Peter H Poole

List of Publications by Year
in descending order

72 papers	9,888 citations	101384 36 h-index	98622 67 g-index
74 all docs	74 docs citations	74 times ranked	4139 citing authors

#	Article	IF	Citations
1	Free energy surface of two-step nucleation. Journal of Chemical Physics, 2021, 154, 234507.	1.2	9
2	Liquidâ€“liquid phase transition in simulations of ultrafast heating and decompression of amorphous ice. Journal of Non-Crystalline Solids: X, 2021, 11-12, 100067.	0.5	4
3	Advances in the study of supercooled water. European Physical Journal E, 2021, 44, 143.	0.7	40
4	Experimental observation of the liquid-liquid transition in bulk supercooled water under pressure. Science, 2020, 370, 978-982.	6.0	143
5	The stability-limit conjecture revisited. Journal of Chemical Physics, 2019, 150, 234502.	1.2	18
6	State variables for glasses: The case of amorphous ice. Journal of Chemical Physics, 2019, 150, 224502.	1.2	14
7	Surface tension of supercooled water nanodroplets from computer simulations. Journal of Chemical Physics, 2019, 150, 234507.	1.2	15
8	Phase transitions in fluctuations and their role in two-step nucleation. Journal of Chemical Physics, 2019, 150, 074501.	1.2	30
9	Evaluating the Laplace pressure of water nanodroplets from simulations. Journal of Physics Condensed Matter, 2018, 30, 144005.	0.7	15
10	Thermodynamic and structural anomalies of water nanodroplets. Nature Communications, 2018, 9, 2402.	5.8	19
11	Advances in Computational Studies of the Liquidâ€“Liquid Transition in Water and Water-Like Models. Chemical Reviews, 2018, 118, 9129-9151.	23.0	152
12	Influence of sample preparation on the transformation of low-density to high-density amorphous ice: An explanation based on the potential energy landscape. Journal of Chemical Physics, 2017, 147, 044501.	1.2	15
13	â€œSwarm relaxationâ€ Equilibrating a large ensemble of computer simulationsâ€†. European Physical Journal E, 2017, 40, 98.	0.7	7
14	Potential energy landscape of the apparent first-order phase transition between low-density and high-density amorphous ice. Journal of Chemical Physics, 2016, 145, 224501.	1.2	27
15	Phase diagram of the ST2 model of water. Molecular Physics, 2015, 113, 2791-2798.	0.8	25
16	Free energy of formation of small ice nuclei near the Widom line in simulations of supercooled water. European Physical Journal E, 2015, 38, 124.	0.7	15
17	Two-state thermodynamics of the ST2 model for supercooled water. Journal of Chemical Physics, 2014, 140, 104502.	1.2	96
18	Free energy surface of ST2 water near the liquid-liquid phase transition. Journal of Chemical Physics, 2013, 138, 034505.	1.2	118

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19	Heterogeneous nucleation in the low-barrier regime. Physical Review E, 2013, 87, 042407.	0.8	14
20	Study of the ST2 model of water close to the liquidâ€“liquid critical point. Physical Chemistry Chemical Physics, 2011, 13, 19759.	1.3	117
21	Dynamical Behavior Near a Liquidâ€“Liquid Phase Transition in Simulations of Supercooled Water. Journal of Physical Chemistry B, 2011, 115, 14176-14183.	1.2	75
22	Mixturelike Behavior Near a Liquid-Liquid Phase Transition in Simulations of Supercooled Water. Physical Review Letters, 2011, 106, 115706.	2.9	132
23	Spatial correlation of the dynamic propensity of a glass-forming liquid. Journal of Physics Condensed Matter, 2011, 23, 235103.	0.7	22
24	Simulations of a lattice model of two-headed linear amphiphiles: Influence of amphiphile asymmetry. Journal of Chemical Physics, 2011, 134, 204503.	1.2	5
25	Spectral statistics of the quenched normal modes of a network-forming molecular liquid. Journal of Chemical Physics, 2009, 130, 124512.	1.2	5
26	Crystal Nucleation in a Supercooled Liquid with Glassy Dynamics. Physical Review Letters, 2009, 103, 225701.	2.9	28
27	Observation of the density minimum in deeply supercooled confined water. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9570-9574.	3.3	178
28	Granular circulation in a cylindrical pan: Simulations of reversing radial and tangential flows. Physical Review E, 2007, 76, 021305.	0.8	0
29	Test of classical nucleation theory on deeply supercooled high-pressure simulated silica. Journal of Chemical Physics, 2006, 124, 224709.	1.2	34
30	Fractional Stokes-Einstein and Debye-Stokes-Einstein Relations in a Network-Forming Liquid. Physical Review Letters, 2006, 97, 055901.	2.9	158
31	Structural and dynamical heterogeneity in a glass-forming liquid. Physical Review E, 2006, 74, 050502.	0.8	68
32	Density minimum and liquidâ€“liquid phase transition. Journal of Physics Condensed Matter, 2005, 17, L431-L437.	0.7	181
33	Bulk motion of granular matter in an agitated cylindrical bed. Physical Review E, 2005, 71, 011303.	0.8	3
34	Simulated silica. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 525-535.	1.6	15
35	Relation between the Widom line and the dynamic crossover in systems with a liquid-liquid phase transition. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16558-16562.	3.3	693
36	Free energy and configurational entropy of liquid silica: Fragile-to-strong crossover and polyamorphism. Physical Review E, 2004, 69, 041503.	0.8	110

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37	Phase diagram of silica from computer simulation. Physical Review E, 2004, 70, 061507.	0.8	73
38	Fragile-to-strong crossover and polyamorphism in liquid silica: changes in liquid structure. Philosophical Magazine, 2004, 84, 1437-1445.	0.7	14
39	Limiting Tensions For Liquids and Glasses from Laboratory and MD Studies. , 2002, , 33-46.		9
40	Interrelationship of Polyamorphism and the Fragile-to-Strong Transition in Liquid Silica. , 2002, , 168-178.		0
41	Fragile-to-strong transition and polyamorphism in the energy landscape of liquid silica. Nature, 2001, 412, 514-517.	13.7	356
42	Influence of mass polydispersity on dynamics of simple liquids and colloids. Physical Review E, 2001, 65, 011402.	0.8	9
43	The potential energy landscape of the Â±JIsing spin glass. Journal of Physics Condensed Matter, 2000, 12, 6675-6682.	0.7	6
44	Computer simulations of liquid silica: â€,Equation of state and liquidâ€“liquid phase transition. Physical Review E, 2000, 63, 011202.	0.8	219
45	Spatial correlations of mobility and immobility in a glass-forming Lennard-Jones liquid. Physical Review E, 1999, 60, 3107-3119.	0.8	455
46	Growing Spatial Correlations of Particle Displacements in a Simulated Liquid on Cooling toward the Glass Transition. Physical Review Letters, 1999, 82, 5064-5067.	2.9	160
47	Spatially-Correlated Dynamics in Glass-Forming Systems: Correlation Functions and Simulations. Springer Proceedings in Physics, 1999, , 212-227.	0.1	1
48	Spatial correlations of particle displacements in a glass-forming liquid. Physica A: Statistical Mechanics and Its Applications, 1998, 261, 51-59.	1.2	43
49	Computer simulations of structure and transport in glasses and supercooled liquids. Current Opinion in Solid State and Materials Science, 1998, 3, 391-396.	5.6	13
50	Dynamical heterogeneity in the Ising spin glass. Physical Review E, 1998, 57, 7350-7353.	0.8	31
51	Stringlike Cooperative Motion in a Supercooled Liquid. Physical Review Letters, 1998, 80, 2338-2341.	2.9	846
52	Equation of state of supercooled water simulated using the extended simple point charge intermolecular potential. Journal of Chemical Physics, 1997, 107, 7443-7450.	1.2	152
53	Emergence of Fast Local Dynamics on Cooling toward the Ising Spin Glass Transition. Physical Review Letters, 1997, 78, 3394-3397.	2.9	29
54	Comparison of Thermodynamic Properties of Simulated Liquid Silica and Water. Physical Review Letters, 1997, 79, 2281-2284.	2.9	158

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55	Line of compressibility maxima in the phase diagram of supercooled water. Physical Review E, 1997, 55, 727-737.	0.8	203
56	Liquid-Liquid Phase Transition: Evidence from Simulations. Physical Review Letters, 1997, 78, 2409-2412.	2.9	270
57	Dynamical Heterogeneities in a Supercooled Lennard-Jones Liquid. Physical Review Letters, 1997, 79, 2827-2830.	2.9	861
58	Polymorphic Phase Transitions in Liquids and Glasses. Science, 1997, 275, 322-323.	6.0	427
59	Non-Monotonic Temperature Dependence of Local Dynamics and Local Energy upon Cooling toward the Ising Spin Glass Transition. Progress of Theoretical Physics Supplement, 1997, 126, 383-386.	0.2	0
60	Chapter 12. COMPUTER SIMULATIONS OF SILICATE MELTS. , 1995, , 563-616.		6
61	Amorphous polymorphism. Computational Materials Science, 1995, 4, 373-382.	1.4	72
62	Crystalline-amorphous transition in silicate perovskites. Physical Review B, 1995, 51, 14841-14848.	1.1	51
63	Glass-forming liquids, anomalous liquids, and polyamorphism in liquids and biopolymers. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 993-1025.	0.4	158
64	Effect of Hydrogen Bonds on the Thermodynamic Behavior of Liquid Water. Physical Review Letters, 1994, 73, 1632-1635.	2.9	409
65	Phase diagram for amorphous solid water. Physical Review E, 1993, 48, 4605-4610.	0.8	181
66	Spinodal of liquid water. Physical Review E, 1993, 48, 3799-3817.	0.8	199
67	Time-dependent thermodynamic properties of the Ising model from damage spreading. Journal of Statistical Physics, 1992, 68, 895-910.	0.5	27
68	Phase behaviour of metastable water. Nature, 1992, 360, 324-328.	13.7	1,652
69	Learning science through guided discovery: liquid water and molecular networks. Physica A: Statistical Mechanics and Its Applications, 1991, 177, 281-293.	1.2	2
70	Lifetime of the bond network and gel-like anomalies in supercooled water. Physical Review Letters, 1990, 64, 1686-1689.	2.9	141
71	Universality classes of theÎ¸andÎ¸â€™points. Physical Review B, 1989, 39, 495-504.	1.1	51
72	Free energy surface of ST2 water near the liquid-liquid phase transition. , 0, .		1