Jack Douglas

List of Publications by Year in descending order

299 papers	17,920 citations	13827 67 h-index	17546 121 g-index
302 all docs	302 docs citations	302 times ranked	13018 citing authors

#	Article	IF	Citations
1	Evidence of Many-Body Interactions in the Virial Coefficients of Polyelectrolyte Gels. Gels, 2022, 8, 96.	2.1	3
2	Influence of network defects on the conformational structure of nanogel particles: From â€œclosed compactâ€•to â€œopen fractalâ€•nanogel particles. Journal of Chemical Physics, 2022, 156, 094903.	1.2	11
3	Soft-Shear-Aligned Vertically Oriented Lamellar Block Copolymers for Template-Free Sub-10 nm Patterning and Hybrid Nanostructures. ACS Applied Materials & Interfaces, 2022, 14, 12824-12835.	4.0	9
4	Reactive Molecular Dynamics Simulations of the Depolymerization of Polyethylene Using Graphene-Oxide-Supported Platinum Nanoparticles. Journal of Physical Chemistry A, 2022, 126, 3167-3173.	1.1	4
5	Enhanced Dielectric Strength and Capacitive Energy Density of Cyclic Polystyrene Films. ACS Polymers Au, 2022, 2, 324-332.	1.7	12
6	Combined Simulation and Experimental Study of Polyampholyte Solution Properties: Effects of Charge Ratio, Hydrophobic Groups, and Polymer Concentration. Macromolecules, 2022, 55, 6750-6761.	2.2	1
7	Comparison of Huggins Coefficients and Osmotic Second Virial Coefficients of Buffered Solutions of Monoclonal Antibodies. Polymers, 2021, 13, 601.	2.0	9
8	Why Enhanced Subnanosecond Relaxations Are Important for Toughness in Polymer Glasses. Macromolecules, 2021, 54, 2518-2528.	2.2	12
9	Fast dynamics in a model metallic glass-forming material. Journal of Chemical Physics, 2021, 154, 084505.	1.2	32
10	Rheological Properties of Cartilage Glycosaminoglycans and Proteoglycans. Macromolecules, 2021, 54, 2316-2324.	2.2	8
11	Observation of General Entropyâ€“Enthalpy Compensation Effect in the Relaxation of Wrinkled Polymer Nanocomposite Films. Nano Letters, 2021, 21, 1274-1281.	4.5	12
12	Polymer Glass Formation: Role of Activation Free Energy, Configurational Entropy, and Collective Motion. Macromolecules, 2021, 54, 3001-3033.	2.2	38
13	Modeling short-chain branched polyethylenes in dilute solution under variable solvent quality conditions: Basic configurational properties. Polymer, 2021, 217, 123429.	1.8	9
14	Localization model description of the interfacial dynamics of crystalline Cu and $$hbox {Cu}_{64}hbox {Zr}_{36}$$ metallic glass nanoparticles. European Physical Journal E, 2021, 44, 33.	0.7	6
15	Equation of State and Entropy Theory Approach to Thermodynamic Scaling in Polymeric Glass-Forming Liquids. Macromolecules, 2021, 54, 3247-3269.	2.2	28
16	Effects of Chain Length on the Structure and Dynamics of Semidilute Nanoparticleâ€“Polymer Composites. Macromolecules, 2021, 54, 3041-3051.	2.2	11
17	Dynamic heterogeneity, cooperative motion, and Johariâ€“Goldstein $$eta $$-relaxation in a metallic glass-forming material exhibiting a fragile-to-strong transition. European Physical Journal E, 2021, 44, 56.	0.7	24
18	Late Stage Domain Coarsening Dynamics of Lamellar Block Copolymers. ACS Macro Letters, 2021, 10, 727-731.	2.3	5

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19	Ionic Liquid Enhanced Parallel Lamellar Ordering in Block Copolymer Films. Macromolecules, 2021, 54, 4531-4545.	2.2	11
20	Molecular dynamics study of water channels in natural and synthetic amyloid-Î² fibrils. Journal of Chemical Physics, 2021, 154, 235102.	1.2	0
21	Structure and Dynamics of Star Polymer Films from Coarse-Grained Molecular Simulations. Macromolecules, 2021, 54, 5344-5353.	2.2	14
22	Influence of Side-Chain Length and Relative Rigidities of Backbone and Side Chains on Glass Formation of Branched Polymers. Macromolecules, 2021, 54, 6327-6341.	2.2	23
23	Control of Phase Morphology of Binary Polymer Grafted Nanoparticle Blend Films via Direct Immersion Annealing. ACS Nano, 2021, 15, 12042-12056.	7.3	17
24	Comparative experimental and computational study of synthetic and natural bottlebrush polyelectrolyte solutions. Journal of Chemical Physics, 2021, 155, 074901.	1.2	10
25	Solvent Processing and Ionic Liquid-Enabled Long-Range Vertical Ordering in Block Copolymer Films with Enhanced Film Stability. Macromolecules, 2021, 54, 8512-8525.	2.2	6
26	Ultra-Fast Vertical Ordering of Lamellar Block Copolymer Films on Unmodified Substrates. Macromolecules, 2021, 54, 1564-1573.	2.2	16
27	Enhanced resistance to decay of imprinted nanopatterns in thin films by bare nanoparticles compared to polymer-grafted nanoparticles. Nanoscale Advances, 2021, 3, 5348-5354.	2.2	3
28	The Interfacial Layers Around Nanoparticle and Its Impact onÂStructural Relaxation and Glass Transition in Model Polymer Nanocomposites. Springer Series in Materials Science, 2021, , 101-131.	0.4	2
29	Activation free energy gradient controls interfacial mobility gradient in thin polymer films. Journal of Chemical Physics, 2021, 155, 174901.	1.2	15
30	Structure and conformational properties of ideal nanogel particles in athermal solutions. Journal of Chemical Physics, 2021, 155, 134905.	1.2	8
31	The initiation of shear band formation in deformed metallic glasses from soft localized domains. Journal of Chemical Physics, 2021, 155, 204504.	1.2	13
32	Explaining the Sensitivity of Polymer Segmental Relaxation to Additive Size Based on the Localization Model. Physical Review Letters, 2021, 127, 277802.	2.9	10
33	Investigation of the Temperature Dependence of Activation Volume in Glass-Forming Polymer Melts under Variable Pressure Conditions. Macromolecules, 2020, 53, 6828-6841.	2.2	21
34	How Does Monomer Structure Affect the Interfacial Dynamics of Supported Ultrathin Polymer Films?. Macromolecules, 2020, 53, 9654-9664.	2.2	7
35	Localization model description of the interfacial dynamics of crystalline Cu and Cu64Zr36 metallic glass films. Journal of Chemical Physics, 2020, 153, 124508.	1.2	16
36	Understanding Activation Volume in Glass-Forming Polymer Melts via Generalized Entropy Theory. Macromolecules, 2020, 53, 7239-7252.	2.2	24

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37	Predictive relation for the Î±-relaxation time of a coarse-grained polymer melt under steady shear. Science Advances, 2020, 6, eaaz0777.	4.7	45
38	Molecular Dynamics Study of Glass Formation in Polymer Melts with Varying Chain Stiffness. Macromolecules, 2020, 53, 4796-4809.	2.2	36
39	Systematic investigation of synthetic polyelectrolyte bottlebrush solutions by neutron and dynamic light scattering, osmometry, and molecular dynamics simulation. Journal of Chemical Physics, 2020, 152, 194904.	1.2	13
40	Impact of particle arrays on phase separation composition patterns. Journal of Chemical Physics, 2020, 152, 224902.	1.2	7
41	Quantifying Fluorogenic Dye Hydration in an Epoxy Resin by Noncontact Microwave Dielectric Spectroscopy. Journal of Physical Chemistry B, 2020, 124, 2914-2919.	1.2	3
42	Reconciling computational and experimental trends in the temperature dependence of the interfacial mobility of polymer films. Journal of Chemical Physics, 2020, 152, 124703.	1.2	20
43	Dynamic heterogeneity and collective motion in star polymer melts. Journal of Chemical Physics, 2020, 152, 054904.	1.2	41
44	Bottlebrush polymers in the melt and polyelectrolytes in solution share common structural features. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5168-5175.	3.3	29
45	Influence of polymer topology on crystallization in thin films. Journal of Chemical Physics, 2020, 152, 044501.	1.2	7
46	Role of Cohesive Energy in Glass Formation of Polymers with and without Bending Constraints. Macromolecules, 2020, 53, 9678-9697.	2.2	28
47	Three-state heterogeneity in a model two-dimensional equilibrium liquid. Journal of Molecular Liquids, 2019, 293, 111466.	2.3	5
48	Influence of Branching on the Configurational and Dynamical Properties of Entangled Polymer Melts. Polymers, 2019, 11, 1045.	2.0	14
49	Tuning the Relaxation of Imprinted Polymer Films with Polymer-Grafted Nanoparticles. Microscopy and Microanalysis, 2019, 25, 2238-2239.	0.2	1
50	Localization model description of diffusion and structural relaxation in superionic crystalline UO2. Journal of Chemical Physics, 2019, 151, 071101.	1.2	18
51	The interfacial zone in thin polymer films and around nanoparticles in polymer nanocomposites. Journal of Chemical Physics, 2019, 151, 124705.	1.2	33
52	Lattice theory for binding of linear polymers to a solid substrate from polymer melts. II. Influence of van der Waals interactions and chain semiflexibility on molecular binding and adsorption. Journal of Chemical Physics, 2019, 151, 124709.	1.2	3
53	Lattice theory for binding of linear polymers to a solid substrate from polymer melts: I. Influence of chain connectivity on molecular binding and adsorption. Journal of Chemical Physics, 2019, 151, 124706.	1.2	3
54	Nanoimprint Directed Assembly of Associating Polymer-Grafted Nanoparticles for Polymer Thin Films with Enhanced Stability. ACS Applied Polymer Materials, 2019, 1, 3242-3252.	2.0	9

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55	Collective Motion in the Interfacial and Interior Regions of Supported Polymer Films and Its Relation to Relaxation. Journal of Physical Chemistry B, 2019, 123, 5935-5941.	1.2	32
56	Superionic UO₂: A model anharmonic crystalline material. Journal of Chemical Physics, 2019, 150, 174506.	1.2	28
57	Energy renormalization for coarse-graining polymers having different segmental structures. Science Advances, 2019, 5, eaav4683.	4.7	58
58	Cooperative dynamics in a model DPPC membrane arise from membrane layer interactions. Emergent Materials, 2019, 2, 1-10.	3.2	3
59	Influence of knot complexity on glass-formation in low molecular mass ring polymer melts. Journal of Chemical Physics, 2019, 150, 101103.	1.2	28
60	Influence of film thickness on the stability of free-standing Lennard-Jones fluid films. Journal of Chemical Physics, 2019, 150, 144705.	1.2	8
61	Universal nature of dynamic heterogeneity in glass-forming liquids: A comparative study of metallic and polymeric glass-forming liquids. Journal of Chemical Physics, 2019, 151, 184503.	1.2	30
62	What does the instantaneous normal mode spectrum tell us about dynamical heterogeneity in glass-forming fluids?. Journal of Chemical Physics, 2019, 151, 184904.	1.2	25
63	Influence of Sodium Salts on the Swelling and Rheology of Hydrophobically Cross-linked Hydrogels Determined by QCM-D. Langmuir, 2019, 35, 16612-16623.	1.6	10
64	Reducing uncertainty in simulation estimates of the surface tension through a two-scale finite-size analysis: thicker is better. RSC Advances, 2019, 9, 35803-35812.	1.7	7
65	Influence of Ion Solvation on the Properties of Electrolyte Solutions. Journal of Physical Chemistry B, 2018, 122, 4029-4034.	1.2	88
66	Valence, loop formation and universality in self-assembling patchy particles. Soft Matter, 2018, 14, 1622-1630.	1.2	18
67	Energy Renormalization for Coarse-Graining the Dynamics of a Model Glass-Forming Liquid. Journal of Physical Chemistry B, 2018, 122, 2040-2045.	1.2	47
68	String-like collective motion in the Î±- and Î²-relaxation of a coarse-grained polymer melt. Journal of Chemical Physics, 2018, 148, 104508.	1.2	51
69	Hierarchically Patterned Elastomeric and Thermoplastic Polymer Films through Nanoimprinting and Ultraviolet Light Exposure. ACS Omega, 2018, 3, 15426-15434.	1.6	10
70	Tuning the Relaxation of Nanopatterned Polymer Films with Polymer-Grafted Nanoparticles: Observation of Entropyâ€“Enthalpy Compensation. Nano Letters, 2018, 18, 7441-7447.	4.5	23
71	Competitive Solvation Effects in Polyelectrolyte Solutions. ACS Symposium Series, 2018, , 15-32.	0.5	5
72	Hidden Hyperuniformity in Soft Polymeric Materials. Physical Review Letters, 2018, 121, 258002.	2.9	37

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73	Quantifying structural dynamic heterogeneity in a dense two-dimensional equilibrium liquid. Journal of Chemical Physics, 2018, 149, 144504.	1.2	4
74	Communication: A comparison between the solution properties of knotted ring and star polymers. Journal of Chemical Physics, 2018, 149, 161101.	1.2	35
75	Fiber Network Formation in Semi-Flexible Polymer Solutions: An Exploratory Computational Study. Gels, 2018, 4, 27.	2.1	19
76	Structure and Dynamics of a Graphene Melt. ACS Nano, 2018, 12, 5427-5435.	7.3	29
77	Energy Renormalization Method for the Coarse-Graining of Polymer Viscoelasticity. Macromolecules, 2018, 51, 3818-3827.	2.2	39
78	Why we need to look beyond the glass transition temperature to characterize the dynamics of thin supported polymer films. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5641-5646.	3.3	50
79	A comparative study of thermodynamic, conformational, and structural properties of bottlebrush with star and ring polymer melts. Journal of Chemical Physics, 2018, 149, 044904.	1.2	55
80	Weak and Strong Gels and the Emergence of the Amorphous Solid State. Gels, 2018, 4, 19.	2.1	53
81	The Influence of Polymer and Ion Solvation on the Conformational Properties of Flexible Polyelectrolytes. Gels, 2018, 4, 20.	2.1	23
82	Topological rigidification of flexible polymers in solution. AIP Conference Proceedings, 2018, , .	0.3	3
83	What does the Tg of thin polymer films really tell us?. AIP Conference Proceedings, 2018, , .	0.3	4
84	Polyelectrolyte association and solvation. Journal of Chemical Physics, 2018, 149, 163305.	1.2	39
85	Lattice theory of competitive binding: Influence of van der Waals interactions on molecular binding and adsorption to a solid substrate from binary liquid mixtures. Journal of Chemical Physics, 2018, 149, 044704.	1.2	6
86	Complex Coacervation in Polyelectrolytes from a Coarse-Grained Model. Macromolecules, 2018, 51, 6717-6723.	2.2	44
87	Influence of Pressure on Glass Formation in a Simulated Polymer Melt. Macromolecules, 2017, 50, 2585-2598.	2.2	34
88	Entropy-driven segregation of polymer-grafted nanoparticles under confinement. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2462-2467.	3.3	38
89	Dynamical heterogeneity in a vapor-deposited polymer glass. Journal of Chemical Physics, 2017, 146, 203310.	1.2	22
90	Comparative Study of the Collective Dynamics of Proteins and Inorganic Nanoparticles. Scientific Reports, 2017, 7, 41671.	1.6	12

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91	Dielectric Characterization of Confined Water in Chiral Cellulose Nanocrystal Films. ACS Applied Materials & Interfaces, 2017, 9, 14222-14231.	4.0	45
92	Particle localization and hyperuniformity of polymerâ€grafted nanoparticle materials. Annalen Der Physik, 2017, 529, 1600342.	0.9	44
93	Electromagnetic Scattering From Multiple Single-Walled Carbon Nanotubes Having Tumbleweed Configurations. IEEE Transactions on Antennas and Propagation, 2017, 65, 3192-3202.	3.1	7
94	Energy-Renormalization for Achieving Temperature Transferable Coarse-Graining of Polymer Dynamics. Macromolecules, 2017, 50, 8787-8796.	2.2	89
95	A wrinkling-based method for investigating glassy polymer film relaxation as a function of film thickness and temperature. Journal of Chemical Physics, 2017, 147, 154902.	1.2	25
96	Knot Energy, Complexity, and Mobility of Knotted Polymers. Scientific Reports, 2017, 7, 13374.	1.6	22
97	Molecular rigidity and enthalpyâ€“entropy compensation in DNA melting. Soft Matter, 2017, 13, 8309-8330.	1.2	28
98	Mixtures of two self- and mutually-associating liquids: Phase behavior, second virial coefficients, and entropy-enthalpy compensation in the free energy of mixing. Journal of Chemical Physics, 2017, 147, 064909.	1.2	14
99	Relation between Polymer Conformational Structure and Dynamics in Linear and Ring Polyethylene Blends. Macromolecular Theory and Simulations, 2017, 26, 1700045.	0.6	18
100	Influence of polymer architectures on diffusion in unentangled polymer melts. Soft Matter, 2017, 13, 5778-5784.	1.2	27
101	Effects of a â€œboundâ€•substrate layer on the dynamics of supported polymer films. Journal of Chemical Physics, 2017, 147, 044901.	1.2	32
102	Coarse-Grained Model of the Dynamics of Electrolyte Solutions. Journal of Physical Chemistry B, 2017, 121, 8195-8202.	1.2	49
103	Hard Spheres with Purely Repulsive Interactions Have Positive Diffusion Interaction Parameter, k D. Biophysical Journal, 2017, 113, 753-754.	0.2	5
104	String-like collective motion and diffusion in the interfacial region of ice. Journal of Chemical Physics, 2017, 147, 194508.	1.2	23
105	Solution properties of star polyelectrolytes having a moderate number of arms. Journal of Chemical Physics, 2017, 147, 044906.	1.2	12
106	Universal interrelation between measures of particle and polymer size. Journal of Chemical Physics, 2017, 147, 014903.	1.2	15
107	Communication: Counter-ion solvation and anomalous low-angle scattering in salt-free polyelectrolyte solutions. Journal of Chemical Physics, 2017, 147, 241103.	1.2	35
108	Electromagnetic Scattering From Individual Crumpled Graphene Flakes: A Characteristic Modes Approach. IEEE Transactions on Antennas and Propagation, 2017, 65, 6035-6047.	3.1	14

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109	ZENO: Software for calculating hydrodynamic, electrical, and shape properties of polymer and particle suspensions. Journal of Research of the National Institute of Standards and Technology, 2017, 122, 1-2.	0.4	37
110	Supramolecular Self-Assembly of a Model Hydrogelator: Characterization of Fiber Formation and Morphology. Gels, 2016, 2, 27.	2.1	9
111	Bound Layers â€œCloakâ€•Nanoparticles in Strongly Interacting Polymer Nanocomposites. ACS Nano, 2016, 10, 10960-10965.	7.3	96
112	Stringlike Cooperative Motion Explains the Influence of Pressure on Relaxation in a Model Glass-Forming Polymer Melt. ACS Macro Letters, 2016, 5, 1375-1380.	2.3	22
113	Conformational nature of DNAâ€“grafted chains on spherical gold nanoparticles. AIP Conference Proceedings, 2016, , .	0.3	3
114	Influence of higher valent ions on flexible polyelectrolyte stiffness and counter-ion distribution. Journal of Chemical Physics, 2016, 144, 164904.	1.2	38
115	Generalized entropy theory of glass-formation in fully flexible polymer melts. Journal of Chemical Physics, 2016, 145, 234509.	1.2	30
116	Evolution of dendrimer conformational structure with generation number. AIP Conference Proceedings, 2016, , .	0.3	4
117	Hydrodynamic radius fluctuations in model DNAâ€“grafted nanoparticles. AIP Conference Proceedings, 2016, 1736, .	0.3	5
118	End-anchored polymers in good solvents from the single chain limit to high anchoring densities. Journal of Chemical Physics, 2016, 145, 174904.	1.2	3
119	Pattern-Directed Phase Separation of Polymer-Grafted Nanoparticles in a Homopolymer Matrix. Macromolecules, 2016, 49, 3965-3974.	2.2	21
120	Magnetic Iron Sulfide Nanoparticles for Potential Applications in Gas Sensing. MRS Advances, 2016, 1, 235-240.	0.5	10
121	The Glass Transition of a Single Macromolecule. Macromolecules, 2016, 49, 7597-7604.	2.2	49
122	Self-assembly of polymer-grafted nanoparticles in solvent-free conditions. Soft Matter, 2016, 12, 9527-9537.	1.2	35
123	Influence of Cohesive Energy on the Thermodynamic Properties of a Model Glass-Forming Polymer Melt. Macromolecules, 2016, 49, 8341-8354.	2.2	65
124	Influence of Cohesive Energy on Relaxation in a Model Glass-Forming Polymer Melt. Macromolecules, 2016, 49, 8355-8370.	2.2	60
125	Impact of Monovalent Counter-ions on the Conformation of Flexible Polyelectrolytes Having Different Molecular Architectures. MRS Advances, 2016, 1, 1841-1846.	0.5	9
126	Coupling of isotropic and directional interactions and its effect on phase separation and self-assembly. Journal of Chemical Physics, 2016, 144, 074901.	1.2	24

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127	Relation Between Solvent Quality and Phase Behavior of Ternary Mixtures of Polymers and Two Solvents that Exhibit Cononsolvency. Journal of Physical Chemistry B, 2016, 120, 5753-5758.	1.2	9
128	Quantifying the Heterogeneous Dynamics of a Simulated Dipalmitoylphosphatidylcholine (DPPC) Membrane. Journal of Physical Chemistry B, 2016, 120, 5172-5182.	1.2	15
129	Localization model description of diffusion and structural relaxation in glass-forming Cuâ€“Zr alloys. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 054048.	0.9	62
130	Counter-ion distribution around flexible polyelectrolytes having different molecular architecture. Soft Matter, 2016, 12, 2932-2941.	1.2	49
131	Electromagnetic Resonances of Individual Single-Walled Carbon Nanotubes With Realistic Shapes: A Characteristic Modes Approach. IEEE Transactions on Antennas and Propagation, 2016, 64, 2743-2757.	3.1	21
132	Electromagnetic scattering from multiple Carbon Nanotubes with experimentally determined shapes and distributions. , 2015, , .		1
133	The osmotic virial formulation of the free energy of polymer mixing. Journal of Chemical Physics, 2015, 143, 104903.	1.2	5
134	Mass dependence of the activation enthalpy and entropy of unentangled linear alkane chains. Journal of Chemical Physics, 2015, 143, 144905.	1.2	47
135	Intrinsic conductivity of carbon nanotubes and graphene sheets having a realistic geometry. Journal of Chemical Physics, 2015, 143, 204902.	1.2	23
136	Communication: When does a branched polymer become a particle?. Journal of Chemical Physics, 2015, 143, 111104.	1.2	80
137	Communication: Cosolvency and cononsolvency explained in terms of a Flory-Huggins type theory. Journal of Chemical Physics, 2015, 143, 131101.	1.2	79
138	A unifying framework to quantify the effects of substrate interactions, stiffness, and roughness on the dynamics of thin supported polymer films. Journal of Chemical Physics, 2015, 142, 234907.	1.2	118
139	Phase behavior and second osmotic virial coefficient for competitive polymer solvation in mixed solvent solutions. Journal of Chemical Physics, 2015, 143, 194901.	1.2	9
140	Persistent draining crossover in DNA and other semi-flexible polymers: Evidence from hydrodynamic models and extensive measurements on DNA solutions. Journal of Chemical Physics, 2015, 143, 124903.	1.2	26
141	Thermally-induced transition of lamellae orientation in block-copolymer films on â€˜neutralâ€™ nanoparticle-coated substrates. Soft Matter, 2015, 11, 5154-5167.	1.2	25
142	Electromagnetic scattering properties of individual Carbon Nanotubes with realistic three dimensional shapes. , 2015, , .		0
143	Polarizability tensors of Carbon Nanotubes and Graphene Sheets with realistic shapes. , 2015, , .		0
144	Critical Examination of the Colloidal Particle Model of Globular Proteins. Biophysical Journal, 2015, 108, 724-737.	0.2	77

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145	The meaning of the â€œuniversalâ€•WLF parameters of glass-forming polymer liquids. Journal of Chemical Physics, 2015, 142, 014905.	1.2	40
146	Quantitative relations between cooperative motion, emergent elasticity, and free volume in model glass-forming polymer materials. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2966-2971.	3.3	171
147	Confronting the complexity of CNT materials. Soft Matter, 2015, 11, 4888-4898.	1.2	23
148	Influence of string-like cooperative atomic motion on surface diffusion in the (110) interfacial region of crystalline Ni. Journal of Chemical Physics, 2015, 142, 084704.	1.2	25
149	Role of string-like collective atomic motion on diffusion and structural relaxation in glass forming Cu-Zr alloys. Journal of Chemical Physics, 2015, 142, 164506.	1.2	97
150	Theory of competitive solvation of polymers by two solvents and entropy-enthalpy compensation in the solvation free energy upon dilution with the second solvent. Journal of Chemical Physics, 2015, 142, 214906.	1.2	13
151	Enhanced vertical ordering of block copolymer films by tuning molecular mass. RSC Advances, 2015, 5, 32307-32318.	1.7	12
152	Direct Immersion Annealing of Thin Block Copolymer Films. ACS Applied Materials & Interfaces, 2015, 7, 21639-21645.	4.0	48
153	Interplay of particle shape and suspension properties: a study of cube-like particles. Soft Matter, 2015, 11, 3360-3366.	1.2	38
154	Dimensional reduction of duplex DNA under confinement to nanofluidic slits. Soft Matter, 2015, 11, 8273-8284.	1.2	16
155	Advances in the generalized entropy theory of glass-formation in polymer melts. Journal of Chemical Physics, 2014, 141, 234903.	1.2	35
156	Two glass transitions in miscible polymer blends?. Journal of Chemical Physics, 2014, 140, 244905.	1.2	25
157	Concentration fluctuations in miscible polymer blends: Influence of temperature and chain rigidity. Journal of Chemical Physics, 2014, 140, 194901.	1.2	8
158	String model for the dynamics of glass-forming liquids. Journal of Chemical Physics, 2014, 140, 204509.	1.2	120
159	Quantitative Model for Clusters of String-like Cooperative Motion in a Coarse-Grained Glass-Forming Polymer Melt. Materials Research Society Symposia Proceedings, 2014, 1622, 95-111.	0.1	2
160	Dynamical clustering and a mechanism for raft-like structures in a model lipid membrane. Soft Matter, 2014, 10, 3036.	1.2	23
161	Prediction and validation of diffusion coefficients in a model drug delivery system using microsecond atomistic molecular dynamics simulation and vapour sorption analysis. Soft Matter, 2014, 10, 7480-7494.	1.2	39
162	Interfacial mobility scale determines the scale of collective motion and relaxation rate in polymer films. Nature Communications, 2014, 5, 4163.	5.8	202

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163	Is duplex DNA a swollen random coil?. Soft Matter, 2013, 9, 8914.	1.2	9
164	Fragility and cooperative motion in a glass-forming polymerâ€“nanoparticle composite. Soft Matter, 2013, 9, 241-254.	1.2	159
165	Glassy interfacial dynamics of Ni nanoparticles: part I Colored noise, dynamic heterogeneity and collective atomic motion. Soft Matter, 2013, 9, 1254-1265.	1.2	31
166	Evolution of collective motion in a model glass-forming liquid during physical aging. Journal of Chemical Physics, 2013, 138, 12A528.	1.2	25
167	Response to â€œComment on â€˜Generalized Localization Model of Relaxation in Glass-Forming Liquidsâ€™â€•by A. Ottochian et al.. Soft Matter, 2013, 9, 7892.	1.2	7
168	Self-assembly fronts in collision: impinging ordering organosilane layers. Soft Matter, 2013, 9, 2493.	1.2	3
169	Glassy interfacial dynamics of Ni nanoparticles: Part II Discrete breathers as an explanation of two-level energy fluctuations. Soft Matter, 2013, 9, 1266-1280.	1.2	25
170	String-like cooperative motion in homogeneous melting. Journal of Chemical Physics, 2013, 138, 12A538.	1.2	69
171	The relationship of dynamical heterogeneity to the Adam-Gibbs and random first-order transition theories of glass formation. Journal of Chemical Physics, 2013, 138, 12A541.	1.2	224
172	Shape characteristics of equilibrium and non-equilibrium fractal clusters. Journal of Chemical Physics, 2013, 139, 044901.	1.2	42
173	Solvation of polymers as mutual association. I. General theory. Journal of Chemical Physics, 2013, 138, 164901.	1.2	7
174	Solvation of polymers as mutual association. II. Basic thermodynamic properties. Journal of Chemical Physics, 2013, 138, 164902.	1.2	12
175	Local variation of fragility and glass transition temperature of ultra-thin supported polymer films. Journal of Chemical Physics, 2012, 137, 244901.	1.2	112
176	Generalized localization model of relaxation in glass-forming liquids. Soft Matter, 2012, 8, 11455.	1.2	106
177	The conundrum of gel formation by molecular nanofibers, wormlike micelles, and filamentous proteins: gelation without cross-links?. Soft Matter, 2012, 8, 8539.	1.2	159
178	Lattice cluster theory of associating polymers. II. Enthalpy and entropy of self-assembly and Flory-Huggins interaction parameter Ï‡ for solutions of telechelic molecules. Journal of Chemical Physics, 2012, 136, 064903.	1.2	11
179	Î²-Relaxation governs protein stability in sugar-glass matrices. Soft Matter, 2012, 8, 2983.	1.2	170
180	The fundamental role of flexibility on the strength of molecular binding. Soft Matter, 2012, 8, 6385.	1.2	56

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181	Modifying Fragility and Collective Motion in Polymer Melts with Nanoparticles. Physical Review Letters, 2011, 106, 115702.	2.9	187
182	String-Like Collective Atomic Motion in the Melting and Freezing of Nanoparticles. Journal of Physical Chemistry B, 2011, 115, 14068-14076.	1.2	30
183	NMR Characterization of the Formation Kinetics and Structure of Di-O-Benzylidene Sorbitol Gels Self-Assembled in Organic Solvents. Langmuir, 2011, 27, 1745-1757.	1.6	12
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