Jammed hard-particle packings: From Kepler to Bernal

Reviews of Modern Physics 82, 2633-2672

DOI: 10.1103/revmodphys.82.2633

Citation Report

#	Article	IF	CITATIONS
1	On the phase behavior of hard aspherical particles. Journal of Chemical Physics, 2010, 133, 234903.	1.2	7
2	Robust algorithm to generate a diverse class of dense disordered and ordered sphere packings via linear programming. Physical Review E, 2010, 82, 061302.	0.8	84
3	Method for dense packing discovery. Physical Review E, 2010, 82, 056707.	0.8	10
4	Athermal jamming of soft frictionless Platonic solids. Physical Review E, 2010, 82, 051304.	0.8	39
5	Dynamic ordering of nuclei in syncytial embryos: a quantitative analysis of the role of cytoskeletal networks. Integrative Biology (United Kingdom), 2011, 3, 1112.	0.6	42
6	Hyperuniformity, quasi-long-range correlations, and void-space constraints in maximally random jammed particle packings. II. Anisotropy in particle shape. Physical Review E, 2011, 83, 051309.	0.8	33
7	Hyperuniformity, quasi-long-range correlations, and void-space constraints in maximally random jammed particle packings. I. Polydisperse spheres. Physical Review E, 2011, 83, 051308.	0.8	51
8	Creep and Fluidity of a Real Granular Packing near Jamming. Physical Review Letters, 2011, 107, 138303.	2.9	74
9	Nonuniversality of density and disorder in jammed sphere packings. Journal of Applied Physics, 2011, 109, .	1.1	46
10	Hyperuniform Long-Range Correlations are a Signature of Disordered Jammed Hard-Particle Packings. Physical Review Letters, 2011, 106, 178001.	2.9	121
11	Modeling Collective Escape Processes for Nearly Jammed Systems. Journal of Physical Chemistry B, 2011, 115, 14184-14189.	1.2	0
12	Structural properties of dense hard sphere packings. Physical Review B, 2011, 83, .	1.1	58
13	Experimental Evidence of Icosahedral and Decahedral Packing in One-Dimensional Nanostructures. ACS Nano, 2011, 5, 6272-6278.	7.3	61
14	Phase Diagram and Structural Diversity of the Densest Binary Sphere Packings. Physical Review Letters, 2011, 107, 125501.	2.9	53
15	Spatial Organization and Correlations of Cell Nuclei in Brain Tumors. PLoS ONE, 2011, 6, e27323.	1.1	29
16	Rigidity of spherical codes. Geometry and Topology, 2011, 15, 2235-2273.	0.5	16
17	Characterizing Order in Amorphous Systems. Physical Review Letters, 2011, 107, 045501.	2.9	41
18	On Structure and Properties of Amorphous Materials. Materials, 2011, 4, 1564-1598.	1.3	112

#	Article	IF	CITATIONS
19	High-dimensional generalizations of the kagom \tilde{A} © and diamond crystals and the decorrelation principle for periodic sphere packings. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P10017.	0.9	12
20	Stress tensor: A quantitative indicator of effective volume and stability of helium in metals. Europhysics Letters, 2011, 96, 66001.	0.7	26
21	On the solution of a â€~solvable' model of an ideal glass of hard spheres displaying a jamming transition. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P03002.	0.9	14
22	Incompressibility of polydisperse random-close-packed colloidal particles. Physical Review E, 2011, 84, 030401.	0.8	58
23	Microscopic theory of the jamming transition of harmonic spheres. Physical Review E, 2011, 84, 051103.	0.8	80
24	Maximally random jammed packings of Platonic solids: Hyperuniform long-range correlations and isostaticity. Physical Review E, 2011, 84, 041309.	0.8	136
25	Maximally random jamming of one-component and binary hard-disk fluids in two dimensions. Physical Review E, 2011, 83, 021120.	0.8	17
26	Glass Transition and Random Close Packing above Three Dimensions. Physical Review Letters, 2011, 107, 185702.	2.9	95
27	Anomalous local coordination, density fluctuations, and void statistics in disordered hyperuniform many-particle ground states. Physical Review E, 2011, 83, 051133.	0.8	45
28	Multicomponent fluids of hard hyperspheres in odd dimensions. Physical Review E, 2011, 83, 011201.	0.8	16
29	Emergent Behaviors from a Cellular Automaton Model for Invasive Tumor Growth in Heterogeneous Microenvironments. PLoS Computational Biology, 2011, 7, e1002314.	1.5	94
30	Nonequilibrium static diverging length scales on approaching a prototypical model glassy state. Physical Review E, 2012, 86, 021505.	0.8	28
31	How does an ice block assembly melt?. Physical Review E, 2012, 85, 051310.	0.8	5
32	X-ray microtomography study of the compaction process of rods under tapping. Physical Review E, 2012, 85, 051311.	0.8	21
33	Structure of finite sphere packings via exact enumeration: Implications for colloidal crystal nucleation. Physical Review E, 2012, 85, 051403.	0.8	39
34	Deposition of general ellipsoidal particles. Physical Review E, 2012, 85, 041301.	0.8	30
35	Families of tessellations of space by elementary polyhedra via retessellations of face-centered-cubic and related tilings. Physical Review E, 2012, 86, 041141.	0.8	9
36	Quantitative characterization of the microstructure of fresh cement paste via random packing of polydispersed Platonic cement particles. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 075003.	0.8	26

#	Article	IF	CITATIONS
37	Towards Hyper-Redundant and Super-Configurable Articulated Structures., 2012,,.		0
38	Packing Confined Hard Spheres Denser with Adaptive Prism Phases. Physical Review Letters, 2012, 109, 218301.	2.9	42
39	On Soccer Balls and Linearized Inverse Statistical Mechanics. Journal of Nonlinear Science, 2012, 22, 935-959.	1.0	36
40	Mathematical modeling of the interaction of non-oriented convex polytopes. Cybernetics and Systems Analysis, 2012, 48, 837-845.	0.4	17
41	Towards a description of particulate fouling: From single particle deposition to clogging. Advances in Colloid and Interface Science, 2012, 185-186, 34-76.	7.0	146
42	Effect of bond and asymmetry of 2D-dumbbells on their structure in high concentration regime. Soft Matter, 2012, 8, 9015.	1.2	7
43	Hard Quasispherical Particle Models for the Viscosity of Solutions of Protein Mixtures. Journal of Physical Chemistry B, 2012, 116, 9310-9315.	1.2	21
44	Nanostructure and Nanomechanics of Cement: Polydisperse Colloidal Packing. Physical Review Letters, 2012, 109, 155503.	2.9	161
45	Densest binary sphere packings. Physical Review E, 2012, 85, 021130.	0.8	65
46	Surface phonons, elastic response, and conformal invariance in twisted kagome lattices. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12369-12374.	3.3	154
47	Effective conductivity of random two-dimensional composites with circular non-overlapping inclusions. Computational Materials Science, 2012, 63, 118-126.	1.4	51
48	Computational topology for configuration spaces of hard disks. Physical Review E, 2012, 85, 011303.	0.8	27
49	Bond orientational order in liquids: Towards a unified description of water-like anomalies, liquid-liquid transition, glass transition, and crystallization. European Physical Journal E, 2012, 35, 113.	0.7	274
50	Mathematical Models of Placement Optimisation: Two- and Three-Dimensional Problems and Applications. Springer Optimization and Its Applications, 2012, , 363-388.	0.6	29
51	Universal Microstructure and Mechanical Stability of Jammed Packings. Physical Review Letters, 2012, 109, 205501.	2.9	129
52	Polymerlike statistical characterization of two-dimensional granular chains. Physical Review E, 2012, 85, 031301.	0.8	15
53	Entropic enhancement of spatial correlations in a laser-driven Rydberg gas. Physical Review A, 2012, 86,	1.0	38
54	Cavity approach to sphere packing in Hamming space. Physical Review E, 2012, 85, 021106.	0.8	1

#	Article	IF	CITATIONS
55	Sparse Locally-Jammed Disk Packings. Annals of Combinatorics, 2012, 16, 773-780.	0.3	10
56	THE PHYSICS OF PROTOPLANETESIMAL DUST AGGLOMERATES. VII. THE LOW-VELOCITY COLLISION BEHAVIOR OF LARGE DUST AGGLOMERATES. Astrophysical Journal, 2012, 758, 35.	1.6	58
57	Equation of state and jamming density for equivalent bi- and polydisperse, smooth, hard sphere systems. Journal of Chemical Physics, 2012, 136, 124508.	1.2	40
58	Deriving the Rosenfeld functional from the virial expansion. Physical Review E, 2012, 85, 041150.	0.8	12
59	Organizing principles for dense packings of nonspherical hard particles: Not all shapes are created equal. Physical Review E, 2012, 86, 011102.	0.8	45
60	Revisiting the phase diagram of hard ellipsoids. Journal of Chemical Physics, 2012, 136, 134505.	1.2	60
61	Density dependence of the entropy and the solvation shell structure in supercritical water via molecular dynamics simulation. Journal of Chemical Physics, 2012, 136, 214501.	1.2	13
62	Random close packing and relative viscosity of multimodal suspensions. Rheologica Acta, 2012, 51, 289-302.	1.1	36
63	Effects of hydrostatic pressure on the drag reduction of submerged aerogel-particle coatings. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 399, 62-70.	2.3	32
64	Mean-field cage theory for the random close packed state of a metastable hard-sphere glass. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 3566-3573.	1.2	1
65	Analytical and modeling investigations of volume fraction of interfacial layers around ellipsoidal aggregate particles in multiphase materials. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 015005.	0.8	34
66	Equilibrium theory of the hard sphere fluid and glasses in the metastable regime up to jamming. I. Thermodynamics. Journal of Chemical Physics, 2013, 139, 054501.	1.2	17
67	Equilibrium theory of the hard sphere fluid and glasses in the metastable regime up to jamming. II. Structure and application to hopping dynamics. Journal of Chemical Physics, 2013, 139, 054502.	1.2	12
68	Granular materials composed of shape-anisotropic grains. Soft Matter, 2013, 9, 7401.	1.2	116
69	Mean-field theory of random close packings of axisymmetric particles. Nature Communications, 2013, 4, 2194.	5.8	129
70	Water and water-like liquids: relationships between structure, entropy and mobility. Physical Chemistry Chemical Physics, 2013, 15, 14162.	1.3	66
71	Disordered strictly jammed binary sphere packings attain an anomalously large range of densities. Physical Review E, 2013, 88, 022205.	0.8	65
72	Simulations of driven overdamped frictionless hard spheres. Computer Physics Communications, 2013, 184, 628-637.	3.0	21

#	Article	IF	CITATIONS
73	Intuitions in physics. SynthÈse, 2013, 190, 2959-2980.	0.6	13
74	Structural features of a Lennard-Jones system at melting and crystallization. JETP Letters, 2013, 97, 327-332.	0.4	12
75	Divergence in the low shear viscosity for Brownian hard-sphere dispersions: At random close packing or the glass transition?. Journal of Rheology, 2013, 57, 1555-1567.	1.3	57
76	Hard ellipses: Equation of state, structure, and self-diffusion. Journal of Chemical Physics, 2013, 139, 024501.	1.2	33
77	Grain Sizing in Porous Media using Bayesian Magnetic Resonance. Physical Review Letters, 2013, 110, 018001.	2.9	18
78	Jammed lattice sphere packings. Physical Review E, 2013, 88, 062151.	0.8	22
79	<mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="italic">NVU</mml:mi </mml:math> perspective on simple liquids' quasiuniversality. Physical Review E, 2013, 87, 022106.	0.8	24
80	Size-topology correlations in disk packings: terminal bidispersity in order–disorder transitions. Philosophical Magazine, 2013, 93, 4018-4029.	0.7	7
81	Differently shaped hard body colloids in confinement: From passive to active particles. European Physical Journal: Special Topics, 2013, 222, 3023-3037.	1.2	23
82	On the behavior of indicators of melting: Lennard-Jones system in the vicinity of the phase transition. JETP Letters, 2013, 98, 259-265.	0.4	15
83	Low-energy non-linear excitations in sphere packings. Soft Matter, 2013, 9, 8252.	1.2	117
84	Critical scaling in thermal systems near the zero-temperature jamming transition. Soft Matter, 2013, 9, 2475.	1.2	29
85	Quasi-random packing of tetrahedra. Soft Matter, 2013, 9, 9298.	1.2	29
86	Nonequilibrium static growing length scales in supercooled liquids on approaching the glass transition. Journal of Chemical Physics, 2013, 138, 12A508.	1.2	31
87	Pore-size entropy of random hard-sphere packings. Soft Matter, 2013, 9, 3361.	1.2	39
88	Magnetically induced phase condensation in an aqueous dispersion of magnetic nanogels. Soft Matter, 2013, 9, 3098.	1.2	33
89	Characterization of void space in polydisperse sphere packings: Applications to hard-sphere packings and to protein structure analysis. European Physical Journal E, 2013, 36, 5.	0.7	17
90	Inherent Structure Landscape Connection between Liquids, Granular Materials, and the Jamming Phase Diagram. Physical Review Letters, 2013, 110, 145701.	2.9	28

#	Article	IF	CITATIONS
91	Two-Step Glass Transition Induced by Attractive Interactions in Quasi-Two-Dimensional Suspensions of Ellipsoidal Particles. Physical Review Letters, 2013, 110, 188301.	2.9	56
92	Isostaticity at Frictional Jamming. Physical Review Letters, 2013, 110, 198002.	2.9	63
93	Perspective: The glass transition. Journal of Chemical Physics, 2013, 138, 12A301.	1.2	287
94	Random packing of spheres in Menger sponge. Journal of Chemical Physics, 2013, 138, 214704.	1.2	16
95	Bridges in three-dimensional granular packings: Experiments and simulations. Europhysics Letters, 2013, 102, 24004.	0.7	22
96	A thermodynamic description of colloidal glasses. Europhysics Letters, 2013, 103, 46005.	0.7	24
97	Precise algorithm to generate random sequential addition of hard hyperspheres at saturation. Physical Review E, 2013, 88, 053312.	0.8	96
98	Analysis of the forces in ordered FCC packings with different orientations. Powder Technology, 2013, 248, 121-130.	2.1	21
99	Calculation of the Voronoi boundary for lens-shaped particles and spherocylinders. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P11009.	0.9	3
100	Further details on the phase diagram of hard ellipsoids of revolution. Journal of Chemical Physics, 2013, 138, 064501.	1.2	41
101	Spontaneous Crystallization in Athermal Polymer Packings. International Journal of Molecular Sciences, 2013, 14, 332-358.	1.8	26
102	Statistical mechanics as guidance for particleâ€based computational methods. Engineering Computations, 2013, 30, 301-316.	0.7	3
103	Jamming of superconducting vortices in a funnel structure. Superconductor Science and Technology, 2013, 26, 075023.	1.8	7
104	Behavior of hollow balls containing granules bouncing repeatedly off the ground. Europhysics Letters, 2013, 103, 14003.	0.7	2
105	Shape-induced chiral ordering in two-dimensional packing of snowmanlike dimeric particles. Physical Review E, 2013, 88, 042202.	0.8	7
106	Detailed characterization of rattlers in exactly isostatic, strictly jammed sphere packings. Physical Review E, 2013, 88, 062208.	0.8	42
107	Efficient linear programming algorithm to generate the densest lattice sphere packings. Physical Review E, 2013, 87, 063303.	0.8	14
108	Evolution and morphology of microenvironment-enhanced malignancy of three-dimensional invasive solid tumors. Physical Review E, 2013, 87, 052707.	0.8	17

#	Article	IF	CITATIONS
109	Transition state theory and the dynamics of hard disks. Physical Review E, 2013, 88, 052132.	0.8	8
110	Effect of dimensionality on the percolation thresholds of various <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>d</mml:mi></mml:math> -dimensional lattices. Physical Review E, 2013, 87, .	0.8	17
111	Dense colloidal fluids form denser amorphous sediments. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5769-5773.	3.3	25
112	Dimensional dependence of the Stokes–Einstein relation and its violation. Journal of Chemical Physics, 2013, 139, 164502.	1.2	50
113	Granular and jammed food materials. , 2013, , 325-335.		0
114	Packing hard spheres with short-range attraction in infinite dimension: phase structure and algorithmic implications. Journal of Physics: Conference Series, 2013, 473, 012020.	0.3	5
115	Tomographic analysis of jammed ellipsoid packings. AIP Conference Proceedings, 2013, , .	0.3	25
116	Electrically Conductive Bulk Composites through a Contact-Connected Aggregate. PLoS ONE, 2013, 8, e82260.	1.1	3
117	Force-chain identification in quasi-2D granular systems. , 2013, , .		3
118	Unification with mirror fermions. EPJ Web of Conferences, 2014, 70, 00051.	0.1	0
119	Packing Different Cuboids with Rotations and Spheres into a Cuboid. Advances in Decision Sciences, 2014, 2014, 1-19.	1.4	9
120	Existence of isostatic, maximally random jammed monodisperse hard-disk packings. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18436-18441.	3.3	68
121	Ball Packings with Periodic Constraints. Discrete and Computational Geometry, 2014, 52, 754-779.	0.4	10
122	Fast synchrotron X-ray tomography study of the packing structures of rods with different aspect ratios. Chinese Physics B, 2014, 23, 044501.	0.7	11
123	Structural characterization of submerged granular packings. Physical Review E, 2014, 90, 062208.	0.8	1
124	Materials by design: An experimental and computational investigation on the microanatomy arrangement of porous metallic glasses. Acta Materialia, 2014, 77, 411-422.	3.8	38
125	Viscosity of bimodal suspensions with hard spherical particles. Journal of Applied Physics, 2014, 116, 184902.	1.1	17
126	Analytical model and numerical simulations for solid propellant using a Random Loose Packing approach. , 2014, , .		0

#	Article	IF	CITATIONS
127	Characterization of maximally random jammed sphere packings: Voronoi correlation functions. Physical Review E, 2014, 90, 052120.	0.8	28
128	Renaissance of Bernal's random close packing and hypercritical line in the theory of liquids. Journal of Physics Condensed Matter, 2014, 26, 463102.	0.7	27
129	Dynamics and spatial correlation of voids in dense two dimensional colloids. Journal of Chemical Physics, 2014, 141, 014502.	1.2	10
130	Random packing of regular polygons and star polygons on a flat two-dimensional surface. Physical Review E, 2014, 90, 022402.	0.8	30
131	Free volume distribution of nearly jammed hard sphere packings. Journal of Chemical Physics, 2014, 141, 044510.	1.2	16
132	Potential energy landscape and inherent dynamics of a hard-sphere fluid. Physical Review E, 2014, 90, 042314.	0.8	5
133	Dense periodic packings of tori. Physical Review E, 2014, 89, 022133.	0.8	11
134	Avian photoreceptor patterns represent a disordered hyperuniform solution to a multiscale packing problem. Physical Review E, 2014, 89, 022721.	0.8	154
135	Nested sampling for materials: The case of hard spheres. Physical Review E, 2014, 89, 022302.	0.8	31
136	Modeling and characterizing anisotropic inclusion orientation in heterogeneous material via directional cluster functions and stochastic microstructure reconstruction. Journal of Applied Physics, 2014, 115, .	1.1	64
137	Exact theory of dense amorphous hard spheres in high dimension. III. The full replica symmetry breaking solution. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P10009.	0.9	127
138	A Probabilistic Description of the Configurational Entropy of Mixing. Entropy, 2014, 16, 2850-2868.	1.1	3
139	Packing and the structural transformations in liquid and amorphous oxides from ambient to extreme conditions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10045-10048.	3.3	74
140	Force-chain distributions in granular systems. Physical Review E, 2014, 89, 012203.	0.8	30
141	Percolation Behavior of Electrically Conductive Graphene Nanoplatelets/Polymer Nanocomposites: Theory and Experiment. Fullerenes Nanotubes and Carbon Nanostructures, 2014, 22, 413-433.	1.0	82
142	Topological boundary modes in isostatic lattices. Nature Physics, 2014, 10, 39-45.	6.5	595
143	Particle shape effects on the stress response of granular packings. Soft Matter, 2014, 10, 48-59.	1.2	170
144	X-ray tomography study of the random packing structure of ellipsoids. Soft Matter, 2014, 10, 990-996.	1.2	23

#	Article	IF	Citations
145	A comparison between bridges and force-chains in photoelastic disk packing. Soft Matter, 2014, 10, 109-114.	1.2	13
146	Shear modulus of glasses: Results from the full replica-symmetry-breaking solution. Physical Review E, 2014, 90, 022302.	0.8	61
147	Denser fluids of charge-stabilized colloids form denser sediments. Soft Matter, 2014, 10, 4913-4921.	1.2	5
148	Mechanically Encoded Cellular Shapes for Synthesis of Anisotropic Mesoporous Particles. Journal of the American Chemical Society, 2014, 136, 13138-13141.	6.6	24
149	Influence of particle size distribution on random close packing of spheres. Physical Review E, 2014, 90, 022204.	0.8	175
150	On the jamming phase diagram for frictionless hard-sphere packings. Soft Matter, 2014, 10, 7838-7848.	1.2	17
151	Elastically cooperative activated barrier hopping theory of relaxation in viscous fluids. I. General formulation and application to hard sphere fluids. Journal of Chemical Physics, 2014, 140, 194506.	1.2	142
152	Ensemble theory for slightly deformable granular matter. European Physical Journal E, 2014, 37, 37.	0.7	1
153	Plastic Deformation of Semicrystalline Polyethylene under Extension, Compression, and Shear Using Molecular Dynamics Simulation. Macromolecules, 2014, 47, 2515-2528.	2.2	96
154	Complexity in Surfaces of Densest Packings for Families of Polyhedra. Physical Review X, 2014, 4, .	2.8	36
155	Random-close packing limits for monodisperse and polydisperse hard spheres. Soft Matter, 2014, 10, 3826.	1.2	149
156	Structural Properties of Dense Hard Sphere Packings. Journal of Physical Chemistry B, 2014, 118, 10761-10766.	1.2	33
157	Fundamental challenges in packing problems: from spherical to non-spherical particles. Soft Matter, 2014, 10, 4423.	1.2	115
158	Simple effective rule to estimate the jamming packing fraction of polydisperse hard spheres. Physical Review E, 2014, 89, 040302.	0.8	34
159	Equilibrium Phase Behavior and Maximally Random Jammed State of Truncated Tetrahedra. Journal of Physical Chemistry B, 2014, 118, 7981-7992.	1.2	48
160	Elastically cooperative activated barrier hopping theory of relaxation in viscous fluids. II. Thermal liquids. Journal of Chemical Physics, 2014, 140, 194507.	1.2	146
161	Modified collective rearrangement sphere-assembly algorithm for random packings of nonspherical particles: Towards engineering applications. Powder Technology, 2014, 253, 311-324.	2.1	33
162	Impact of the timestep in some molecular dynamics simulations on compression of granular systems. European Physical Journal E, 2014, 37, 15.	0.7	4

#	ARTICLE	IF	CITATIONS
163	Thermodynamics and dynamics of the hard-sphere system: From stable to metastable states. Chemical Physics, 2014, 439, 85-94.	0.9	5
164	Application of molecular dynamics simulations for the generation of dense concrete mesoscale geometries. Computers and Structures, 2015, 158, 274-284.	2.4	11
165	Anisotropic Light Transport in White Beetle Scales. Advanced Optical Materials, 2015, 3, 1337-1341.	3.6	62
166	Residual Defect Density in Random Disks Deposits. Scientific Reports, 2015, 5, 12703.	1.6	2
167	A Geometric-Structure Theory for Maximally Random Jammed Packings. Scientific Reports, 2015, 5, 16722.	1.6	17
168	A New Packing Code for Creating Mirostructures of Propellants and Explosives. , 2015, , .		6
169	Structural characterization of the packings of granular regular polygons. Physical Review E, 2015, 92, 062203.	0.8	22
170	Confined disordered strictly jammed binary sphere packings. Physical Review E, 2015, 92, 062207.	0.8	19
171	Divergence of Viscosity in Jammed Granular Materials: A Theoretical Approach. Physical Review Letters, 2015, 115, 098001.	2.9	18
172	Effective diffusion coefficients in random packings of polydisperse hard spheres from two-point and three-point correlation functions. Journal of Applied Physics, $2015,118,.$	1.1	34
173	Free volume under shear. Journal of Chemical Physics, 2015, 143, 144502.	1.2	3
174	Extension of the BMCSL equation of state for hard spheres to the metastable disordered region: Application to the SAFT approach. Journal of Chemical Physics, 2015, 143, 044507.	1.2	8
175	From Crystals to Disordered Crystals: A Hidden Order-Disorder Transition. Scientific Reports, 2015, 5, 15378.	1.6	49
176	Mechanisms for pressure-induced crystal-crystal transition, amorphization, and devitrification of Snl4. Journal of Chemical Physics, 2015, 143, 164508.	1.2	13
177	Hard convex lens-shaped particles: Densest-known packings and phase behavior. Journal of Chemical Physics, 2015, 143, 224506.	1.2	19
178	Limit of Anisotropic Hydraulic Conductivity Ratio of Homogeneous Granular Materials. Vadose Zone Journal, 2015, 14, 1-12.	1.3	3
179	Universal Spatial Correlation Functions for Describing and Reconstructing Soil Microstructure. PLoS ONE, 2015, 10, e0126515.	1.1	89
180	Nanocrystal superlattices that exhibit improved order on heating: an example of inverse melting?. Faraday Discussions, 2015, 181, 181-192.	1.6	34

#	Article	IF	Citations
181	Tap density equations of granular powders based on the rate process theory and the free volume concept. Soft Matter, 2015, 11, 1554-1561.	1.2	18
182	Shapes for maximal coverage for two-dimensional random sequential adsorption. Physical Chemistry Chemical Physics, 2015, 17, 24376-24381.	1.3	28
183	The Hard Core of Soft Matter: Kugelsysteme in der weichen Materie. Mitteilungen Der Deutschen Mathematiker-Vereinigung, 2015, 23, .	0.0	0
184	Fluctuations, structure factor and polytetrahedra in random packings of sticky hard spheres. Journal of Non-Crystalline Solids, 2015, 411, 85-100.	1.5	8
185	Internal friction and absence of dilatancy of packings of frictionless polygons. Physical Review E, 2015, 91, 010202.	0.8	30
186	Inherent structures, fragility, and jamming: Insights from quasi-one-dimensional hard disks. Physical Review E, 2015, 91, 022301.	0.8	24
187	Compression- and shear-driven jamming of U-shaped particles in two dimensions. Granular Matter, 2015, 17, 121-133.	1.1	13
188	Packing density of irregular shape particles: DEM simulations applied to anode-grade coke aggregates. Advanced Powder Technology, 2015, 26, 1256-1262.	2.0	30
189	Adhesive loose packings of small dry particles. Soft Matter, 2015, 11, 6492-6498.	1.2	55
190	Jamming Criticality Revealed by Removing Localized Buckling Excitations. Physical Review Letters, 2015, 114, 125504.	2.9	118
191	The role of curvature anisotropy in the ordering of spheres on an ellipsoid. Soft Matter, 2015, 11, 5872-5882.	1.2	22
192	Random sequential adsorption of starlike particles. Physical Review E, 2015, 91, 042404.	0.8	8
193	The geometry of closed sets in the state of chemical transformation. Journal of Thermal Analysis and Calorimetry, 2015, 119, 1633-1651.	2.0	1
194	On the origin of multi-component bulk metallic glasses: Atomic size mismatches and de-mixing. Journal of Chemical Physics, 2015, 143, 054501.	1.2	25
195	How to predict the ideal glass transition density in polydisperse hard-sphere packings. Journal of Chemical Physics, 2015, 143, 044501.	1.2	5
196	Correlation between crystalline order and vitrification in colloidal monolayers. Journal of Physics Condensed Matter, 2015, 27, 194124.	0.7	14
197	Gelation of Fmoc-diphenylalanine is a first order phase transition. Soft Matter, 2015, 11, 7663-7673.	1.2	23
198	Discrete element models for non-spherical particle systems: From theoretical developments to applications. Chemical Engineering Science, 2015, 127, 425-465.	1.9	434

#	Article	IF	CITATIONS
199	The role of local structure in dynamical arrest. Physics Reports, 2015, 560, 1-75.	10.3	338
200	Towards the Development of a Universal Expression for the Configurational Entropy of Mixing. Entropy, 2016, 18, 5.	1.1	2
201	Memory of jamming–multiscale models for soft and granular matter. Granular Matter, 2016, 18, 1.	1.1	85
202	Statics and dynamics of infinite-dimensional liquids and glasses: a parallel and compact derivation. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 033210.	0.9	24
203	Formation of icosahedral nanowires. Physica Status Solidi (B): Basic Research, 2016, 253, 1149-1155.	0.7	3
204	A new method applicable to study solid compounds with multiple polyhedral structures. Journal of Computational Chemistry, 2016, 37, 1476-1483.	1.5	10
205	Protocol-dependent shear modulus of amorphous solids. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 104001.	0.9	28
206	Packing of nonoverlapping cubic particles: Computational algorithms and microstructural characteristics. Physical Review E, 2016, 94, 062901.	0.8	14
207	Disordered contact networks in jammed packings of frictionless disks. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 114002.	0.9	9
208	Perspective: Evolutionary design of granular media and block copolymer patterns. APL Materials, 2016, 4, .	2.2	33
209	Accurate bulk density determination of irregularly shaped translucent and opaque aerogels. Applied Physics Letters, 2016, 108, 194104.	1.5	5
210	Simple liquids' quasiuniversality and the hard-sphere paradigm. Journal of Physics Condensed Matter, 2016, 28, 323001.	0.7	97
211	Fractal aggregation kinetics contributions to thermal conductivity of nano-suspensions in unsteady thermal convection. Scientific Reports, 2016, 6, 39446.	1.6	11
212	Geometric aspects of shear jamming induced by deformation of frictionless sphere packings. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 094002.	0.9	7
213	Chemical potential and entropy in monodisperse and polydisperse hard-sphere fluids using Widom's particle insertion method and a pore size distribution-based insertion probability. Journal of Chemical Physics, 2016, 144, 214503.	1.2	8
214	Structural Characterization and Statistical-Mechanical Model of Epidermal Patterns. Biophysical Journal, 2016, 111, 2534-2545.	0.2	14
215	Extreme lattices: symmetries and decorrelation. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 113301.	0.9	6
216	Consequences of minimising pair correlations in fluids for dynamics, thermodynamics and structure. Molecular Physics, 2016, 114, 2411-2423.	0.8	1

#	Article	IF	CITATIONS
217	Managing numerical errors in random sequential adsorption. Surface Science, 2016, 651, 182-186.	0.8	10
218	Maximally dense random packings of spherocylinders. Powder Technology, 2016, 292, 176-185.	2.1	64
219	The simplest model of jamming. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 145001.	0.7	83
220	Laminated altered layers in historical glass: Density variations of silica nanoparticle random packings as explanation for the observed lamellae. Journal of Non-Crystalline Solids, 2016, 442, 1-16.	1.5	23
221	Roadmap across the mesoscale for durable and sustainable cement paste $\hat{a}\in$ A bioinspired approach. Construction and Building Materials, 2016, 115, 13-31.	3.2	39
222	Ordering and stress transmission in packings of straight and curved spherocylinders. Granular Matter, 2016, $18,1.$	1.1	4
223	Characterization of maximally random jammed sphere packings. II. Correlation functions and density fluctuations. Physical Review E, 2016, 94, 022152.	0.8	18
224	Computer simulation of random loose packings of micro-particles in presence of adhesion and friction. Powder Technology, 2016, 302, 414-422.	2.1	35
225	Critical slowing down and hyperuniformity on approach to jamming. Physical Review E, 2016, 94, 012902.	0.8	54
226	Static structural signatures of nearly jammed disordered and ordered hard-sphere packings: Direct correlation function. Physical Review E, 2016, 94, 032902.	0.8	14
227	Self-Assembly of Colloidal Nanocrystals: From Intricate Structures to Functional Materials. Chemical Reviews, 2016, 116, 11220-11289.	23.0	1,485
228	The Perfect Glass Paradigm: Disordered Hyperuniform Glasses Down to Absolute Zero. Scientific Reports, 2016, 6, 36963.	1.6	48
229	Scaling collapse at the jamming transition. Physical Review E, 2016, 93, 012902.	0.8	7
230	Structural Transition in a Fluid of Spheroids: A Low-Density Vestige of Jamming. Physical Review Letters, 2016, 116, 098001.	2.9	10
232	Computer simulation study of a mesogenic lattice model based on long-range dispersion interactions. Physical Review E, 2016, 94, 042702.	0.8	2
233	The jamming transition in high dimension: an analytical study of the TAP equations and the effective thermodynamic potential. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 093301.	0.9	24
234	Heaping and secondary flows in sheared granular materials. New Journal of Physics, 2016, 18, 113006.	1.2	17
235	Microstructural characterization of random packings of cubic particles. Scientific Reports, 2016, 6, 35024.	1.6	23

#	Article	IF	CITATIONS
236	Colloidal Crystallization. , 0, , 203-248.		2
237	Two typical structure patterns in jammed monodisperse disk packings at high densities. Physica A: Statistical Mechanics and Its Applications, 2016, 461, 747-755.	1.2	1
238	Geometry: The leading parameter for the Poisson's ratio of bending-dominated cellular solids. International Journal of Solids and Structures, 2016, 100-101, 1-10.	1.3	23
239	Anm: a geometrical model for the composite structure of mortar and concrete using real-shape particles. Materials and Structures/Materiaux Et Constructions, 2016, 49, 149-158.	1.3	66
240	Effect of long-range repulsive Coulomb interactions on packing structure of adhesive particles. Soft Matter, 2016, 12, 1836-1846.	1.2	40
241	Ultrahigh-pressure polyamorphism in GeO ₂ glass with coordination number >6. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3436-3441.	3.3	75
242	The random packing density of nearly spherical particles. Soft Matter, 2016, 12, 4123-4128.	1.2	22
243	Disentangling the role of structure and friction in shear jamming. Nature Physics, 2016, 12, 578-583.	6.5	62
244	Order metrics and order maps of octahedron packings. Physica A: Statistical Mechanics and Its Applications, 2016, 444, 870-882.	1.2	15
245	The microscopic structure of mono-disperse granular heaps and sediments of particles on inclined surfaces. Soft Matter, 2016, 12, 3184-3188.	1.2	7
246	Density-induced reentrant melting of colloidal Wigner crystals. Physical Chemistry Chemical Physics, 2016, 18, 5211-5218.	1.3	12
247	Maximal density, kinetics of deposition and percolation threshold of loose packed lattices. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1684-1688.	0.9	2
248	Optimizing packing fraction in granular media composed of overlapping spheres. Soft Matter, 2016, 12, 1107-1115.	1.2	34
249	Exact results for the jammed state of binary mixtures of superdisks on the plane. Physica A: Statistical Mechanics and Its Applications, 2016, 441, 93-99.	1.2	1
250	Glass and Jamming Transitions: From Exact Results to Finite-Dimensional Descriptions. Annual Review of Condensed Matter Physics, 2017, 8, 265-288.	5.2	217
251	Percolation of disordered jammed sphere packings. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 085001.	0.7	43
252	Modeling Granular Materials: Century-Long Research across Scales. Journal of Engineering Mechanics - ASCE, 2017, 143, .	1.6	67
253	Shear Yielding and Shear Jamming of Dense Hard Sphere Glasses. Physical Review Letters, 2017, 118, 038001.	2.9	70

#	ARTICLE	IF	CITATIONS
254	Surface fine structure influence on saturated random packings. Journal of Chemical Physics, 2017, 146, 054706.	1.2	4
255	Pore configuration landscape of granular crystallization. Nature Communications, 2017, 8, 15082.	5.8	92
256	Equation of state for random sphere packings with arbitrary adhesion and friction. Soft Matter, 2017, 13, 421-427.	1.2	34
257	Investigation of the shock-induced chemical reaction (SICR) in Ni + Al nanoparticle mixtures. Physical Chemistry Chemical Physics, 2017, 19, 17607-17617.	1.3	20
258	Packing, entropic patchiness, and self-assembly of non-convex colloidal particles: A simulation perspective. Current Opinion in Colloid and Interface Science, 2017, 30, 62-69.	3.4	36
259	Shape effects on time-scale divergence at athermal jamming transition of frictionless non-spherical particles. Physica A: Statistical Mechanics and Its Applications, 2017, 484, 470-481.	1.2	3
260	Surface Localization of Defects in Black TiO ₂ : Enhancing Photoactivity or Reactivity. Journal of Physical Chemistry Letters, 2017, 8, 199-207.	2.1	97
261	Kinetic theory of binary particles with unequal mean velocities and non-equipartition energies. Physica A: Statistical Mechanics and Its Applications, 2017, 469, 293-304.	1.2	17
262	Maximally dense random packings of cubes and cuboids via a novel inverse packing method. Soft Matter, 2017, 13, 748-757.	1.2	31
263	Jammed systems of oriented needles always percolate on square lattices. Physical Review E, 2017, 96, 022154.	0.8	22
264	Flow, Transport, and Reaction in Porous Media: Percolation Scaling, Criticalâ€Path Analysis, and Effective Medium Approximation. Reviews of Geophysics, 2017, 55, 993-1078.	9.0	130
265	Transition in Dynamics as Nanoparticles Jam at the Liquid/Liquid Interface. Nano Letters, 2017, 17, 6855-6862.	4.5	30
266	Structural disorder, filament growth and self-poisoning in short rods confined onto a flat wall. Soft Matter, 2017, 13, 8678-8683.	1.2	2
267	Defect structure and percolation in the packing of bidispersed particles on a sphere. Soft Matter, 2017, 13, 7090-7097.	1.2	11
268	Yield stress materials in soft condensed matter. Reviews of Modern Physics, 2017, 89, .	16.4	511
269	Amorphization model of nanostructured composite solid electrolytes. Nanotechnologies in Russia, 2017, 12, 243-246.	0.7	0
270	Characterizing pixel and point patterns with a hyperuniformity disorder length. Physical Review E, 2017, 96, 032909.	0.8	10
271	Stratification in binary colloidal polymer films: experiment and simulations. Soft Matter, 2017, 13, 6969-6980.	1.2	60

#	Article	IF	Citations
272	Nature of the spin-glass phase in dense packings of Ising dipoles with random anisotropy axes. Journal of Physics Condensed Matter, 2017, 29, 355802.	0.7	7
273	Amorphous chalcogenides as random octahedrally bonded solids: I. Implications for the first sharp diffraction peak, photodarkening, and Boson peak. Journal of Chemical Physics, 2017, 147, 114505.	1.2	9
274	Equation of state of polydisperse hard-disk mixtures in the high-density regime. Physical Review E, 2017, 96, 062603.	0.8	16
275	Irreversible Local Markov Chains with Rapid Convergence towards Equilibrium. Physical Review Letters, 2017, 119, 240603.	2.9	23
276	Rattler-induced aging dynamics in jammed granular systems. Soft Matter, 2017, 13, 9132-9137.	1.2	13
277	Subjamming transition in binary sphere mixtures. Physical Review E, 2017, 96, 052905.	0.8	19
279	Spectrally Optimized Pointset Configurations. Constructive Approximation, 2017, 46, 1-35.	1.8	4
280	Scaling Properties of the Number of Random Sequential Adsorption Iterations Needed to Generate Saturated Random Packing. Journal of Statistical Physics, 2017, 166, 39-44.	0.5	15
281	Random scalar fields and hyperuniformity. Journal of Applied Physics, 2017, 121, .	1.1	48
282	Localization in random bipartite graphs: Numerical and empirical study. Physical Review E, 2017, 95, 052149.	0.8	6
283	Experimental soft-matter science. Reviews of Modern Physics, 2017, 89, .	16.4	82
284	Attraction Controls the Inversion of Order by Disorder in Buckled Colloidal Monolayers. Physical Review Letters, 2017, 118, 218002.	2.9	10
285	Role of disorder in determining the vibrational properties of mass-spring networks. Frontiers of Physics, 2017, 12, 1.	2.4	11
286	X-ray tomography study on the structure of the granular random loose packing. Chinese Physics B, 2017, 26, 084503.	0.7	1
287	Another resolution of the configurational entropy paradox as applied to hard spheres. Journal of Chemical Physics, 2017, 147, 224503.	1.2	10
288	Discrete Element Method Investigation of Bulk Density and Electrical Resistivity of Calcined Coke Mixes. Metals, 2017, 7, 154.	1.0	5
289	Analysis of the structure of random packings of powder particles in laser additive technologies. MATEC Web of Conferences, 2017, 129, 01066.	0.1	1
290	Kinetic theory for strong uniform shear flow of granular media at high density. EPJ Web of Conferences, 2017, 140, 03064.	0.1	1

#	Article	IF	CITATIONS
291	Rational design of stealthy hyperuniform two-phase media with tunable order. Physical Review E, 2018, 97, 023311.	0.8	17
292	Shapes within shapes: how particles arrange inside a cavity. Soft Matter, 2018, 14, 3012-3017.	1.2	10
293	Edwards statistical mechanics for jammed granular matter. Reviews of Modern Physics, 2018, 90, .	16.4	135
294	Characterization of maximally random jammed sphere packings. III. Transport and electromagnetic properties via correlation functions. Physical Review E, 2018, 97, 012118.	0.8	21
295	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
296	Random sequential adsorption of cubes. Journal of Chemical Physics, 2018, 148, 024501.	1.2	17
297	Synchronized oscillations and acoustic fluidization in confined granular materials. Physical Review E, 2018, 97, 010901.	0.8	3
298	Drag, lift and torque acting on a two-dimensional non-spherical particle near a wall. Advanced Powder Technology, 2018, 29, 1507-1517.	2.0	15
299	Hyperuniform states of matter. Physics Reports, 2018, 745, 1-95.	10.3	259
300	Corrected Mean-Field Model for Random Sequential Adsorption on Random Geometric Graphs. Journal of Statistical Physics, 2018, 173, 872-894.	0.5	2
301	A unified materials approach to mitigating optical nonlinearities in optical fiber. II. A. Material additivity models and basic glass properties. International Journal of Applied Glass Science, 2018, 9, 278-287.	1.0	26
302	Characterization of the structural, mechanical, and electronic properties of fullerene mixtures: a molecular simulations description. Journal of Materials Chemistry C, 2018, 6, 3642-3650.	2.7	8
303	High-resolution of particle contacts via fluorophore exclusion in deep-imaging of jammed colloidal packings. Physica A: Statistical Mechanics and Its Applications, 2018, 490, 1387-1395.	1.2	6
304	Frustrated packing in a granular system under geometrical confinement. Soft Matter, 2018, 14, 396-404.	1.2	15
305	CFD-DEM modeling of strongly polydisperse particulate systems. Powder Technology, 2018, 325, 698-711.	2.1	19
306	Hard convex lens-shaped particles: metastable, glassy and jammed states. Soft Matter, 2018, 14, 8205-8218.	1.2	8
307	Random sequential adsorption of cuboids. Journal of Chemical Physics, 2018, 149, 194704.	1.2	9
308	Dynamic modelling on the confined crystallization of mono-sized cubic particles under mechanical vibration. European Physical Journal E, 2018, 41, 139.	0.7	10

#	Article	IF	CITATIONS
309	A Finite Element Model Order Reduction Technique for Multiscale Electromagnetic Problems. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 140-148.	1.4	1
310	Random sequential adsorption of unoriented rectangles at saturation. Physical Review E, 2018, 98, .	0.8	18
311	Jamming and percolation properties of random sequential adsorption with relaxation. Physical Review E, 2018, 98, .	0.8	12
312	Saturated packings of convex anisotropic objects under random sequential adsorption protocol. Physical Review E, 2018, 98, .	0.8	24
313	Resistance Is Not Futile: Grain Resistance Controls on Observed Critical Shields Stress Variations. Journal of Geophysical Research F: Earth Surface, 2018, 123, 3308-3322.	1.0	36
314	A neutron tomography study: probing the spontaneous crystallization of randomly packed granular assemblies. Scientific Reports, 2018, 8, 17637.	1.6	5
315	Coupling effects of particle size and shape on improving the density of disordered polydisperse packings. Physical Review E, 2018, 98, .	0.8	31
316	Spectrum of structure for jammed and unjammed soft disks. Physical Review E, 2018, 98, .	0.8	6
317	Configuration Spaces of Equal Spheres Touching a Given Sphere: The Twelve Spheres Problem. Bolyai Society Mathematical Studies, 2018, , 219-277.	0.3	6
318	Green-Kubo stress correlation function at the atomic scale and a long-range bond-orientational ordering in a model liquid. Physical Review E, 2018, 98, .	0.8	3
319	Effect of aging on electrical conductivity of two-dimensional composite with rod-like fillers. Journal of Physics: Conference Series, 2018, 955, 012006.	0.3	4
320	Universality of jamming of nonspherical particles. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11736-11741.	3.3	52
321	Evolutions of packing properties of perfect cylinders under densification and crystallization. Journal of Chemical Physics, 2018, 149, 104503.	1.2	15
322	Particle arrangement effects on the stress intensity in composite material. Engineering Fracture Mechanics, 2018, 202, 33-46.	2.0	5
323	Concrete material science: Past, present, and future innovations. Cement and Concrete Research, 2018, 112, 5-24.	4.6	201
324	Conductivity of regular composite. Square lattice. , 2018, , 161-189.		0
325	Conductivity of regular composite. Hexagonal array. , 2018, , 191-220.		0
326	Effective Conductivity of 3D regular composites. , 2018, , 221-247.		0

#	Article	IF	CITATIONS
327	Random 2D composites., 2018,, 249-281.		0
328	From metallic glasses to nanocrystals: Molecular dynamics simulations on the crossover from glass-like to grain-boundary-mediated deformation behaviour. Acta Materialia, 2018, 156, 205-214.	3.8	38
329	Kinetics of deposition in the diffusion-controlled limit. Physical Review E, 2018, 98, 012119.	0.8	0
330	Skinny emulsions take on granular matter. Soft Matter, 2018, 14, 7310-7323.	1.2	6
331	Perspective: Basic understanding of condensed phases of matter via packing models. Journal of Chemical Physics, 2018, 149, 020901.	1.2	99
332	Densification Mechanisms of Oxide Glasses and Melts. , 2018, , 343-369.		10
333	Packing Fraction of a Two-dimensional Eden Model with Random-Sized Particles. Journal of the Physical Society of Japan, 2018, 87, 014005.	0.7	1
334	Molecular Dynamics Simulation of the Cage Effect in a Wide Packing Fraction Range. Russian Journal of Physical Chemistry A, 2018, 92, 1321-1331.	0.1	2
335	Universal Features of Metastable State Energies in Cellular Matter. Physical Review Letters, 2018, 120, 248001.	2.9	17
336	Self-Similar Dynamics of Nuclear Packing in the Early Drosophila Embryo. Biophysical Journal, 2019, 117, 743-750.	0.2	19
337	Phase Behaviors of Soft-core Particle Systems. Chinese Journal of Polymer Science (English Edition), 2019, 37, 1065-1082.	2.0	10
338	Pore Structure of Grain-Size Fractal Granular Material. Materials, 2019, 12, 2053.	1.3	10
339	Mean field theory of jamming of nonspherical particles. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 344001.	0.7	11
340	Effects of size polydispersity on random close-packed configurations of spherical particles. Physical Review E, 2019, 100, 042906.	0.8	26
341	Phase diagram for ensembles of random close-packed Ising-like dipoles as a function of texturation. Physical Review B, 2019, 100, .	1,1	7
342	Random sequential adsorption of Platonic and Archimedean solids. Physical Review E, 2019, 100, 042903.	0.8	11
343	Simulation of solid propellant microstructures by combining the collective rearrangement method with the discrete element method. AIP Advances, 2019, 9, .	0.6	1
344	An optimization-based approach for modeling of complex particles. Powder Technology, 2019, 356, 342-352.	2.1	10

#	Article	IF	CITATIONS
345	Morphology and kinetics of random sequential adsorption of superballs: From hexapods to cubes. Physical Review E, 2019, 100, 020602.	0.8	5
346	Jamming transition in non-spherical particle systems: pentagons versus disks. Granular Matter, 2019, 21, 1.	1.1	14
347	Elastic properties of dense hard-sphere fluids. Physical Review E, 2019, 100, 032138.	0.8	14
348	A simple landscape of metastable state energies for two-dimensional cellular matter. Soft Matter, 2019, 15, 237-242.	1.2	3
349	Random close packing from hard-sphere Percus-Yevick theory. Physical Review E, 2019, 99, 012146.	0.8	7
350	From simple liquids to colloids and soft matter. Physics Today, 2019, 72, 38-39.	0.3	21
351	From jamming to fast compaction dynamics in granular binary mixtures. Scientific Reports, 2019, 9, 7281.	1.6	19
352	On the Issue of Predicting the Strength Characteristics of Dispersed-Hardened Polymeric Composite Materials at the Design Stage of Engineering Products. Materials Science Forum, 0, 951, 45-50.	0.3	0
353	Pore scale study of the influence of particle geometry on soil permeability. Advances in Water Resources, 2019, 129, 232-249.	1.7	42
354	Random sequential adsorption of ellipsoids and spherocylinders. Physica A: Statistical Mechanics and Its Applications, 2019, 527, 121361.	1.2	11
355	Nanorod–Surfactant Assemblies and Their Interfacial Behavior at Liquid–Liquid Interfaces. ACS Macro Letters, 2019, 8, 512-518.	2.3	21
356	Experimental Evidence of Thermal-Like Behavior in Dense Granular Suspensions. Physical Review Letters, 2019, 122, 168001.	2.9	3
357	Manifestation of dipole-induced disorder in self-assembly of ferroelectric and ferromagnetic nanocubes. Nanoscale, 2019, 11, 7293-7303.	2.8	10
358	Determining random packing density and equivalent packing size of superballs via binary mixtures with spheres. Chemical Engineering Science, 2019, 202, 270-281.	1.9	15
359	Building Reconfigurable Devices Using Complex Liquid–Fluid Interfaces. Advanced Materials, 2019, 31, e1806370.	11.1	120
360	Solvation Entropy Made Simple. Journal of Chemical Theory and Computation, 2019, 15, 3204-3214.	2.3	42
361	Hyperuniformity order metric of Barlow packings. Physical Review E, 2019, 99, 022111.	0.8	6
362	Effects of central symmetry and elongation on the dense disordered packings of entangled particles. Physica A: Statistical Mechanics and Its Applications, 2019, 523, 120-128.	1.2	1

#	Article	IF	CITATIONS
363	Unified size-density and size-topology relations in random packings of dry adhesive polydisperse spheres. Physical Review E, 2019, 99, 022901.	0.8	6
364	Jammed packings of 3D superellipsoids with tunable packing fraction, coordination number, and ordering. Soft Matter, 2019, 15, 9751-9761.	1.2	15
365	Geometry and kinetics determine the microstructure in arrested coalescence of Pickering emulsion droplets. Soft Matter, 2019, 15, 9587-9596.	1.2	9
366	Implementation of Numerical Mesostructure Concrete Material Models: A Dot Matrix Method. Materials, 2019, 12, 3835.	1.3	8
367	Random sequential adsorption of particles with tetrahedral symmetry. Physical Review E, 2019, 100, 052903.	0.8	6
368	Jammed hard-sphere hcp crystals permeated with trivacancy tunnels. Journal of Applied Physics, 2019, 126, 194901.	1.1	1
369	Hard convex lens-shaped particles: Characterization of dense disordered packings. Physical Review E, 2019, 100, 062902.	0.8	11
370	Particle spatial arrangement metrics for near-crack-tip stress. Theoretical and Applied Fracture Mechanics, 2019, 104, 102386.	2.1	1
371	Induced and endogenous acoustic oscillations in granular faults. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170389.	1.6	7
372	Spatial Stochastic Intracellular Kinetics: A Review of Modelling Approaches. Bulletin of Mathematical Biology, 2019, 81, 2960-3009.	0.9	42
373	The jamming transition is a k-core percolation transition. Physica A: Statistical Mechanics and Its Applications, 2019, 516, 172-177.	1.2	19
374	The Inner Workings of Crustal Distillation Columns; the Physical Mechanisms and Rates Controlling Phase Separation in Silicic Magma Reservoirs. Journal of Petrology, 2019, 60, 3-18.	1.1	120
375	Disorder-Induced Phase Transitions in the Transmission of Dielectric Metasurfaces. Physical Review Letters, 2019, 122, 015702.	2.9	35
376	Uniaxial compression of three-dimensional entangled fibre networks: impacts of contact interactions. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 015006.	0.8	10
377	The fraction of overlapping interphase around 2D and 3D polydisperse non-spherical particles: Theoretical and numerical models. Computer Methods in Applied Mechanics and Engineering, 2019, 345, 728-747.	3.4	32
378	A depth-averaged two-phase model for fluvial sediment-laden flows over erodible beds. Advances in Water Resources, 2019, 129, 338-353.	1.7	7
379	Linking micro grainsize polydispersity to macro porosity. International Journal of Solids and Structures, 2020, 187, 75-84.	1.3	17
380	Hydrogel microparticles for biomedical applications. Nature Reviews Materials, 2020, 5, 20-43.	23.3	646

#	Article	IF	CITATIONS
381	Structural, electronic and mechanical properties of all-sp2 carbon allotropes with density lower than graphene. Carbon, 2020, 159, 512-526.	5.4	18
383	Infinite-Dimensional Models in Statistical Physics. , 2020, , 1-36.		0
384	Atomic Liquids in Infinite Dimensions: Thermodynamics. , 2020, , 37-66.		0
385	Atomic Liquids in Infinite Dimensions: Equilibrium Dynamics. , 2020, , 67-98.		0
386	Thermodynamics of Glass States. , 2020, , 99-139.		0
387	Replica Symmetry Breaking and Hierarchical Free Energy Landscapes. , 2020, , 140-179.		0
388	The Gardner Transition. , 2020, , 180-198.		0
389	Counting Glass States: The Complexity. , 2020, , 199-230.		0
390	Packing Spheres in Large Dimensions. , 2020, , 231-250.		0
391	The Jamming Transition. , 2020, , 251-289.		0
392	Rheology of the Glass. , 2020, , 290-304.		0
394	Particle shape matters – Using 3D printed particles to investigate fundamental particle and packing properties. Powder Technology, 2020, 361, 711-718.	2.1	35
395	Introduction to computational methods and theory of composites. , 2020, , 1-56.		0
396	Simple fluids, suspensions and selected random systems. , 2020, , 265-315.		0
398	A three-dimensional axial fuel relocation framework with discrete element method to support burnup extension. Journal of Nuclear Materials, 2020, 541, 152408.	1.3	9
399	Predicting maximally random jammed packing density of non-spherical hard particles via analytical continuation of fluid equation of state. Physical Chemistry Chemical Physics, 2020, 22, 22635-22644.	1.3	3
400	A simple explicit model constructed from a homogenization solution for the large-strain mechanical response of elastomeric syntactic foams. International Journal of Non-Linear Mechanics, 2020, 126, 103548.	1.4	14
401	Dense packings of hard circular arcs. Physical Review E, 2020, 102, 042903.	0.8	6

#	Article	IF	CITATIONS
402	Paris car parking problem for partially oriented discorectangles on a line. Physical Review E, 2020, 102, 012128.	0.8	5
403	Morphology of random packing of micro-particles and its effect on the absorption of laser radiation during selective melting of powders. International Journal of Engineering Science, 2020, 157, 103378.	2.7	21
404	Collapse modes in simple cubic and body-centered cubic arrangements of elastic beads. Physical Review E, 2020, 102, 032901.	0.8	0
405	Magnetic ordering of random dense packings of freely rotating dipoles. Physical Review B, 2020, 102, .	1.1	2
406	Large deviations in one-dimensional random sequential adsorption. Physical Review E, 2020, 102, 062108.	0.8	6
407	Numerical Evaluation of the Thermal Properties of UD-Fibers Reinforced Composites for Different Morphologies. International Journal of Applied Mechanics, 2020, 12, 2050032.	1.3	5
408	Toward Dataâ€Assisted Particleâ€Fluid Simulations of Heat Transfer in Blast Furnaces. Steel Research International, 2020, 91, 2000132.	1.0	5
409	Structured randomness: jamming of soft discs and pins. Soft Matter, 2020, 16, 5305-5313.	1.2	3
410	Relaxation times, jamming densities, and ideal glass transition densities for hard spheres in a wide range of polydispersities. AIP Advances, 2020, 10, 035212.	0.6	5
411	Hyperuniformity and density fluctuations at a rigidity transition in a model of biological tissues. Soft Matter, 2020, 16, 5942-5950.	1.2	11
412	Jammed systems of oriented dimers always percolate on hypercubic lattices. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 063203.	0.9	1
413	Shear thickening of suspensions of dimeric particles. Journal of Rheology, 2020, 64, 239-254.	1.3	2
414	Infinitesimal asphericity changes the universality of the jamming transition. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 033302.	0.9	6
415	Revealing Structural Changes at Glass Transition via Radial Distribution Functions. Journal of Physical Chemistry B, 2020, 124, 3186-3194.	1.2	41
416	Connecting glass-forming ability of binary mixtures of soft particles to equilibrium melting temperatures. Nature Communications, 2020, 11, 3198.	5.8	12
417	Photonic glass based structural color. APL Photonics, 2020, 5, 060901.	3.0	37
418	Two-Scale Scenario of Rigidity Percolation of Sticky Particles. Physical Review Letters, 2020, 124, 255501.	2.9	2
419	Shape effects on packing properties of bi-axial superellipsoids. Powder Technology, 2020, 364, 49-59.	2.1	5

#	Article	IF	Citations
420	Random sequential adsorption of lattice animals on a three-dimensional cubic lattice. Physical Review E, 2020, 101, 012119.	0.8	3
421	Organic Molecules of Intrinsic Microporosity. Organic Materials, 2020, 02, 020-025.	1.0	10
422	Pressure Dependent Shear Response of Jammed Packings of Frictionless Spherical Particles. Physical Review Letters, 2020, 124, 038004.	2.9	20
423	Equation of State of Four- and Five-Dimensional Hard-Hypersphere Mixtures. Entropy, 2020, 22, 469.	1.1	4
424	Kinetics of random sequential adsorption of two-dimensional shapes on a one-dimensional line. Physical Review E, 2020, 101, 042901.	0.8	9
425	Structural universality in disordered packings with size and shape polydispersity. Soft Matter, 2020, 16, 4528-4539.	1.2	8
426	Athermal Fluctuations in Disordered Crystals. Physical Review Letters, 2020, 124, 168004.	2.9	13
427	Predicting filtration of needle-like crystals: A Monte Carlo simulation study of polydisperse packings of spherocylinders. Chemical Engineering Science, 2021, 230, 116151.	1.9	3
428	Inferring the particle-wise dynamics of amorphous solids from the local structure at the jamming point. Soft Matter, 2021, 17, 1056-1083.	1.2	5
429	Density distribution functions of random sequential adsorption on a <mmi:math altimg="si4.svg" display="inline" id="d1e364" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mo linebreak="goodbreak" linebreakstyle="after">×</mml:mo><mml:mi>â^ž</mml:mi>(mml:mi>c/mml:mrow> lattice. Physica A:</mml:mrow></mmi:math>	1.2	3
430	Effect of vibration mode on self-assembly of granular spheres under three-dimensional vibration. Powder Technology, 2021, 380, 47-58.	2.1	8
431	Three-dimensional Voronoi analysis of realistic grain packing: An XCT assisted set Voronoi tessellation framework. Powder Technology, 2021, 379, 251-264.	2.1	17
432	Topological Metric Detects Hidden Order in Disordered Media. Physical Review Letters, 2021, 126, 048101.	2.9	13
433	Micro-mechanical (granular) mixtures for environmental safety technologies. E3S Web of Conferences, 2021, 234, 00075.	0.2	0
434	Structural diversity of random aggregates of identical spheres. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 045003.	0.7	0
436	Structural analysis of disordered dimer packings. Soft Matter, 2021, 17, 8877-8890.	1.2	3
437	High-fidelity stochastic modeling of carbon black-based conductive polymer composites for strain and fatigue sensing. Journal of Materials Science, 2021, 56, 6861-6877.	1.7	3
438	<i>Volvox barberi</i> (Chlorophyceae) actively forms twoâ€dimensional flocks in culture. Journal of Phycology, 2021, 57, 967-974.	1.0	2

#	Article	IF	CITATIONS
439	Leaky cell model of hard spheres. Journal of Chemical Physics, 2021, 154, 104505.	1.2	1
440	Kinetic Frustration Effects on Dense Two-Dimensional Packings of Convex Particles and Their Structural Characteristics. Journal of Physical Chemistry B, 2021, 125, 2450-2464.	1.2	3
441	Three-dimensional mesoscale modeling of concrete with convex aggregate based on motion simulation. Construction and Building Materials, 2021, 277, 122257.	3.2	14
442	Beyond Salsburg–Wood: Glass equation of state for polydisperse hard spheres. AIP Advances, 2021, 11, 035311.	0.6	3
443	Introduction to Colloidal Suspension Rheology. , 2021, , 1-43.		1
444	Breaking universality in random sequential adsorption on a square lattice with long-range correlated defects. Physical Review E, 2021, 103, 042134.	0.8	5
445	A jamming plane of sphere packings. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118 , .	3.3	15
446	Interacting jammed granular systems. Physical Review E, 2021, 103, 042901.	0.8	1
447	Percolation in metal-insulator composites of randomly packed spherocylindrical nanoparticles. Physical Review B, 2021, 103, .	1.1	2
448	Shape effects on mechanical properties of maximally random jammed packings of intersecting spherocylinders. Powder Technology, 2021, 383, 443-453.	2.1	6
449	Structural characterization of many-particle systems on approach to hyperuniform states. Physical Review E, 2021, 103, 052126.	0.8	21
450	Start-up shear of spherocylinder packings: Effect of friction. Physical Review E, 2021, 103, 052903.	0.8	0
451	Jamming criticality of near–crystals. Europhysics Letters, 0, , .	0.7	6
452	Algorithms to generate saturated random sequential adsorption packings built of rounded polygons. Physical Review E, 2021, 103, 063308.	0.8	6
453	Universality of jammed frictional packing. Physical Review Research, 2021, 3, .	1.3	4
454	Critical pore radius and transport properties of disordered hard- and overlapping-sphere models. Physical Review E, 2021, 104, 014127.	0.8	9
455	Finite-size effects in the microscopic critical properties of jammed configurations: A comprehensive study of the effects of different types of disorder. Physical Review E, 2021, 104, 014102.	0.8	11
456	Orientation order parameters and effective conductivity of a 2-D solid with partially disordered array of circular inhomogeneities. Mathematics and Mechanics of Solids, 2021, 26, 1204-1218.	1.5	0

#	Article	IF	CITATIONS
457	Long-Range Anomalous Decay of the Correlation in Jammed Packings. Physical Review Letters, 2021, 127, 038001.	2.9	21
458	Đ£Đ ©Đ†Đ›Đ¬ĐĐ•ĐĐĐ¯ (ĐšĐžĐœĐŸĐĐšĐ¢Đ¯Đ—ĐĐ¦Đ†Đ¯) Đ'ĐŸĐĐšĐ£Đ'ĐĐĐĐ¯ Đ£ БІ-ĐšĐžĐœĐŸĐžĐЕЀ)¢ @ ₽†Ð™	МІКÐ
459	Viscous-like forces control the impact response of shear-thickening dense suspensions. Journal of Fluid Mechanics, 2021, 923, .	1.4	7
460	Locally ordered representation of 3D space in the entorhinal cortex. Nature, 2021, 596, 404-409.	13.7	50
461	Jamming of bidisperse frictional spheres. Physical Review Research, 2021, 3, .	1.3	10
462	Disorder perturbation expansion for athermal crystals. Physical Review E, 2021, 104, 034608.	0.8	6
463	Disorder Criterion and Explicit Solution for the Disc Random Packing Problem. Physical Review Letters, 2021, 127, 118002.	2.9	12
464	Random sequential adsorption of oriented rectangles with random aspect ratio. Physical Review E, 2021, 104, 034903.	0.8	4
465	Packing and void structures of octahedral, dodecahedral and icosahedral granular particles. Granular Matter, 2021, 23, 1.	1.1	4
466	Softness mapping of the concentration dependence of the dynamics in model soft colloidal systems. Journal of Colloid and Interface Science, 2022, 605, 398-409.	5.0	1
467	Structural characterization and statistical properties of jammed soft ellipsoid packing. Soft Matter, 2021, 17, 2963-2972.	1.2	6
468	Elongation and percolation of defect motifs in anisotropic packing problems. Soft Matter, 2021, 17, 4426-4433.	1.2	3
471	Jamming and percolation of dimers in restricted-valence random sequential adsorption. Physical Review Research, 2020, 2, .	1.3	8
472	The Connectedness of Packed Circles and Spheres with Application to Conductive Cellular Materials. PLoS ONE, 2012, 7, e51695.	1.1	8
474	Universality of the SAT-UNSAT (jamming) threshold in non-convex continuous constraint satisfaction problems. SciPost Physics, 2017, 2, .	1.5	78
475	Exploring the jamming transition over a wide range of critical densities. SciPost Physics, 2017, 3, .	1.5	47
476	Generating dense packings of hard spheres by soft interaction design. SciPost Physics, 2018, 4, .	1.5	19
477	Density scaling of generalized Lennard-Jones fluids in different dimensions. SciPost Physics, 2020, 9, .	1.5	5

#	Article	IF	Citations
478	Handling congestion in crowd motion modeling. Networks and Heterogeneous Media, 2011, 6, 485-519.	0.5	77
479	A thermodynamic model of grain-grain contact force. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 044502.	0.2	2
480	Jamming phenomena of a two-dimensional frictional granular system under isotropic confining. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 124502.	0.2	3
483	Granular / Multiphase Flow Observed in Civil Engineering Fields. Japanese Journal of Multiphase Flow, 2014, 28, 321-329.	0.1	0
485	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
486	DEM Simulation of Random Loose Packings of Micron-Sized Particles with Both Adhesion and Friction. Springer Proceedings in Physics, 2017, , 515-524.	0.1	1
487	Numerical study of the random packings structure of solid metal powder particles. AIP Conference Proceedings, $2017, \ldots$	0.3	1
488	Metastable Glasses. Springer Theses, 2017, , 49-83.	0.0	0
489	Defining temperatures of granular powders analogously with thermodynamics to understand jamming phenomena. AIMS Materials Science, $2018, 5, 1-33$.	0.7	5
491	Resilient Jammed Packing: A Novel Feature of a Classic Geometry Problem. SIAM Undergraduate Research Online, 0, 11 , .	0.2	1
492	Derivation of Light Scattering Properties of Whole Blood from Classical Density Functional Theory. Transactions of the Society of Instrument and Control Engineers, 2018, 54, 458-466.	0.1	0
494	Preparatory stage effectiveness increase in manufacturing machinery of dispersed-strengthening polymeric composites. Science Intensive Technologies in Mechanical Engineering, 2018, 2018, 3-8.	0.1	1
495	COLLISIONS OF PARTICLES IN LIMITED SPACE ANALYZED BY MOLECULAR DYNAMICS METHODS. Bulletin of Kharkov National Automobile and Highway University, 2018, .	0.0	0
496	The Jamming Transition. Springer Theses, 2019, , 45-64.	0.0	0
497	Two-Dimensional Systems of Elongated Particles: From Diluted to Dense. , 2020, , 153-200.		1
499	Long Wavelength Thermal Density Fluctuations in Molecular and Polymer Glass-Forming Liquids: Experimental and Theoretical Analysis under Isobaric Conditions. Journal of Physical Chemistry B, 2021, 125, 12353-12364.	1.2	10
500	Diffusing wave microrheology of strongly attractive dense emulsions. Physical Review E, 2020, 102, 062610.	0.8	6
501	Set Voronoi Tessellation for Particulate Systems in Two Dimensions. Springer Proceedings in Physics, 2020, , 429-437.	0.1	1

#	Article	IF	CITATIONS
502	Uniform shape elongation effects on the random packings of uniaxially variable superellipsoids. Powder Technology, 2020, 376, 60-71.	2.1	4
503	Simu-D: A Simulator-Descriptor Suite for Polymer-Based Systems under Extreme Conditions. International Journal of Molecular Sciences, 2021, 22, 12464.	1.8	7
504	Aspects of bulk properties of amorphous jammed disks under isotopic compression. European Physical Journal E, 2021, 44, 140.	0.7	0
505	Colloidal Shear-Thickening Fluids Using Variable Functional Star-Shaped Particles: A Molecular Dynamics Study. Materials, 2021, 14, 6867.	1.3	4
506	Predicting the crystalline phase generation effectively in monosized granular matter using machine learning. Granular Matter, 2022, 24, 1.	1.1	3
507	Jammed Microâ€Flake Hydrogel for Fourâ€Dimensional Living Cell Bioprinting. Advanced Materials, 2022, 34, e2109394.	11.1	49
508	Cubatic structural transformation of the packing of granular cylinders. Soft Matter, 2022, 18, 726-734.	1.2	4
509	Rigidity transitions in development and disease. Trends in Cell Biology, 2022, 32, 433-444. Explicit Analytical Solution for Random Close Packing in <mml:math< td=""><td>3.6</td><td>26</td></mml:math<>	3.6	26
510	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mn>2</mml:mn> <mml:mn>2</mml:mn> <mml:mn>3</mml:mn> .	/> <td>ıath3</td>	ıath3
511	Physical Review Letters, 2022, 128, 028002. Dionysian Hard Sphere Packings Are Mechanically Stable at Vanishingly Low Densities. Physical Review Letters, 2022, 128, 018002.	2.9	2
512	Revealing the characteristic length of random close packing by a critical-like random pinning. Soft Matter, 2022, , .	1.2	1
514	Jammed disks of two sizes and weights in a channel: Alternating sequences. Physical Review E, 2022, 105, 024904.	0.8	2
515	Characterization of void space, large-scale structure, and transport properties of maximally random jammed packings of superballs. Physical Review Materials, 2022, 6, .	0.9	9
516	Jamming and percolation in the random sequential adsorption of a binary mixture on the square lattice. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 204005.	0.7	3
517	The effect of substrate waviness on random sequential adsorption packing properties. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 033303.	0.9	1
518	Jamming of Nano-Ellipsoids in a Microsphere: A Quantitative Analysis of Packing Fraction by Small-Angle Scattering. Langmuir, 2022, 38, 3832-3843.	1.6	3
519	Pump Up the Jam: Granular Media as a Quasiâ€Hydraulic Fluid for Independent Control Over Isometric and Isotonic Actuation. Advanced Science, 2022, 9, e2104402.	5.6	6
520	Random sequential adsorption of rounded rectangles, isosceles and right triangles. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 184003.	0.7	3

#	Article	IF	CITATIONS
521	On regular and random two-dimensional packing of crosses. Granular Matter, 2022, 24, 1.	1.1	4
522	Could network structures generated with simple rules imposed on a cubic lattice reproduce the structural descriptors of globular proteins?. Journal of Complex Networks, 2021, 10, .	1.1	0
523	Relaxation of saturated random sequential adsorption packings of discorectangles aligned on a line. Physical Review E, 2021, 104, 064104.	0.8	1
524	Inherent structure landscape of hard spheres confined to narrow cylindrical channels. Physical Review E, 2021, 104, 064602.	0.8	0
525	Connecting Packing Efficiency of Binary Hard Sphere Systems to Their Intermediate Range Structure. Physical Review Letters, 2021, 127, 278001.	2.9	3
526	Three simple scenarios for high-dimensional sphere packings. Physical Review E, 2021, 104, 064612.	0.8	3
527	Sparse Hard-Disk Packings and Local Markov Chains. Journal of Statistical Physics, 2022, 187, 1.	0.5	2
528	Random sequential adsorption: An efficient tool for investigating the deposition of macromolecules and colloidal particles. Advances in Colloid and Interface Science, 2022, 306, 102692.	7.0	16
529	Efficient algorithm for simulating particles in true quasiperiodic environments. Journal of Physics A: Mathematical and Theoretical, $0, , .$	0.7	1
530	Softer than soft: Diving into squishy granular matter. Papers in Physics, 0, 14, 140009.	0.2	5
531	Simulation study of random sequential deposition of binary mixtures of lattice animals on a three-dimensional cubic lattice. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 053206.	0.9	0
532	Finding the grain size distribution that produces the densest arrangement in frictional sphere packings: Revisiting and rediscovering the century-old Fuller and Thompson distribution. Physical Review E, 2022, 105, .	0.8	11
533	Relaxation and Aging of Nanosphere Assemblies at a Water–Oil Interface. ACS Nano, 2022, 16, 8967-8973.	7.3	7
534	The effective shear modulus of a random isotropic suspension of monodisperse rigid <mml:math altimg="si60.svg" display="inline" id="d1e1207" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -spheres: From the dilute limit to the percolation threshold. Extreme Mechanics Letters, 2022, 55, 101818.	2.0	7
535	Kinematics and shear-induced alignment in confined granular flows of elongated particles. New Journal of Physics, 2022, 24, 073018.	1.2	4
536	Short-range and long-range correlations in driven dense colloidal mixtures in narrow pores. Physical Review E, 2022, 106, .	0.8	1
537	Revised scattering exponents for a power-law distribution of surface and mass fractals. Physical Review E, 2022, 106, .	0.8	2
538	Correct use of excess configurational entropies to study the ideal glass transition in hard-sphere systems with continuous polydispersity. AIP Advances, 2022, 12, 085204.	0.6	0

#	Article	IF	CITATIONS
539	Ordered packing of uniform spheres via random packing protocol. Powder Technology, 2022, 409, 117853.	2.1	0
540	Dense packings of geodesic hard ellipses on a sphere. Soft Matter, 2022, 18, 7670-7678.	1.2	4
541	In situ formation of osteochondral interfaces through "bone-ink―printing in tailored microgel suspensions. Acta Biomaterialia, 2023, 156, 75-87.	4.1	7
542	Introduction to the dynamics of disordered systems: Equilibrium and gradient descent. Physica A: Statistical Mechanics and Its Applications, 2023, 631, 128152.	1.2	3
543	Dense disordered jammed packings of hard very elongate particles: A new derivation of the random contact equation. Journal of Chemical Physics, 2022, 157, .	1.2	2
544	Athermal fluctuations in three dimensional disordered crystals. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 103201.	0.9	1
545	Excluded volume of the system of hard-core spheres revisited: New insights from computer simulations. Journal of Molecular Liquids, 2022, 368, 120672.	2.3	2
546	Structural Measures as Guides to Ultrastable States in Overjammed Packings. Physical Review Letters, 2022, 129, .	2.9	1
547	Disordered packings of binary mixtures of dimer particles. Journal of Physics Communications, 2022, 6, 105006.	0.5	1
548	Secondary flow in ensembles of nonconvex granular particles under shear. Physical Review E, 2022, 106, .	0.8	0
549	The impact of PET microplastic fibres on PVDF ultrafiltration performance – A short-term assessment of MP fouling in simple and complex matrices. Chemosphere, 2023, 310, 136891.	4.2	8
550	Rheology of polydisperse nonspherical graphite particles suspended in mineral oil. Journal of Rheology, 2023, 67, 81-89.	1.3	6
551	Granular piston-probing in microgravity: powder compression, from densification to jamming. Npj Microgravity, 2022, 8, .	1.9	4
552	Hard-sphere jamming through the lens of linear optimization. Physical Review E, 2022, 106, .	0.8	2
553	An improved model of fine particulate matter formation coupling the mechanism of mineral coalescence and char fragmentation during pulverized coal combustion. Proceedings of the Combustion Institute, 2023, 39, 3539-3549.	2.4	5
554	From jammed solids to mechanical metamaterials: A brief review. Current Opinion in Solid State and Materials Science, 2023, 27, 101053.	5.6	7
555	First-contact-breaking distributions in strained disordered crystals. Physical Review E, 2022, 106, .	0.8	1
556	Mixing properties of bi-disperse ellipsoid assemblies: mean-field behaviour in a granular matter experiment. Soft Matter, 0, , .	1.2	0

#	Article	IF	CITATIONS
557	Jammed microgels fabricated via various methods for biological studies. Korean Journal of Chemical Engineering, 0 , , .	1.2	0
558	Structure ordering and glass transition in size-asymmetric ternary mixtures of hard spheres: Variation from fragile to strong glasses. Physical Review E, 2023, 107, .	0.8	O
559	A heuristic approach for the densest packing fraction of hard-sphere mixtures. Physica A: Statistical Mechanics and Its Applications, 2023, 612, 128485.	1.2	2
560	Dense random packing with a power-law size distribution: The structure factor, mass–radius relation, and pair distribution function. Journal of Chemical Physics, 2023, 158, .	1.2	2
561	Estimating random close packing in polydisperse and bidisperse hard spheres via an equilibrium model of crowding. Journal of Chemical Physics, 2023, 158, .	1.2	6
562	Percolation of a fine particle in static granular beds. Physical Review E, 2023, 107, .	0.8	0
563	Approaching the hard sphere limit in colloids suitable for confocal microscopy – the end of a decade lasting quest. Soft Matter, 2023, 19, 2146-2157.	1.2	1
564	Optimal shapes of disk assembly in saturated random packings. Soft Matter, 2023, 19, 3325-3336.	1.2	2
565	A spherical harmonic-random field coupled method for efficient reconstruction of CT-image based 3D aggregates with controllable multiscale morphology. Computer Methods in Applied Mechanics and Engineering, 2023, 406, 115901.	3 . 4	11
566	Microscopic foundation of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>ν</mml:mi><mml:mo>(</mml:mo><mml:mi) .<="" 2023,="" 5,="" flows="" inclined="" on="" physical="" planes.="" research,="" review="" td="" to=""><td>j ETQq1 i</td><td>1 0,784314 rg</td></mml:mi)></mml:math>	j ETQq1 i	1 0,784314 rg
567	Virial coefficients of hard, homonuclear dumbbells in two- to four-dimensional Euclidean spaces. Physical Review E, 2023, 107, .	0.8	1
568	Random sequential covering. Journal of Statistical Mechanics: Theory and Experiment, 2023, 2023, 033202.	0.9	1
569	Densest packing of flexible polymers in 2D films. Journal of Chemical Physics, 2023, 158, .	1.2	1
574	A Bird's-Eye View of Amorphous Solids. Lecture Notes in Physics, 2023, , 1-51.	0.3	0
598	Curl Noise Jittering., 2023,,.		O