Kenneth S Schweizer

List of Publications by Year
in descending order

177 papers	10,792 citations	17405 63 h-index	37111 96 g-index
179 all docs	179 docs citations	179 times ranked	4471 citing authors

#	Article	IF	Citations
1	Vibrational dephasing and frequency shifts of polyatomic molecules in solution. Journal of Chemical Physics, 1982, 76, 2296-2314.	1.2	385
2	Microscopic theory of the dynamics of polymeric liquids: General formulation of a modeâ€“modeâ€coupling approach. Journal of Chemical Physics, 1989, 91, 5802-5821.	1.2	280
3	Theory of Phase Separation in Polymer Nanocomposites. Macromolecules, 2006, 39, 5133-5142.	2.2	278
4	Entropic barriers, activated hopping, and the glass transition in colloidal suspensions. Journal of Chemical Physics, 2003, 119, 1181-1196.	1.2	276
5	Contact Aggregation, Bridging, and Steric Stabilization in Dense Polymerâ˜Particle Mixtures. Macromolecules, 2005, 38, 8858-8869.	2.2	265
6	Integral Equation Theories of the Structure, Thermodynamics, and Phase Transitions of Polymer Fluids. Advances in Chemical Physics, 2007, , 1-142.	0.3	224
7	Local structure of semiflexible polymer melts. Macromolecules, 1990, 23, 3496-3505.	2.2	185
8	Big Effect of Small Nanoparticles: A Shift in Paradigm for Polymer Nanocomposites. ACS Nano, 2017, 11, 752-759.	7.3	177
9	Structure of colloid-polymer suspensions. Journal of Physics Condensed Matter, 2002, 14, R239-R269.	0.7	175
10	Diffusion of a polymer â€˜pancakeâ€™. Nature, 2000, 406, 146-146.	13.7	164
11	Entropy driven phase transitions in colloidâ€“polymer suspensions: Tests of depletion theories. Journal of Chemical Physics, 2002, 116, 2201-2212.	1.2	157
12	Nanoparticle Diffusion in Polymer Nanocomposites. Physical Review Letters, 2014, 112, 108301.	2.9	157
13	Structure, surface excess and effective interactions in polymer nanocomposite melts and concentrated solutions. Journal of Chemical Physics, 2004, 121, 6986-6997.	1.2	155
14	Derivation of a microscopic theory of barriers and activated hopping transport in glassy liquids and suspensions. Journal of Chemical Physics, 2005, 123, 244501.	1.2	153
15	Molecular theories of polymer nanocomposites. Current Opinion in Solid State and Materials Science, 2010, 14, 38-48.	5.6	150
16	Elastically cooperative activated barrier hopping theory of relaxation in viscous fluids. II. Thermal liquids. Journal of Chemical Physics, 2014, 140, 194507.	1.2	146
17	Elastically cooperative activated barrier hopping theory of relaxation in viscous fluids.â€‰I.â€‰General formulation and application to hard sphere fluids. Journal of Chemical Physics, 2014, 140, 194506.	1.2	142
18	Strain softening, yielding, and shear thinning in glassy colloidal suspensions. Physical Review E, 2005, 71, 021401.	0.8	138

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19	Structure and thermodynamics of colloid-polymer mixtures: A macromolecular approach. Europhysics Letters, 2000, 51, 621-627.	0.7	131
20	Surface Diffusion of Poly(ethylene glycol). Macromolecules, 2002, 35, 1776-1784.	2.2	130
21	Theory of nanoparticle diffusion in unentangled and entangled polymer melts. Journal of Chemical Physics, 2011, 135, 224902.	1.2	130
22	Chain Conformations and Bound-Layer Correlations in Polymer Nanocomposites. Physical Review Letters, 2007, 98, 128302.	2.9	129
23	Polymer reference interaction site model theory: New molecular closures for phase separating fluids and alloys. Journal of Chemical Physics, 1993, 98, 9053-9079.	1.2	120
24	Microscopic theory of polymer-mediated interactions between spherical particles. Journal of Chemical Physics, 1998, 109, 10464-10476.	1.2	120
25	Effects of polyethylene glycol on protein interactions. Journal of Chemical Physics, 2000, 113, 9863-9873.	1.2	120
26	Activated Hopping, Barrier Fluctuations, and Heterogeneity in Glassy Suspensions and Liquidsâ€. Journal of Physical Chemistry B, 2004, 108, 19729-19741.	1.2	120
27	Viscoelasticity and rheology of depletion flocculated gels and fluids. Journal of Chemical Physics, 2003, 119, 8747-8760.	1.2	114
28	Microscopic theory of gelation and elasticity in polymerâ€“particle suspensions. Journal of Chemical Physics, 2004, 120, 7212-7222.	1.2	112
29	Unified Theory of Activated Relaxation in Liquids over 14 Decades in Time. Journal of Physical Chemistry Letters, 2013, 4, 3648-3653.	2.1	109
30	Depletion Interactions in the Protein Limit: Effects of Polymer Density Fluctuations. Physical Review Letters, 1999, 83, 4554-4557.	2.9	108
31	Theory of Yielding, Strain Softening, and Steady Plastic Flow in Polymer Glasses under Constant Strain Rate Deformation. Macromolecules, 2011, 44, 3988-4000.	2.2	108
32	Theory of dynamic barriers, activated hopping, and the glass transition in polymer melts. Journal of Chemical Physics, 2004, 121, 1984-2000.	1.2	107
33	Integral equation theory of polymer melts: intramolecular structure, local order, and the correlation hole. Macromolecules, 1988, 21, 3070-3081.	2.2	103
34	Microscopic Theory of the Long-Time Diffusivity and Intermediate-Time Anomalous Transport of a Nanoparticle in Polymer Melts. Macromolecules, 2015, 48, 152-163.	2.2	96
35	A comparison between integral equation theory and molecular dynamics simulations of dense, flexible polymer liquids. Journal of Chemical Physics, 1989, 91, 1357-1364.	1.2	95
36	Dynamical Theory of Segmental Relaxation and Emergent Elasticity in Supercooled Polymer Melts. Macromolecules, 2015, 48, 1901-1913.	2.2	93

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37	Resolving the Mystery of the Chain Friction Mechanism in Polymer Liquids. Physical Review Letters, 2009, 102, 248301.	2.9	92
38	Reference interaction site model theory of polymeric liquids: Selfâ€consistent formulation and nonideality effects in dense solutions and melts. Journal of Chemical Physics, 1992, 96, 3211-3225.	1.2	89
39	Molecular Theories of Segmental Dynamics and Mechanical Response in Deeply Supercooled Polymer Melts and Glasses. Annual Review of Condensed Matter Physics, 2010, 1, 277-300.	5.2	86
40	Liquidâ€state theory of the density dependent conformation of nonpolar linear polymers. Journal of Chemical Physics, 1994, 100, 6857-6872.	1.2	85
41	Activated hopping and dynamical fluctuation effects in hard sphere suspensions and fluids. Journal of Chemical Physics, 2006, 125, 044509.	1.2	85
42	Nonlinear Creep in a Polymer Glass. Macromolecules, 2008, 41, 4969-4977.	2.2	85
43	Collisions, caging, thermodynamics, and jamming in the barrier hopping theory of glassy hard sphere fluids. Journal of Chemical Physics, 2007, 127, 164505.	1.2	84
44	Many body effects on the phase separation and structure of dense polymer-particle melts. Journal of Chemical Physics, 2008, 128, 234901.	1.2	84
45	Progress towards a phenomenological picture and theoretical understanding of glassy dynamics and vitrification near interfaces and under nanoconfinement. Journal of Chemical Physics, 2019, 151, 240901.	1.2	84
46	Solvation potentials for macromolecules. Journal of Chemical Physics, 1994, 100, 6846-6856.	1.2	83
47	Polymer-mode-coupling theory of the slow dynamics of entangled macromolecular fluids. Macromolecular Theory and Simulations, 1997, 6, 1037-1117.	0.6	82
48	Stress-enhanced mobility and dynamic yielding in polymer glasses. Europhysics Letters, 2007, 79, 26006.	0.7	79
49	Concentration Fluctuations, Local Order, and the Collective Structure of Polymer Nanocomposites. Macromolecules, 2009, 42, 8435-8442.	2.2	79
50	Microstructure of dense colloidâ€“polymer suspensions and gels. Journal of Physics Condensed Matter, 2003, 15, 4751-4778.	0.7	77
51	Communication: Slow relaxation, spatial mobility gradients, and vitrification in confined films. Journal of Chemical Physics, 2014, 141, 161103.	1.2	76
52	Integral equation theory of block copolymer liquids. I. General formalism and analytic predictions for symmetric copolymers. Journal of Chemical Physics, 1994, 100, 7767-7783.	1.2	74
53	Surface segregation in polymer blends due to stiffness disparity. Journal of Chemical Physics, 1994, 100, 4691-4694.	1.2	72
54	Transport coefficients in glassy colloidal fluids. Journal of Chemical Physics, 2003, 119, 1197-1203.	1.2	72

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55	Correlation between Fragility and the Arrhenius Crossover Phenomenon in Metallic, Molecular, and Network Liquids. Physical Review Letters, 2016, 117, 205701.	2.9	72
56	Dynamical fluctuation effects in glassy colloidal suspensions. Current Opinion in Colloid and Interface Science, 2007, 12, 297-306.	3.4	71
57	Phase behavior and concentration fluctuations in suspensions of hard spheres and nearly ideal polymers. Journal of Chemical Physics, 2003, 118, 3350-3361.	1.2	70
58	Theory of Localization and Activated Hopping of Nanoparticles in Cross-Linked Networks and Entangled Polymer Melts. Macromolecules, 2014, 47, 405-414.	2.2	69
59	Equation of state of polymer melts: General formulation of a microscopic integral equation theory. Journal of Chemical Physics, 1988, 89, 3342-3349.	1.2	68
60	Elasticity and clustering in concentrated depletion gels. Physical Review E, 2004, 70, 040401.	0.8	68
61	Microscopic Constitutive Equation Theory for the Nonlinear Mechanical Response of Polymer Glasses. Macromolecules, 2008, 41, 5908-5918.	2.2	66
62	Large-amplitude jumps and non-Gaussian dynamics in highly concentrated hard sphere fluids. Physical Review E, 2008, 77, 051504.	0.8	65
63	Real Space Structure and Scattering Patterns of Model Polymer Nanocomposites. Macromolecules, 2007, 40, 6998-7008.	2.2	64
64	Multiscale Structure, Interfacial Cohesion, Adsorbed Layers, and Thermodynamics in Dense Polymer-Nanoparticle Mixtures. Physical Review Letters, 2011, 107, 225504.	2.9	63
65	Non-Gaussian effects, space-time decoupling, and mobility bifurcation in glassy hard-sphere fluids and suspensions. Physical Review E, 2006, 74, 061501.	0.8	62
66	Theory of activated glassy relaxation, mobility gradients, surface diffusion, and vitrification in free standing thin films. Journal of Chemical Physics, 2015, 143, 244705.	1.2	61
67	Dynamical Simulations of Coarse Grain Polymeric Systems: Rouse and Entangled Dynamics. Macromolecules, 2013, 46, 6287-6299.	2.2	59
68	Selfâ€consistent polymer integral equation theory: Comparisons with Monte Carlo simulations and alternative closure approximations. Journal of Chemical Physics, 1992, 97, 1455-1464.	1.2	57
69	Structure-Property Correlations of Atomistic and Coarse-Grained Models of Polymer Melts. Macromolecules, 1995, 28, 1528-1540.	2.2	57
70	Revealing spatially heterogeneous relaxation in a model nanocomposite. Journal of Chemical Physics, 2015, 143, 194704.	1.2	57
71	Integral equation theory of polymer blends: Numerical investigation of molecular closure approximations. Journal of Chemical Physics, 1993, 98, 9080-9093.	1.2	55
72	Nonuniversal Coupling of Cage Scale Hopping and Collective Elastic Distortion as the Origin of Dynamic Fragility Diversity in Glass-Forming Polymer Liquids. Macromolecules, 2016, 49, 9655-9664.	2.2	54

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73	Nonlinear elasticity and yielding of depletion gels. Journal of Chemical Physics, 2005, 123, 164902.	1.2	52
74	Diffusion of Sticky Nanoparticles in a Polymer Melt: Crossover from Suppressed to Enhanced Transport. Macromolecules, 2018, 51, 2268-2275.	2.2	52
75	Fluctuations effects in diblock copolymer fluids: Comparison of theories and experiment. Journal of Chemical Physics, 1997, 106, 7391-7410.	1.2	50
76	Correlation effects in dilute particle-polymer mixtures. Journal of Chemical Physics, 1998, 109, 10477-10488.	1.2	50
77	Integral equation theory of block copolymer liquids. II. Numerical results for finite hardâ€core diameter chains. Journal of Chemical Physics, 1994, 100, 7784-7795.	1.2	49
78	Variational approach to the conformation of flexible polymers in solution. Journal of Chemical Physics, 1993, 99, 5571-5580.	1.2	48
79	Depletion interactions in suspensions of spheres and rodâ€“polymers. Journal of Chemical Physics, 2002, 117, 1351-1362.	1.2	48
80	On the scaling of the critical temperature with the degree of polymerization in symmetric polymer blends. Journal of Chemical Physics, 1992, 97, 5927-5930.	1.2	44
81	Reptation as a dynamic meanâ€field theory: Self and tracer diffusion in a simple model of rodlike polymers. Journal of Chemical Physics, 1994, 100, 3127-3141.	1.2	44
82	Relationships between the single particle barrier hopping theory and thermodynamic, disordered media, elastic, and jamming models of glassy systems. Journal of Chemical Physics, 2007, 127, 164506.	1.2	44
83	Structure, scattering patterns and phase behavior of polymer nanocomposites with nonspherical fillers. Soft Matter, 2010, 6, 1015.	1.2	44
84	Linear and nonlinear rheology and structural relaxation in dense glassy and jammed soft repulsive pNIPAM microgel suspensions. Soft Matter, 2019, 15, 1038-1052.	1.2	44
85	Thermodynamics and Structure of Poly[n]catenane Melts. Macromolecules, 2020, 53, 3390-3408.	2.2	44
86	Structure of confined alkane liquids. Journal of Chemical Physics, 1994, 100, 3361-3364.	1.2	43
87	Correlation effects and entropyâ€driven phase separation in athermal polymer blends. Journal of Chemical Physics, 1995, 103, 5814-5832.	1.2	43
88	Mode-coupling theory of the slow dynamics of polymeric liquids: Fractal macromolecular architectures. Journal of Chemical Physics, 1997, 106, 347-375.	1.2	42
89	Dynamic yielding, shear thinning, and stress rheology of polymer-particle suspensions and gels. Journal of Chemical Physics, 2005, 123, 164903.	1.2	40
90	Barrier hopping, viscous flow, and kinetic gelation in particle-polymer suspensions. Physical Review E, 2005, 71, 041405.	0.8	39

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91	Dynamics of poly[n]catenane melts. Journal of Chemical Physics, 2020, 152, 214901.	1.2	39
92	Integral equation theory for compressible polymer alloys: thermodynamics, scattering, and miscibility of Gaussian chains. Macromolecules, 1991, 24, 6736-6747.	2.2	38
93	Phase separation in suspensions of colloids, polymers and nanoparticles: Role of solvent quality, physical mesh, and nonlocal entropic repulsion. Journal of Chemical Physics, 2003, 118, 3880-3890.	1.2	38
94	Theory of gelation, vitrification, and activated barrier hopping in mixtures of hard and sticky spheres. Journal of Chemical Physics, 2008, 128, 084509.	1.2	38
95	Theory and Simulation of Attractive Nanoparticle Transport in Polymer Melts. Macromolecules, 2018, 51, 2258-2267.	2.2	38
96	Ideal glass transitions, shear modulus, activated dynamics, and yielding in fluids of nonspherical objects. Journal of Chemical Physics, 2007, 126, 014505.	1.2	37
97	Self-Assembly of Monodisperse Starburst Carbon Spheres into Hierarchically Organized Nanostructured Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2015, 7, 9128-9133.	4.0	36
98	A strain stiffening theory for transient polymer networks under asymptotically nonlinear oscillatory shear. Journal of Rheology, 2017, 61, 643-665.	1.3	34
99	Integral equation theory of thermodynamics, pair structure, and growing static length scale in metastable hard sphere and Weeks-Chandler-Andersen fluids. Physical Review E, 2020, 101, 042121.	0.8	34
100	Collective Nanoparticle Dynamics Associated with Bridging Network Formation in Model Polymer Nanocomposites. ACS Nano, 2021, 15, 11501-11513.	7.3	34
101	Experimental test of a predicted dynamicsâ€“structureâ€“thermodynamics connection in molecularly complex glass-forming liquids. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	32
102	Microscopic Theory for the Role of Attractive Forces in the Dynamics of Supercooled Liquids. Physical Review Letters, 2015, 115, 205702.	2.9	31
103	Athermal stiffness blends: A comparison of Monte Carlo simulations and integral equation theory. Journal of Chemical Physics, 1995, 103, 9460-9474.	1.2	30
104	Long Wavelength Concentration Fluctuations and Cage Scale Ordering of Nanoparticles in Concentrated Polymer Solutions. Macromolecules, 2010, 43, 10123-10131.	2.2	30
105	Nature of dynamic gradients, glass formation, and collective effects in ultrathin freestanding films. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	30
106	Correlated matrix-fluctuation-mediated activated transport of dilute penetrants in glass-forming liquids and suspensions. Journal of Chemical Physics, 2017, 146, 194906.	1.2	29
107	Physics of the Stress Overshoot and Chain Stretch Dynamics of Entangled Polymer Liquids Under Continuous Startup Nonlinear Shear. ACS Macro Letters, 2018, 7, 218-222.	2.3	29
108	Thermodynamicsâ€“Structureâ€“Dynamics Correlations and Nonuniversal Effects in the Elastically Collective Activated Hopping Theory of Glass-Forming Liquids. Journal of Physical Chemistry B, 2020, 124, 6121-6131.	1.2	29

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109	Modeâ€coupling theory of diffusion in block copolymer melts: Influence of concentration fluctuations. Journal of Chemical Physics, 1995, 103, 6296-6299.	1.2	28
110	Liquid state theory of the structure and phase behaviour of polymer-tethered nanoparticles in dense suspensions, melts and nanocomposites. Molecular Simulation, 2009, 35, 835-848.	0.9	28
111	Influence of Longer Range Transfer of Vapor Interface Modified Caging Constraints on the Spatially Heterogeneous Dynamics of Glass-Forming Liquids. Macromolecules, 2019, 52, 5192-5206.	2.2	27
112	Mode-coupling theory of macromolecular liquids. Physica Scripta, 1993, T49A, 99-106.	1.2	26
113	Glassy Dynamics and Kinetic Vitrification of Isotropic Suspensions of Hard Rods. Langmuir, 2008, 24, 7474-7484.	1.6	26
114	Entangled polymer chain melts: Orientation and deformation dependent tube confinement and interchain entanglement elasticity. Journal of Chemical Physics, 2013, 139, 234904.	1.2	26
115	Statistical Mechanical Theory of Penetrant Diffusion in Polymer Melts and Glasses. Macromolecules, 2016, 49, 5727-5739.	2.2	26
116	Dynamic Gradients, Mobile Layers, T_g Shifts, Role of Vitrification Criterion, and Inhomogeneous Decoupling in Free-Standing Polymer Films. Macromolecules, 2018, 51, 6063-6075.	2.2	26
117	Influence of chemistry, interfacial width, and non-isothermal conditions on spatially heterogeneous activated relaxation and elasticity in glass-forming free standing films. Journal of Chemical Physics, 2017, 146, 203301.	1.2	25
118	Inferring the Nonlinear Mechanisms of a Reversible Network. Macromolecules, 2018, 51, 8772-8789.	2.2	25
119	Consequences of Delayed Chain Retraction on the Rheology and Stretch Dynamics of Entangled Polymer Liquids under Continuous Nonlinear Shear Deformation. Macromolecules, 2018, 51, 4185-4200.	2.2	25
120	Anomalous diffusion, structural relaxation and shear thinning in glassy hard sphere fluids. Journal of Physics Condensed Matter, 2008, 20, 244129.	0.7	24
121	Theory of Spatial Gradients of Relaxation, Vitrification Temperature and Fragility of Glass-Forming Polymer Liquids Near Solid Substrates. ACS Macro Letters, 2020, 9, 448-453.	2.3	24
122	Glassy dynamics and mechanical response in dense fluids of soft repulsive spheres. II. Shear modulus, relaxation-elasticity connections, and rheology. Journal of Chemical Physics, 2011, 134, 204909.	1.2	23
123	Theory of Entanglements and Tube Confinement in Rodâ€“Sphere Nanocomposites. ACS Macro Letters, 2013, 2, 955-959.	2.3	23
124	Theory of the spatial transfer of interface-nucleated changes of dynamical constraints and its consequences in glass-forming films. Journal of Chemical Physics, 2019, 150, 044508.	1.2	23
125	Liquid-state theory of anisotropic flexible polymer fluids. Journal of Chemical Physics, 1999, 110, 6597-6600.	1.2	21
126	The influence of shape on the glassy dynamics of hard nonspherical particle fluids. I. Dynamic crossover and elasticity. Journal of Chemical Physics, 2009, 130, 244906.	1.2	21

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127	Activated dynamics in dense fluids of attractive nonspherical particles. I. Kinetic crossover, dynamic free energies, and the physical nature of glasses and gels. Physical Review E, 2011, 83, 041406.	0.8	21
128	Mode-coupling theory of entangled polymer fluids. Transport Theory and Statistical Physics, 1995, 24, 947-977.	0.4	20
129	Liquid crystallinity in flexible and rigid rod polymers. Journal of Chemical Physics, 2000, 112, 4881-4892.	1.2	20
130	Structure and thermodynamics of anisotropic polymer fluids. Journal of Chemical Physics, 2000, 112, 4869-4880.	1.2	20
131	Microscopic Theory of Coupled Slow Activated Dynamics in Glass-Forming Binary Mixtures. Journal of Physical Chemistry B, 2018, 122, 3465-3479.	1.2	20
132	Bridging-Controlled Network Microstructure and Long-Wavelength Fluctuations in Silicaâ€“Poly(2-vinylpyridine) Nanocomposites: Experimental Results and Theoretical Analysis. Macromolecules, 2020, 53, 6984-6994.	2.2	20
133	Experimental Tests of a Theoretically Predicted Noncausal Correlation between Dynamics and Thermodynamics in Glass-forming Polymer Melts. Macromolecules, 2021, 54, 10086-10099.	2.2	19
134	The Asakuraâ€“Oosawa theory: Entropic forces in physics, biology, and soft matter. Journal of Chemical Physics, 2022, 156, 080401.	1.2	19
135	Percolation, phase separation, and gelation in fluids and mixtures of spheres and rods. Journal of Chemical Physics, 2011, 135, 234902.	1.2	18
136	Density fluctuation correlation length in polymer fluids. Journal of Chemical Physics, 2003, 119, 7599-7603.	1.2	17
137	Structural Relaxation and Vitrification in Dense Cross-Linked Polymer Networks: Simulation, Theory, and Experiment. Macromolecules, 2022, 55, 4159-4173.	2.2	17
138	Analytic integral equation theory for the critical properties of homopolymer fluids. Journal of Chemical Physics, 1998, 108, 3813-3826.	1.2	16
139	Mode-coupling theory of self-diffusion in diblock copolymers. II. Model calculations and experimental comparisons. Journal of Chemical Physics, 1998, 108, 1271-1283.	1.2	16
140	Stretching, Packing, and Thermodynamics in Highly Branched Polymer Melts. Macromolecules, 2003, 36, 2544-2552.	2.2	16
141	Microscopic Theory of Long-Time Center-of-Mass Self-Diffusion and Anomalous Transport in Ring Polymer Liquids. Macromolecules, 2020, 53, 10431-10445.	2.2	16
142	Activated penetrant dynamics in glass forming liquids: size effects, decoupling, slaving, collective elasticity and correlation with matrix compressibility. Soft Matter, 2021, 17, 2624-2639.	1.2	16
143	Diffusion and relaxation of chain polymer liquids. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 71, 783-791.	0.6	15
144	Thermoresponsive Stiffening with Microgel Particles in a Semiflexible Fibrin Network. Macromolecules, 2019, 52, 3029-3041.	2.2	15

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145	Microscopic theory of the influence of strong attractive forces on the activated dynamics of dense glass and gel forming fluids. Journal of Chemical Physics, 2019, 151, 244502.	1.2	15
146	Mode-coupling theory of self-diffusion in diblock copolymers I. General derivation and qualitative predictions. Journal of Chemical Physics, 1998, 108, 1257-1270.	1.2	14
147	Dynamic cross-correlations between entangled biofilaments as they diffuse. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3322-3327.	3.3	14
148	A collective elastic fluctuation mechanism for decoupling and stretched relaxation in glassy colloidal and molecular liquids. Journal of Chemical Physics, 2020, 152, 034502.	1.2	14
149	Physical Bond Breaking in Associating Copolymer Liquids. ACS Macro Letters, 2021, 10, 122-128.	2.3	14
150	The role of collective elasticity on activated structural relaxation, yielding, and steady state flow in hard sphere fluids and colloidal suspensions under strong deformation. Journal of Chemical Physics, 2020, 153, 194502.	1.2	14
151	Modeâ€coupling theory for selfâ€diffusion in polymer blends and blend solutions. Journal of Chemical Physics, 1996, 105, 779-791.	1.2	13
152	Entropic depletion in colloidal suspensions and polymer liquids: role of nanoparticle surface topography. Soft Matter, 2015, 11, 9086-9098.	1.2	13
153	Microscopic Theory of the Effect of Caging and Physical Bonding on Segmental Relaxation in Associating Copolymer Liquids. Macromolecules, 2020, 53, 4366-4380.	2.2	12
154	Linear and nonlinear viscoelasticity of concentrated thermoresponsive microgel suspensions. Journal of Colloid and Interface Science, 2021, 601, 886-898.	5.0	12
155	Influence of Attractive Functional Groups on the Segmental Dynamics and Glass Transition in Associating Polymers. Macromolecules, 2022, 55, 2345-2357.	2.2	12
156	Theory of kinetic arrest, elasticity, and yielding in dense binary mixtures of rods and spheres. Physical Review E, 2012, 86, 061503.	0.8	11
157	Packing correlations, collective scattering and compressibility of fractal-like aggregates in polymer nanocomposites and suspensions. Soft Matter, 2011, 7, 5397.	1.2	10
158	Theory of activated penetrant diffusion in viscous fluids and colloidal suspensions. Journal of Chemical Physics, 2015, 143, 144906.	1.2	10
159	Controlling effective interactions and spatial dispersion of nanoparticles in multiblock copolymer melts. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1098-1111.	2.4	10
160	Theory of the effect of external stress on the activated dynamics and transport of dilute penetrants in supercooled liquids and glasses. Journal of Chemical Physics, 2021, 155, 054505.	1.2	10
161	Long Wavelength Thermal Density Fluctuations in Molecular and Polymer Glass-Forming Liquids: Experimental and Theoretical Analysis under Isobaric Conditions. Journal of Physical Chemistry B, 2021, 125, 12353-12364.	1.2	10
162	Activated relaxation in supercooled monodisperse atomic and polymeric WCA fluids: Simulation and ECNLE theory. Journal of Chemical Physics, 2022, 156, 114901.	1.2	10

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163	Segment-scale, force-level theory of mesoscopic dynamic localization and entropic elasticity in entangled chain polymer liquids. Journal of Chemical Physics, 2017, 146, 134901.	1.2	9
164	Local structure, thermodynamics, and phase behavior of asymmetric particle mixtures: Comparison between integral equation theories and simulation. Journal of Chemical Physics, 2019, 150, 214902.	1.2	9
165	Mechanism of Soft Nanoparticle Diffusion in Entangled Polymer Melts. Macromolecules, 2020, 53, 7580-7589.	2.2	9
166	On the interpretation of â€˜â€˜rippleâ€™â€™ polymer interdiffusion experiments in terms of models for bulk singleâ€chain dynamics. Journal of Chemical Physics, 1995, 102, 2222-2238.	1.2	8
167	PRISM Theory of Local Structure and Phase Behavior of Dense Polymer Nanocomposites: Improved Closure Approximation and Comparison with Simulation. Macromolecules, 2020, 53, 9962-9972.	2.2	8
168	Directing Colloidal Assembly and a Metal-Insulator Transition Using a Quench-Disordered Porous Rod Template. Physical Review Letters, 2014, 113, 208302.	2.9	7
169	Theory of Anisotropic Diffusion of Entangled and Unentangled Polymers in Rodâ€“Sphere Mixtures. ACS Macro Letters, 2015, 4, 53-57.	2.3	7
170	Multi-scale entropic depletion phenomena in polymer liquids. Journal of Chemical Physics, 2015, 142, 214903.	1.2	7
171	Microscopic Theory of Dynamically Heterogeneous Activated Relaxation as the Origin of Decoupling of Segmental and Chain Relaxation in Supercooled Polymer Melts. Macromolecules, 2020, 53, 5350-5360.	2.2	7
172	Integration of colloids into a semi-flexible network of fibrin. Soft Matter, 2017, 13, 1430-1443.	1.2	6
173	Theory of microstructure-dependent glassy shear elasticity and dynamic localization in melt polymer nanocomposites. Journal of Chemical Physics, 2020, 153, 114901.	1.2	6
174	Theory of Transient Localization, Activated Dynamics, and a Macromolecular Glass Transition in Ring Polymer Liquids. ACS Macro Letters, 2021, 10, 1229-1235.	2.3	6
175	Theory for the Elementary Time Scale of Stress Relaxation in Polymer Nanocomposites. ACS Macro Letters, 2022, 11, 199-204.	2.3	6
176	Microscopic theory of onset of decaging and bond-breaking activated dynamics in ultradense fluids with strong short-range attractions. Physical Review E, 2020, 101, 060601.	0.8	4
177	Preface: Special Topic on Dynamics of Polymer Materials in Thin Films and Related Geometries. Journal of Chemical Physics, 2017, 146, 203001.	1.2	0