Hajime Tanaka

List of Publications by Year
in descending order

310 papers	18,100 citations	9264 74 h-index	17592 121 g-index
312 all docs	312 docs citations	312 times ranked	9651 citing authors

#	Article	IF	Citations
1	Water: A Tale of Two Liquids. Chemical Reviews, 2016, 116, 7463-7500.	47.7	627
2	Universal link between the boson peak and transverse phonons in glass. Nature Materials, 2008, 7, 870-877.	27.5	471
3	Viscoelastic phase separation. Journal of Physics Condensed Matter, 2000, 12, R207-R264.	1.8	442
4	Critical-like behaviour of glass-forming liquids. Nature Materials, 2010, 9, 324-331.	27.5	418
5	Frustration on the way to crystallization in glass. Nature Physics, 2006, 2, 200-206.	16.7	332
6	Formation of a crystal nucleus from liquid. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14036-14041.	7.1	324
7	Direct observation of a local structural mechanism for dynamic arrest. Nature Materials, 2008, 7, 556-561.	27.5	300
8	Simulation Method of Colloidal Suspensions with Hydrodynamic Interactions: Fluid Particle Dynamics. Physical Review Letters, 2000, 85, 1338-1341.	7.8	297
9	Bond orientational order in liquids: Towards a unified description of water-like anomalies, liquid-liquid transition, glass transition, and crystallization. European Physical Journal E, 2012, 35, 113.	1.6	274
10	General view of a liquid-liquid phase transition. Physical Review E, 2000, 62, 6968-6976.	2.1	255
11	Correlation between Dynamic Heterogeneity and Medium-Range Order in Two-Dimensional Glass-Forming Liquids. Physical Review Letters, 2007, 99, 215701.	7.8	249
12	Understanding waterâ€™s anomalies with locally favoured structures. Nature Communications, 2014, 5, 3556.	12.8	248
13	Nonergodic states of charged colloidal suspensions: Repulsive and attractive glasses and gels. Physical Review E, 2004, 69, 031404.	2.1	246
14	Laponite:Â What Is the Difference between a Gel and a Glass?. Langmuir, 1999, 15, 7534-7536.	3.5	244
15	Roles of icosahedral and crystal-like order in the hard spheres glass transition. Nature Communications, 2012, 3, 974.	12.8	241
16	Unusual phase separation in a polymer solution caused by asymmetric molecular dynamics. Physical Review Letters, 1993, 71, 3158-3161.	7.8	228
17	Universality of Viscoelastic Phase Separation in Dynamically Asymmetric Fluid Mixtures. Physical Review Letters, 1996, 76, 787-790.	7.8	227
18	Critical-Like Phenomena Associated with Liquid-Liquid Transition in a Molecular Liquid. Science, 2004, 306, 845-848.	12.6	202

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19	The microscopic pathway to crystallization in supercooled liquids. Scientific Reports, 2012, 2, 505.	3.3	199
20	Simple physical model of liquid water. Journal of Chemical Physics, 2000, 112, 799-809.	3.0	198
21	Relationship among glass-forming ability, fragility, and short-range bond ordering of liquids. Journal of Non-Crystalline Solids, 2005, 351, 678-690.	3.1	187
22	Liquid-Liquid Transition in the Molecular Liquid Triphenyl Phosphite. Physical Review Letters, 2004, 92, 025701.	7.8	183
23	Laponite: Aging and Shear Rejuvenation of a Colloidal Glass. Physical Review Letters, 2002, 89, 015701.	7.8	175
24	Liquidâ€“liquid transition without macroscopic phase separation in a waterâ€“glycerol mixture. Nature Materials, 2012, 11, 436-443.	27.5	169
25	New metastable form of ice and its role in the homogeneous crystallization of water. Nature Materials, 2014, 13, 733-739.	27.5	168
26	New Types of Phase Separation Behavior during the Crystallization Process in Polymer Blends with Phase Diagram. Physical Review Letters, 1985, 55, 1102-1105.	7.8	167
27	Two-order-parameter description of liquids. I. A general model of glass transition covering its strong to fragile limit. Journal of Chemical Physics, 1999, 111, 3163-3174.	3.0	157
28	Relation between Thermodynamics and Kinetics of Glass-Forming Liquids. Physical Review Letters, 2003, 90, 055701.	7.8	142
29	Local phase separation at the growth front of a polymer spherulite during crystallization and nonlinear spherulitic growth in a polymer mixture with a phase diagram. Physical Review A, 1989, 39, 783-794.	2.5	140
30	Simple Physical Explanation of the Unusual Thermodynamic Behavior of Liquid Water. Physical Review Letters, 1998, 80, 5750-5753.	7.8	137
31	Spontaneous Double Phase Separation Induced by Rapid Hydrodynamic Coarsening in Two-Dimensional Fluid Mixtures. Physical Review Letters, 1998, 81, 389-392.	7.8	137
32	Application of digital image analysis to pattern formation in polymer systems. Journal of Applied Physics, 1986, 59, 3627-3643.	2.5	134
33	Revealing key structural features hidden in liquids and glasses. Nature Reviews Physics, 2019, 1, 333-348.	26.6	134
34	Interplay between wetting and phase separation in binary fluid mixtures: roles of hydrodynamics. Journal of Physics Condensed Matter, 2001, 13, 4637-4674.	1.8	128
35	Pattern evolution caused by dynamic coupling between wetting and phase separation in binary liquid mixture containing glass particles. Physical Review Letters, 1994, 72, 2581-2584.	7.8	124
36	Transparent nematic phase in a liquid-crystal-based microemulsion. Nature, 2001, 409, 321-325.	27.8	120

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37	Colloidal Aggregation in a Nematic Liquid Crystal: Topological Arrest of Particles by a Single-Stroke Disclination Line. Physical Review Letters, 2006, 97, 127801.	7.8	120
38	Structural origin of enhanced slow dynamics near a wall in glass-forming systems. Nature Materials, 2011, 10, 512-520.	27.5	120
39	Memory and topological frustration in nematic liquid crystals confined in porous materials. Nature Materials, 2011, 10, 303-309.	27.5	118
40	Appearance of a moving droplet phase and unusual networklike or spongelike patterns in a phase-separating polymer solution with a double-well-shaped phase diagram. Macromolecules, 1992, 25, 6377-6380.	4.8	117
41	On the abundance and general nature of the liquidâ€"liquid phase transition in molecular systems. Journal of Physics Condensed Matter, 2005, 17, L293-L302.	1.8	116
42	Origin of the emergent fragile-to-strong transition in supercooled water. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9444-9449.	7.1	107
43	Roles of local icosahedral chemical ordering in glass and quasicrystal formation in metallic glass formers. Journal of Physics Condensed Matter, 2003, 15, L491-L498.	1.8	106
44	Identification of long-lived clusters and their link to slow dynamics in a model glass former. Journal of Chemical Physics, 2013, 138, 12A535.	3.0	106
45	Viscoelastic model of phase separation. Physical Review E, 1997, 56, 4451-4462.	2.1	103
46	Kinetics of ergodic-to-nonergodic transitions in charged colloidal suspensions: Aging and gelation. Physical Review E, 2005, 71, 021402.	2.1	103
47	Phase Inversion during Viscoelastic Phase Separation: Roles of Bulk and Shear Relaxation Moduli. Physical Review Letters, 1997, 78, 4966-4969.	7.8	102
48	Study of block copolymer interface by pulsed NMR. Journal of Chemical Physics, 1985, 82, 4326-4331.	3.0	101
49	Wetting dynamics in a confined symmetric binary mixture undergoing phase separation. Physical Review Letters, 1993, 70, 2770-2773.	7.8	101
50	Direct Observation of Medium-Range Crystalline Order in Granular Liquids Near the Glass Transition. Physical Review Letters, 2008, 100, 158002.	7.8	99
51	Key Role of Hydrodynamic Interactions in Colloidal Gelation. Physical Review Letters, 2010, 104, 245702.	7.8	99
52	Critical dynamics and phaseâ€separation kinetics in dynamically asymmetric binary fluids: New dynamic universality class for polymer mixtures or dynamic crossover?. Journal of Chemical Physics, 1994, 100, 5323-5337.	3.0	98
53	Dynamic interplay between phase separation and wetting in a binary mixture confined in a one-dimensional capillary. Physical Review Letters, 1993, 70, 53-56.	7.8	97
54	Coarsening mechanisms of droplet spinodal decomposition in binary fluid mixtures. Journal of Chemical Physics, 1996, 105, 10099-10114.	3.0	96

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55	Viscoelastic phase separation in soft matter: Numerical-simulation study on its physical mechanism. Chemical Engineering Science, 2006, 61, 2108-2141.	3.8	95
56	New coarsening mechanisms for spinodal decomposition having droplet pattern in binary fluid mixture: Collision-induced collisions. Physical Review Letters, 1994, 72, 1702-1705.	7.8	94
57	Multiple nonergodic disordered states in Laponite suspensions: A phase diagram. Physical Review E, 2008, 78, 061405.	2.1	92
58	Crystal nucleation as the ordering of multiple order parameters. Journal of Chemical Physics, 2016, 145, 211801.	3.0	91
59	Anomalous phonon scattering and elastic correlations in amorphous solids. Nature Materials, 2016, 15, 1177-1181.	27.5	91
60	Simple view of waterlike anomalies of atomic liquids with directional bonding. Physical Review B, 2002, 66, .	3.2	90
61	Structural and Dynamical Features of Multiple Metastable Glassy States in a Colloidal System with Competing Interactions. Physical Review Letters, 2010, 104, 165702.	7.8	90
62	Liquidâ€“liquid transition and polyamorphism. Journal of Chemical Physics, 2020, 153, 130901.	3.0	87
63	Inhomogeneous flow and fracture of glassyÂmaterials. Nature Materials, 2009, 8, 601-609.	27.5	86
64	Two-order-parameter model of the liquidâ€“glass transition. I. Relation between glass transition and crystallization. Journal of Non-Crystalline Solids, 2005, 351, 3371-3384.	3.1	85
65	Three-Dimensional Numerical Simulations of Viscoelastic Phase Separation:Â Morphological Characteristics. Macromolecules, 2001, 34, 1953-1963.	4.8	84
66	Structural origin of dynamic heterogeneity in three-dimensional colloidal glass formers and its link to crystal nucleation. Journal of Physics Condensed Matter, 2010, 22, 232102.	1.8	84
67	High-resolution solid-state 13C nuclear magnetic resonance study of isotactic polypropylene polymorphs. Polymer, 1987, 28, 2227-2232.	3.8	83
68	Possible resolution of the Kauzmann paradox in supercooled liquids. Physical Review E, 2003, 68, 011505.	2.1	83
69	Study of crystallization process of polymer from melt by a realâ€time pulsed NMR measurement. Journal of Chemical Physics, 1986, 85, 6197-6209.	3.0	80
70	Two-order-parameter description of liquids: critical phenomena and phase separation of supercooled liquids. Journal of Physics Condensed Matter, 1999, 11, L159-L168.	1.8	79
71	Selection mechanism of polymorphs in the crystal nucleation of the Gaussian core model. Soft Matter, 2012, 8, 4206.	2.7	79
72	Morphological and kinetic evolution of surface patterns in gels during the swelling process: Evidence of dynamic pattern ordering. Physical Review Letters, 1992, 68, 2794-2797.	7.8	78

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73	Importance of many-body orientational correlations in the physical description of liquids. Faraday Discussions, 2013, 167, 9.	3.2	77
74	Anisotropic Cooperative Structural Rearrangements in Sheared Supercooled Liquids. Physical Review Letters, 2009, 102, 016001.	7.8	76
75	Revealing Hidden Structural Order Controlling Both Fast and Slow Glassy Dynamics in Supercooled Liquids. Physical Review X, 2018, 8, .	8.9	75
76	Origin of the excess wing and slowÎ²relaxation of glass formers: A unified picture of local orientational fluctuations. Physical Review E, 2004, 69, 021502.	2.1	73
77	Measuring colloidal interactions with confocal microscopy. Journal of Chemical Physics, 2007, 127, 044507.	3.0	73
78	Two-order-parameter description of liquids. II. Criteria for vitrification and predictions of our model. Journal of Chemical Physics, 1999, 111, 3175-3182.	3.0	72
79	Direct link between mechanical stability in gels and percolation of isostatic particles. Science Advances, 2019, 5, eaav6090.	10.3	72
80	Spin diffusion in block copolymers as studied by pulsed NMR. Physical Review B, 1986, 33, 32-42.	3.2	70
81	Transition from metastability to instability in a binary-liquid mixture. Physical Review Letters, 1990, 65, 3136-3139.	7.8	69
82	Shear-Induced Sponge-to-Lamellar Transition in a Hyperswollen Lyotropic System. Physical Review Letters, 1996, 77, 4390-4393.	7.8	69
83	Formation of Network and Cellular Structures by Viscoelastic Phase Separation. Advanced Materials, 2009, 21, 1872-1880.	21.0	69
84	Common microscopic structural origin for waterâ€™s thermodynamic and dynamic anomalies. Journal of Chemical Physics, 2018, 149, 224502.	3.0	68
85	Two-order-parameter model of the liquidâ€“glass transition. II. Structural relaxation and dynamic heterogeneity. Journal of Non-Crystalline Solids, 2005, 351, 3385-3395.	3.1	67
86	Structural signature of slow dynamics and dynamic heterogeneity in two-dimensional colloidal liquids: glassy structural order. Journal of Physics Condensed Matter, 2011, 23, 194121.	1.8	66
87	A new coarsening mechanism of droplet spinodal decomposition. Journal of Chemical Physics, 1995, 103, 2361-2364.	3.0	64
88	A simple physical model of liquid - glass transition: intrinsic fluctuating interactions and random fields hidden in glass-forming liquids. Journal of Physics Condensed Matter, 1998, 10, L207-L214.	1.8	64
89	Direct observation of hydrodynamic instabilities in a driven non-uniform colloidal dispersion. Soft Matter, 2009, 5, 1340.	2.7	64
90	Purely hydrodynamic ordering of rotating disks at a finite Reynolds number. Nature Communications, 2015, 6, 5994.	12.8	64

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91	A novel coarsening mechanism of droplets in immiscible fluid mixtures. Nature Communications, 2015, 6, 7407.	12.8	63
92	Viscoelastic model of phase separation in colloidal suspensions and emulsions. Physical Review E, 1999, 59, 6842-6852.	2.1	62
93	Hydrodynamic interface quench effects on spinodal decomposition for symmetric binary fluid mixtures. Physical Review E, 1995, 51, 1313-1329.	2.1	59
94	A new scenario of the apparent fragile-to-strong transition in tetrahedral liquids: water as an example. Journal of Physics Condensed Matter, 2003, 15, L703-L711.	1.8	59
95	Lifetimes and lengthscales of structural motifs in a model glassformer. Faraday Discussions, 2013, 167, 405.	3.2	57
96	Structure and kinetics in the freezing of nearly hard spheres. Soft Matter, 2013, 9, 297-305.	2.7	57
97	The anomalies and criticality of liquid water. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26591-26599.	7.1	57
98	Viscoelastic phase separation in soft matter and foods. Faraday Discussions, 2012, 158, 371.	3.2	56
99	Structural order as a genuine control parameter of dynamics in simple glass formers. Nature Communications, 2019, 10, 5596.	12.8	56
100	Direct determination of the probability distribution function of concentration in polymer mixtures undergoing phase separation. Physical Review Letters, 1987, 59, 692-695.	7.8	55
101	Viscoelastic Phase Separation of Protein Solutions. Physical Review Letters, 2005, 95, 078103.	7.8	55
102	Possible origin of enhanced crystal growth in a glass. Physical Review B, 2007, 76, .	3.2	55
103	Water-like anomalies as a function of tetrahedrality. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3333-E3341.	7.1	55
104	Effect of crystallization condition on the ferroelectric phase transition in vinylidene fluoride/trifluoroethylene (VF2/F3E) copolymers. Macromolecules, 1988, 21, 2469-2474.	4.8	54
105	Wetting-induced depletion interaction between particles in a phase-separating liquid mixture. Physical Review E, 2006, 73, 061506.	2.1	54
106	Digital image analysis of droplet patterns in polymer systems: Point pattern. Journal of Applied Physics, 1989, 65, 4480-4495.	2.5	53
107	Violation of the incompressibility of liquid by simple shear flow. Nature, 2006, 443, 434-438.	27.8	53
108	The reversibility and first-order nature of liquidâ€"liquid transition in a molecular liquid. Nature Communications, 2016, 7, 13438.	12.8	53

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109	Surface-assisted single-crystal formation of charged colloids. Nature Physics, 2017, 13, 503-509.	16.7	53
110	Network-forming phase separation of colloidal suspensions. Journal of Physics Condensed Matter, 2005, 17, L143-L153.	1.8	52
111	Nonequilibrium Critical Casimir Effect in Binary Fluids. Physical Review Letters, 2013, 111, 055701.	7.8	52
112	General nature of liquidâ€“liquid transition in aqueous organic solutions. Nature Communications, 2013, 4, 2844.	12.8	52
113	Double phase separation in a confined, symmetric binary mixture: Interface quench effect unique to bicontinuous phase separation. Physical Review Letters, 1994, 72, 3690-3693.	7.8	51
114	Bridging length scales in colloidal liquids and interfaces from near-critical divergence to single particles. Nature Physics, 2007, 3, 636-640.	16.7	51
115	Self-organization in phase separation of a lyotropic liquid crystal into cellular, network and droplet morphologies. Nature Materials, 2006, 5, 147-152.	27.5	50
116	Surface-wetting effects on the liquidâ€“liquid transition of a single-component molecular liquid. Nature Communications, 2010, 1, 16.	12.8	50
117	Direct Evidence in the Scattering Function for the Coexistence of Two Types of Local Structures in Liquid Water. Journal of the American Chemical Society, 2020, 142, 2868-2875.	13.7	50
118	Nonlocal Nature of the Viscous Transport in Supercooled Liquids: Complex Fluid Approach to Supercooled Liquids. Physical Review Letters, 2009, 103, 135703.	7.8	49
119	New mechanisms of droplet coarsening in phase-separating fluid mixtures. Journal of Chemical Physics, 1997, 107, 3734-3737.	3.0	48
120	Importance of many-body correlations in glass transition: An example from polydisperse hard spheres. Journal of Chemical Physics, 2013, 138, 12A536.	3.0	48
121	Assessing the role of static length scales behind glassy dynamics in polydisperse hard disks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6920-6924.	7.1	48
122	Origin of the boson peak in amorphous solids. Nature Physics, 2022, 18, 669-677.	16.7	46
123	Two-order-parameter model of the liquidâ€“glass transition. III. Universal patterns of relaxations in glass-forming liquids. Journal of Non-Crystalline Solids, 2005, 351, 3396-3413.	3.1	45
124	Vitrification and gelation in sticky spheres. Journal of Chemical Physics, 2018, 148, 044501.	3.0	45
125	Possible Link of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="sans-serif">V</mml:mi></mml:math>-Shaped Phase Diagram to the Glass-Forming Ability and Fragility in a Water-Salt Mixture. Physical Review Letters, 2011, 106, 125703.	7.8	43
126	Probing Colloidal Gels at Multiple Length Scales: The Role of Hydrodynamics. Physical Review Letters, 2015, 114, 258302.	7.8	42

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127	Defect science and engineering of liquid crystals under geometrical frustration. Soft Matter, 2013, 9, 8107.	2.7	41
128	Local structure and dynamics in colloidal fluids and gels. Europhysics Letters, 2008, 84, 46002.	2.0	40
129	Common mechanism of thermodynamic and mechanical origin for ageing and crystallization of glasses. Nature Communications, 2017, 8, 15954.	12.8	40
130	Distinct signature of local tetrahedral ordering in the scattering function of covalent liquids and glasses. Science Advances, 2019, 5, eaav3194.	10.3	40
131	Spontaneous coarsening of a colloidal network driven by self-generated mechanical stress. Europhysics Letters, 2007, 79, 58003.	2.0	39
132	Nonclassical pathways of crystallization in colloidal systems. MRS Bulletin, 2016, 41, 369-374.	3.5	39
133	Microscopic structural descriptor of liquid water. Journal of Chemical Physics, 2018, 148, 124503.	3.0	39
134	Shear Effects on Layer Undulation Fluctuations of a Hyperswollen Lamellar Phase. Physical Review Letters, 1995, 74, 932-935.	7.8	38
135	Fluid particle dynamics simulation of charged colloidal suspensions. Journal of Physics Condensed Matter, 2004, 16, L115-L123.	1.8	37
136	Physical origin of glass formation from multicomponent systems. Science Advances, 2020, 6, .	10.3	37
137	Study of chemical gelation dynamics of acrylamide in water by realâ€time pulsed nuclear magnetic resonance measurement. Journal of Chemical Physics, 1988, 89, 3363-3372.	3.0	36
138	Optical Manipulation of Defects in a Lyotropic Lamellar Phase. Physical Review Letters, 2003, 90, 045501.	7.8	36
139	Geometric frustration in small colloidal clusters. Journal of Physics Condensed Matter, 2009, 21, 425103.	1.8	36
140	Formation of porous crystals via viscoelastic phase separation. Nature Materials, 2017, 16, 1022-1028.	27.5	36
141	Fast crystal growth at ultra-low temperatures. Nature Materials, 2021, 20, 1431-1439.	27.5	36
142	Application of digital image analysis to the study of highâ€order structure of polymers. Journal of Applied Physics, 1986, 59, 653-655.	2.5	35
143	Control of fluidity and miscibility of a binary liquid mixture by the liquidâ€"liquid transition. Nature Materials, 2008, 7, 647-652.	27.5	35
144	Direct evidence of heterogeneous mechanical relaxation in supercooled liquids. Physical Review E, 2011, 84, 061503.	2.1	35

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145	Glass Forming Ability in Systems with Competing Orderings. Physical Review X, 2018, 8, .	8.9	35
146	The potential of chemical bonding to design crystallization and vitrification kinetics. Nature Communications, 2021, 12, 4978.	12.8	35
147	Study of the thermochromic phase transition of a polydiacetylene by solid state carbon-13 NMR. Macromolecules, 1987, 20, 3094-3097.	4.8	34
148	Nematohydrodynamic Effects on the Phase Separation of a Symmetric Mixture of an Isotropic Liquid and a Liquid Crystal. Physical Review Letters, 2004, 93, .	7.8	34
149	Hydrodynamic Selection of the Kinetic Pathway of a Polymer Coil-Globule Transition. Physical Review Letters, 2009, 102, 108303.	7.8	34
150	Bond orientational ordering in a metastable supercooled liquid: a shadow of crystallization and liquidâ€"liquid transition. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P12001.	2.3	34
151	Relationship between the Phase Diagram, the Glass-Forming Ability, and the Fragility of a Water/Salt Mixture. Journal of Physical Chemistry B, 2011, 115, 14077-14090.	2.6	34
152	Periodic Spinodal Decomposition in a Binary Polymeric Fluid Mixture. Physical Review Letters, 1995, 75, 874-877.	7.8	33
153	Impact of local symmetry breaking on the physical properties of tetrahedral liquids. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1980-1985.	7.1	33
154	Power-law coarsening in network-forming phase separation governed by mechanical relaxation. Nature Communications, 2021, 12, 912.	12.8	33
155	A New Phase-Coherent Light Scattering Method: First Observation of Complex Brillouin Spectra. Physical Review Letters, 1997, 79, 881-884.	7.8	32
156	Kinetics of the liquid-liquid transition of triphenyl phosphite. Physical Review B, 2006, 73, .	3.2	32
157	Structural evolution in the aging process of supercooled colloidal liquids. Physical Review E, 2014, 89, 062315.	2.1	32
158	Physical principle for optimizing electrophoretic separation of charged particles. Europhysics Letters, 2008, 82, 18004.	2.0	31
159	The interplay of sedimentation and crystallization in hard-sphere suspensions. Soft Matter, 2013, 9, 7369.	2.7	31
160	Novel kinetic trapping in charged colloidal clusters due to self-induced surface charge organization. Scientific Reports, 2013, 3, 2072.	3.3	31
161	Pattern formation caused by double quenches in binary polymer mixtures: Response of phase-separated structure to a second quench within a two-phase region. Physical Review E, 1993, 47, 2946-2949.	2.1	30
162	Dynamic control of the photonic smectic order of membranes. Nature Materials, 2004, 4, 75-80.	27.5	30

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163	Surface-sensitive particle selection by driving particles in a nematic solvent. Journal of Physics Condensed Matter, 2006, 18, L193-L203.	1.8	30
164	A novel particle tracking method with individual particle size measurement and its application to ordering in glassy hard sphere colloids. Soft Matter, 2013, 9, 1447-1457.	2.7	30
165	Role of Attractive Interactions in Structure Ordering and Dynamics of Glass-Forming Liquids. Physical Review Letters, 2020, 124, 225501.	7.8	30
166	Evidence of Liquid-Liquid Transition in Triphenyl Phosphite from Time-Resolved Light Scattering Experiments. Physical Review Letters, 2014, 112, 125702.	7.8	29
167	Microscopic identification of the order parameter governing liquidâ€“liquid transition in a molecular liquid. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5956-5961.	7.1	29
168	Controlling competition between crystallization and glass formation in binary colloids with an external field. Journal of Physics Condensed Matter, 2008, 20, 404225.	1.8	28
169	Fracture Phase Separation. Physical Review Letters, 2009, 102, 065701.	7.8	28
170	Study of banded structure in polymer spherulites by polarized microâ€Raman spectroscopy. Applied Physics Letters, 1986, 48, 393-395.	3.3	27
171	Realâ€time pulsed nuclear magnetic resonance measurement system for the study of nonequilibrium phenomena in polymers. Journal of Applied Physics, 1986, 60, 1306-1309.	2.5	27
172	Surface-pattern evolution in a swelling gel under a geometrical constraint: Direct observation of fold structure and its coarsening dynamics. Physical Review E, 1994, 49, R39-R42.	2.1	27
173	Control of the Fragility of a Glass-Forming Liquid Using the Liquid-Liquid Phase Transition. Physical Review Letters, 2005, 95, 065701.	7.8	27
174	Structural predictor for nonlinear sheared dynamics in simple glass-forming liquids. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 87-92.	7.1	27
175	Morphology selection kinetics of crystallization in a sphere. Nature Physics, 2021, 17, 121-127.	16.7	27
176	Effect of Size Polydispersity on the Nature of Lennard-Jones Liquids. Journal of Physical Chemistry B, 2015, 119, 11052-11062.	2.6	26
177	Emergent solidity of amorphous materials as a consequence of mechanical self-organisation. Nature Communications, 2020, 11, 4863.	12.8	26
178	Phase-ordering kinetics of the liquid-liquid transition in single-component molecular liquids. Journal of Chemical Physics, 2007, 126, 204505.	3.0	25
179	Anomalous Phase Separation Behavior in a Binary Mixture of Poly(Vinyl Methyl Ether) and Water under Deep Quench Conditions. Japanese Journal of Applied Physics, 1988, 27, L1787-L1790.	1.5	24
180	Nonuniversal nature of dynamic critical anomaly in polymer solutions. Physical Review E, 2002, 65, 021802.	2.1	24

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181	Fluid structure in colloidâ€“polymer mixtures: the competition between electrostatics and depletion. Journal of Physics Condensed Matter, 2005, 17, S3401-S3408.	1.8	24
182	Multi-particle collision dynamics simulations of sedimenting colloidal dispersions in confinement. Faraday Discussions, 2010, 144, 245-252.	3.2	24
183	Novel stable crystalline phase for the Stillinger-Weber potential. Physical Review B, 2014, 90, .	3.2	24
184	Impact of complex topology of porous media on phase separation of binary mixtures. Science Advances, 2017, 3, eaap9570.	10.3	24
185	Acoustic anomaly in a critical binary mixture of aniline and cyclohexane at low and ultrasonic frequencies. Chemical Physics, 1982, 68, 223-231.	1.9	23
186	Acoustic study of a critical binary mixture of nitrobenzene and n-hexane at low and ultrasonic frequencies. Chemical Physics, 1983, 75, 37-43.	1.9	23
187	Theoretical consideration on the acoustic anomaly of critical binary mixtures. Physical Review A, 1985, 32, 512-524.	2.5	23
188	Critical anomaly of complex shear modulus in polymer solutions: Viscoelastic suppression of order parameter fluctuation due to dynamic asymmetry. Physical Review Letters, 1993, 71, 2244-2247.	7.8	23
189	Physical Origin of the Boson Peak Deduced from a Two-Order-Parameter Model of Liquid. Journal of the Physical Society of Japan, 2001, 70, 1178-1181.	1.6	23
190	Roles of hydrodynamic interactions in structure formation of soft matter: protein folding as an example. Journal of Physics Condensed Matter, 2005, 17, S2795-S2803.	1.8	23
191	A novel physical mechanism of liquid flow slippage on a solid surface. Science Advances, 2020, 6, eaaz0504.	10.3	23
192	Viscoelastic phase separation in biological cells. Communications Physics, 2022, 5, .	5.3	23
193	Simple hydrodynamic model of fast-mode kinetics in surface-mediated fluid phase separation. Physical Review E, 1996, 54, 1709-1714.	2.1	22
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