

# Daan Frenkel

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/5440509/daan-frenkel-publications-by-citations.pdf>

**Version:** 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

514  
papers

36,985  
citations

99  
h-index

172  
g-index

544  
ext. papers

39,212  
ext. citations

5.6  
avg, IF

7.65  
L-index

#	Paper	IF	Citations
514	Enhancement of protein crystal nucleation by critical density fluctuations. <i>Science</i> , <b>1997</b> , 277, 1975-8	33.3	1131
513	New Monte Carlo method to compute the free energy of arbitrary solids. Application to the fcc and hcp phases of hard spheres. <i>Journal of Chemical Physics</i> , <b>1984</b> , 81, 3188-3193	3.9	945
512	Configurational bias Monte Carlo: a new sampling scheme for flexible chains. <i>Molecular Physics</i> , <b>1992</b> , 75, 59-70	1.7	912
511	Prediction of absolute crystal-nucleation rate in hard-sphere colloids. <i>Nature</i> , <b>2001</b> , 409, 1020-3	50.4	768
510	Tracing the phase boundaries of hard spherocylinders. <i>Journal of Chemical Physics</i> , <b>1997</b> , 106, 666-687	3.9	624
509	Understanding Molecular Simulation. <i>Computers in Physics</i> , <b>1997</b> , 11, 351		621
508	Numerical calculation of the rate of crystal nucleation in a Lennard-Jones system at moderate undercooling. <i>Journal of Chemical Physics</i> , <b>1996</b> , 104, 9932-9947	3.9	604
507	Monte Carlo study of the isotropic and nematic phases of infinitely thin hard platelets. <i>Molecular Physics</i> , <b>1984</b> , 52, 1303-1334	1.7	576
506	The hard ellipsoid-of-revolution fluid. <i>Molecular Physics</i> , <b>1985</b> , 55, 1171-1192	1.7	425
505	Numerical evidence for bcc ordering at the surface of a critical fcc nucleus. <i>Physical Review Letters</i> , <b>1995</b> , 75, 2714-2717	7.4	420
504	Fluid-fluid coexistence in colloidal systems with short-ranged strongly directional attraction. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 9882-9889	3.9	401
503	Molecular Dynamics Simulations <b>2002</b> , 63-107		391
502	Computer simulation study of gas-liquid nucleation in a Lennard-Jones system. <i>Journal of Chemical Physics</i> , <b>1998</b> , 109, 9901-9918	3.9	389
501	Receptor-mediated endocytosis of nanoparticles of various shapes. <i>Nano Letters</i> , <b>2011</b> , 11, 5391-5	11.5	384
500	Determination of phase diagrams for the hard-core attractive Yukawa system. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 4093-4097	3.9	383
499	Novel scheme to study structural and thermal properties of continuously deformable molecules. <i>Journal of Physics Condensed Matter</i> , <b>1992</b> , 4, 3053-3076	1.8	356
498	Extended corresponding-states behavior for particles with variable range attractions. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 2941-2944	3.9	353

497	Phase behavior of disklike hard-core mesogens. <i>Physical Review A</i> , <b>1992</b> , 45, 5632-5648	2.6	344
496	Computer simulation study of free energy barriers in crystal nucleation. <i>Journal of Chemical Physics</i> , <b>1992</b> , 96, 4655-4668	3.9	342
495	Thermodynamic stability of a smectic phase in a system of hard rods. <i>Nature</i> , <b>1988</b> , 332, 822-823	50.4	332
494	Entropy difference between crystal phases. <i>Nature</i> , <b>1997</b> , 388, 235-236	50.4	325
493	Monte Carlo Simulations <b>2002</b> , 23-61		324
492	Suppression of crystal nucleation in polydisperse colloids due to increase of the surface free energy. <i>Nature</i> , <b>2001</b> , 413, 711-3	50.4	322
491	Accelerating Monte Carlo Sampling <b>2002</b> , 389-408		316
490	Onset of heterogeneous crystal nucleation in colloidal suspensions. <i>Nature</i> , <b>2004</b> , 428, 404-6	50.4	314
489	Entropy-driven formation of a superlattice in a hard-sphere binary mixture. <i>Nature</i> , <b>1993</b> , 365, 35-37	50.4	288
488	Computer simulations in the Gibbs ensemble. <i>Molecular Physics</i> , <b>1989</b> , 68, 931-950	1.7	286
487	Simulating rare events in equilibrium or nonequilibrium stochastic systems. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 024102	3.9	280
486	Numerical prediction of absolute crystallization rates in hard-sphere colloids. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 3015-29	3.9	266
485	The steady state of heterogeneous catalysis, studied by first-principles statistical mechanics. <i>Physical Review Letters</i> , <b>2004</b> , 93, 116105	7.4	265
484	Colloids dispersed in polymer solutions. A computer simulation study. <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 6873-6887	3.9	263
483	Phase Diagram of a System of Hard Ellipsoids. <i>Physical Review Letters</i> , <b>1984</b> , 52, 287-290	7.4	262
482	Does C60 have a liquid phase?. <i>Nature</i> , <b>1993</b> , 365, 425-426	50.4	251
481	Dissipative particle dynamics for interacting systems. <i>Journal of Chemical Physics</i> , <b>2001</b> , 115, 5015-5026	3.9	247
480	Evidence for one-, two-, and three-dimensional order in a system of hard parallel spherocylinders. <i>Physical Review A</i> , <b>1987</b> , 36, 2929-2945	2.6	229

479	Molecular dynamics studies of orientational and collision-induced light scattering in molecular fluids. <i>Journal of Chemical Physics</i> , <b>1980</b> , 72, 2801-2818	3.9	220
478	Ab initio molecular dynamics with excited electrons. <i>Physical Review Letters</i> , <b>1994</b> , 73, 2599-2602	7.4	213
477	Designing super selectivity in multivalent nano-particle binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 10963-8	11.5	212
476	Melting line of Yukawa system by computer simulation. <i>Journal of Chemical Physics</i> , <b>1991</b> , 94, 2269-2271	3.9	209
475	Evidence for algebraic orientational order in a two-dimensional hard-core nematic. <i>Physical Review A</i> , <b>1985</b> , 31, 1776-1787	2.6	205
474	Phase diagram of a system of hard spherocylinders by computer simulation. <i>Physical Review A</i> , <b>1990</b> , 41, 3237-3244	2.6	201
473	Phase behavior of two-dimensional hard rod fluids. <i>Journal of Chemical Physics</i> , <b>2000</b> , 112, 10034-10041	3.9	192
472	Ab initio Molecular Dynamics Simulation of Laser Melting of Silicon. <i>Physical Review Letters</i> , <b>1996</b> , 77, 3149-3152	7.4	186
471	Finite-size corrections to the free energies of crystalline solids. <i>Journal of Chemical Physics</i> , <b>2000</b> , 112, 5339-5342	3.9	183
470	Structure of hard-core models for liquid crystals. <i>The Journal of Physical Chemistry</i> , <b>1988</b> , 92, 3280-3284		182
469	Depletion effects in binary hard-sphere fluids. <i>Journal of Physics Condensed Matter</i> , <b>1996</b> , 8, 10799-10821	1.8	181
468	Hard Convex Body Fluids. <i>Advances in Chemical Physics</i> , <b>2007</b> , 1-166		179
467	Prediction of an expanded-to-condensed transition in colloidal crystals. <i>Physical Review Letters</i> , <b>1994</b> , 72, 2211-2214	7.4	175
466	Homogeneous nucleation and the Ostwald step rule. <i>Physical Chemistry Chemical Physics</i> , <b>1999</b> , 1, 2191-2196	3.9	170
465	Forward flux sampling-type schemes for simulating rare events: efficiency analysis. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 194111	3.9	169
464	Direct simulation of phase equilibria of chain molecules. <i>Journal of Physics Condensed Matter</i> , <b>1992</b> , 4, L255-L259	1.8	165
463	Surface-induced melting and freezing II. A semi-empirical Landau-type model. <i>Surface Science</i> , <b>1990</b> , 239, 282-300	1.8	162
462	Entropy-driven phase transitions. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1999</b> , 263, 26-38	3.3	161

461	Calculation of the chemical potential in the Gibbs ensemble. <i>Molecular Physics</i> , <b>1989</b> , 68, 951-958	1.7	161
460	Self-consistent dissipative particle dynamics algorithm. <i>Europhysics Letters</i> , <b>1998</b> , 42, 377-382	1.6	152
459	Numerical study of the phase behavior of rodlike colloids with attractive interactions. <i>Journal of Chemical Physics</i> , <b>1997</b> , 107, 1551-1564	3.9	150
458	Order through entropy. <i>Nature Materials</i> , <b>2015</b> , 14, 9-12	27	149
457	Computer simulation of hard-core models for liquid crystals. <i>Molecular Physics</i> , <b>1987</b> , 60, 1-20	1.7	149
456	Evidence for smectic order in a fluid of hard parallel spherocylinders. <i>Physical Review Letters</i> , <b>1986</b> , 57, 1452-1455	7.4	148
455	Isostructural solid-solid transition in crystalline systems with short-ranged interaction. <i>Physical Review E</i> , <b>1994</b> , 50, 4880-4890	2.4	147
454	Phase separation in binary hard-core mixtures. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 3179-3189	3.9	137
453	Monte Carlo Study of the Isotropic-Nematic Transition in a Fluid of Thin Hard Disks. <i>Physical Review Letters</i> , <b>1982</b> , 49, 1089-1092	7.4	136
452	Polymer Crystallization Driven by Anisotropic Interactions 1-35		135
451	Rate of homogeneous crystal nucleation in molten NaCl. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 194501	3.9	135
450	Nematic-Isotropic transition in polydisperse systems of infinitely thin hard platelets. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 6553-6559	3.9	135
449	Can stacking faults in hard-sphere crystals anneal out spontaneously?. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 4589-4592	3.9	135
448	Computer simulation of solid-liquid coexistence in binary hard sphere mixtures. <i>Molecular Physics</i> , <b>1991</b> , 72, 679-697	1.7	134
447	Line tension controls wall-induced crystal nucleation in hard-sphere colloids. <i>Physical Review Letters</i> , <b>2003</b> , 91, 015703	7.4	132
446	Evidence for an Orientationally Ordered Two-Dimensional Fluid Phase from Molecular-Dynamics Calculations. <i>Physical Review Letters</i> , <b>1979</b> , 42, 1632-1635	7.4	132
445	Quantitative prediction of crystal-nucleation rates for spherical colloids: a computational approach. <i>Annual Review of Physical Chemistry</i> , <b>2004</b> , 55, 333-61	15.7	131
444	Simulation of the adhesive-hard-sphere model. <i>Molecular Physics</i> , <b>1988</b> , 64, 403-424	1.7	131

443	Vapor-liquid equilibria of the two-dimensional Lennard-Jones fluid(s). <i>Journal of Chemical Physics</i> , <b>1991</b> , 94, 5663-5668	3.9	130
442	Onsager's spherocylinders revisited. <i>The Journal of Physical Chemistry</i> , <b>1987</b> , 91, 4912-4916		129
441	Simulation of homogeneous crystal nucleation close to coexistence. <i>Faraday Discussions</i> , <b>1996</b> , 104, 93	3.6	128
440	Harvesting graphics power for MD simulations. <i>Molecular Simulation</i> , <b>2008</b> , 34, 259-266	2	127
439	Monte Carlo simulation of two-dimensional hard ellipses. <i>Physical Review A</i> , <b>1990</b> , 42, 2126-2136	2.6	127
438	Computer simulation of polymer-induced clustering of colloids. <i>Physical Review Letters</i> , <b>1991</b> , 67, 1110-1113	1.3	126
437	Phase diagram of the adhesive hard sphere fluid. <i>Journal of Chemical Physics</i> , <b>2004</b> , 121, 535-45	3.9	123
436	Competition of percolation and phase separation in a fluid of adhesive hard spheres. <i>Physical Review Letters</i> , <b>2003</b> , 90, 135702	7.4	122
435	Force barriers for membrane tube formation. <i>Physical Review Letters</i> , <b>2005</b> , 94, 068101	7.4	121
434	Field-induced self-assembly of suspended colloidal membranes. <i>Physical Review Letters</i> , <b>2009</b> , 103, 22839-1	9.1	118
433	Influence of polydispersity on the phase behavior of colloidal liquid crystals: A Monte Carlo simulation study. <i>Journal of Chemical Physics</i> , <b>1998</b> , 109, 6193-6199	3.9	118
432	Simulation of Shish-Kebab Crystallite Induced by a Single Prealigned Macromolecule. <i>Macromolecules</i> , <b>2002</b> , 35, 7172-7174	5.5	117
431	Crucial role of nonspecific interactions in amyloid nucleation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 17869-74	11.5	116
430	Role of long-range interactions in the melting of a metallic surface. <i>Physical Review B</i> , <b>1989</b> , 40, 1353-1356	5.6	110
429	Calculation of the melting point of NaCl by molecular simulation. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 728-735	3.9	108
428	The hard ellipsoid-of-revolution fluid. <i>Molecular Physics</i> , <b>1985</b> , 55, 1193-1215	1.7	108
427	Computer Simulations of Freezing and Supercooled Liquids. <i>Annual Review of Physical Chemistry</i> , <b>1980</b> , 31, 491-521	15.7	108
426	Light-induced actuating nanotransducers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 5503-7	11.5	108

425	Living clusters and crystals from low-density suspensions of active colloids. <i>Physical Review Letters</i> , <b>2013</b> , 111, 245702	7.4	106
424	Evidence for entropy-driven demixing in hard-core fluids. <i>Physical Review Letters</i> , <b>1994</b> , 72, 298-300	7.4	106
423	Structure factors of polydisperse systems of hard spheres: A comparison of Monte Carlo simulations and Percus-Yevick theory. <i>Journal of Chemical Physics</i> , <b>1986</b> , 84, 4625-4630	3.9	106
422	Quasibinary amorphous phase in a three-dimensional system of particles with repulsive-shoulder interactions. <i>Journal of Chemical Physics</i> , <b>2008</b> , 129, 064512	3.9	103
421	Modeling the phase diagram of carbon. <i>Physical Review Letters</i> , <b>2005</b> , 94, 145701	7.4	103
420	Molecular dynamics study of the dynamical properties of an assembly of infinitely thin hard rods. <i>Molecular Physics</i> , <b>1983</b> , 49, 503-541	1.7	103
419	Phase diagram of Hertzian spheres. <i>Journal of Chemical Physics</i> , <b>2009</b> , 131, 044514	3.9	102
418	Molecular dynamics simulation using hard particles. <i>Computer Physics Reports</i> , <b>1989</b> , 9, 301-353		100
417	Computing stationary distributions in equilibrium and nonequilibrium systems with forward flux sampling. <i>Journal of Chemical Physics</i> , <b>2007</b> , 127, 114109	3.9	99
416	Enhanced stability of layered phases in parallel hard spherocylinders due to addition of hard spheres. <i>Physical Review E</i> , <b>2000</b> , 62, 3925-33	2.4	99
415	Numerical study of the phase diagram of a mixture of spherical and rodlike colloids. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 9869-9875	3.9	99
414	Intramolecular Nucleation Model for Polymer Crystallization. <i>Macromolecules</i> , <b>2003</b> , 36, 8178-8183	5.5	98
413	Phase separation in binary hard-core mixtures: An exact result. <i>Physical Review Letters</i> , <b>1992</b> , 68, 3363-3365	7.4	97
412	Chromatin Unfolding by Epigenetic Modifications Explained by Dramatic Impairment of Internucleosome Interactions: A Multiscale Computational Study. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 10205-15	16.4	96
411	The stability of the AB 13 crystal in a binary hard sphere system. <i>Molecular Physics</i> , <b>1993</b> , 79, 105-120	1.7	94
410	Invited Lecture. Columnar ordering as an excluded-volume effect. <i>Liquid Crystals</i> , <b>1989</b> , 5, 929-940	2.3	94
409	Partial enthalpies and related quantities in mixtures from computer simulation. <i>Chemical Physics Letters</i> , <b>1987</b> , 136, 35-41	2.5	94
408	Evidence for out-of-equilibrium crystal nucleation in suspensions of oppositely charged colloids. <i>Physical Review Letters</i> , <b>2007</b> , 99, 055501	7.4	92

407	Re-entrant melting as a design principle for DNA-coated colloids. <i>Nature Materials</i> , <b>2012</b> , 11, 518-22	27	91
406	Crystal nucleation of colloidal suspensions under shear. <i>Physical Review Letters</i> , <b>2004</b> , 93, 068303	7.4	91
405	Nonperiodic solid phase in a two-dimensional hard-dimer system. <i>Physical Review Letters</i> , <b>1991</b> , 66, 3168-3171	7.4	91
404	Spatiotemporal control and superselectivity in supramolecular polymers using multivalency. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 12203-8	11.5	90
403	Effect of Nutrient Diffusion and Flow on Coral Morphology. <i>Physical Review Letters</i> , <b>1996</b> , 77, 2328-2331	7.4	90
402	Waterlike thermodynamic anomalies in a repulsive-shoulder potential system. <i>Physical Review E</i> , <b>2009</b> , 79, 051202	2.4	89
401	Dislocation unbinding in dense two-dimensional crystals. <i>Physical Review Letters</i> , <b>1995</b> , 74, 2519-2522	7.4	89
400	Colloidal systems. Playing tricks with designer "atoms". <i>Science</i> , <b>2002</b> , 296, 65-6	33.3	88
399	Simulation study of the isotropic-to-nematic transitions of semiflexible polymers. <i>Physical Review E</i> , <b>1995</b> , 51, 5891-5898	2.4	88
398	Designing multivalent probes for tunable superselective targeting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 5579-84	11.5	87
397	Calculation of liquid-crystal Frank constants by computer simulation. <i>Physical Review A</i> , <b>1988</b> , 37, 1813-1816	3.6	87
396	The crucial effect of early-stage gelation on the mechanical properties of cement hydrates. <i>Nature Communications</i> , <b>2016</b> , 7, 12106	17.4	86
395	Discrete solution of the electrokinetic equations. <i>Journal of Chemical Physics</i> , <b>2004</b> , 121, 973-86	3.9	86
394	On the anisotropy of diffusion in nematic liquid crystals: test of a modified affine transformation model via molecular dynamics. <i>Molecular Physics</i> , <b>1991</b> , 74, 765-774	1.7	86
393	Simulations: The dark side. <i>European Physical Journal Plus</i> , <b>2013</b> , 128, 1	3.1	85
392	Intrinsic disorder modulates protein self-assembly and aggregation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 6951-6	11.5	84
391	Numerical calculation of the rate of homogeneous gas-liquid nucleation in a Lennard-Jones system. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 1591-1599	3.9	84
390	Relative stability of columnar and crystalline phases in a system of parallel hard spherocylinders. <i>Physical Review A</i> , <b>1991</b> , 43, 4334-4343	2.6	84



389	A general theory of DNA-mediated and other valence-limited colloidal interactions. <i>Journal of Chemical Physics</i> , <b>2012</b> , 137, 094108	3.9	82
388	Structural, dynamical, electronic, and bonding properties of laser-heated silicon: An ab initio molecular-dynamics study. <i>Physical Review B</i> , <b>1997</b> , 56, 3806-3812	3.3	81
387	Crystallization of weakly charged colloidal spheres: a numerical study. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 7667-7680	1.8	81
386	Rational design of self-assembly pathways for complex multicomponent structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 6313-8	11.5	80
385	Numerical Simulation of Crystal Nucleation in Colloids. <i>Advances in Polymer Science</i> , <b>2005</b> , 149-208	1.3	80
384	Simulation of diffusion in a two-dimensional lattice-gas cellular automaton: A test of mode-coupling theory. <i>Physical Review Letters</i> , <b>1989</b> , 63, 2165-2168	7.4	79
383	Superselective targeting using multivalent polymers. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 1722-5	16.4	78
382	Homogeneous bubble nucleation driven by local hot spots: a molecular dynamics study. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 3776-84	3.4	78
381	Speed-up of Monte Carlo simulations by sampling of rejected states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 17571-5	11.5	78
380	The effect of chain stiffness on the phase behaviour of isolated homopolymers. <i>Journal of Chemical Physics</i> , <b>1998</b> , 108, 2134-2142	3.9	78
379	The role of long-range forces in the phase behavior of colloids and proteins. <i>Europhysics Letters</i> , <b>1999</b> , 48, 332-338	1.6	78
378	Two-step vapor-crystal nucleation close below triple point. <i>Journal of Chemical Physics</i> , <b>2008</b> , 129, 20450-9	3.9	77
377	Algebraic Decay of Velocity Fluctuations in a Confined Fluid. <i>Physical Review Letters</i> , <b>1997</b> , 78, 3785-3788	7.4	76
376	Soft condensed matter. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2002</b> , 313, 1-31	3.3	76
375	Simulation of nucleation in almost hard-sphere colloids: the discrepancy between experiment and simulation persists. <i>Journal of Chemical Physics</i> , <b>2011</b> , 134, 134901	3.9	74
374	Transverse interlayer order in lyotropic smectic liquid crystals. <i>Physical Review E</i> , <b>1995</b> , 52, R1277-R1280	2.4	74
373	Free energy changes on freezing and melting ductile metals. <i>Molecular Physics</i> , <b>1993</b> , 80, 801-814	1.7	74
372	Physical determinants of the self-replication of protein fibrils. <i>Nature Physics</i> , <b>2016</b> , 12, 874-880	16.2	73

371	Numerical evidence for nucleated self-assembly of DNA brick structures. <i>Physical Review Letters</i> , <b>2014</b> , 112, 238103	7.4	72
370	A parameter-free, solid-angle based, nearest-neighbor algorithm. <i>Journal of Chemical Physics</i> , <b>2012</b> , 136, 234107	3.9	72
369	Monte Carlo study of hard pentagons. <i>Physical Review E</i> , <b>2005</b> , 71, 036138	2.4	72
368	Unexpected length dependence of the solubility of chain molecules. <i>Molecular Physics</i> , <b>1992</b> , 75, 983-988.	7	72
367	Gibbs, Boltzmann, and negative temperatures. <i>American Journal of Physics</i> , <b>2015</b> , 83, 163-170	0.7	71
366	An enhanced version of the heat exchange algorithm with excellent energy conservation properties. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 124104	3.9	71
365	Design rule for colloidal crystals of DNA-functionalized particles. <i>Physical Review Letters</i> , <b>2011</b> , 107, 045902	7.0	69
364	Phase Transitions in Biological Systems with Many Components. <i>Biophysical Journal</i> , <b>2017</b> , 112, 683-691	2.9	68
363	Numerical study of DNA-functionalized microparticles and nanoparticles: explicit pair potentials and their implications for phase behavior. <i>Journal of Chemical Physics</i> , <b>2011</b> , 134, 084702	3.9	68
362	Recent advances in the modelling and simulation of electrokinetic effects: bridging the gap between atomistic and macroscopic descriptions. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 9566-80	3.6	68
361	Protein shape and crowding drive domain formation and curvature in biological membranes. <i>Biophysical Journal</i> , <b>2008</b> , 94, 640-7	2.9	68
360	Location of melting point at 300 K of nitrogen by Monte Carlo simulation. <i>Journal of Chemical Physics</i> , <b>1990</b> , 92, 7570-7575	3.9	68
359	Liquid network connectivity regulates the stability and composition of biomolecular condensates with many components. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 13238-13247	11.5	64
358	Numerical calculation of granular entropy. <i>Physical Review Letters</i> , <b>2014</b> , 112, 098002	7.4	64
357	Demixing in hard ellipsoid rod-plate mixtures. <i>Journal of Chemical Physics</i> , <b>1997</b> , 106, 9270-9275	3.9	63
356	Observation of dynamical precursors of the isotropic-nematic transition by computer simulation. <i>Physical Review Letters</i> , <b>1987</b> , 58, 1748-1750	7.4	63
355	Efficient schemes to compute diffusive barrier crossing rates. <i>Molecular Physics</i> , <b>1997</b> , 90, 925-942	1.7	62
354	Phase behavior and selectivity of DNA-linked nanoparticle assemblies. <i>Physical Review Letters</i> , <b>2004</b> , 92, 068302	7.4	62

353	Pore nucleation in mechanically stretched bilayer membranes. <i>Journal of Chemical Physics</i> , <b>2005</b> , 123, 154701	3.9	61
352	Elastic constants of hard-sphere crystals. <i>Physical Review Letters</i> , <b>1987</b> , 59, 1169	7.4	61
351	Mobile linkers on DNA-coated colloids: valency without patches. <i>Physical Review Letters</i> , <b>2014</b> , 113, 128302	7.4	60
350	Liquid-crystalline ordering of antimicrobial peptide-DNA complexes controls TLR9 activation. <i>Nature Materials</i> , <b>2015</b> , 14, 696-700	27	60
349	Molecular simulations of droplet coalescence in oil/water/surfactant systems. <i>Journal of Chemical Physics</i> , <b>2007</b> , 127, 134701	3.9	60
348	Modeling flexible amphiphilic bilayers: a solvent-free off-lattice Monte Carlo study. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 234711	3.9	60
347	Do Hydrodynamic Dispersion Coefficients Exist?. <i>Physical Review Letters</i> , <b>1996</b> , 77, 4552-4555	7.4	60
346	Self-Assembly of Structures with Addressable Complexity. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 2457-67	16.4	58
345	Optimal multivalent targeting of membranes with many distinct receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 7210-7215	11.5	58
344	Connecting macroscopic observables and microscopic assembly events in amyloid formation using coarse grained simulations. <i>PLoS Computational Biology</i> , <b>2012</b> , 8, e1002692	5	58
343	Kinetic Monte Carlo simulations of the growth of polymer crystals. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 2692-2702	3.9	58
342	Long-time tails of the velocity autocorrelation function in two- and three-dimensional lattice-gas cellular automata: A test of mode-coupling theory. <i>Physical Review A</i> , <b>1990</b> , 41, 4277-4284	2.6	58
341	Infinitely thin disks exhibit a first order nematic-columnar phase transition. <i>Physical Review E</i> , <b>1998</b> , 57, 4824-4826	2.4	57
340	Long-time tails in angular momentum correlations. <i>Journal of Chemical Physics</i> , <b>1995</b> , 103, 1582-1587	3.9	57
339	A computer simulation investigation into the stability of the AB <sub>2</sub> superlattice in a binary hard sphere system. <i>Molecular Physics</i> , <b>1993</b> , 80, 987-995	1.7	57
338	Coil-Globule Transition in Gas-Liquid Nucleation of Polar Fluids. <i>Physical Review Letters</i> , <b>1998</b> , 81, 3695-3698	7.4	56
337	Computational methodology for solubility prediction: Application to the sparingly soluble solutes. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 214110	3.9	55
336	State-of-the-art models for the phase diagram of carbon and diamond nucleation. <i>Molecular Physics</i> , <b>2008</b> , 106, 2011-2038	1.7	55

335	Multiple occupancy crystals formed by purely repulsive soft particles. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 494245	1.8	55
334	Phase coexistence of cluster crystals: beyond the Gibbs phase rule. <i>Physical Review Letters</i> , <b>2007</b> , 99, 235702	7.4	55
333	Do cylinders exhibit a cubatic phase?. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 11652-11659	3.9	55
332	Calculation of partial enthalpies of an argon-krypton mixture by NPT molecular dynamics. <i>Chemical Physics</i> , <b>1989</b> , 129, 213-224	2.3	54
331	Intracellular release of endocytosed nanoparticles upon a change of ligand-receptor interaction. <i>ACS Nano</i> , <b>2012</b> , 6, 10598-605	16.7	53
330	Relation between molecular shape and the morphology of self-assembling aggregates: a simulation study. <i>Biophysical Journal</i> , <b>2011</b> , 101, 1432-9	2.9	53
329	Application of lattice-gas cellular automata to the Brownian motion of solids in suspension. <i>Physical Review Letters</i> , <b>1988</b> , 60, 975-978	7.4	53
328	Isostructural solid - solid transitions in systems with a repulsive 'shoulder' potential. <i>Journal of Physics Condensed Matter</i> , <b>1997</b> , 9, 381-387	1.8	52
327	Homogeneous nucleation under shear in a two-dimensional Ising model: cluster growth, coalescence, and breakup. <i>Journal of Chemical Physics</i> , <b>2008</b> , 129, 134704	3.9	52
326	Confinement free energy of semiflexible polymers. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1993</b> , 193, 374-393	3.3	52
325	First-order nematic-smectic phase transition for hard spherocylinders in the limit of infinite aspect ratio. <i>Physical Review E</i> , <b>1997</b> , 56, R6260-R6263	2.4	50
324	Evidence for faster-than-t-1 decay of the velocity autocorrelation function in a 2D fluid. <i>Physical Review Letters</i> , <b>1991</b> , 66, 1591-1594	7.4	50
323	Discotic liquid crystals Physical parameters of some 2,3,7,8,12,13-hexa(alkanoyloxy)truxenes. Observation of a re-entrant isotropic phase in a pure disc-like mesogen. <i>Liquid Crystals</i> , <b>1988</b> , 3, 1087-1104	2.3	50
322	A simple lattice model that captures protein folding, aggregation and amyloid formation. <i>PLoS ONE</i> , <b>2014</b> , 9, e85185	3.7	50
321	Kinetics of spontaneous filament nucleation via oligomers: Insights from theory and simulation. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 211926	3.9	50
320	Self-poisoning of crystal nuclei in hard-rod liquids. <i>Physical Review Letters</i> , <b>2004</b> , 92, 085505	7.4	49
319	Simulating colloids with Baxter's adhesive hard sphere model. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S4901-S4912	1.8	49
318	Virtual-move parallel tempering. <i>ChemPhysChem</i> , <b>2005</b> , 6, 1779-83	3.2	49

3 <sup>17</sup>	The super long-time decay of velocity fluctuations in a two-dimensional fluid. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1995</b> , 220, 251-260	3.3	49
3 <sup>16</sup>	The Lennard-Jones potential: when (not) to use it. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 10624-10633	3.6	49
3 <sup>15</sup>	Large difference in the elastic properties of fcc and hcp hard-sphere crystals. <i>Physical Review Letters</i> , <b>2003</b> , 90, 255501	7.4	48
3 <sup>14</sup>	Recoil growth: An efficient simulation method for multi-polymer systems. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 3220-3228	3.9	48
3 <sup>13</sup>	A Monte Carlo simulation study of the two-dimensional melting mechanism. <i>Journal of Chemical Physics</i> , <b>1983</b> , 78, 4206-4222	3.9	48
3 <sup>12</sup>	Numerical prediction of the melting curve of n-octane. <i>Journal of Chemical Physics</i> , <b>1999</b> , 111, 1501-1510	3.9	47
3 <sup>11</sup>	Theory and simulation of DNA-coated colloids: a guide for rational design. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 6373-93	3.6	46
3 <sup>10</sup>	Communication: a simple analytical formula for the free energy of ligand-receptor-mediated interactions. <i>Journal of Chemical Physics</i> , <b>2013</b> , 138, 021102	3.9	46
3 <sup>09</sup>	Stretching the Frontiers: Exploring the Relationships Between Entrepreneurship and Ethics. <i>Journal of Business Ethics</i> , <b>2005</b> , 60, 207-209	4.3	46
3 <sup>08</sup>	Turning intractable counting into sampling: Computing the configurational entropy of three-dimensional jammed packings. <i>Physical Review E</i> , <b>2016</b> , 93, 012906	2.4	45
3 <sup>07</sup>	Quantitative prediction of the phase diagram of DNA-functionalized nanosized colloids. <i>Physical Review Letters</i> , <b>2012</b> , 108, 268301	7.4	45
3 <sup>06</sup>	Coarse-grained simulations of charge, current and flow in heterogeneous media. <i>Faraday Discussions</i> , <b>2010</b> , 144, 223-43; discussion 323-45, 467-81	3.6	45
3 <sup>05</sup>	Chain formation in homogeneous gas/liquid nucleation of polar fluids. <i>Journal of Chemical Physics</i> , <b>1999</b> , 111, 4762-4773	3.9	45
3 <sup>04</sup>	Breakdown of classical nucleation theory near isostructural phase transitions. <i>Physical Review Letters</i> , <b>2004</b> , 93, 166105	7.4	44
3 <sup>03</sup>	Finite-size corrections to the chemical potential. <i>Journal of Physics Condensed Matter</i> , <b>1992</b> , 4, 679-691	1.8	44
3 <sup>02</sup>	Design principles for broad-spectrum protein-crystal nucleants with nanoscale pits. <i>Physical Review Letters</i> , <b>2010</b> , 105, 205501	7.4	43
3 <sup>01</sup>	Geometrical frustration: a study of four-dimensional hard spheres. <i>Physical Review E</i> , <b>2009</b> , 79, 030201	2.4	43
3 <sup>00</sup>	Unexpected relaxation dynamics of a self-avoiding polymer in cylindrical confinement. <i>Journal of Chemical Physics</i> , <b>2007</b> , 127, 164903	3.9	43

- 299 Crystallization of a polymer on a surface. *Journal of Chemical Physics*, **1998**, 109, 10033-10041 3.9 43
- 298 Mechanism of Thickness Determination in Polymer Crystals. *Physical Review Letters*, **1998**, 81, 2160-2163 7.4 43
- 297 Ab initio calculation of the sound velocity of dense hydrogen: implications for models of Jupiter. *Science*, **1995**, 269, 1252-4 33.3 43
- 296 Structure of the hard ellipsoid fluid. *Journal of Chemical Physics*, **1990**, 92, 3048-3057 3.9 43
- 295 Thermodynamic properties of binary hard sphere mixtures. *Molecular Physics*, **1991**, 72, 715-733 1.7 43
- 294 Direct determination of the size of basins of attraction of jammed solids. *Physical Review Letters*, **2011**, 106, 245502 7.4 42
- 293 Disordered flanks prevent peptide aggregation. *PLoS Computational Biology*, **2008**, 4, e1000241 5 42
- 292 Melting of polydisperse hard disks. *Physical Review E*, **2004**, 69, 066123 2.4 42
- 291 Phase Transitions of Bulk Statistical Copolymers Studied by Dynamic Monte Carlo Simulations. *Macromolecules*, **2003**, 36, 2165-2175 5.5 42
- 290 Lattice-Boltzmann method for the simulation of transport phenomena in charged colloids. *Physical Review E*, **2001**, 64, 061507 2.4 42
- 289 Calculation of solid-fluid phase equilibria for systems of chain molecules. *Journal of Chemical Physics*, **1998**, 109, 318-328 3.9 42
- 288 Short-time dynamics of colloidal suspensions in confined geometries. *Physical Review E*, **1999**, 59, 4458-4469 4.9 42
- 287 Monte Carlo simulations of a two-dimensional hard dimer system. *Physica A: Statistical Mechanics and Its Applications*, **1993**, 196, 519-545 3.3 42
- 286 Computer simulation of solid-liquid coexistence in binary hard-sphere mixtures. *Journal of Physics Condensed Matter*, **1989**, 1, 7735-7739 1.8 42
- 285 Stability of the high-pressure body-centered-cubic phase of helium. *Physical Review Letters*, **1986**, 56, 858-860 7.4 42
- 284 Materials science. Colloidal encounters: a matter of attraction. *Science*, **2006**, 314, 768-9 33.3 41
- 283 Solid-liquid interfacial free energy of small colloidal hard-sphere crystals. *Journal of Chemical Physics*, **2003**, 119, 7467-7470 3.9 41
- 282 Effect of inert tails on the thermodynamics of DNA hybridization. *Journal of the American Chemical Society*, **2014**, 136, 6538-41 16.4 39

281	Molecular Simulation of Thermo-osmotic Slip. <i>Physical Review Letters</i> , <b>2017</b> , 119, 038002	7.4	39
280	Local structure of liquid carbon controls diamond nucleation. <i>Physical Review Letters</i> , <b>2007</b> , 99, 055702	7.4	39
279	Controlling the temperature sensitivity of DNA-mediated colloidal interactions through competing linkages. <i>Soft Matter</i> , <b>2012</b> , 8, 2213	3.6	38
278	Vapour-liquid equilibria of the hard core Yukawa fluid. <i>Molecular Physics</i> , <b>1991</b> , 74, 35-39	1.7	38
277	Quantitative analysis of co-oligomer formation by amyloid-beta peptide isoforms. <i>Scientific Reports</i> , <b>2016</b> , 6, 28658	4.9	38
276	Simulation study of micelle formation by bile salts. <i>Soft Matter</i> , <b>2010</b> , 6, 3815	3.6	37
275	Lattice-model study of the thermodynamic interplay of polymer crystallization and liquid-liquid demixing. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 10343-10348	3.9	37
274	Non-Ideal DPD Fluids. <i>Molecular Simulation</i> , <b>2000</b> , 25, 167-175	2	37
273	Calculation of ion scattering yields from simulated crystal surfaces: theory and application to melting and non-melting Al surfaces. <i>Surface Science</i> , <b>1991</b> , 256, 385-396	1.8	37
272	Determination of potential energy surfaces for ArCl and KrCl from rotational linebroadening data. <i>Journal of Chemical Physics</i> , <b>1978</b> , 69, 4606-4616	3.9	37
271	Phase behavior of colloid plus polydisperse polymer mixtures. <i>Physical Review E</i> , <b>1997</b> , 55, 1677-1681	2.4	36
270	Influence of vacancies on the melting transition of hard disks in two dimensions. <i>Physical Review E</i> , <b>2000</b> , 61, 5223-7	2.4	36
269	Point Defects in Hard-Sphere Crystals. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 6722-6727	3.4	36
268	Spiers Memorial Lecture: Effect of interaction specificity on the phase behaviour of patchy particles. <i>Faraday Discussions</i> , <b>2012</b> , 159, 9	3.6	35
267	Accounting for adsorption and desorption in lattice Boltzmann simulations. <i>Physical Review E</i> , <b>2013</b> , 88, 013308	2.4	35
266	Simulation of colloidal crystallization on finite structured templates. <i>Physical Review E</i> , <b>2005</b> , 72, 041604	2.4	35
265	Molecular Dynamics Study of Infinitely Thin Hard Rods: Scaling Behavior of Transport Properties. <i>Physical Review Letters</i> , <b>1981</b> , 47, 1025-1028	7.4	35
264	Visualizing basins of attraction for different minimization algorithms. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 12717-23	3.4	34



263	Grand-canonical simulations of solvated ideal fermions. Evidence for phase separation. <i>Journal of Chemical Physics</i> , <b>1992</b> , 97, 9249-9257	3.9	34
262	Elastic constants of hard and soft nematic liquid crystals. <i>The Journal of Physical Chemistry</i> , <b>1992</b> , 96, 3942-3948		34
261	A unified description of colloidal thermophoresis. <i>European Physical Journal E</i> , <b>2018</b> , 41, 7	1.5	33
260	Recoil growth algorithm for chain molecules with continuous interactions. <i>Molecular Physics</i> , <b>1999</b> , 97, 1243-1254	1.7	33
259	Free energy calculations for solid solutions by computer simulations. <i>Molecular Physics</i> , <b>1991</b> , 72, 699-713	3.7	33
258	Irreducible finite-size effects in the surface free energy of NaCl crystals from crystal-nucleation data. <i>Physical Review Letters</i> , <b>2008</b> , 100, 036103	7.4	32
257	High-pressure diamondlike liquid carbon. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	32
256	Designing refoldable model molecules. <i>Physical Review E</i> , <b>2003</b> , 68, 046703	2.4	32
255	Anisotropic density fluctuations in argon at different densities: Far infrared measurements and molecular dynamic calculations. <i>Journal of Chemical Physics</i> , <b>1999</b> , 67, 4243	3.9	32
254	Rotational diffusion in dense suspensions. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1999</b> , 272, 376-391	3.3	32
253	Self-diffusion of colloidal particles in a two-dimensional suspension: Are deviations from Fick's law experimentally observable?. <i>Physical Review Letters</i> , <b>1991</b> , 67, 3459-3462	7.4	32
252	An explicit expression for finite-size corrections to the chemical potential. <i>Journal of Physics Condensed Matter</i> , <b>1989</b> , 1, 8659-8665	1.8	32
251	Phase Diagram of Hard Ellipsoids of Revolution. <i>Molecular Crystals and Liquid Crystals</i> , <b>1985</b> , 123, 119-128		32
250	Sectorization of a Lamellar Polymer Crystal Studied by Dynamic Monte Carlo Simulations. <i>Macromolecules</i> , <b>2003</b> , 36, 549-552	5.5	31
249	Surface and bulk dissolution properties, and selectivity of DNA-linked nanoparticle assemblies. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 214904	3.9	31
248	Algebraic decay of velocity fluctuations near a wall. <i>Physical Review E</i> , <b>1998</b> , 58, 7288-7295	2.4	31
247	Solid-solid and liquid-solid phase equilibria for the restricted primitive model. <i>Molecular Physics</i> , <b>1996</b> , 87, 159-166	1.7	31
246	Objections to Handel's quantum theory of $1/f$ noise. <i>Physical Review A</i> , <b>1987</b> , 35, 2750-2753	2.6	31



245	Communication: theoretical prediction of free-energy landscapes for complex self-assembly. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 021101	3.9	30
244	Why colloidal systems can be described by statistical mechanics: some not very original comments on the Gibbs paradox. <i>Molecular Physics</i> , <b>2014</b> , 112, 2325-2329	1.7	30
243	Nanoparticle organization in sandwiched polymer brushes. <i>Nano Letters</i> , <b>2014</b> , 14, 2617-22	11.5	30
242	Predicting DNA-mediated colloidal pair interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, E378-9; author reply E380	11.5	30
241	A finite-cluster phase in DNA-coated colloids. <i>Soft Matter</i> , <b>2007</b> , 3, 703-706	3.6	30
240	Cubic phase for tetrapods. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 5486-92	3.9	30
239	Effect of Metastable Liquid-Liquid Demixing on the Morphology of Nucleated Polymer Crystals. <i>Macromolecules</i> , <b>2004</b> , 37, 4336-4338	5.5	30
238	Numerical study of gas-liquid nucleation in partially miscible binary mixtures. <i>Journal of Chemical Physics</i> , <b>1998</b> , 109, 9919-9927	3.9	30
237	Non-linear density dependence of rotational line-broadening of HCl in dense argon. <i>Chemical Physics Letters</i> , <b>1976</b> , 40, 9-13	2.5	30
236	Measurements of the ratio of the Frank constants for splay and bend in nematics of disc-like molecules. <i>Journal De Physique</i> , <b>1987</b> , 48, 319-324		30
235	Quantifying Co-Oligomer Formation by Synuclein. <i>ACS Nano</i> , <b>2018</b> , 12, 10855-10866	16.7	30
234	Novel scheme to compute chemical potentials of chain molecules on a lattice. <i>Molecular Physics</i> , <b>1991</b> , 74, 41-47	1.7	29
233	Rational design of molecularly imprinted polymers. <i>Soft Matter</i> , <b>2016</b> , 12, 35-44	3.6	28
232	Monte Carlo Sampling of a Markov Web. <i>Journal of Chemical Theory and Computation</i> , <b>2005</b> , 1, 389-93	6.4	28
231	Free energy barrier to melting of single-chain polymer crystallite. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 3455-3457	3.9	28
230	The simulation of entropic phase transitions. <i>Journal of Physics Condensed Matter</i> , <b>1994</b> , 6, A71-A78	1.8	28
229	Predicting phase behavior in multicomponent mixtures. <i>Journal of Chemical Physics</i> , <b>2013</b> , 139, 024108	3.9	27
228	Dispersion of charged tracers in charged porous media. <i>Europhysics Letters</i> , <b>2008</b> , 83, 34004	1.6	27

227	Designing ordered DNA-linked nanoparticle assemblies. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, S567-S580	1.8	27
226	Gas-solid coexistence of adhesive spheres. <i>Journal of Chemical Physics</i> , <b>2007</b> , 126, 196101	3.9	27
225	Homogeneous nucleation of colloidal melts under the influence of shearing fields. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S3873-S3884	1.8	27
224	Large effect of polydispersity on defect concentrations in colloidal crystals. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 6764-8	3.9	27
223	Phase behavior of model mixtures of colloidal disks and polymers. <i>Physical Review E</i> , <b>2000</b> , 62, 5225-9	2.4	27
222	The mechanism of thickness selection in the Sadler-Gilmer model of polymer crystallization. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 7073-7086	3.9	27
221	Optimal packing of polydisperse hard-sphere fluids. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 5318-5324	3.9	27
220	Velocity auto-correlation functions in a 2d lattice Lorentz gas: Comparison of theory and computer simulation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>1987</b> , 121, 385-389	2.3	27
219	Oriented primary crystal nucleation in lamellar diblock copolymer systems. <i>Faraday Discussions</i> , <b>2005</b> , 128, 253-60	3.6	26
218	Nonmetal-metal transition in metal-molten-salt solutions. <i>Physical Review B</i> , <b>1996</b> , 53, 12750-12760	3.3	26
217	Order through disorder: entropy strikes back. <i>Physics World</i> , <b>1993</b> , 6, 24-25	0.5	26
216	Monte Carlo study of rod-like molecules. <i>Molecular Physics</i> , <b>1989</b> , 67, 633-650	1.7	26
215	Lattice simulation method to model diffusion and NMR spectra in porous materials. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 094701	3.9	25
214	Numerical test of the Edwards conjecture shows that all packings are equally probable at jamming. <i>Nature Physics</i> , <b>2017</b> , 13, 848-851	16.2	25
213	Microscopic and mesoscopic simulation of entropic micelles. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1997</b> , 244, 45-58	3.3	25
212	Orientational order and solid-liquid coexistence in the two-dimensional Lennard-Jones system. <i>Physical Review B</i> , <b>1987</b> , 35, 6933-6939	3.3	25
211	Observation of a re-entrant isotropic phase in a pure disc-like liquid crystal. <i>Liquid Crystals</i> , <b>1988</b> , 3, 149-152	1.5	25
210	Multivalent Recognition at Fluid Surfaces: The Interplay of Receptor Clustering and Superselectivity. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 2577-2588	16.4	24

209	Anomalous phase behavior of liquid-vapor phase transition in binary mixtures of DNA-coated particles. <i>Soft Matter</i> , <b>2010</b> , 6, 6136	3.6	24
208	Computer simulation of colloid-polymer mixtures. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1995</b> , 213, 130-137	3.3	24
207	Simulation study of a two-dimensional system of semiflexible polymers. <i>Physical Review E</i> , <b>1994</b> , 50, 3492-3517	3.5	24
206	Tagged particle diffusion in 3d lattice gas cellular automata. <i>Physica D: Nonlinear Phenomena</i> , <b>1991</b> , 47, 191-197	3.3	24
205	Dissipative hydrodynamic interactions via lattice-gas cellular automata. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1990</b> , 2, 1921-1924		24
204	A far infrared study of the ArCl van der Waals molecule. <i>Journal of Chemical Physics</i> , <b>1977</b> , 66, 1826-1829	3.9	24
203	Consistent Treatment of Hydrophobicity in Protein Lattice Models Accounts for Cold Denaturation. <i>Physical Review Letters</i> , <b>2016</b> , 116, 078101	7.4	23
202	Out-of-equilibrium processes in suspensions of oppositely charged colloids: liquid-to-crystal nucleation and gel formation. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 494247	1.8	23
201	Phase behavior and crystallization kinetics of poly-12-hydroxystearic-coated polymethylmethacrylate colloids. <i>Physical Review E</i> , <b>2003</b> , 67, 020401	2.4	23
200	Smectic filaments in colloidal suspensions of rods. <i>Physical Review E</i> , <b>2002</b> , 66, 041606	2.4	23
199	Structural arrest in an ideal gas. <i>Physical Review Letters</i> , <b>2005</b> , 94, 135703	7.4	22
198	Rotational Diffusion Model with a Variable Collision Distribution. <i>Journal of Chemical Physics</i> , <b>1972</b> , 57, 2691-2697	3.9	22
197	Breakdown of the law of rectilinear diameter and related surprises in the liquid-vapor coexistence in systems of patchy particles. <i>Journal of Chemical Physics</i> , <b>2019</b> , 150, 224510	3.9	21
196	DNA brick self-assembly with an off-lattice potential. <i>Soft Matter</i> , <b>2016</b> , 12, 6253-60	3.6	21
195	Phase separation in solutions with specific and nonspecific interactions. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 204109	3.9	21
194	Designing specificity of protein-substrate interactions. <i>Physical Review E</i> , <b>2004</b> , 70, 051917	2.4	21
193	Procedure to construct a multi-scale coarse-grained model of DNA-coated colloids from experimental data. <i>Soft Matter</i> , <b>2013</b> , 9, 7342	3.6	20
192	Running faster together: huge speed up of thermal ratchets due to hydrodynamic coupling. <i>Physical Review Letters</i> , <b>2012</b> , 109, 168101	7.4	20

191	Probing ergodicity in granular matter. <i>Physical Review Letters</i> , <b>2012</b> , 109, 208001	7.4	20
190	Lattice-Boltzmann simulation of the sedimentation of charged disks. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 124903	3.9	20
189	Constant-Pressure Monte Carlo Simulations for Lattice Models. <i>Europhysics Letters</i> , <b>1994</b> , 27, 549-554	1.6	20
188	Monte Carlo study of substrate-induced folding and refolding of lattice proteins. <i>Biophysical Journal</i> , <b>2007</b> , 92, 1150-6	2.9	19
187	Enhanced protein crystallization around the metastable critical point. <i>Theoretical Chemistry Accounts</i> , <b>1999</b> , 101, 205-208	1.9	19
186	Extended mode coupling and simulations in cellular-automata fluids. <i>Physical Review A</i> , <b>1991</b> , 44, 2484-2494	2.4	19
185	Accuracy of Enskog theory for rotational versus translational motion: A molecular-dynamics study. <i>Physical Review A</i> , <b>1989</b> , 39, 4330-4332	2.6	19
184	Superposition Enhanced Nested Sampling. <i>Physical Review X</i> , <b>2014</b> , 4,	9.1	18
183	Collective ordering of colloids in grafted polymer layers. <i>Soft Matter</i> , <b>2013</b> , 9, 5565	3.6	18
182	Liquid-vapor transition driven by bond disorder. <i>Physical Review Letters</i> , <b>2008</b> , 101, 045701	7.4	18
181	Effect of the coil-globule transition on the free-energy barrier for intrachain crystal nucleation. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 3734-7	3.4	18
180	Velocity fluctuations and dispersion in a simple porous medium. <i>Physical Review E</i> , <b>2003</b> , 67, 056306	2.4	18
179	Diffusion of brownian particles in the isotropic phase of a nematic liquid crystal. <i>Liquid Crystals</i> , <b>1987</b> , 2, 539-547	2.3	18
178	Controlling Cargo Trafficking in Multicomponent Membranes. <i>Nano Letters</i> , <b>2018</b> , 18, 5350-5356	11.5	17
177	Communication: Evidence for non-ergodicity in quiescent states of periodically sheared suspensions. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 241103	3.9	17
176	Simulations suggest possible novel membrane pore structure. <i>Langmuir</i> , <b>2014</b> , 30, 1304-10	4	17
175	Mesoscopic lattice modeling of electrokinetic phenomena. <i>Computer Physics Communications</i> , <b>2005</b> , 169, 192-196	4.2	17
174	Phase behavior of a simple model for membrane proteins. <i>Journal of Chemical Physics</i> , <b>2001</b> , 114, 2477-2483	3.9	17

173	Perspective on the effect of shape on the interaction of colloidal particles <i>Theoretical Chemistry Accounts</i> , <b>2000</b> , 103, 212-213	1.9	17
172	Direct measurement of correlation functions in a lattice Lorentz gas. <i>Physical Review A</i> , <b>1990</b> , 42, 2463-2466	3.6	17
171	Pair interactions between complex mesoscopic particles from Widom's particle-insertion method. <i>Soft Matter</i> , <b>2011</b> , 7, 1450-1455	3.6	16
170	Simulation study of intra- and intermicellar ordering in triblock-copolymer systems. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 5839-48	3.9	16
169	Lattice-gas automata with attractive and repulsive interactions. <i>Physical Review E</i> , <b>1993</b> , 48, 988-999	2.4	16
168	Short-time correlations in liquids: Molecular-dynamics simulation of hard spheroids. <i>Physical Review Letters</i> , <b>1990</b> , 65, 2828-2831	7.4	16
167	Molecular dynamics calculations on the time dependence of simple, anisotropic potentials in dense argon. <i>Chemical Physics Letters</i> , <b>1976</b> , 40, 14-18	2.5	16
166	Experimental and calculated cross sections for pressure broadening of pure rotational Raman lines of HCl. <i>Chemical Physics Letters</i> , <b>1978</b> , 56, 602-607	2.5	16
165	Non-equilibrium simulations of thermally induced electric fields in water. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 224102	3.9	16
164	Communication: Simple approach for calculating the binding free energy of a multivalent particle. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 161101	3.9	16
163	Heterogeneous versus homogeneous crystal nucleation of hard spheres. <i>Soft Matter</i> , <b>2019</b> , 15, 9625-9631	3.6	16
162	Computational methodology for solubility prediction: Application to sparingly soluble organic/inorganic materials. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 054102	3.9	15
161	The role of non-specific interactions in a patchy model of protein crystallization. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 194511	3.9	15
160	Layering, freezing, and re-entrant melting of hard spheres in soft confinement. <i>Physical Review E</i> , <b>2012</b> , 85, 021502	2.4	15
159	Dynamic pruned-enriched Rosenbluth method. <i>Molecular Physics</i> , <b>2003</b> , 101, 1675-1682	1.7	15
158	Stresses inside critical nuclei. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 6587-94	3.4	15
157	Novel Monte Carlo scheme for systems with short-ranged interactions. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 244106	3.9	15
156	Free Energy Calculations <b>2002</b> , 167-200		15

155	The overlapping distribution method to compute chemical potentials of chain molecules. <i>Journal of Physics Condensed Matter</i> , <b>1994</b> , 6, 3879-3888	1.8	15
154	Optimizing the Selectivity of Surface-Adsorbing Multivalent Polymers. <i>Macromolecules</i> , <b>2014</b> , 47, 7496-7509	5.9	14
153	Transdisciplinary EU science institute needs funds urgently. <i>Nature</i> , <b>2010</b> , 463, 876	50.4	14
152	Translocation boost protein-folding efficiency of double-barreled chaperonins. <i>Biophysical Journal</i> , <b>2006</b> , 90, 3375-81	2.9	14
151	Lattice-Boltzmann Simulations of Ionic Current Modulation by DNA Translocation. <i>Journal of Chemical Theory and Computation</i> , <b>2006</b> , 2, 495-503	6.4	14
150	Short-time dynamics of colloidal suspensions. <i>Physical Review E</i> , <b>1996</b> , 54, 2704-2713	2.4	14
149	Comment on "Determination of the chemical potential of polymeric systems from Monte Carlo simulations". <i>Physical Review Letters</i> , <b>1992</b> , 68, 3657	7.4	14
148	Computer simulation studies of static and dynamical scaling in dilute solutions of excluded-volume polymers. <i>Macromolecules</i> , <b>1992</b> , 25, 3435-3438	5.5	14
147	Thermodynamics and kinetics of phase separation of protein-RNA mixtures by a minimal model. <i>Biophysical Journal</i> , <b>2021</b> , 120, 1219-1230	2.9	14
146	Waste-Recycling Monte Carlo <b>2006</b> , 127-137		14
145	Self-assembly protocol design for periodic multicomponent structures. <i>Soft Matter</i> , <b>2015</b> , 11, 8930-8	3.6	13
144	Hamiltonian Transformation to Compute Thermo-osmotic Forces. <i>Physical Review Letters</i> , <b>2018</b> , 121, 068002	7.4	13
143	Accounting for protein-solvent contacts facilitates design of nonaggregating lattice proteins. <i>Biophysical Journal</i> , <b>2011</b> , 100, 693-700	2.9	13
142	Self-poisoning of crystal nuclei in hard-rod liquids. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S2029-S2036	5.2	13
141	Phase behavior of a lattice protein model. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 9015-9022	3.9	13
140	Evidence for Universal Asymptotic Decay of Velocity Fluctuations in Lorentz Gases. <i>Europhysics Letters</i> , <b>1992</b> , 20, 7-12	1.6	13
139	Smectic ordering in nematic and smectic liquid-crystalline films probed by means of surface light scattering. <i>Physical Review A</i> , <b>1988</b> , 38, 6316-6323	2.6	13
138	A review of immune amplification via ligand clustering by self-assembled liquid-crystalline DNA complexes. <i>Advances in Colloid and Interface Science</i> , <b>2016</b> , 232, 17-24	14.3	12

137	Stability of bicelles: a simulation study. <i>Langmuir</i> , <b>2014</b> , 30, 4229-35	4	12
136	Microscopic Marangoni Flows Cannot Be Predicted on the Basis of Pressure Gradients. <i>Physical Review Letters</i> , <b>2017</b> , 119, 224502	7.4	12
135	Simulating polymer liquid crystals. <i>Journal of Physics Condensed Matter</i> , <b>1996</b> , 8, 9445-9449	1.8	12
134	Liquid carbon: structure near the freezing line. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, S3619-S3628	2.8	12
133	Continuous freezing in three dimensions. <i>Physical Review Letters</i> , <b>2003</b> , 90, 195701	7.4	12
132	The hard ellipsoid-of-revolution fluid I. Monte Carlo simulations. <i>Molecular Physics</i> , <b>2002</b> , 100, 201-217	1.7	12
131	Anomalous diffusion in the nematic phase of thin disks. <i>Physical Review A</i> , <b>1992</b> , 45, R5355-R5357	2.6	12
130	From lattice gases to polymers. <i>Journal of Physics Condensed Matter</i> , <b>1990</b> , 2, SA265-SA269	1.8	12
129	Rotational diffusion model with a variable collision distribution. II. The effect of energy transfer. <i>Journal of Chemical Physics</i> , <b>1974</b> , 61, 4671-4679	3.9	12
128	Structural analysis of high-dimensional basins of attraction. <i>Physical Review E</i> , <b>2016</b> , 94, 031301	2.4	12
127	Emergence of complex behavior in pili-based motility in early stages of <i>P. aeruginosa</i> surface adaptation. <i>Scientific Reports</i> , <b>2017</b> , 7, 45467	4.9	11
126	Structural and Linear Elastic Properties of DNA Hydrogels by Coarse-Grained Simulation. <i>Macromolecules</i> , <b>2019</b> , 52, 504-512	5.5	11
125	When droplets become stars: charged dielectric droplets beyond the Rayleigh limit. <i>Soft Matter</i> , <b>2017</b> , 13, 8781-8795	3.6	11
124	Length, protein-protein interactions, and complexity. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2005</b> , 350, 52-62	3.3	11
123	Nucleation in suspensions of anisotropic colloids. <i>Computer Physics Communications</i> , <b>2005</b> , 169, 117-121	4.2	11
122	Advanced Monte Carlo Techniques <b>1993</b> , 93-152		11
121	On the Raman spectrum of argon dimers. <i>Journal of Chemical Physics</i> , <b>1979</b> , 70, 2695-2699	3.9	11
120	Thermophoretic forces on a mesoscopic scale. <i>Soft Matter</i> , <b>2018</b> , 14, 7446-7454	3.6	11



119	Effects of co-ordination number on the nucleation behaviour in many-component self-assembly. <i>Faraday Discussions</i> , <b>2016</b> , 186, 215-28	3.6	10
118	Reactive Momentum Transfer Contributes to the Self-Propulsion of Janus Particles. <i>Physical Review Letters</i> , <b>2020</b> , 124, 188001	7.4	10
117	Pressure gradients fail to predict diffusio-osmosis. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 205002.8	2.8	10
116	What experiments on pinned nanobubbles can tell about the critical nucleus for bubble nucleation. <i>European Physical Journal E</i> , <b>2017</b> , 40, 114	1.5	10
115	Hot electrons and the approach to metallic behaviour in K x (KCl) 1 $\bar{x}$ . <i>Europhysics Letters</i> , <b>1996</b> , 33, 551-556	1.6	10
114	A Systematic Optimization Scheme for Configurational Bias Monte Carlo. <i>Molecular Simulation</i> , <b>1996</b> , 17, 41-55	2	10
113	Lecture Notes on: Free-Energy Calculations <b>1991</b> , 85-117		10
112	Density dependence of the pressure induced shift of HCl rotational lines perturbed by argon. <i>Chemical Physics Letters</i> , <b>1977</b> , 50, 116-119	2.5	10
111	Nanoparticle Assembly:A Perspective and some Unanswered Questions. <i>Current Science</i> , <b>2017</b> , 112, 1635.2	5.2	10
110	Kinetics of formation of bile salt micelles from coarse-grained Langevin dynamics simulations. <i>Soft Matter</i> , <b>2016</b> , 12, 5172-9	3.6	10
109	Investigating the role of boundary bricks in DNA brick self-assembly. <i>Soft Matter</i> , <b>2017</b> , 13, 1670-1680	3.6	9
108	Designing stimulus-sensitive colloidal walkers. <i>Soft Matter</i> , <b>2014</b> , 10, 3463-70	3.6	9
107	Design Principles for Super Selectivity using Multivalent Interactions <b>2017</b> , 75-101		9
106	Role of fluctuations in ligand binding cooperativity of membrane receptors. <i>Physical Review Letters</i> , <b>2011</b> , 106, 168103	7.4	9
105	Density functional approach to helium at finite temperature. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 9077-9088	1.8	9
104	Numerical test of the generalized Flory and generalized Flory dimer theories. <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 6088-6091	3.9	9
103	Computational design of probes to detect bacterial genomes by multivalent binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 8719-8726	11.5	9
102	Lattice models and Monte Carlo methods for simulating DNA origami self-assembly. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 234905	3.9	9



101	Error analysis and correction for Lattice Boltzmann simulated flow conductance in capillaries of different shapes and alignments. <i>Journal of Computational Physics</i> , <b>2012</b> , 231, 2634-2640	4.1	8
100	Real-time monitoring of complex moduli from micro-rheology. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 194118	1.8	8
99	Deviations from Fick's law in Lorentz gases. <i>Journal of Statistical Physics</i> , <b>1997</b> , 87, 1229-1244	1.5	8
98	Multi-scale simulations provide supporting evidence for the hypothesis of intramolecular protein translocation in GroEL/GroES complexes. <i>PLoS Computational Biology</i> , <b>2008</b> , 4, e1000006	5	8
97	Liquid-Like Behavior in Solids. <i>Molecular Simulation</i> , <b>1996</b> , 16, 127-137	2	8
96	Measurements of the ratio of the Frank constants for splay and bend in nematics consisting of disc-like molecules 2, 3, 6, 7, 10, 11-hexakis(p-alkoxybenzoxy)triphenylenes. <i>Liquid Crystals</i> , <b>1988</b> , 3, 369-380	2.3	8
95	Approximate relation between the melting of hard spheres and ellipsoidal platelets and needles. <i>Molecular Physics</i> , <b>1985</b> , 54, 145-148	1.7	8
94	Monte Carlo Simulations <b>1990</b> , 83-123		8
93	Preface: Special Topic on Nucleation: New Concepts and Discoveries. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 211501	3.9	8
92	Numerical evidence for thermally induced monopoles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 4911-4914	11.5	7
91	The other entropy. <i>Molecular Physics</i> , <b>2013</b> , 111, 3641-3650	1.7	7
90	Comparison of simple perturbation-theory estimates for the liquid-solid and the liquid-vapor interfacial free energies of Lennard-Jones systems. <i>Molecular Simulation</i> , <b>2007</b> , 33, 1023-1028	2	7
89	The effect of temperature jumps during polymer crystallization. <i>Polymer</i> , <b>2000</b> , 41, 1519-1528	3.9	7
88	Velocity Autocorrelation Function in a Four-Dimensional Lattice Gas. <i>Europhysics Letters</i> , <b>1992</b> , 17, 39-43	1.6	7
87	Computing the Heat Conductivity of Fluids from Density Fluctuations. <i>Physical Review Letters</i> , <b>2020</b> , 125, 130602	7.4	7
86	Switch-like surface binding of competing multivalent particles. <i>European Physical Journal: Special Topics</i> , <b>2016</b> , 225, 1673-1682	2.3	7
85	Calculation of the water-octanol partition coefficient of cholesterol for SPC, TIP3P, and TIP4P water. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 224501	3.9	7
84	Multiple stalk formation as a pathway of defect-induced membrane fusion. <i>European Physical Journal E</i> , <b>2004</b> , 14, 3-6	1.5	6

83	Liquid-like behavior in colloidal crystals. <i>Physica B: Condensed Matter</i> , <b>1996</b> , 228, 33-39	2.8	6
82	Computation of partial enthalpies of various Lennard-Jones model mixtures by NPT molecular dynamics. <i>Journal of Physics Condensed Matter</i> , <b>1989</b> , 1, 957-963	1.8	6
81	Mechanism of two-step vapour-crystal nucleation in a pore. <i>Molecular Physics</i> , <b>2015</b> , 113, 2742-2754	1.7	5
80	Numerical calculation of the melting phase diagram of low molecular-weight polyethylene. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 9433-9440	3.9	5
79	Computer simulation of the phase behavior of a model membrane protein: Annexin V. <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 7217-7224	3.9	5
78	Modeling the Phase Behavior of the Membrane Binding Protein Annexin V. <i>Langmuir</i> , <b>2002</b> , 18, 2988-2992		5
77	Non-Boltzmann behavior from the Boltzmann equation. <i>Physical Review E</i> , <b>1995</b> , 51, 4287-4291	2.4	5
76	Simulation of sub-molecular and supra-molecular fluids. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1991</b> , 176, 54-62	3.3	5
75	Computer simulation of hard-core models for liquid crystals. <i>Computer Physics Communications</i> , <b>1987</b> , 44, 243-253	4.2	5
74	Dynamics of the Frederiks transition in nematics consisting of disc-like molecules Thermal dependence of a bend viscosity coefficient. <i>Liquid Crystals</i> , <b>1988</b> , 3, 1105-1114	2.3	5
73	Interpretation of dipole correlation functions in some liquid systems. <i>Faraday Symposia of the Chemical Society</i> , <b>1972</b> , 6, 94		5
72	Oligonucleotides can act as superscaffolds that enhance liquid-liquid phase separation of intracellular mixtures		5
71	Oligomers of Heat-Shock Proteins: Structures That Don't Imply Function. <i>PLoS Computational Biology</i> , <b>2016</b> , 12, e1004756	5	5
70	Computer Simulations of Phase Transitions in Liquid Crystals. <i>NATO ASI Series Series B: Physics</i> , <b>1992</b> , 67-95		5
69	Comparing theory and simulation for thermo-osmosis. <i>Journal of Chemical Physics</i> , <b>2019</b> , 151, 124109	3.9	4
68	Comment on "Novel Monte Carlo Approach to the Dynamics of Fluids: Single-Particle Diffusion, Correlation Functions, and Phase Ordering of Binary Fluids". <i>Physical Review Letters</i> , <b>1997</b> , 79, 1168-1168	7.4	4
67	Simulation of phase coexistence for complex molecules. <i>Computers in Physics</i> , <b>1997</b> , 11, 246		4
66	Dynamical heterogeneity in a glass-forming ideal gas. <i>Physical Review E</i> , <b>2008</b> , 78, 011505	2.4	4

65	Simple off-lattice model to study the folding and aggregation of peptides. <i>Molecular Physics</i> , <b>2007</b> , 105, 375-385	1.7	4
64	Free Energy and Structure of Dislocation Cores in Two-Dimensional Crystals $\square$ <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 6707-6718	3.4	4
63	Computation challenges in complex liquids: Entropy-driven phase transitions. <i>Future Generation Computer Systems</i> , <b>1994</b> , 10, 207-212	7.5	4
62	Thermodynamics and kinetics of crystallization in deeply supercooled Stillinger-Weber silicon. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 194502	3.9	4
61	Numerical Techniques to Study Complex Liquids <b>1995</b> , 357-419		4
60	Theoretical Prediction of Thermal Polarization. <i>Physical Review Letters</i> , <b>2018</b> , 120, 226001	7.4	4
59	Studying polymer diffusiophoresis with non-equilibrium molecular dynamics. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 164901	3.9	3
58	Information density, structure and entropy in equilibrium and non-equilibrium systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2020</b> , 2020, 023204	1.9	3
57	Effect of the interaction strength and anisotropy on the diffusiophoresis of spherical colloids. <i>Soft Matter</i> , <b>2020</b> , 16, 3621-3627	3.6	3
56	Addressing hysteresis and slow equilibration issues in cavity-based calculation of chemical potentials. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 014105	3.9	3
55	Publisher's Note: Design Rule for Colloidal Crystals of DNA-Functionalized Particles [Phys. Rev. Lett. 107, 045902 (2011)]. <i>Physical Review Letters</i> , <b>2011</b> , 107,	7.4	3
54	Colloidal crystals full of invisible vacancies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 17728-9	11.5	3
53	Free-energy-based method for step size detection of processive molecular motors. <i>European Physical Journal E</i> , <b>2010</b> , 31, 411-7	1.5	3
52	Non-Fickian diffusion in colloidal glasses. <i>Journal of Chemical Physics</i> , <b>1998</b> , 109, 275-280	3.9	3
51	Computer simulations of long-time tails: What's new?. <i>Transport Theory and Statistical Physics</i> , <b>1995</b> , 24, 1227-1247		3
50	Computer simulation of crystal nucleation of parallel hard spherocylinders. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1989</b> , 156, 599-612	3.3	3
49	Non-linear conductivity in morpholinium (TCNQ) <sub>2</sub> salts. <i>Journal of Physics C: Solid State Physics</i> , <b>1987</b> , 20, 2109-2117		3
48	Dynamic light scattering near the isotropic-blue phase transition of cholesteryl-oleylcarbonate. <i>Liquid Crystals</i> , <b>1988</b> , 3, 337-345	2.3	3

47	Introduction to colloidal systems. <i>Scottish Graduate Series</i> , <b>2000</b> , 113-143		3
46	Hot Nanoparticles in Polar or Paramagnetic Liquids Interact as Monopoles. <i>Journal of Physical Chemistry B</i> , <b>2016</b> , 120, 5987-9	3.4	3
45	Solubilities of pyrene in organic solvents: Comparison between chemical potential calculations using a cavity-based method and direct coexistence simulations. <i>Journal of Chemical Thermodynamics</i> , <b>2019</b> , 131, 620-629	2.9	3
44	Monte Carlo sampling for stochastic weight functions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 6924-6929	11.5	2
43	Numerical method for computing the free energy of glasses. <i>Physical Review E</i> , <b>2020</b> , 102, 063303	2.4	2
42	Application of the optimized Baxter model to the hard-core attractive Yukawa system. <i>Journal of Chemical Physics</i> , <b>2006</b> , 125, 194506	3.9	2
41	Multiple Histogram Method and Static Monte Carlo Sampling. <i>Macromolecular Theory and Simulations</i> , <b>2004</b> , 13, 36-43	1.5	2
40	Response to Rotational velocity autocorrelation function of interacting Brownian particles. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2001</b> , 289, 419-421	3.3	2
39	Response to Comment on Long-time tails in angular momentum correlations. <i>J. Chem. Phys.</i> 104, 7363 (1996). <i>Journal of Chemical Physics</i> , <b>1996</b> , 104, 7364-7365	3.9	2
38	Phase separation in mixtures of a rodlike colloid and two or more rodlike polymers. <i>Journal of Chemical Physics</i> , <b>1996</b> , 105, 10632-10636	3.9	2
37	Velocity correlations in a one-dimensional lattice gas: Theory and simulations. <i>Physical Review E</i> , <b>1993</b> , 47, 4098-4103	2.4	2
36	Order through disorder: Entropy-driven phase transitions <b>1993</b> , 137-148		2
35	Stability of the High-Pressure Body-Centered-Cubic Phase of Helium. <i>Physical Review Letters</i> , <b>1986</b> , 57, 2331-2331	7.4	2
34	Free energies of crystals computed using Einstein crystal with fixed center of mass and differing spring constants. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 164509	3.9	2
33	Computation of the chemical potential and solubility of amorphous solids. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 124502	3.9	2
32	Long time tails in stress correlation functions <b>1995</b> , 240-249		2
31	Jean-Pierre Hansen's stimulating history of simulating fluids. <i>Molecular Physics</i> , <b>2015</b> , 113, 2363-2375	1.7	1
30	Lattice-based Monte Carlo method for telechelic chain molecules. <i>Physical Review E</i> , <b>2007</b> , 75, 036708	2.4	1

29	Monte Carlo simulations <b>1998</b> ,			1
28	Monte Carlo simulation of carrier number noise spectra in the integral quantum Hall regime. <i>Journal of Physics C: Solid State Physics</i> , <b>1988</b> , 21, L177-L183			1
27	Challenges in modelling diffusiophoretic transport. <i>European Physical Journal B</i> , <b>2021</b> , 94, 1	1.2		1
26	Dynamics of Colloidal Dispersions via Lattice-Gas Models of an Incompressible Fluid. <i>Springer Proceedings in Physics</i> , <b>1989</b> , 242-245	0.2		1
25	Phase Behavior of Lyotropic Liquid Crystals <b>2000</b> , 51-72			1
24	Long-Time Decay of Velocity Autocorrelation Function of Two-Dimensional Lattice Gas Cellular Automata. <i>Springer Proceedings in Physics</i> , <b>1989</b> , 144-154	0.2		1
23	Study of Diffusion in Lattice-Gas Fluids and Colloids. <i>NATO ASI Series Series B: Physics</i> , <b>1992</b> , 205-220			1
22	Interpretation of far Infrared Spectra in Terms of a Collision Distribution <b>1974</b> , 647-653			1
21	Reduced variance analysis of molecular dynamics simulations by linear combination of estimators. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 191101	3.9		1
20	Folding Proteins One Loop at a Time. <i>Biophysical Journal</i> , <b>2016</b> , 111, 893-4	2.9		1
19	Modelling aggregates of cetyltrimethylammonium bromide on gold surfaces using dissipative particle dynamics simulations. <i>Molecular Simulation</i> , 1-10	2		1
18	Rotational Relaxation of Solute Molecules in Dense Noble Gases <b>1978</b> , 441-445			1
17	Using Molecular Simulation to Compute Transport Coefficients of Molecular Gases. <i>Journal of Physical Chemistry B</i> , <b>2020</b> , 124, 7636-7646	3.4		0
16	Estimation of the equilibrium free energy for glasses using the Jarzynski equality. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 231101	3.9		0
15	Nano-pump based on exothermic surface reactions. <i>Soft Matter</i> , <b>2021</b> , 17, 1173-1177	3.6		0
14	The pathway and kinetics of hierarchical assembly of ionic oligomers into a lyotropic columnar phase. <i>Soft Matter</i> , <b>2019</b> , 15, 4460-4466	3.6		
13	Special Issue on Liquid Matter 2017. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 290301	1.8		
12	Introduction: Role of Modeling in Soft Matter Physics. <i>Series in Sof Condensed Matter</i> , <b>2010</b> , 1-7			

- 11 Perspective on Statistical mechanical theory of irreversible processes. I. General theory and simple applications to magnetic and conduction problems. *Theoretical Chemistry Accounts*, **2000**, 103, 234-235 1.9
- 10 Simulating mesoscopic order. *Computational Materials Science*, **1994**, 2, 127-130 3.2
- 9 Effects of sound modes on the VACF in cellular automaton fluids. *Lecture Notes in Physics*, **1990**, 29-38 0.8
- 8 Computer simulation of pretransitional phenomena in hard-core models for liquid crystals **1987**, 143-170
- 7 Light scattering study of the statistical properties of nematic director fluctuations. *Physica A: Statistical Mechanics and Its Applications*, **1985**, 131, 278-288 3.3
- 6 Perspective on The effect of shape on the interaction of colloidal particles **2000**, 212-213
- 5 A Test of Mode-Coupling Theory. *NATO ASI Series Series B: Physics*, **1990**, 279-289
- 4 Simulation of Sub-molecular and Supra-molecular Fluids. *Springer Series in Solid-state Sciences*, **1992**, 111-129 0.4
- 3 Isostructural Solid-Solid Transition in Crystalline Systems with Short Ranged Interaction **1998**, 315-324
- 2 Effect of social distancing on super-spreading diseases: why pandemics modelling is more challenging than molecular simulation. *Molecular Physics*, e1936247 1.7
- 1 Synthesis of Nanoparticle Assemblies: general discussion. *Faraday Discussions*, **2016**, 186, 123-52 3.6