Francesco Sciortino

List of Publications by Year in descending order

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438 papers	29,249 citations	3515 90 h-index	6979 154 g-index
441 all docs	441 docs citations	441 times ranked	9889 citing authors

#	Article	IF	Citations
1	Phase behaviour of metastable water. Nature, 1992, 360, 324-328.	13.7	1,652
2	Long-range correlations in nucleotide sequences. Nature, 1992, 356, 168-170.	13.7	1,297
3	Gelation of particles with short-range attraction. Nature, 2008, 453, 499-503.	13.7	811
4	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
5	Singularity-free interpretation of the thermodynamics of supercooled water. Physical Review E, 1996, 53, 6144-6154.	0.8	499
6	Phase Diagram of Patchy Colloids: Towards Empty Liquids. Physical Review Letters, 2006, 97, 168301.	2.9	482
7	Equilibrium Cluster Phases and Low-Density Arrested Disordered States: The Role of Short-Range Attraction and Long-Range Repulsion. Physical Review Letters, 2004, 93, 055701.	2.9	434
8	Effect of Hydrogen Bonds on the Thermodynamic Behavior of Liquid Water. Physical Review Letters, 1994, 73, 1632-1635.	2.9	409
9	Inherent Structure Entropy of Supercooled Liquids. Physical Review Letters, 1999, 83, 3214-3217.	2.9	408
10	Higher-order glass-transition singularities in colloidal systems with attractive interactions. Physical Review E, 2000, 63, 011401.	0.8	367
11	Fragile-to-strong transition and polyamorphism in the energy landscape of liquid silica. Nature, 2001, 412, 514-517.	13.7	356
12	Effect of defects on molecular mobility in liquid water. Nature, 1991, 354, 218-221.	13.7	339
13	Configurational entropy and diffusivity of supercooled water. Nature, 2000, 406, 166-169.	13.7	323
14	Supercooled water and the kinetic glass transition. Physical Review E, 1996, 54, 6331-6343.	0.8	317
15	Observation of empty liquids and equilibrium gels in a colloidal clay. Nature Materials, 2011, 10, 56-60.	13.3	307
16	Slow Dynamics of Water Molecules in Supercooled States. Physical Review Letters, 1996, 76, 2730-2733.	2.9	281
17	Liquid-Liquid Phase Transition: Evidence from Simulations. Physical Review Letters, 1997, 78, 2409-2412.	2.9	270
18	Network defects and molecular mobility in liquid water. Journal of Chemical Physics, 1992, 96, 3857-3865.	1.2	255

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19	Phase Diagram of Janus Particles. Physical Review Letters, 2009, 103, 237801.	2.9	254
20	Glassy colloidal systems. Advances in Physics, 2005, 54, 471-524.	35.9	230
21	Ideal glass-glass transitions and logarithmic decay of correlations in a simple system. Physical Review E, 1999, 59, R1347-R1350.	0.8	225
22	Interplay between Time-Temperature Transformation and the Liquid-Liquid Phase Transition in Water. Physical Review Letters, 2002, 88, 195701.	2.9	225
23	Computer simulations of liquid silica: â€‚Equation of state and liquidâ€“liquid phase transition. Physical Review E, 2000, 63, 011202.	0.8	219
24	Dynamics of simulated water under pressure. Physical Review E, 1999, 60, 6757-6768.	0.8	213
25	Saddles in the Energy Landscape Probed by Supercooled Liquids. Physical Review Letters, 2000, 85, 5356-5359.	2.9	211
26	Line of compressibility maxima in the phase diagram of supercooled water. Physical Review E, 1997, 55, 727-737.	0.8	203
27	Spinodal of liquid water. Physical Review E, 1993, 48, 3799-3817.	0.8	199
28	Self-assembly of patchy particles into polymer chains: A parameter-free comparison between Wertheim theory and Monte Carlo simulation. Journal of Chemical Physics, 2007, 126, 194903.	1.2	199
29	One liquid, two glasses. Nature Materials, 2002, 1, 145-146.	13.3	196
30	Ground-State Clusters for Short-Range Attractive and Long-Range Repulsive Potentials. Langmuir, 2004, 20, 10756-10763.	1.6	187
31	Phase diagram for amorphous solid water. Physical Review E, 1993, 48, 4605-4610.	0.8	181
32	Density minimum and liquidâ€“liquid phase transition. Journal of Physics Condensed Matter, 2005, 17, L431-L437.	0.7	181
33	One-Dimensional Cluster Growth and Branching Gels in Colloidal Systems with Short-Range Depletion Attraction and Screened Electrostatic Repulsion. Journal of Physical Chemistry B, 2005, 109, 21942-21953.	1.2	179
34	Potential energy landscape description of supercooled liquids and glasses. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P05015.	0.9	176
35	Second critical point in two realistic models of water. Science, 2020, 369, 289-292.	6.0	176
36	Hydrogen bond cooperativity in simulated water: Time dependence analysis of pair interactions. Journal of Chemical Physics, 1989, 90, 2786-2792.	1.2	169

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37	Phase equilibria and glass transition in colloidal systems with short-ranged attractive interactions: Application to protein crystallization. Physical Review E, 2002, 65, 031407.	0.8	168
38	Liquids more stable than crystals in particles with limited valence and flexible bonds. Nature Physics, 2013, 9, 554-558.	6.5	160
39	Phase behavior and critical activated dynamics of limited-valence DNA nanostars. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15633-15637.	3.3	156
40	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
41	Advances in Computational Studies of the Liquidâ€“Liquid Transition in Water and Water-Like Models. Chemical Reviews, 2018, 118, 9129-9151.	23.0	152
42	Theoretical and numerical study of the phase diagram of patchy colloids: Ordered and disordered patch arrangements. Journal of Chemical Physics, 2008, 128, 144504.	1.2	150
43	Reversible gels of patchy particles: Role of the valence. Journal of Chemical Physics, 2009, 131, 014504.	1.2	146
44	Model for Reversible Colloidal Gelation. Physical Review Letters, 2005, 94, 218301.	2.9	143
45	Colloidal systems with competing interactions: from an arrested repulsive cluster phase to a gel. Soft Matter, 2009, 5, 2390.	1.2	143
46	Lifetime of the bond network and gel-like anomalies in supercooled water. Physical Review Letters, 1990, 64, 1686-1689.	2.9	141
47	Confirmation of anomalous dynamical arrest in attractive colloids: A molecular dynamics study. Physical Review E, 2002, 66, 041402.	0.8	138
48	Scaling of Dynamics with the Range of Interaction in Short-Range Attractive Colloids. Physical Review Letters, 2005, 94, 078301.	2.9	134
49	Patterning symmetry in the rational design of colloidal crystals. Nature Communications, 2012, 3, 975.	5.8	134
50	Molecular-dynamics study of incoherent quasielastic neutron-scattering spectra of supercooled water. Physical Review E, 1997, 56, 4231-4243.	0.8	133
51	Supercooled water and the kinetic glass transition.â€ƒII. Collective dynamics. Physical Review E, 1997, 56, 5397-5404.	0.8	131
52	Extension of the Fluctuation-Dissipation Theorem to the Physical Aging of a Model Glass-Forming Liquid. Physical Review Letters, 2001, 86, 107-110.	2.9	129
53	Aging as dynamics in configuration space. Europhysics Letters, 2000, 49, 590-596.	0.7	128
54	Isochoric differential scattering functions in liquid water: The fifth neighbor as a network defect. Physical Review Letters, 1990, 65, 3452-3455.	2.9	124

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55	Glass-Transition Temperature of Water: A Simulation Study. Physical Review Letters, 2004, 93, 047801.	2.9	123
56	A numerical study of one-patch colloidal particles: from square-well to Janus. Physical Chemistry Chemical Physics, 2010, 12, 11869.	1.3	123
57	Erasing no-manâ€™s land by thermodynamically stabilizing the liquidâ€“liquid transition in tetrahedral particles. Nature Physics, 2014, 10, 653-657.	6.5	123
58	Vapor-liquid coexistence of patchy models: Relevance to protein phase behavior. Journal of Chemical Physics, 2007, 127, 084902.	1.2	121
59	Static and dynamic properties of water-in-oil microemulsions near the critical and percolation points. Journal of Physics Condensed Matter, 1994, 6, 10855-10883.	0.7	118
60	Free energy surface of ST2 water near the liquid-liquid phase transition. Journal of Chemical Physics, 2013, 138, 034505.	1.2	118
61	Study of the ST2 model of water close to the liquidâ€“liquid critical point. Physical Chemistry Chemical Physics, 2011, 13, 19759.	1.3	117
62	Asymmetric caging in soft colloidal mixtures. Nature Materials, 2008, 7, 780-784.	13.3	116
63	Phase diagram of a tetrahedral patchy particle model for different interaction ranges. Journal of Chemical Physics, 2010, 132, .	1.2	116
64	Crystallization of tetrahedral patchy particles in silico. Journal of Chemical Physics, 2011, 134, 174502.	1.2	116
65	Model for single-particle dynamics in supercooled water. Physical Review E, 1999, 59, 6708-6714.	0.8	115
66	Patchy from the bottom up. Nature Materials, 2011, 10, 171-173.	13.3	114
67	Anomalous dynamics of intruders in a crowded environment of mobile obstacles. Nature Communications, 2016, 7, 11133.	5.8	114
68	Debye-Waller Factor of Liquid Silica: Theory and Simulation. Physical Review Letters, 2001, 86, 648-651.	2.9	112
69	Arrested phase separation in a short-ranged attractive colloidal system: A numerical study. Journal of Chemical Physics, 2005, 122, 224903.	1.2	112
70	Modeling equilibrium clusters in lysozyme solutions. Europhysics Letters, 2007, 77, 48004.	0.7	112
71	Free energy and configurational entropy of liquid silica: Fragile-to-strong crossover and polyamorphism. Physical Review E, 2004, 69, 041503.	0.8	110
72	Slow Dynamics of Water under Pressure. Physical Review Letters, 1999, 82, 3629-3632.	2.9	108

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73	Cluster-Driven Dynamical Arrest in Concentrated Lysozyme Solutions. Journal of Physical Chemistry B, 2011, 115, 7227-7237.	1.2	108
74	Evidence of a Higher-Order Singularity in Dense Short-Ranged Attractive Colloids. Physical Review Letters, 2003, 91, 268301.	2.9	107
75	Structural Arrest in Dense Star-Polymer Solutions. Physical Review Letters, 2003, 90, 238301.	2.9	107
76	Effects of patch size and number within a simple model of patchy colloids. Journal of Chemical Physics, 2010, 132, 174110.	1.2	107
77	Mechanical properties of a model of attractive colloidal solutions. Physical Review E, 2001, 63, 031501.	0.8	106
78	Two dimensional assembly of triblock Janus particles into crystal phases in the two bond per patch limit. Soft Matter, 2011, 7, 5799.	1.2	106
79	Reversible gels of patchy particles. Current Opinion in Solid State and Materials Science, 2011, 15, 246-253.	5.6	106
80	Limits of stability of the liquid phase in a lattice model with waterâ€like properties. Journal of Chemical Physics, 1993, 98, 9863-9872.	1.2	105
81	Reentrant Phase Diagram of Network Fluids. Physical Review Letters, 2011, 106, 085703.	2.9	104
82	Static and dynamic anomalies in a repulsive spherical ramp liquid: Theory and simulation. Physical Review E, 2005, 72, 021501.	0.8	102
83	Evidence for an unusual dynamical-arrest scenario in short-ranged colloidal systems. Physical Review E, 2002, 65, 050802.	0.8	99
84	Dynamics in the Presence of Attractive Patchy Interactions. Journal of Physical Chemistry B, 2006, 110, 8064-8079.	1.2	99
85	Supercooled and glassy water: Metastable liquid(s), amorphous solid(s), and a no-manâ€™s land. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13336-13344.	3.3	99
86	Dynamics and configurational entropy in the Lewis-WahnstrÃ¶m model for supercooled orthoterphenyl. Physical Review E, 2002, 65, 041205.	0.8	98
87	Harmonic Dynamics in Supercooled Liquids: The Case of Water. Physical Review Letters, 1997, 78, 2385-2388.	2.9	97
88	Is there a second critical point in liquid water?. Physica A: Statistical Mechanics and Its Applications, 1994, 205, 122-139.	1.2	96
89	Sound propagation in liquid water: The puzzle continues. Journal of Chemical Physics, 1994, 100, 3881-3893.	1.2	95
90	Patchy Particle Model for Vitrimers. Physical Review Letters, 2013, 111, 188002.	2.9	95

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91	Î±-relaxation processes in binary hard-sphere mixtures. Physical Review E, 2004, 69, 011505.	0.8	92
92	On the Possibility of Extending the Noroâ˜'Frenkel Generalized Law of Correspondent States to Nonisotropic Patchy Interactions. Journal of Physical Chemistry B, 2007, 111, 9702-9705.	1.2	89
93	Tuning the Liquid-Liquid Transition by Modulating the Hydrogen-Bond Angular Flexibility in a Model for Water. Physical Review Letters, 2015, 115, 015701.	2.9	89
94	No Evidence of Gas-Liquid Coexistence in Dipolar Hard Spheres. Physical Review Letters, 2011, 107, 237801.	2.9	88
95	Molecular mode-coupling theory for supercooled liquids: Application to water. Physical Review E, 1999, 60, 5768-5777.	0.8	87
96	Predicting crystals of Janus colloids. Journal of Chemical Physics, 2013, 138, 164505.	1.2	87
97	Mixing Effects for the Structural Relaxation in Binary Hard-Sphere Liquids. Physical Review Letters, 2003, 91, 085701.	2.9	86
98	Landscapes and fragilities. Journal of Chemical Physics, 2004, 120, 10666-10680.	1.2	85
99	Gel to glass transition in simulation of a valence-limited colloidal system. Journal of Chemical Physics, 2006, 124, 124908.	1.2	85
100	Model for assembly and gelation of four-armed DNA dendrimers. Journal of Physics Condensed Matter, 2006, 18, L347-L353.	0.7	84
101	Fully Solvable Equilibrium Self-Assembly Process:â€‰ Fine-Tuning the Clusters Size and the Connectivity in Patchy Particle Systems. Journal of Physical Chemistry B, 2007, 111, 11765-11769.	1.2	83
102	Instantaneous Normal Mode Analysis of Supercooled Water. Physical Review Letters, 2000, 84, 4605-4608.	2.9	80
103	Structural properties of the dipolar hard-sphere fluid at low temperatures and densities. Soft Matter, 2012, 8, 6310.	1.2	80
104	Thermodynamic and structural aspects of the potential energy surface of simulated water. Physical Review E, 2001, 63, 041201.	0.8	78
105	Crossover (or Kovacs) Effect in an Aging Molecular Liquid. Physical Review Letters, 2004, 92, 045504.	2.9	78
106	Gelation as arrested phase separation in short-ranged attractive colloidâ€“polymer mixtures. Journal of Physics Condensed Matter, 2008, 20, 494242.	0.7	78
107	Evidence of a two-state picture for supercooled water and its connections with glassy dynamics. European Physical Journal E, 2009, 29, 305-310.	0.7	78
108	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

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109	Nonmonotonic Magnetic Susceptibility of Dipolar Hard-Spheres at Low Temperature and Density. Physical Review Letters, 2013, 110, 148306.	2.9	75
110	Gels of DNA Nanostars Never Crystallize. ACS Nano, 2014, 8, 3567-3574.	7.3	74
111	Phase diagram of silica from computer simulation. Physical Review E, 2004, 70, 061507.	0.8	73
112	Self-Assembling DNA Dendrimers:Â A Numerical Study. Langmuir, 2007, 23, 5896-5905.	1.6	73
113	Interference of phase separation and gelation: A zeroth-order kinetic model. Physical Review E, 1993, 47, 4615-4618.	0.8	72
114	Amorphous polymorphism. Computational Materials Science, 1995, 4, 373-382.	1.4	72
115	Physics of the Liquid-Liquid Critical Point. Physical Review Letters, 2003, 91, 155701.	2.9	72
116	Re-entrant phase behaviour of network fluids: A patchy particle model with temperature-dependent valence. Journal of Chemical Physics, 2011, 135, 034501.	1.2	72
117	Self-Assembly of Bifunctional Patchy Particles with Anisotropic Shape into Polymers Chains: Theory, Simulations, and Experiments. Macromolecules, 2012, 45, 1090-1106.	2.2	72
118	Potential Energy Landscape Equation of State. Physical Review Letters, 2002, 88, 225701.	2.9	70
119	Re-entrant DNA gels. Nature Communications, 2016, 7, 13191.	5.8	69
120	Tailoring the Flow of Soft Glasses by Soft Additives. Physical Review Letters, 2005, 95, 268301.	2.9	68
121	Thermodynamics of supercooled liquids in the inherent-structure formalism: a case study. Journal of Physics Condensed Matter, 2000, 12, 6525-6534.	0.7	67
122	Relation between the High Density Phase and the Very-High Density Phase of Amorphous Solid Water. Physical Review Letters, 2005, 94, 107803.	2.9	67
123	Hierarchies of networked phases induced by multiple liquidâ€“liquid critical points. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13711-13715.	3.3	67
124	The vanishing limit of the square-well fluid: The adhesive hard-sphere model as a reference system. Journal of Chemical Physics, 2008, 128, 134513.	1.2	67
125	Dynamics of Vitrimers: Defects as a Highway to Stress Relaxation. Physical Review Letters, 2018, 121, 058003.	2.9	67
126	Fractal landscapes in biological systems: Long-range correlations in DNA and interbeat heart intervals. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 1-12.	1.2	66

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127	Gel-forming patchy colloids and network glass formers: thermodynamic and dynamic analogies. European Physical Journal B, 2008, 64, 505-509.	0.6	66
128	Freely Jointed Polymers Made of Droplets. Physical Review Letters, 2018, 121, 138002.	2.9	64
129	Role of Unstable Directions in the Equilibrium and Aging Dynamics of Supercooled Liquids. Physical Review Letters, 2000, 85, 1464-1467.	2.9	62
130	Pinning in phase-separating systems. Physical Review E, 1994, 49, 247-258.	0.8	61
131	Ising Universality Class for the Liquid-Liquid Critical Point of a One Component Fluid: A Finite-Size Scaling Test. Physical Review Letters, 2012, 109, 177801.	2.9	61
132	Order parameters of gels and gelation kinetics of aqueous agarose systems: Relation to the spinodal decomposition of the sol. Biopolymers, 1987, 26, 743-761.	1.2	60
133	Phase Diagram of One-Patch Colloids Forming Tubes and Lamellae. Journal of Physical Chemistry B, 2013, 117, 9540-9547.	1.2	60
134	Free energy surface of supercooled water. Physical Review E, 2000, 62, 8016-8020.	0.8	58
135	Dynamics of Uniaxial Hard Ellipsoids. Physical Review Letters, 2007, 98, 265702.	2.9	58
136	Crystal stability limits at positive and negative pressures, and crystal-to-glass transitions. Physical Review E, 1995, 52, 6484-6491.	0.8	57
137	Transitions between inherent structures in water. Physical Review E, 2002, 65, 041502.	0.8	57
138	Self-assembly of short DNA duplexes: from a coarse-grained model to experiments through a theoretical link. Soft Matter, 2012, 8, 8388.	1.2	56
139	Cluster formation in one-patch colloids: low coverage results. Soft Matter, 2013, 9, 2652.	1.2	56
140	Configuration Space Connectivity across the Fragile-to-Strong Transition in Silica. Physical Review Letters, 2002, 88, 035501.	2.9	55
141	Is There a Reentrant Glass in Binary Mixtures?. Physical Review Letters, 2004, 92, 225703.	2.9	55
142	Quantitative investigation of the two-state picture for water in the normal liquid and the supercooled regime. European Physical Journal E, 2011, 34, 48.	0.7	55
143	Evidence for the Weak Steric Hindrance Scenario in the Supercooled-State Reorientational Dynamics. Physical Review Letters, 2005, 94, 215701.	2.9	54
144	Long-range fractal correlations in DNA. Physical Review Letters, 1993, 71, 1776-1776.	2.9	53

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145	Energy landscapes, ideal glasses, and their equation of state. Journal of Chemical Physics, 2003, 118, 8821-8830.	1.2	53
146	Phase diagram of amorphous solid water: Low-density, high-density, and very-high-density amorphous ices. Physical Review E, 2005, 72, 031510.	0.8	53
147	Equilibrium phases of one-patch colloids with short-range attractions. Soft Matter, 2014, 10, 5121-5128.	1.2	53
148	Equilibrium gels of low-valence DNA nanostars: a colloidal model for strong glass formers. Soft Matter, 2015, 11, 3132-3138.	1.2	53
149	Equilibrium gels of limited valence colloids. Current Opinion in Colloid and Interface Science, 2017, 30, 90-96.	3.4	53
150	Gaussian density fluctuations and mode coupling theory for supercooled liquids. Europhysics Letters, 2001, 55, 157-163.	0.7	52
151	Routes to colloidal gel formation. Computer Physics Communications, 2005, 169, 166-171.	3.0	52
152	Quasisaddles as relevant points of the potential energy surface in the dynamics of supercooled liquids. Journal of Chemical Physics, 2002, 116, 10297-10306.	1.2	50
153	Equilibrium self-assembly of colloids with distinct interaction sites: Thermodynamics, percolation, and cluster distribution functions. Journal of Chemical Physics, 2010, 132, 234502.	1.2	50
154	Accurate phase diagram of tetravalent DNA nanostars. Journal of Chemical Physics, 2014, 140, .	1.2	50
155	General features of the energy landscape in Lennard-Jones-like model liquids. Journal of Chemical Physics, 2003, 119, 2120-2126.	1.2	49
156	Fractal landscape analysis of DNA walks. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 25-29.	1.2	48
157	Structural order in glassy water. Physical Review E, 2005, 71, 061505.	0.8	48
158	Test of molecular mode coupling theory for general rigid molecules. Physical Review E, 2000, 62, 1856-1861.	0.8	47
159	Potential-Energy Landscape Study of the Amorphous-Amorphous Transformation inH2O. Physical Review Letters, 2003, 91, 115504.	2.9	47
160	Effect of bond lifetime on the dynamics of a short-range attractive colloidal system. Physical Review E, 2004, 70, 041401.	0.8	47
161	Role of the Range in the Fluidâ"Crystal Coexistence for a Patchy Particle Model. Journal of Physical Chemistry B, 2009, 113, 15133-15136.	1.2	47
162	How fluorescent labelling alters the solution behaviour of proteins. Physical Chemistry Chemical Physics, 2015, 17, 31177-31187.	1.3	47

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163	Multiple Glass Transitions in Star Polymer Mixtures: Insights from Theory and Simulations. Macromolecules, 2009, 42, 423-434.	2.2	46
164	Structure Factor Scaling during Irreversible Cluster-Cluster Aggregation. Physical Review Letters, 1995, 74, 282-285.	2.9	45
165	Energy Landscape of a Simple Model for Strong Liquids. Physical Review Letters, 2005, 95, 157802.	2.9	45
166	Quantitative tests of mode-coupling theory for fragile and strong glass formers. Journal of Non-Crystalline Solids, 2002, 307-310, 181-187.	1.5	44
167	Scaling in soft spheres: fragility invariance on the repulsive potential softness. Journal of Physics Condensed Matter, 2004, 16, L489-L494.	0.7	44
168	Self-Assembly in Chains, Rings, and Branches: A Single Component System with Two Critical Points. Physical Review Letters, 2013, 111, 168302.	2.9	44
169	Collective excitations in liquid water at low frequency and large wave vector. Journal of Chemical Physics, 1991, 95, 7775-7776.	1.2	43
170	Leveraging Hierarchical Self-Assembly Pathways for Realizing Colloidal Photonic Crystals. ACS Nano, 2020, 14, 5348-5359.	7.3	43
171	A molecular dynamics study of chemical gelation in a patchy particle model. Soft Matter, 2008, 4, 1173.	1.2	42
172	Phase diagram and structural properties of a simple model for one-patch particles. Journal of Chemical Physics, 2009, 131, 174114.	1.2	42
173	Cluster theory of Janus particles. Soft Matter, 2011, 7, 2419.	1.2	41
174	Understanding tetrahedral liquids through patchy colloids. Journal of Chemical Physics, 2013, 139, 234901.	1.2	41
175	Self-Dynamics and Collective Swap-Driven Dynamics in a Particle Model for Vitrimers. Macromolecules, 2018, 51, 1232-1241.	2.2	41
176	Activated Bond-Breaking Processes Preempt the Observation of a Sharp Glass-Glass Transition in Dense Short-Ranged Attractive Colloids. Physical Review Letters, 2003, 91, 108301.	2.9	40
177	Advances in the study of supercooled water. European Physical Journal E, 2021, 44, 143.	0.7	40
178	Cooperative molecular motions in water: The liquid-liquid critical point hypothesis. Physica A: Statistical Mechanics and Its Applications, 1997, 236, 19-37.	1.2	39
179	Theoretical Description of a DNA-Linked Nanoparticle Self-Assembly. Physical Review Letters, 2010, 105, 055502.	2.9	38
180	Temperature-induced structural transitions in self-assembling magnetic nanocolloids. Physical Chemistry Chemical Physics, 2015, 17, 16601-16608.	1.3	38

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181	Three-body potential for simulating bond swaps in molecular dynamics. European Physical Journal E, 2017, 40, 3.	0.7	38
182	Self-assembly of a bioelastomeric structure: Solution dynamics and the spinodal and coacervation lines. Biopolymers, 1990, 29, 1401-1407.	1.2	37
183	Self-assembly of bioelastomeric structures from solutions: Mean-field critical behavior and Flory-Huggins free energy of interactions. Biopolymers, 1993, 33, 743-752.	1.2	37
184	Low frequency depolarized Raman spectra in water: Results from normal mode analysis. Journal of Chemical Physics, 1994, 100, 5361-5366.	1.2	37
185	Slow dynamics in a primitive tetrahedral network model. Journal of Chemical Physics, 2006, 125, 204710.	1.2	37
186	Viscoelasticity and Stokes-Einstein relation in repulsive and attractive colloidal glasses. Journal of Chemical Physics, 2007, 127, 144906.	1.2	37
187	Connecting Irreversible to Reversible Aggregation: Time and Temperature. Journal of Physical Chemistry B, 2009, 113, 1233-1236.	1.2	37
188	Valency Dependence of Polymorphism and Polyamorphism in DNA-Functionalized Nanoparticles. Langmuir, 2010, 26, 3601-3608.	1.6	37
189	Self-assembly of hard helices: a rich and unconventional polymorphism. Soft Matter, 2014, 10, 8171-8187.	1.2	37
190	Microrheology of DNA hydrogel gelling and melting on cooling. Soft Matter, 2018, 14, 6431-6438.	1.2	37
191	Structure and dynamics in hexagonal ice: A molecular dynamics simulation with anab initiopolarizable and flexible potential. Journal of Chemical Physics, 1993, 98, 5694-5700.	1.2	36
192	Quantitative description of the self-assembly of patchy particles into chains and rings. Journal of Chemical Physics, 2012, 137, 044901.	1.2	36
193	Casimir-like forces at the percolation transition. Nature Communications, 2014, 5, 3267.	5.8	35
194	Dynamics of supercooled water in configuration space. Physical Review E, 2001, 64, 036102.	0.8	34
195	Dynamics in a supercooled molecular liquid:â€ƒTheory and simulations. Physical Review E, 2001, 63, 061210.	0.8	34
196	Dynamic arrest in a liquid of symmetric dumbbells: Reorientational hopping for small molecular elongations. Journal of Chemical Physics, 2005, 123, 204505.	1.2	34
197	Gasâ€“liquid phase coexistence in a tetrahedral patchy particle model. Journal of Physics Condensed Matter, 2007, 19, 322101.	0.7	34
198	Metabasin dynamics and local structure in supercooled water. Physical Review E, 2007, 75, 041501.	0.8	33

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199	Branching points in the low-temperature dipolar hard sphere fluid. Journal of Chemical Physics, 2013, 139, 134901.	1.2	33
200	Statistical physics and liquid water at negative pressures. Physica A: Statistical Mechanics and Its Applications, 2002, 315, 281-289.	1.2	32
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