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List of Publications by Year
in descending order

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90 papers	2,049 citations	236925 25 h-index	254184 43 g-index
91 all docs	91 docs citations	91 times ranked	1230 citing authors

#	Article	IF	Citations
1	Clustering in Mixtures of SALR Particles and Hard Spheres with Cross Attraction. Journal of Physical Chemistry B, 2022, 126, 2027-2039.	2.6	6
2	Condensation and Crystal Nucleation in a Lattice Gas with a Realistic Phase Diagram. Entropy, 2022, 24, 419.	2.2	1
3	Early stages of aggregation in fluid mixtures of dimers and spheres: a theoretical and simulation study. Physical Chemistry Chemical Physics, 2021, 23, 22661-22672.	2.8	3
4	Bose-Hubbard model on polyhedral graphs. Physical Review A, 2021, 103, .	2.5	6
5	Self-Assembled Structures of Colloidal Dimers and Disks on a Spherical Surface. Entropy, 2021, 23, 585.	2.2	10
6	Statistical Mechanics and Thermodynamics of Liquids and Crystals. Entropy, 2021, 23, 715.	2.2	2
7	Classical and Quantum Gases on a Semiregular Mesh. Applied Sciences (Switzerland), 2021, 11, 10053.	2.5	2
8	Entropy Multiparticle Correlation Expansion for a Crystal. Entropy, 2020, 22, 1024.	2.2	3
9	Ultracold Bosons on a Regular Spherical Mesh. Entropy, 2020, 22, 1289.	2.2	3
10	A variational mean-field study of clusterization in a zero-temperature system of soft-core bosons. EPJ Web of Conferences, 2020, 230, 00008.	0.3	3
11	Structure factors and x-ray diffraction intensities in molten alkali halides. Journal of Physics Communications, 2020, 4, 075017.	1.2	2
12	Ground state of weakly repulsive soft-core bosons on a sphere. Physical Review A, 2019, 99, .	2.5	17
13	Complex Self-Assembly from Simple Interaction Rules in Model Colloidal Mixtures. Journal of Physical Chemistry B, 2019, 123, 9272-9280.	2.6	7
14	Clusterization of weakly-interacting bosons in one dimension: an analytic study at zero temperature. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 015002.	2.1	9
15	Universal behavior of soft-core fluids near the threshold of thermodynamic stability. Journal of Chemical Physics, 2018, 148, 084904.	3.0	4
16	The barrier to ice nucleation in monatomic water. Journal of Chemical Physics, 2018, 148, 124505.	3.0	19
17	Freezing of soft-core bosons at zero temperature: A variational theory. Physical Review B, 2018, 98, .	3.2	18
18	Molecular dynamics determination of liquid-vapor coexistence in molten alkali halides. Physical Review E, 2018, 98, 010103.	2.1	5

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19	Self-assembly in a model colloidal mixture of dimers and spherical particles. Journal of Chemical Physics, 2017, 146, 084902.	3.0	13
20	Aggregation of colloidal spheres mediated by Janus dimers: A Monte Carlo study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 397-404.	4.7	11
21	Two-dimensional mixture of amphiphilic dimers and spheres: Self-assembly behaviour. Journal of Chemical Physics, 2017, 147, 144902.	3.0	11
22	Analytic solution of two-density integral equations for sticky Janus dumbbells with arbitrary monomer diameters. Journal of Chemical Physics, 2016, 144, 234504.	3.0	2
23	Characterization of the structural collapse undergone by an unstable system of ultrasoft particles. Physica A: Statistical Mechanics and Its Applications, 2016, 457, 492-505.	2.6	6
24	Encapsulation of spherical nanoparticles by colloidal dimers. Physical Chemistry Chemical Physics, 2016, 18, 24922-24930.	2.8	17
25	Markov state modeling of sliding friction. Physical Review E, 2016, 94, 053001.	2.1	5
26	Probing the existence of phase transitions in one-dimensional fluids of penetrable particles. Physical Review E, 2015, 92, 022138.	2.1	17
27	Shapes of a liquid droplet in a periodic box. Physical Review E, 2015, 92, 022141.	2.1	15
28	Phase behavior near and beyond the thermodynamic stability threshold. Physical Review E, 2015, 92, 050301.	2.1	7
29	On the determination of phase boundaries via thermodynamic integration across coexistence regions. Journal of Chemical Physics, 2015, 142, 214502.	3.0	17
30	Hexatic phase and cluster crystals of two-dimensional GEM4 spheres. Journal of Chemical Physics, 2014, 141, 184502.	3.0	31
31	Twofold reentrant melting in a double-Gaussian fluid. Journal of Chemical Physics, 2014, 140, 084906.	3.0	11
32	Shape and area fluctuation effects on nucleation theory. Journal of Chemical Physics, 2014, 140, 094501.	3.0	34
33	Phase behavior of a fluid with a double Gaussian potential displaying waterlike features. Physical Review E, 2014, 90, 012305.	2.1	9
34	Cluster phases of penetrable rods on a line. Physical Review E, 2014, 90, 042306.	2.1	12
35	Supercooled water escaping from metastability. Scientific Reports, 2014, 4, 7230.	3.3	12
36	Minimum-density anomaly and spatial ordering of softly repulsive particles in a narrow channel. Soft Matter, 2013, 9, 9876.	2.7	6

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37	A fingerprint of surface-tension anisotropy in the free-energy cost of nucleation. Journal of Chemical Physics, 2013, 138, 064508.	3.0	27
38	A maximum-entropy approach to the adiabatic freezing of a supercooled liquid. Journal of Chemical Physics, 2013, 138, 164501.	3.0	3
39	Volume crossover in deeply supercooled water adiabatically freezing under isobaric conditions. Journal of Chemical Physics, 2013, 138, 184504.	3.0	3
40	Spontaneous Freezing of Supercooled Water under Isochoric and Adiabatic Conditions. Journal of Physical Chemistry B, 2013, 117, 8189-8195.	2.6	2
41	Density anomaly in a fluid of softly repulsive particles embedded in a spherical surface. Soft Matter, 2012, 8, 11708.	2.7	13
42	Hexatic phase and water-like anomalies in a two-dimensional fluid of particles with a weakly softened core. Journal of Chemical Physics, 2012, 137, 104503.	3.0	46
43	On the accuracy of the melting curves drawn from modelling a solid as an elastic medium. Journal of Physics Condensed Matter, 2012, 24, 035102.	1.8	13
44	Systematic Improvement of Classical Nucleation Theory. Physical Review Letters, 2012, 108, 225701.	7.8	88
45	Thermodynamic and structural anomalies of the Gaussian-core model in one dimension. Molecular Physics, 2011, 109, 3001-3013.	1.7	18
46	Hexatic Phase in the Two-Dimensional Gaussian-Core Model. Physical Review Letters, 2011, 106, 235701.	7.8	77
47	Anomalous melting and solid polymorphism of a modified inverse-power potential. Molecular Physics, 2011, 109, 2837-2844.	1.7	17
48	Anomalous phase behavior in a model fluid with only one type of local structure. Journal of Chemical Physics, 2010, 133, 144504.	3.0	43
49	Re-entrant melting of the exp-6 fluid: the role of the repulsion softness. Physics and Chemistry of Liquids, 2010, 48, 477-487.	1.2	7
50	Entropy from Correlations in TIP4P Water. Journal of Chemical Theory and Computation, 2010, 6, 625-636.	5.3	22
51	Unusual phase behavior of one-component systems with two-scale isotropic interactions. Journal of Physics Condensed Matter, 2009, 21, 504106.	1.8	91
52	The zero-temperature phase diagram of soft-repulsive particle fluids. Soft Matter, 2009, 5, 2795.	2.7	47
53	Anomalous phase behavior of a soft-repulsive potential with a strictly monotonic force. Physical Review E, 2009, 80, 031502.	2.1	46
54	Liquid-solid coexistence via the metadynamics approach. Journal of Chemical Physics, 2008, 128, 114707.	3.0	6

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55	Anomalous melting behavior under extreme conditions: Hard matter turning â€œsoftâ€. Journal of Chemical Physics, 2008, 129, 241101.	3.0	33
56	Phase diagram of Gaussian-core nematics. Journal of Chemical Physics, 2007, 126, 194902.	3.0	21
57	Inverse melting in lattice-gas models. Physical Review E, 2007, 75, 011107.	2.1	8
58	Evaluation of phenomenological one-phase criteria for the melting and freezing of softly repulsive particles. Journal of Chemical Physics, 2006, 124, 244504.	3.0	58
59	High-pressure phase diagram of the exp-6 model: The case of Xe. Physical Review B, 2005, 72, .	3.2	39
60	The ideal gas as an urn model: derivation of the entropy formula. European Journal of Physics, 2005, 26, 137-150.	0.6	1
61	Phase diagram of the Gaussian-core model. Physical Review E, 2005, 71, 050102.	2.1	142
62	Phase diagram of softly repulsive systems: The Gaussian and inverse-power-law potentials. Journal of Chemical Physics, 2005, 123, 144110.	3.0	90
63	The entropy multiparticle-correlation expansion for a mixture of spherical and elongated particles. Journal of Statistical Mechanics: Theory and Experiment, 2004, 2004, P09008.	2.3	13
64	A probabilistic model for the equilibration of an ideal gas. Physica A: Statistical Mechanics and Its Applications, 2004, 340, 373-379.	2.6	1
65	Lattice density-functional theory of surface melting: the effect of a square-gradient correction. Journal of Physics Condensed Matter, 2003, 15, 8065-8080.	1.8	6
66	Density-functional theory of a lattice-gas model with vapour, liquid, and solid phases. Journal of Physics Condensed Matter, 2003, 15, 3931-3956.	1.8	13
67	The Concavity of Entropy and Extremum Principles in Thermodynamics. Journal of Statistical Physics, 2003, 111, 479-493.	1.2	10
68	Analog of surface preroughening in a two-dimensional lattice Coulomb gas. Physical Review E, 2002, 66, 021602.	2.1	3
69	Kink-kink interactions and pre-roughening of vicinal surfaces. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 637-674.	0.6	2
70	String Tension and Stability of Magic Tip-Suspended Nanowires. Science, 2001, 291, 288-290.	12.6	247
71	Scaling of local density correlations in a fluid close to freezing. Journal of Chemical Physics, 2001, 115, 7586-7591.	3.0	30
72	Two-dimensional lattice liquids. Physical Review E, 2000, 62, 2177-2187.	2.1	9

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73	Phase transitions at the early stages of surface melting. Surface Science, 2000, 454-456, 608-612.	1.9	2
74	Can one have preroughening of vicinal surfaces?. Surface Science, 2000, 454-456, 652-656.	1.9	0
75	MATERIALS SCIENCE: Weird Gold Nanowires. Science, 2000, 289, 561-563.	12.6	59
76	Entropy, correlations, and ordering in two dimensions. Journal of Chemical Physics, 2000, 113, 2806-2813.	3.0	33
77	Variational theory of preroughening. Physical Review B, 1999, 59, 3108-3124.	3.2	9
78	Surface-Melting-Induced Preroughening. Physical Review Letters, 1999, 83, 2753-2756.	7.8	27
79	Statistical Entropy of a Lattice-Gas Model: Multiparticle Correlation Expansion. Journal of Statistical Physics, 1999, 96, 135-167.	1.2	26
80	Entropy and multi-particle correlations in two-dimensional lattice gases. European Physical Journal B, 1999, 11, 621-627.	1.5	9
81	Preroughening, fractional-layer occupancies, and phase separation at a disordered flat metal surface. Physical Review B, 1998, 57, 10157-10165.	3.2	5
82	PREROUGHENING, AND DISORDERED FLAT PHASE SEPARATION IN SURFACE MOLECULAR DYNAMICS SIMULATIONS. Surface Review and Letters, 1997, 04, 843-846.	1.1	6
83	Disordered flat phase in a solid-on-solid model fcc (111) surface. Surface Science, 1997, 377-379, 509-513.	1.9	5
84	Disordered flat phase and phase diagram for restricted solid-on-solid models of fcc (110) surfaces. Physical Review B, 1996, 53, 13169-13186.	3.2	9
85	Preroughening, Diffusion, and Growth of a fcc(111) Surface. Physical Review Letters, 1995, 75, 4468-4471.	7.8	38
86	On entropy and ordering in binary hard-sphere mixtures. Journal of Physics Condensed Matter, 1994, 6, 9853-9865.	1.8	23
87	Statistical geometry of four calottes on a sphere. Journal of Statistical Physics, 1994, 75, 1093-1118.	1.2	4
88	Statistical geometry of hard particles on a sphere: analysis of defects at high density. Physica A: Statistical Mechanics and Its Applications, 1993, 201, 649-665.	2.6	30
89	Entropy and the freezing of simple liquids. Physical Review A, 1992, 45, R6966-R6968.	2.5	72
90	Statistical geometry of hard particles on a sphere. Physica A: Statistical Mechanics and Its Applications, 1992, 187, 456-474.	2.6	31