMES - Computer Modeling in Engineering and Sciences, 2022, 131, 1-30.	0.8	1
1239	Local percolation of non-spherical particles in moving bed waste heat recovery unit for hydrogen production by methanol steam reforming. International Journal of Hydrogen Energy, 2022, , .	3.8	2
1240	Numerical Analysis of Motion Characteristics of Sliding or Rolling and Saltation of Sediment Particles under Turbulent Flow. Water (Switzerland), 2022, 14, 1506.	1.2	0
1241	Fractal dependence of the packed bed porosity on the particles size distribution. Chaos, Solitons and Fractals, 2022, 159, 112144.	2.5	2
1242	Experimental Investigation and Computational Fluid Dynamic Simulation of Hydrodynamics of Liquidâ€"Solid Fluidized Beds. ChemEngineering, 2022, 6, 37.	1.0	4
1243	Numerical investigation of sand production mechanisms in weak sandstone formations with various reservoir fluids. International Journal of Rock Mechanics and Minings Sciences, 2022, 154, 105096.	2.6	6
1244	Particle-scale modelling of the pyrolysis of end-of-life solar panel particles in fluidized bed reactors. Resources, Conservation and Recycling, 2022, 183, 106378.	5.3	16
1245	GPU-based SPH-DEM Method to Examine the Three-Phase Hydrodynamic Interactions between Multiphase Flow and Solid Particles. International Journal of Multiphase Flow, 2022, 153, 104125.	1.6	9
1246	CFD-DEM evaluation of screen types for sand control applications. Powder Technology, 2022, 404, 117496.	2.1	13
1247	Study of fluid cell coarsening for CFD-DEM simulations of polydisperse gasâ€"solid flows. Particuology, 2023, 73, 128-138.	2.0	5
1248	Rock-pipeline impact force and pipeline response during deep-water rock dumping operation. Marine Structures, 2022, 84, 103235.	1.6	2
1249	A Novel Method for Bounding the Phase Fractions at Both Ends in Eulerian multi-fluid Model. Computers and Fluids, 2022, , 105512.	1.3	2
1250	Hydrodynamic modeling of liquid-solid flow in polyolefin slurry reactors using CFD techniques â€" A critical analysis. Powder Technology, 2022, 405, 117544.	2.1	15
1251	Simulation investigation of the particle flow behavior in the gas full circulation oil shale retort. Journal of Petroleum Science and Engineering, 2022, , 110674.	2.1	1
1253	Hydrodynamic Simulation Supports Scale Formation in Technical Specification for Downhole Equipment. , 2022, , .		0
1254	Mixing intensification through modifications of PBT impellers studied by DEM-VOF method. Chemical Engineering and Processing: Process Intensification, 2022, 177, 109001.	1.8	5
1255	Investigation of the influence of impact velocity and liquid bridge volume on the maximum liquid bridge length. Advanced Powder Technology, 2022, 33, 103630.	2.0	4

#	Article	IF	Citations
1256	Coupled CFD–DEM modeling to predict how EPS affects bacterial biofilm deformation, recovery and detachment under flow conditions. Biotechnology and Bioengineering, 2022, 119, 2551-2563.	1.7	7
1257	Material optimization of the square composite granular structure composed of viscoelastic spheres for improving the impact mitigation performance. Granular Matter, 2022, 24, .	1.1	0
1258	Fracture mechanisms of intact rock-like materials under compression. Computers and Geotechnics, 2022, 148, 104845.	2.3	5
1260	A review on particle based simulation in selective laser melting additive manufacturing. , 2022, , 100010.		0
1261	Coarse-Grained DEM–CFD Simulation of Fluidization Behavior of Irregular Shape Sand Particles. Industrial & Engineering Chemistry Research, 2022, 61, 9099-9109.	1.8	5
1262	DEM study of particle segregation in the throat region of a blast furnace. Powder Technology, 2022, 407, 117660.	2.1	6
1263	Modelling Method and Application of Anti-Corrosion Pill Particles in Oil and Gas Field Wellbore Casing Annulus Based on the Discrete Element Method. Processes, 2022, 10, 1164.	1.3	2
1264	Packing characteristics of sub-micron particles under van der Waals force and electrostatic force via discrete element method. Powder Technology, 2022, 407, 117668.	2.1	8
1265	Viscoelastic behavior in discrete element method realized by interparticle Maxwell–Zener model. Journal of Micromechanics and Molecular Physics, 2022, 07, 197-212.	0.7	1
1266	Modelling of the coefficients of restitution for prolate spheroid particles and its application in simulations of 2D granular flow. Granular Matter, 2022, 24, .	1.1	1
1267	Study on Screening Mechanism and Numerical Simulation for Crashed Concrete Particles by Using DEM. Separations, 2022, 9, 153.	1.1	3
1268	Numerical study on automatic repair inside the pipeline for the small leakage gas pipeline by using fibrous particles. Powder Technology, 2022, 407, 117606.	2.1	0
1269	Numerical investigation of flow characteristics and packing structure of binary-sized pebble flow in a circulating pebble bed. Progress in Nuclear Energy, 2022, 150, 104312.	1.3	3
1270	Drag model from interface-resolved simulations of particle sedimentation in a periodic domain and vertical turbulent channel flows. Journal of Fluid Mechanics, 2022, 944, .	1.4	5
1271	Three-dimensional DEM-CFD simulation of a lab-scale fluidized bed to support the development of two-fluid model approach. International Journal of Multiphase Flow, 2022, 156, 104189.	1.6	13
1272	Coarse-grained CFD-DEM study of Gas-solid flow in gas cyclone. Chemical Engineering Science, 2022, 260, 117906.	1.9	24
1273	Transition of sub- and super-critical water fluidized beds using low density ratio kinetic theory of granular flow. Powder Technology, 2022, 407, 117689.	2.1	1
1274	Coarse-grained rCFD-DEM analysis of coke gasification and iron ore reduction in the shaft region of an ironmaking blast furnace. Powder Technology, 2022, 408, 117706.	2.1	7

#	Article	IF	Citations
1275	Investigation of particle shape and ambient fluid on sandpiles using a coupled micro-geomechanical model. Powder Technology, 2022, 409, 117711.	2.1	5
1276	DEM modelling of breakage behaviour of semi-brittle agglomerates subject to compaction and impaction. Powder Technology, 2022, 408, 117710.	2.1	2
1277	Recent progress on the discrete element method simulations for powder transport systems: A review. Advanced Powder Technology, 2022, 33, 103664.	2.0	17
1278	The accurate prediction and analysis of bed expansion characteristics in liquid–solid fluidized bed based on machine learning methods. Chemical Engineering Science, 2022, 260, 117841.	1.9	9
1279	Numerical study on clogging mechanism of slurry infiltration in porous media based on coupled CFD-DEM method. Tunnelling and Underground Space Technology, 2022, 128, 104622.	3.0	9
1280	Experimental and numerical study of extracting silver from end-of-life c-Si photovoltaic solar cells in rotating systems. Resources, Conservation and Recycling, 2022, 186, 106548.	5.3	5
1281	Analysis on mechanical properties and evolution of mesostructure of debris flow from complex network perspective. Granular Matter, 2022, 24, .	1.1	0
1282	Understanding the Mechanism of Abrasive-Based Finishing Processes Using Mathematical Modeling and Numerical Simulation. Metals, 2022, 12, 1328.	1.0	10
1283	Experimental Quantification of the Radial Mixing of Binary Mixtures in Annular Fluidized Beds Using the Capacitance Probe Method. Industrial & Engineering Chemistry Research, 2022, 61, 12825-12834.	1.8	1
1284	Optimization and Experiment of a Disturbance-Assisted Seed Filling High-Speed Vacuum Seed-Metering Device Based on DEM-CFD. Agriculture (Switzerland), 2022, 12, 1304.	1.4	6
1285	Effect of gradation variation on particle transport process in a generalized flash flood gully via CFD-DEM method. Acta Geophysica, 2023, 71, 391-404.	1.0	2
1286	Modeling and numerical research on powder paving process of nylon powder in selective laser sintering. Computational Particle Mechanics, 0, , .	1.5	2
1287	Process model of vibrating screen based on DEM and physics-informed machine learning. Powder Technology, 2022, 410, 117869.	2.1	10
1288	Quantitative simulation of selective laser melting of metals enabled by new high-fidelity multiphase, multiphysics computational tool. Computer Methods in Applied Mechanics and Engineering, 2022, 399, 115422.	3.4	13
1289	Modelling of gas-solid-liquid flow and particle mixing in a rotary drum. Powder Technology, 2022, 409, 117758.	2.1	6
1290	A DEM based scale-up model for tumbling ball mills. Powder Technology, 2022, 409, 117854.	2.1	8
1291	Numerical modeling and analysis of particle-fluid flow and wall erosion in centrifugal slurry pumps under different solid concentrations. Powder Technology, 2022, 410, 117861.	2.1	10
1292	Particle scale modelling of powder recoating and melt pool dynamics in laser powder bed fusion additive manufacturing: A review. Powder Technology, 2022, 409, 117789.	2.1	13

#	Article	IF	Citations
1293	Energy transfer mechanisms in flow-like landslide processes in deep valleys. Engineering Geology, 2022, 308, 106798.	2.9	1
1294	Improving mechanical properties of manufactured sand concrete with high biotite content: Application of magnetic separation process and equipment optimization. Construction and Building Materials, 2022, 350, 128861.	3.2	3
1295	Development of transfer chute design through Discrete Element Modelling for using Refused Derived fuel in Indian cement plants. Sustainable Energy Technologies and Assessments, 2022, 53, 102567.	1.7	2
1296	A semi-resolved CFD-DEM coupling model using a two-way domain expansion method. Journal of Computational Physics, 2022, 469, 111532.	1.9	6
1297	Numerical and experimental investigation into powder entrainment and denudation phenomena in laser powder bed fusion process. Powder Technology, 2022, 410, 117907.	2.1	8
1298	Numerical simulation of proppant directly entering complex fractures in shale gas. Journal of Natural Gas Science and Engineering, 2022, 107, 104792.	2.1	10
1299	A numerical approach for fluid-particle-structure interactions problem with CFD-DEM-CSD coupling method. Computers and Geotechnics, 2022, 152, 105007.	2.3	2
1300	Clogging effect of fines in seepage erosion by using CFD–DEM. Computers and Geotechnics, 2022, 152, 105013.	2.3	25
1301	Experimental and numerical study on the development process and flow characteristics of powder fuel jet in the powder fuel scramjet. Energy, 2023, 262, 125431.	4.5	3
1302	Particle-Scale Modelling of Injected Hydrogen and Coke Co-Combustion in the Raceway of an Ironmaking Blast Furnace. SSRN Electronic Journal, 0, , .	0.4	0
1303	Analysis of Coke Particle Gasification in the Raceway of a Blast Furnace. IFAC-PapersOnLine, 2022, 55, 277-282.	0.5	0
1304	Particle based Large Eddy Simulation of vortex ripple dynamics using an Euler–Lagrange approach. European Journal of Mechanics, B/Fluids, 2023, 97, 53-69.	1.2	0
1305	Recent Trends in the Preparation of Nano-Starch Particles. Molecules, 2022, 27, 5497.	1.7	15
1306	Modeling of dynamic characteristic of particle in transient gas–solid flow via a machine learning approach. Powder Technology, 2022, 412, 117939.	2.1	3
1307	Study on the Discharge Process and Mechanism of Anti-Corrosion Pill Particles in the Oil and Gas Field Wellbore Casing Annulus Based on the Discrete Element Method. Processes, 2022, 10, 1737.	1.3	1
1308	A Study on the Calibration of Wheat Seed Interaction Properties Based on the Discrete Element Method. Agriculture (Switzerland), 2022, 12, 1497.	1.4	4
1309	Numerical prediction of stagnant and flowing zones in a blast furnace by a novel potential flow model. Powder Technology, 2022, 410, 117903.	2.1	1
1310	Mechanical behavior and reinforcement mechanism of nanoparticle cluster fillers in dental resin composites: Simulation and experimental study. Dental Materials, 2022, 38, 1801-1811.	1.6	4

#	Article	IF	Citations
1311	Prediction of the remaining time and time interval of pebbles in pebble bed HTGRs aided by CNN via DEM datasets. Nuclear Engineering and Technology, 2023, 55, 339-352.	1.1	3
1312	A review of recent development for the CFD-DEM investigations of non-spherical particles. Powder Technology, 2022, 412, 117972.	2.1	56
1313	Experimental and Numerical Studies of Fine Quartz Single-Particle Sedimentation Based on Particle Morphology. Processes, 2022, 10, 1981.	1.3	0
1314	Erosion Prediction in FCC Unit of Refinery Through Computational Fluid Dynamics Simulation. , 2022, , .		0
1315	Research on Coarse-Grained Discrete Element Model and Optimization for Fine Particles. Coatings, 2022, 12, 1483.	1.2	0
1316	Co-simulation of multibody dynamics and discrete element method for hydraulic excavators. Powder Technology, 2023, 414, 118001.	2.1	7
1317	Evaluation of RANS-DEM and LES-DEM Methods in OpenFOAM for Simulation of Particle-Laden Turbulent Flows. Fluids, 2022, 7, 337.	0.8	3
1318	Experimental study and numerical simulation of the influence of ball milling parameters on granule sizes of mold powder. Powder Technology, 2023, 413, 118037.	2.1	2
1319	Characteristic simulation and working parameter optimization of the aggregate dryer. Drying Technology, 0, , 1-15.	1.7	1
1320	Interactive Role of Rolling Friction and Cohesion on the Angle of Repose through a Microscale Assessment. International Journal of Geomechanics, 2023, 23, .	1.3	4
1321	CFD-DEM simulation of sand erosion into defective gravity pipes under constant groundwater table. Tunnelling and Underground Space Technology, 2023, 131, 104823.	3.0	9
1322	Study on liquid-solid fluidisation behaviour of coarse coal particles: Experiment and CFD simulation. Chemical Engineering Research and Design, 2023, 189, 1-13.	2.7	4
1323	Investigation of the flow characteristics of spherical harmonic particles using the level set method. Powder Technology, 2023, 413, 118069.	2.1	3
1324	Modeling of radiation heat transfer in dense-bed flows of solids in indirectly heated rotary kilns. Thermal Science and Engineering Progress, 2023, 38, 101545.	1.3	0
1325	General polygon mesh discrete element method for arbitrarily shaped particles and complex structures based on an energy-conserving contact model. Acta Mechanica Sinica/Lixue Xuebao, 2023, 39, .	1.5	2
1326	an extended CFD-DEM model based on micropolar fluid and its application in geological engineering. Computers and Geotechnics, 2023, 154, 105133.	2.3	6
1327	Sub-millimetre wave range-Doppler radar as a diagnostic tool for gas-solids systems - solids concentration measurements. Advanced Powder Technology, 2023, 34, 103894.	2.0	3
1328	Effect of particle shape on the hydrodynamics of gas-solid fluidized bed. Chemical Engineering Research and Design, 2023, 189, 461-473.	2.7	5

#	Article	IF	Citations
1329	Sorption enhanced steam methane reforming in a bubbling fluidized bed reactor: Simulation and analysis by the CPFD method. Computers and Chemical Engineering, 2023, 169, 108080.	2.0	1
1330	CFD-DEM simulations of a fluidized bed with droplet injection: Effects on flow patterns and particle behavior. Advanced Powder Technology, 2023, 34, 103897.	2.0	5
1331	Modelling of paddy soil using the CFD-DEM coupling method. Soil and Tillage Research, 2023, 226, 105591.	2.6	6
1332	GPU-based discrete element model of realistic non-convex aggregates: Mesoscopic insights into ITZ volume fraction and diffusivity of concrete. Cement and Concrete Research, 2023, 164, 107048.	4.6	24
1333	Numerical investigation of characteristics and mechanism of tunnel erosion of loess with coupled CFD and DEM method. Catena, 2023, 222, 106729.	2.2	5
1334	Aggregate effect on the mechanical and fracture behaviours of concrete. International Journal of Mechanical Sciences, 2023, 243, 108067.	3.6	8
1335	Particle-scale modelling of injected hydrogen and coke co-combustion in the raceway of an ironmaking blast furnace. Fuel, 2023, 336, 126778.	3.4	3
1336	An improved CFD-DEM modelling of raceway dynamics and coke combustion in an industrial-scale blast furnace. Chemical Engineering Journal, 2023, 455, 140677.	6.6	9
1337	Particle–particle drag force in inertial bidisperse gas–particle suspensions. Journal of Fluid Mechanics, 2022, 952, .	1.4	0
1338	Improved modelling of interfacial terms in the second-moment closure for particle-laden flows based on interface-resolved simulation data. Journal of Fluid Mechanics, 2022, 952, .	1.4	5
1339	Hydrodynamic CFD-DEM model validation in a gas–solid vortex unit. Chemical Engineering Journal, 2023, 455, 140529.	6.6	4
1340	Quantitative analysis of the erosion process in horizontal cobble and gravel embankment piping via CFD-DEM coupling method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, .	0.8	0
1341	A coupled CFD-DEM investigation into suffusion of gap-graded soil considering anisotropic stress conditions and flow directions. Acta Geotechnica, 2023, 18, 3111-3132.	2.9	6
1342	Review on the chemical reduction modelling of hematite iron ore to magnetite in fluidized bed reactor. Reviews in Chemical Engineering, 2022, .	2.3	0
1343	Multi-scale numerical simulation of fluidized beds: Model applicability assessment. Particuology, 2023, 80, 11-41.	2.0	16
1344	DEM simulation of biomass pyrolysis in a novel interconnected screw reactor. International Journal of Chemical Reactor Engineering, 2023, 21, 937-949.	0.6	1
1345	Study on energy transition of dense particulate flow in a horizontal agitator. Journal of Physics: Conference Series, 2022, 2383, 012069.	0.3	0
1346	Discrete Element Methods with Special Focus on DEM. Springer Tracts in Civil Engineering, 2023, , 447-519.	0.3	0

#	ARTICLE	IF	CITATIONS
1347	Does cavity dimension of vibrated granular container matter?. Granular Matter, 2023, 25, .	1.1	2
1348	Drafting, Kissing and Tumbling Process of Two Particles: The Effect of Morphology. International Journal of Multiphase Flow, 2023, 160, 104379.	1.6	4
1349	Developments and applications of the CFD-DEM method in particle–fluid numerical simulation in petroleum engineering: A review. Applied Thermal Engineering, 2023, 222, 119865.	3.0	23
1350	CFD-DEM study of reactive gas-solid flows with cohesive particles in a high temperature polymerization fluidized bed. Chemical Engineering Science, 2023, 268, 118437.	1.9	5
1351	Review of CFD-DEM Modeling of Wet Fluidized Bed Granulation and Coating Processes. Processes, 2023, 11, 382.	1.3	4
1352	Thirty years of developments in contact modelling of non-spherical particles in DEM: a selective review. Acta Mechanica Sinica/Lixue Xuebao, 2023, 39, .	1.5	14
1353	A Novel Minkowski Sum Contact Algorithm for Arbitrarily Shaped Particles Constructed by Multiple Dilated Dem Models. SSRN Electronic Journal, 0, , .	0.4	0
1354	Evaluation of coarse-grained CFD-DEM models with the validation of PEPT measurements. Particuology, 2023, 82, 48-63.	2.0	13
1355	Collisional forces and flow characteristics of a stream of falling particles in interaction with a large stationary sphere. Powder Technology, 2023, 421, 118447.	2.1	0
1356	Micromechanical analysis of granular dynamics and energy dissipation during hopper discharging of polydisperse particles. Powder Technology, 2023, 422, 118462.	2.1	3
1357	Size-induced axial segregation of ellipsoids in a rotating drum. Powder Technology, 2023, 422, 118490.	2.1	0
1358	Why the presence of insert above the outlet can enhance silo discharge: A tentative answer. Powder Technology, 2023, 421, 118384.	2.1	3
1359	Computational fluid dynamics study of hydrogen production by sorption enhanced steam ethanol reforming process in fluidized bed. Fuel, 2023, 344, 128043.	3.4	5
1360	Advances in numerical simulation of unit operations for tablet preparation. International Journal of Pharmaceutics, 2023, 634, 122638.	2.6	3
1361	Micro pore analysis of suffusion in filter layer using tri-layer CFD–DEM model. Computers and Geotechnics, 2023, 156, 105303.	2.3	11
1362	A Primer on CFD-DEM for Polymer-Filled Suspensions. Applied Sciences (Switzerland), 2023, 13, 2466.	1.3	2
1363	Powder processing—Models and simulations. , 2024, , 679-693.		0
1364	Numerical simulation on transport behavior of gradated coarse particles in deep-sea vertical pipe transportation. Physics of Fluids, 2023, 35, .	1.6	9

#	Article	IF	Citations
1365	Study of CFD-DEM on the Impact of the Rolling Friction Coefficient on Deposition of Lignin Particles in a Single Ceramic Membrane Pore. Membranes, 2023, 13, 382.	1.4	2
1366	Pressureâ€controlled secondary flows and mixing in sheared Platonic solidâ€shaped particles. AICHE Journal, 0, , .	1.8	1
1367	Effect of operational and geometric parameters on the hydrodynamics of a Wurster coater: A CFD-DEM study. Particuology, 2024, 85, 62-76.	2.0	2
1368	Coarse-graining of CFD-DEM for simulation of sand production in the modified cohesive contact model. , 2023, 113, 204976.		5
1369	Analysis of the screening process of particulate material and the application of a grade efficiency curve as a function of screen length. Powder Technology, 2023, 424, 118558.	2.1	0
1370	CFD-DEM Study of heat and mass transfer of ellipsoidal particles in fluidized bed dryers. Powder Technology, 2023, 425, 118535.	2.1	2
1371	Configuration-dependent dynamics of non-spherical particles in a gasâ€"solid fluidized bed. Chemical Engineering Journal, 2023, 465, 142969.	6.6	3
1372	Simulations of debris flow impacting on bridge pier based on coupled CFD-DEM method. Ocean Engineering, 2023, 279, 114532.	1.9	3
1373	CFD-DEM simulations of a gas-solid-liquid fluidization system: Effects on the flow field and particle behavior of semi-dry desulfurization fluidized bed. Journal of Environmental Chemical Engineering, 2023, 11, 109973.	3.3	1
1395	Optimal Time-Step forÂCoupled CFD-DEM Model inÂSand Production. Lecture Notes in Computer Science, 2023, , 116-130.	1.0	1
1427	Recent Advances and Perspectives of CFDâ€"DEM Simulation in Fluidized Bed. Archives of Computational Methods in Engineering, 2024, 31, 871-918.	6.0	1
1433	Multiphase Flows in Pharmaceutical Applications. , 2023, , 749-772.		0
1450	Increasing the Efficiency of the Drying Process of Seeded Fruit Products with the Application of Microwave Tunnel Treatment. , 2023, , .		0
1456	Turbulent Thermal Convection Driven byÂHeat-Releasing Particles. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2024, , 188-195.	0.1	0
1457	ACOPLAMENTO PARTÃCULA ESTRUTURA (DEM/FEA) APLICADO Ã€ SIMULAÃ‡ÃƒO DE PROCESSOS. , 0, , .		0
1471	Computational fluid dynamics modeling of gas-solid fluidized bed reactor: Influence of numerical and operating parameters. Experimental and Computational Multiphase Flow, 2024, 6, 85-125.	1.9	1
1477	Parallel Multi-Physics Coupled Simulation of a Midrex Blast Furnace. , 2024, , .		0
1481	Smoothed Polyhedral DEM Model Based on Minkowski Sum Algorithm. Springer Tracts in Mechanical Engineering, 2024, , 85-113.	0.1	0

#	ARTICLE	IF	CITATIONS
1482	Superquadric DEM Model Based on Functional Representations. Springer Tracts in Mechanical Engineering, 2024, , 35-58.	0.1	0
1483	In silico, in situ, in vitro, and in vivo predictive methods for modeling formulation performance. , 2024, , 67-116.		0
1509	Simulations of the Behavior of Granular Bodies Using the Discrete Element Approach. , 2024, , .		0