Ralph H Colby

List of Publications by Year
in descending order

255 papers	18,330 citations	10986 71 h-index	15266 126 g-index
256 all docs	256 docs citations	256 times ranked	12671 citing authors

#	Article	IF	Citations
1	Anisotropic self-assembly of spherical polymer-grafted nanoparticles. Nature Materials, 2009, 8, 354-359.	27.5	925
2	Scaling Theory of Polyelectrolyte Solutions. Macromolecules, 1995, 28, 1859-1871.	4.8	834
3	Dynamics of reversible networks. Macromolecules, 1991, 24, 4701-4707.	4.8	614
4	Correlations of Solution Rheology with Electrospun Fiber Formation of Linear and Branched Polyesters. Macromolecules, 2004, 37, 1760-1767.	4.8	594
5	Modeling electrode polarization in dielectric spectroscopy: Ion mobility and mobile ion concentration of single-ion polymer electrolytes. Journal of Chemical Physics, 2006, 124, 144903.	3.0	403
6	Structure and linear viscoelasticity of flexible polymer solutions: comparison of polyelectrolyte and neutral polymer solutions. Rheologica Acta, 2010, 49, 425-442.	2.4	397
7	The melt viscosity-molecular weight relationship for linear polymers. Macromolecules, 1987, 20, 2226-2237.	4.8	350
8	Two-parameter scaling for polymers in Î˜ solvents. Macromolecules, 1990, 23, 2753-2757.	4.8	333
9	Polyampholytes. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3513-3538.	2.1	269
10	Elastic modulus and equilibrium swelling of poly(dimethylsiloxane) networks. Macromolecules, 1992, 25, 5241-5251.	4.8	263
11	Elastic Modulus and Equilibrium Swelling of Polyelectrolyte Gels. Macromolecules, 1996, 29, 398-406.	4.8	251
12	Network Modulus and Superelasticity. Macromolecules, 1994, 27, 3191-3198.	4.8	218
13	Breakdown of time-temperature superposition in miscible polymer blends. Polymer, 1989, 30, 1275-1278.	3.8	215
14	Concentration fluctuation induced dynamic heterogeneities in polymer blends. Journal of Chemical Physics, 1996, 105, 3777-3788.	3.0	211
15	â€œGel-likeâ€•Mechanical Reinforcement in Polymer Nanocomposite Melts. Macromolecules, 2010, 43, 1003-1010.	4.8	209
16	Selfâ€consistent theory of polydisperse entangled polymers: Linear viscoelasticity of binary blends. Journal of Chemical Physics, 1988, 89, 5291-5306.	3.0	206
17	Constraint release in polymer melts: tube reorganization versus tube dilation. Macromolecules, 1991, 24, 3587-3596.	4.8	203
18	Rheology of Sodium Hyaluronate under Physiological Conditions. Biomacromolecules, 2001, 2, 65-69.	5.4	201

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19	Ionomer dynamics and the sticky Rouse model. Journal of Rheology, 2013, 57, 1441-1462.	2.6	197
20	Mechanical Reinforcement of Polymer Nanocomposites from Percolation of a Nanoparticle Network. ACS Macro Letters, 2015, 4, 398-402.	4.8	189
21	Effects of concentration and thermodynamic interaction on the viscoelastic properties of polymer solutions. Macromolecules, 1991, 24, 3873-3882.	4.8	188
22	Rheology of Sulfonated Polystyrene Solutions. Macromolecules, 1998, 31, 5746-5755.	4.8	186
23	Dynamics of Semidilute Polyelectrolyte Solutions. Physical Review Letters, 1994, 73, 2776-2779.	7.8	184
24	Dynamics of associative polymers. Soft Matter, 2018, 14, 2961-2977.	2.7	184
25	Dielectric spectroscopy and conductivity of polyelectrolyte solutions. Journal of Physics Condensed Matter, 2004, 16, R1423-R1463.	1.8	181
26	Molecular Mobility, Ion Mobility, and Mobile Ion Concentration in Poly(ethylene oxide)-Based Polyurethane Ionomers. Macromolecules, 2008, 41, 5723-5728.	4.8	181
27	Mechanical Reinforcement in Polymer Melts Filled with Polymer Grafted Nanoparticles. Macromolecules, 2011, 44, 7473-7477.	4.8	180
28	Network dynamics in nanofilled polymers. Nature Communications, 2016, 7, 11368.	12.8	180
29	Dielectric and Viscoelastic Responses of Imidazolium-Based Ionomers with Different Counterions and Side Chain Lengths. Macromolecules, 2014, 47, 777-790.	4.8	179
30	Lamellae orientation in dynamically sheared diblock copolymer melts. Journal De Physique II, 1992, 2, 1941-1959.	0.9	174
31	Molecular mobility and Li+ conduction in polyester copolymer ionomers based on poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	3.0	173
32	Diagnosing long-chain branching in polyethylenes. Journal of Molecular Structure, 1999, 485-486, 569-583.	3.6	170
33	Conformations and Structures of Poly(oxyethylene) Melts from Molecular Dynamics Simulations and Small-Angle Neutron Scattering Experiments. Macromolecules, 1996, 29, 3462-3469.	4.8	165
34	Ionic Conduction and Dielectric Response of Poly(imidazolium acrylate) Ionomers. Macromolecules, 2012, 45, 3974-3985.	4.8	151
35	Reinforcement of rubber by fractal aggregates. Journal De Physique II, 1993, 3, 367-383.	0.9	148
36	Structure of sodium carboxymethyl cellulose aqueous solutions: A SANS and rheology study. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 492-501.	2.1	141

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37	Kinetics of Triple Helix Formation in Semidilute Gelatin Solutions. Macromolecules, 2003, 36, 9999-10008.	4.8	137
38	Dynamics in Miscible Blends of Polystyrene and Poly(vinyl methyl ether). Macromolecules, 1999, 32, 2553-2561.	4.8	132
39	Glass transition temperature from the chemical structure of conjugated polymers. Nature Communications, 2020, 11, 893.	12.8	130
40	Synthesis and Lithium Ion Conduction of Polysiloxane Single-Ion Conductors Containing Novel Weak-Binding Borates. Chemistry of Materials, 2012, 24, 2316-2323.	6.7	129
41	Segmental Dynamics of Polymer Melts with Spherical Nanoparticles. ACS Macro Letters, 2014, 3, 773-777.	4.8	128
42	Polymerized Ionic Liquids with Enhanced Static Dielectric Constants. Macromolecules, 2013, 46, 1175-1186.	4.8	126
43	Ion Conduction in Imidazolium Acrylate Ionic Liquids and their Polymers. Chemistry of Materials, 2010, 22, 5814-5822.	6.7	124
44	Viscoelasticity of Reversible Gelation for Ionomers. Macromolecules, 2015, 48, 1221-1230.	4.8	123
45	Synthesis and Characterization of Poly(Ethylene Glycol)-Based Single-Ion Conductors. Chemistry of Materials, 2006, 18, 4288-4295.	6.7	122
46	Physical Gelation of Gelatin Studied with Rheo-Optics. Macromolecules, 2003, 36, 10009-10020.	4.8	114
47	Synthesis and Characterization of Long Chain Branched Isotactic Polypropylene via Metallocene Catalyst and T-Reagent. Macromolecules, 2007, 40, 2712-2720.	4.8	112
48	Component relaxation dynamics in a miscible polymer blend: poly(ethylene oxide)/poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30	4.8	107
49	Segmental dynamics of miscible polymer blends: Comparison of the predictions of a concentration fluctuation model to experiment. Journal of Chemical Physics, 1999, 111, 6121-6128.	3.0	105
50	Rheopexy of synovial fluid and protein aggregation. Journal of the Royal Society Interface, 2006, 3, 167-174.	3.4	105
51	Thermally Driven Ionic Aggregation in Poly(ethylene oxide)-Based Sulfonate Ionomers. Journal of the American Chemical Society, 2011, 133, 10826-10831.	13.7	102
52	Role of Condensed Counterions in the Thermodynamics of Surfactant Micelle Formation with and without Oppositely Charged Polyelectrolytes. Langmuir, 1999, 15, 58-65.	3.5	98
53	Rheology of Miscible Blends:Â SAN and PMMAâ€. Macromolecules, 1998, 31, 8988-8997.	4.8	96
54	Imidazolium Polyesters: Structureâ€“Property Relationships in Thermal Behavior, Ionic Conductivity, and Morphology. Advanced Functional Materials, 2011, 21, 708-717.	14.9	94

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55	Viscosity and Scaling of Semiflexible Polyelectrolyte NaCMC in Aqueous Salt Solutions. Macromolecules, 2017, 50, 332-338.	4.8	94
56	Counterion Dynamics in Polyurethane-Carboxylate Ionomers with Ionic Liquid Counterions. Chemistry of Materials, 2011, 23, 1862-1873.	6.7	92
57	Dynamic scaling approach to glass formation. Physical Review E, 2000, 61, 1783-1792.	2.1	91
58	What Length Scales Control the Dynamics of Miscible Polymer Blends?. Macromolecules, 2003, 36, 10087-10094.	4.8	89
59	Electrical Conductivity of Polyelectrolyte Solutions in the Semidilute and Concentrated Regime:Â The Role of Counterion Condensation. Journal of Physical Chemistry B, 2002, 106, 6887-6893.	2.6	87
60	Counterion Dynamics in Polyesterâ^'Sulfonate Ionomers with Ionic Liquid Counterions. Macromolecules, 2011, 44, 3572-3582.	4.8	86
61	Shear thinning of unentangled flexible polymer liquids. Rheologica Acta, 2007, 46, 569-575.	2.4	84
62	Viscoelasticity of randomly branched polymers in the vulcanization class. Physical Review E, 1999, 60, 5657-5669.	2.1	79
63	Glass transition and ionic conduction in plasticized and doped ionomers. Journal of Non-Crystalline Solids, 2005, 351, 2825-2830.	3.1	79
64	Solution rheology of cellulose in 1-butyl-3-methyl imidazolium chloride. Journal of Rheology, 2011, 55, 485-494.	2.6	78
65	Glass Transition Temperature of Conjugated Polymers by Oscillatory Shear Rheometry. Macromolecules, 2017, 50, 5146-5154.	4.8	78
66	Multi-Length Scale Morphology of Poly(ethylene oxide)-Based Sulfonate Ionomers with Alkali Cations at Room Temperature. Macromolecules, 2010, 43, 4223-4229.	4.8	76
67	Molecular Volume Effects on the Dynamics of Polymerized Ionic Liquids and their Monomers. Electrochimica Acta, 2015, 175, 55-61.	5.2	76
68	Dynamics of near-critical polymer gels. Physical Review E, 1993, 48, 3712-3716.	2.1	75
69	Electrostatic and Hydrophobic Interactions in NaCMC Aqueous Solutions: Effect of Degree of Substitution. Macromolecules, 2018, 51, 3165-3175.	4.8	75
70	Onset of Flow-Induced Crystallization Kinetics of Highly Isotactic Polypropylene. Macromolecules, 2015, 48, 3725-3738.	4.8	74
71	Chain entanglement in polymer melts and solutions. Macromolecules, 1992, 25, 996-998.	4.8	73
72	Charge density effects in salt-free polyelectrolyte solution rheology. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2001-2013.	2.1	73

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73	Both protein adsorption and aggregation contribute to shear yielding and viscosity increase in protein solutions. Soft Matter, 2014, 10, 122-131.	2.7	73
74	Segmental Dynamics and Dielectric Constant of Polysiloxane Polar Copolymers as Plasticizers for Polymer Electrolytes. ACS Applied Materials & Interfaces, 2016, 8, 3215-3225.	8.0	73
75	Viscoelasticity of randomly branched polymers in the critical percolation class. Physical Review E, 1995, 52, 6271-6280.	2.1	70
76	Polyelectrolyte conductivity. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 2951-2960.	2.1	70
77	Melt Rheology of Lower Critical Solution Temperature Polybutadiene/Polyisoprene Blends. Macromolecules, 2000, 33, 9732-9739.	4.8	70
78	Viscoelasticity of entangled random polystyrene ionomers. Journal of Rheology, 2016, 60, 1031-1040.	2.6	70
79	Block copolymer dynamics. Current Opinion in Colloid and Interface Science, 1996, 1, 454-465.	7.4	68
80	Temperature dependence of relaxation times and the length scale of cooperative motion for glass-forming liquids. Journal of Non-Crystalline Solids, 2002, 307-310, 225-231.	3.1	68
81	Influence of imidazoliumâ€based ionic liquids on the performance of ionic polymer conductor network composite actuators. Polymer International, 2010, 59, 321-328.	3.1	67
82	Molecular Mobility and Cation Conduction in Polyetherâ€“Esterâ€“Sulfonate Copolymer Ionomers. Macromolecules, 2012, 45, 3962-3973.	4.8	67
83	Interactions among Hydrophobically Modified Polyelectrolytes and Surfactants of the Same Charge. Langmuir, 2000, 16, 2609-2614.	3.5	66
84	Linear Viscoelastic and Dielectric Properties of Phosphonium Siloxane Ionomers. ACS Macro Letters, 2013, 2, 970-974.	4.8	63
85	Influence of Solvating Plasticizer on Ion Conduction of Polysiloxane Single-Ion Conductors. Macromolecules, 2014, 47, 3145-3153.	4.8	63
86	Linear viscoelasticity of side chain liquid crystal polymer. Liquid Crystals, 1993, 13, 233-245.	2.2	62
87	Polyurethanes Containing an Imidazolium Diolâ€Based Ionicâ€Liquid Chain Extender for Incorporation of Ionicâ€Liquid Electrolytes. Macromolecular Chemistry and Physics, 2013, 214, 1027-1036.	2.2	62
88	Synthesis and Characterization of Maleic Anhydride Grafted Polypropylene with a Well-Defined Molecular Structure. Macromolecules, 2013, 46, 4313-4323.	4.8	62
89	Linear Viscoelasticity and Swelling of Polyelectrolyte Complex Coacervates. Macromolecules, 2018, 51, 5547-5555.	4.8	62
90	Micellar structure changes in aqueous mixtures of nonionic surfactants. Journal of Rheology, 2001, 45, 1223-1243.	2.6	60

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91	Shear-Induced Layered Structure of Polymeric Micelles by SANS. Macromolecules, 2007, 40, 4016-4022.	4.8	59
92	Segmental Dynamics of Head-to-Head Polypropylene and Polyisobutylene in Their Blend and Pure Components. Macromolecules, 2005, 38, 7721-7729.	4.8	58
93	The effect of physiologically relevant additives on the rheological properties of concentrated Pluronic copolymer gels. Polymer, 2008, 49, 3561-3567.	3.8	58
94	Official symbols and nomenclature of The Society of Rheology. Journal of Rheology, 2013, 57, 1047-1055.	2.6	57
95	Lifetime of Flow-Induced Precursors in Isotactic Polypropylene. Macromolecules, 2015, 48, 7286-7299.	4.8	57
96	Viscosity of Polyelectrolyte Solutions with Oppositely Charged Surfactantâ€. Journal of Physical Chemistry B, 2003, 107, 8166-8171.	2.6	55
97	Smectic rheology. Rheologica Acta, 1997, 36, 498-504.	2.4	54
98	1,2-Bis[N-(Nâ€²-alkylimidazolium)]ethane salts: a new class of organic ionic plastic crystals. Journal of Materials Chemistry, 2011, 21, 12280.	6.7	54
99	Semidilute solution rheology of polyelectrolytes with no added salt. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 3429-3437.	2.1	53
100	Modeling the Segmental Relaxation Time Distribution of Miscible Polymer Blends:Â Polyisoprene/Poly(vinylethylene). Macromolecules, 2005, 38, 4919-4928.	4.8	52
101	Practical Oil Spill Recovery by a Combination of Polyolefin Absorbent and Mechanical Skimmer. ACS Sustainable Chemistry and Engineering, 2018, 6, 12036-12045.	6.7	51
102	Component Dynamics in Miscible Blends of 1,4-Polyisoprene and 1,2-Polybutadiene. Macromolecules, 1994, 27, 6861-6870.	4.8	50
103	Computer Simulations of Local Concentration Variations in Miscible Polymer Blends. Macromolecules, 2002, 35, 9211-9218.	4.8	49
104	Linear Viscoelasticity and Dielectric Spectroscopy of Ionomer/Plasticizer Mixtures: A Transition from Ionomer to Polyelectrolyte. Macromolecules, 2015, 48, 8240-8252.	4.8	49
105	Viscoelastic properties of a model mainâ€chain liquid crystalline polyether. Journal of Rheology, 1994, 38, 1623-1638.	2.6	48
106	Dynamics of Miscible Polymer Blends:â€‰ Predicting the Dielectric Response. Macromolecules, 2007, 40, 5767-5775.	4.8	48
107	High Ion Content Siloxane Phosphonium Ionomers with Very Low T_g. Macromolecules, 2014, 47, 4428-4437.	4.8	48
108	Hierarchical Sticker and Sticky Chain Dynamics in Self-Healing Butyl Rubber Ionomers. Macromolecules, 2019, 52, 4169-4184.	4.8	48

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109	Linear Viscoelasticity and Fourier Transform Infrared Spectroscopy of Polyetherâ€“Esterâ€“Sulfonate Copolymer Ionomers. Macromolecules, 2014, 47, 3635-3644.	4.8	47
110	A survey of polyvinylphenol blend miscibility. Journal of Applied Polymer Science, 1994, 54, 991-1011.	2.6	46
111	Nonlinear shear and uniaxial extensional rheology of polyether-ester-sulfonate copolymer ionomer melts. Journal of Rheology, 2017, 61, 1279-1289.	2.6	46
112	Ionic aggregate dissolution and conduction in a plasticized single-ion polymer conductor. Polymer, 2015, 59, 133-143.	3.8	44
113	Miscibility in binary blends of poly(vinylphenol) and aromatic polyesters. Macromolecules, 1993, 26, 6299-6307.	4.8	43
114	Polyelectrolyte Charge Effects on Solution Viscosity of Poly(acrylic acid). Macromolecules, 1999, 32, 2803-2805.	4.8	43
115	Enhanced Elasticity and Soft Glassy Rheology of a Smectic in a Random Porous Environment. Physical Review Letters, 2005, 94, 107801.	7.8	43
116	Flow-Induced Crystallization of PEEK: Isothermal Crystallization Kinetics and Lifetime of Flow-Induced Precursors during Isothermal Annealing. ACS Macro Letters, 2016, 5, 849-853.	4.8	43
117	Sensitivity of Polymer Crystallization to Shear at Low and High Supercooling of the Melt. Macromolecules, 2018, 51, 2785-2795.	4.8	43
118	Miscible Polymer Blend Dynamics:Â Double Reptation Predictions of Linear Viscoelasticity in Model Blends of Polyisoprene and Poly(vinyl ethylene). Macromolecules, 2004, 37, 6994-7000.	4.8	42
119	Measuring Component Contributions to the Dynamic Modulus in Miscible Polymer Blends. Macromolecules, 1994, 27, 6851-6860.	4.8	41
120	Connecting the Mechanical and Conductive Properties of Conjugated Polymers. Advanced Electronic Materials, 2018, 4, 1700356.	5.1	41
121	Solution Rheology of a Strongly Charged Polyelectrolyte in Good Solvent. Macromolecules, 2008, 41, 6505-6510.	4.8	40
122	Determination of Polyelectrolyte Charge and Interaction with Water Using Dielectric Spectroscopy. Macromolecules, 2002, 35, 7031-7038.	4.8	39
123	Collective motion in Poly(ethylene oxide)/poly(methylmethacrylate) blends. Physical Review E, 2005, 72, 031809.	2.1	38
124	Rheology of Polyethylenes with Novel Branching Topology Synthesized by a Chain-Walking Catalyst. Macromolecules, 2005, 38, 10571-10579.	4.8	38
125	Elastic Modulus and Equilibrium Swelling of Near-Critical Gels. Macromolecules, 1994, 27, 3184-3190.	4.8	37
126	Relaxation Behavior of Polymer Blends after the Cessation of Shear. Macromolecules, 2000, 33, 2486-2496.	4.8	37

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127	Rheology of Thermoreversible Hydrogels from Multiblock Associating Copolymers. Macromolecules, 2008, 41, 3646-3652.	4.8	37
128	Ion States and Transport in Styrenesulfonate Methacrylic PEO₉ Random Copolymer Ionomers. Macromolecules, 2015, 48, 7273-7285.	4.8	37
129	Structure and Dynamics in Aqueous Solutions of Amphiphilic Sodium Maleate-Containing Alternating Copolymers. Macromolecules, 2004, 37, 8457-8465.	4.8	36
130	Wellâ€Đefined Imidazolium ABA Triblock Copolymers as Ionicâ€Ł iquidâ€Œ ontaining Electroactive Membranes. Macromolecular Chemistry and Physics, 2014, 215, 1319-1331.	2.2	36
131	Scaling properties of branched polyesters. 2. Static scaling above the gel point. Macromolecules, 1992, 25, 7180-7187.	4.8	35
132	Dynamic Heterogeneity in Miscible Polymer Blends with Stiffness Disparity:Â Computer Simulations Using the Bond Fluctuation Model. Macromolecules, 2003, 36, 8567-8573.	4.8	35
133	Dynamics of Miscible Polymer Blends:â€‰ Role of Concentration Fluctuations on Characteristic Segmental Relaxation Times. Macromolecules, 2007, 40, 5759-5766.	4.8	35
134	Reversible Gelation Model Predictions of the Linear Viscoelasticity of Oligomeric Sulfonated Polystyrene Ionomer Blends. Macromolecules, 2016, 49, 3936-3947.	4.8	35
135	Room Temperature to 150 Â°C Lithium Metal Batteries Enabled by a Rigid Molecular Ionic Composite Electrolyte. Advanced Energy Materials, 2021, 11, 2003559.	19.5	35
136	Brittle fracture in associative polymers: the case of ionomer melts. Soft Matter, 2016, 12, 7606-7612.	2.7	34
137	Amphiphilic maleic acid-containing alternating copolymers?1. Dissociation behavior and compositions. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3571-3583.	2.1	33
138	Critical Incorporation Concentration of Surfactants Added to Micellar Solutions of Hydrophobically Modified Polyelectrolytes of the Same Charge. Langmuir, 2001, 17, 2937-2941.	3.5	32
139	Dispersing Grafted Nanoparticle Assemblies into Polymer Melts through Flow Fields. ACS Macro Letters, 2013, 2, 1051-1055.	4.8	32
140	Explaining the Non-Newtonian Character of Aggregating Monoclonal Antibody Solutions Using Small-Angle Neutron Scattering. Biophysical Journal, 2014, 107, 469-476.	0.5	32
141	The Role of Solvating 12-Crown-4 Plasticizer on Dielectric Constant and Ion Conduction of Poly(ethylene oxide) Single-Ion Conductors. Macromolecules, 2017, 50, 5582-5591.	4.8	32
142	Effect of the Hydrophilic Size on the Structural Phases of Aqueous Nonionic Gemini Surfactant Solutions. Langmuir, 2004, 20, 9061-9068.	3.5	31
143	Side chain length affects backbone dynamics in poly(3â€alkylthiophene)s. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1193-1202.	2.1	31
144	Transition in Crystal Morphology for Flow-Induced Crystallization of Isotactic Polypropylene. Macromolecules, 2016, 49, 5561-5575.	4.8	30

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145	Solvent-non-solvent rapid-injection for preparing nanostructured materials from micelles to hydrogels. Nature Communications, 2019, 10, 3855.	12.8	30
146	Exploring the role of ion solvation in ethylene oxide based single-ion conducting polyanions and polycations. Soft Matter, 2013, 9, 10275.	2.7	29
147	Simultaneous Reduction and Polymerization of Graphene Oxide/Styrene Mixtures To Create Polymer Nanocomposites with Tunable Dielectric Constants. ACS Applied Nano Materials, 2020, 3, 962-968.	5.0	28
148	Synthesis, Morphology, and Ion Conduction of Polyphosphazene Ammonium Iodide Ionomers. Macromolecules, 2015, 48, 111-118.	4.8	27
149	Imidazole-containing triblock copolymers with a synergy of ether and imidazolium sites. Journal of Materials Chemistry C, 2015, 3, 3891-3901.	5.5	27
150	Isothermal Flow-Induced Crystallization of Polyamide 66 Melts. Macromolecules, 2018, 51, 4269-4279.	4.8	27
151	Two Distinct Morphologies for Semicrystalline Isotactic Polypropylene Crystallized after Shear Flow. Macromolecules, 2018, 51, 4750-4761.	4.8	27
152	Diffusion and melt viscosity of a main-chain liquid crystalline polyether. Macromolecules, 1993, 26, 3764-3771.	4.8	26
153	Dynamic light scattering and rheology studies of aqueous solutions of amphiphilic sodium maleate containing copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 774-785.	2.1	26
154	Polloidal Chains from Self-Assembly of Flattened Particles. Langmuir, 2013, 29, 10340-10345.	3.5	26
155	Mechanical Properties of Tandem-Repeat Proteins Are Governed by Network Defects. ACS Biomaterials Science and Engineering, 2018, 4, 884-891.	5.2	26
156	Nuclear magnetic resonance investigation of dynamics in poly(ethylene oxide)-based lithium polyether-ester-sulfonate ionomers. Journal of Chemical Physics, 2012, 136, 014510.	3.0	25
157	Morphological Evolution of Ionomer/Plasticizer Mixtures during a Transition from Ionomer to Polyelectrolyte. Macromolecules, 2017, 50, 963-971.	4.8	25
158	Hydrodynamics of polymer solutions via two-parameter scaling. Journal De Physique II, 1994, 4, 1299-1310.	0.9	25
159	Temperature and hydrophobic alcohol-induced structural changes of Pluronics micelles. Physica B: Condensed Matter, 2006, 385-386, 685-687.	2.7	24
160	Controlled Flats on Spherical Polymer Colloids. Langmuir, 2010, 26, 7644-7649.	3.5	24
161	Plasticizing Li single-ion conductors with low-volatility siloxane copolymers and oligomers containing ethylene oxide and cyclic carbonates. Journal of Materials Chemistry A, 2015, 3, 21269-21276.	10.3	24
162	Local Chain Alignment via Nematic Ordering Reduces Chain Entanglement in Conjugated Polymers. Macromolecules, 2018, 51, 10271-10284.	4.8	24

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163	Zwitterions Raise the Dielectric Constant of Soft Materials. Physical Review Letters, 2021, 127, 228001.	7.8	24
164	Surface characterization of cross-linked elastomers by shear modulation force microscopy. Polymer, 2003, 44, 3327-3332.	3.8	23
165	Evidence for dynamic heterogeneities in computer simulations of miscible polymer blends. Physical Review E, 2003, 67, 010801.	2.1	23
166	Linear viscoelastic response and steady shear viscosity of native cellulose in 1-ethyl-3-methylimidazolium methylphosphonate. Journal of Rheology, 2018, 62, 81-87.	2.6	23
167	Isothermal crystallization of poly(ether ether ketone) with different molecular weights over a wide temperature range. Polymer Crystallization, 2019, 2, e10055.	0.8	23
168	Thermodynamic signature of the onset of caged dynamics in glass-forming liquids. Journal of Chemical Physics, 2002, 116, 865-868.	3.0	22
169	The Effect of Water on Rheology of Native Cellulose/Ionic Liquids Solutions. Biomacromolecules, 2017, 18, 2849-2857.	5.4	22
170	Ion Transport and Mechanical Properties of Non-Crystallizable Molecular Ionic Composite Electrolytes. Macromolecules, 2020, 53, 1405-1414.	4.8	22
171	Role of Distributions of Intramolecular Concentrations on the Dynamics of Miscible Polymer Blends Probed by Molecular Dynamics Simulation. Physical Review Letters, 2009, 103, 037801.	7.8	21
172	Electroactuation with single charge carrier ionomers: the roles of electrostatic pressure and steric strain. Soft Matter, 2013, 9, 3767.	2.7	21
173	Cluster-continuum quantum mechanical models to guide the choice of anions for Li+-conducting ionomers. Journal of Chemical Physics, 2013, 139, 204905.	3.0	21
174	Constraint Release Mechanisms for H-Polymers Moving in Linear Matrices of Varying Molar Masses. Macromolecules, 2019, 52, 3010-3028.	4.8	21
175	Rheological investigation of collagen, fibrinogen, and thrombin solutions for drop-on-demand 3D bioprinting. Soft Matter, 2020, 16, 10506-10517.	2.7	21
176	Rheo-NMR of Wormlike Micelles Formed from Nonionic Pluronic Surfactants. Macromolecules, 2008, 41, 804-814.	4.8	20
177	Terminal Flow of Cluster-Forming Supramolecular Polymer Networks: Single-Chain Relaxation or Micelle Reorganization?. Physical Review Letters, 2020, 125, 127801.	7.8	20
178	Rheology of Entangled Polyelectrolyte Solutions. Macromolecules, 2021, 54, 1375-1387.	4.8	20
179	Rheology, Sticky Chain, and Sticker Dynamics of Supramolecular Elastomers Based on Cluster-Forming Telechelic Linear and Star Polymers. Macromolecules, 2021, 54, 5065-5076.	4.8	20
180	Mesoscopic Structural Length Scales in P3HT/PCBM Mixtures Remain Invariant for Various Processing Conditions. Chemistry of Materials, 2013, 25, 2812-2818.	6.7	19

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