Ruiping Zou

List of Publications by Year
in descending order

70 papers	3,971 citations	126708 33 h-index	118652 62 g-index
70 all docs	70 docs citations	70 times ranked	2229 citing authors

#	Article	IF	Citations
1	Air impact induced densest amorphous granular materials: Formation, dynamics, and mechanisms. Physical Review B, 2022, 105, .	1.1	4
2	Numerical modeling and analysis of hydrogen blast furnace ironmaking process. Fuel, 2022, 323, 124368.	3.4	28
3	3D-Printed Superhydrophobic and Magnetic Device That Can Self-Powered Sense A Tiny Droplet Impact. Engineering, 2022, 15, 196-205.	3.2	42
4	CFD-DEM numerical study on air impacted packing densification of equiaxed cylindrical particles. Advanced Powder Technology, 2022, 33, 103641.	2.0	1
5	Computational simulation of air-side heat transfer and pressure drop performance in staggered mannered twisted oval tube bundle operating in crossflow. International Journal of Thermal Sciences, 2021, 161, 106748.	2.6	35
6	Compressible and Stretchable Magnetoelectric Sensors Based on Liquid Metals for Highly Sensitive, Self-Powered Respiratory Monitoring. ACS Applied Materials & Interfaces, 2021, 13, 15727-15737.	4.0	44
7	Multi-particle FEM modeling on hot isostatic pressing of Ti6Al4V powders. International Journal of Mechanical Sciences, 2021, 196, 106288.	3.6	11
8	Facile, scalable, and adaptive infrared reflection towards soft systems by blowing a Janus rubber film. IScience, 2021, 24, 102430.	1.9	2
9	DEM simulation of vibrated packing densification of mono-sized regular octahedral particles. Powder Technology, 2021, 384, 29-35.	2.1	8
10	Anti-stress ball energy harvester. Nano Energy, 2021, 90, 106493.	8.2	9
11	Investigation of densification behavior of tungsten powders during hot isostatic pressing with a 3D multi-particle FEM approach. Powder Technology, 2020, 361, 297-305.	2.1	14
12	Promote cohesive solid flow in a screw feeder with new screw designs. Powder Technology, 2020, 361, 248-257.	2.1	15
13	Packing of different shaped tetrahedral particles: DEM simulation and experimental study. Powder Technology, 2020, 360, 21-32.	2.1	15
14	Magnetoelectric soft composites with a self-powered tactile sensing capacity. Nano Energy, 2020, 69, 104391.	8.2	44
15	Modeling and analysis of flow regimes in hydraulic conveying of coarse particles. Powder Technology, 2020, 373, 543-554.	2.1	48
16	Liquid Metal Based Stretchable Magnetoelectric Films and Their Capacity for Mechanoelectrical Conversion. Advanced Functional Materials, 2020, 30, 2003680.	7.8	40
17	Experimental study on 3D vibrated packing densification of mono-sized dodecahedral particles. Powder Technology, 2020, 367, 703-712.	2.1	6
18	Three-dimensional MPFEM modelling on isostatic pressing and solid phase sintering of tungsten powders. Powder Technology, 2019, 354, 854-866.	2.1	10

#	Article	IF	Citations
19	Binary cooperative flexible magnetoelectric materials working as self-powered tactile sensors. Journal of Materials Chemistry C, 2019, 7, 8527-8536.	2.7	31
20	Equivalent packing size of spheroidal particles: A microscopic test. Powder Technology, 2018, 333, 286-292.	2.1	13
21	Molten salt synthesis, characterization and luminescence of Tb3â^'xCexAl5O12 (TAG:Ce) phosphors. Materials Letters, 2018, 221, 77-80.	1.3	2
22	Characteristics of red mud slurry flow in carbonation reactor. Powder Technology, 2017, 311, 66-76.	2.1	17
23	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
24	Stress distribution in conical sandpiles formed with ellipsoidal particles. EPJ Web of Conferences, 2017, 140, 06023.	0.1	1
25	Quasi-universality in the packing of uniform spheres under gravity. Granular Matter, 2016, 18, 1.	1.1	17
26	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
27	Radical tessellation of the packing of spheres with a log-normal size distribution. Physical Review E, 2015, 92, 032201.	0.8	14
28	Angle of repose and stress distribution of sandpiles formed with ellipsoidal particles. Granular Matter, 2014, 16, 695-709.	1.1	66
29	Flow characteristics and discharge rate of ellipsoidal particles in a flat bottom hopper. Powder Technology, 2014, 253, 70-79.	2.1	144
30	Application of periodic boundary conditions to CFD-DEM simulation of gasâ€"solid flow in pneumatic conveying. Chemical Engineering Science, 2013, 93, 214-228.	1.9	78
31	Packing of fine particles in an electrical field. Granular Matter, 2013, 15, 467-476.	1.1	24
32	Numerical study of the influence of particle friction on horizontal pneumatic conveying. , 2013, , .		2
33	Discrete modelling of the packing of ellipsoidal particles. , 2013, , .		4
34	Microscopic analysis of Hopper flow with ellipsoidal particles. , 2013, , .		0
35	Segregation of binary mixtures of spheres and ellipsoids. AIP Conference Proceedings, 2013, , .	0.3	8
36	Effect of cohesive force on the formation of a sandpile. AIP Conference Proceedings, 2013, , .	0.3	4

#	Article	IF	Citations
37	Discrete element modeling of gas fluidization of fine ellipsoidal particles. AIP Conference Proceedings, 2013, , .	0.3	1
38	Numerical study of vertical pneumatic conveying: Effect of friction coefficient. , 2013, , .		2
39	Gasâ€“Solid Flow and Energy Dissipation in Inclined Pneumatic Conveying. Industrial & Engineering Chemistry Research, 2012, 51, 14289-14302.	1.8	53
40	Dense random packings of spherocylinders. Soft Matter, 2012, 8, 1003-1009.	1.2	132
41	Settling of particles in liquids: Effects of material properties. AICHE Journal, 2012, 58, 1409-1421.	1.8	35
42	Dynamic Simulation of the Packing of Ellipsoidal Particles. Industrial & Engineering Chemistry Research, 2011, 50, 9787-9798.	1.8	178
43	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
44	Discrete particle simulation of gas fluidization of ellipsoidal particles. Chemical Engineering Science, 2011, 66, 6128-6145.	1.9	198
45	Numerical Study of Wet Particle Flow in a Rotating Drum. , 2009, , .		0
46	Numerical Simulation of the Flow of Fine Particles in a Hopper. , 2009, , .		1
47	Experimental study of the packing of mono-sized spheres subjected to one-dimensional vibration. Powder Technology, 2009, 196, 50-55.	2.1	76
48	Critical states and phase diagram in the packing of uniform spheres. Europhysics Letters, 2009, 86, 46003.	0.7	49
49	Effect of vibration condition and inter-particle frictions on the packing of uniform spheres. Powder Technology, 2008, 188, 102-109.	2.1	83
50	Characterization of interparticle forces in the packing of cohesive fine particles. Physical Review E, 2008, 78, 031302.	0.8	42
51	Analysis of the packing structure of wet spheres by Voronoiâ€“Delaunay tessellation. Granular Matter, 2007, 9, 455-463.	1.1	16
52	Role of Interparticle Forces in the Formation of Random Loose Packing. Physical Review Letters, 2006, 96, 145505.	2.9	128
53	Pore structure of the packing of fine particles. Journal of Colloid and Interface Science, 2006, 299, 719-725.	5.0	49
54	Self-Assembly of Particles for Densest Packing by Mechanical Vibration. Physical Review Letters, 2006, 97, 265501.	2.9	113

#	Article	IF	Citations
55	Publisherâ€™s Note: Role of Interparticle Forces in the Formation of Random Loose Packing [Phys. Rev. Lett.96, 145505 (2006)]. Physical Review Letters, 2006, 96, .	2.9	3
56	Micromechanical Simulation and Analysis of One-Dimensional Vibratory Sphere Packing. Physical Review Letters, 2005, 95, 205502.	2.9	116
57	Prediction of the Porosity of Multicomponent Mixtures of Wet Coarse Spheres. Industrial & Engineering Chemistry Research, 2005, 44, 8401-8408.	1.8	11
58	Packing structure of cohesive spheres. Physical Review E, 2004, 69, 032301.	0.8	16
59	On the relationship between porosity and interparticle forces. Powder Technology, 2003, 130, 70-76.	2.1	161
60	Microdynamic analysis of particle flow in a horizontal rotating drum. Powder Technology, 2003, 130, 138-146.	2.1	158
61	Numerical study of the packing of wet coarse uniform spheres. AICHE Journal, 2003, 49, 1656-1666.	1.8	61
62	Effect of material properties on the packing of fine particles. Journal of Applied Physics, 2003, 94, 3025-3034.	1.1	87
63	Simulation study of the evolution mechanisms of clusters in a large-scale liquid Al system during rapid cooling processes. Journal of Physics Condensed Matter, 2003, 15, 743-753.	0.7	39
64	Voronoi tessellation of the packing of fine uniform spheres. Physical Review E, 2002, 65, 041302.	0.8	93
65	Computer simulation of the packing of fine particles. Physical Review E, 2000, 62, 3900-3908.	0.8	382
66	Coordination number of binary mixtures of spheres. Journal Physics D: Applied Physics, 1998, 31, 457-462.	1.3	99
67	Modifying the Linear Packing Model for Predicting the Porosity of Nonspherical Particle Mixtures. Industrial & Engineering Chemistry Research, 1996, 35, 3730-3741.	1.8	189
68	Evaluation of the packing characteristics of mono-sized non-spherical particles. Powder Technology, 1996, 88, 71-79.	2.1	279
69	The packing of spheres in a cylindrical container: the thickness effect. Chemical Engineering Science, 1995, 50, 1504-1507.	1.9	154
70	Packing of Ternary Mixtures of Nonspherical Particles. Journal of the American Ceramic Society, 1992, 75, 2765-2772.	1.9	59