Ronald G Larson

List of Publications by Year in Descending Order

197 papers	7,674 citations	43 h-index	81 g-index
205 ext. papers	8,654 ext. citations	5.5 avg, IF	6.72 L-index

#	Paper	IF	Citations
197	Associative Thickeners for Waterborne Paints: Structure, Characterization, Rheology, and Modeling. *Progress in Polymer Science*, **2022**, 129, 101546	29.6	0
196	Nonlinear rheology of entangled wormlike micellar solutions predicted by a micelle-slip-spring model. *Journal of Rheology*, **2022**, 66, 639-656	4.1	0
195	Free Energy Cost of Interdigitation of Lamellar Bilayers of Fatty Alcohols with Cationic Surfactants from Molecular Dynamics Simulations. *Journal of Physical Chemistry B*, **2021**, 125, 2389-2397	3.4	2
194	Methods of Colloidal Simulation **2021**, 120-154		0
193	Accurate Closure for the Configuration Dynamics and Rheology of Dilute Polymer Chains in Arbitrary Flows. *Macromolecules*, **2021**, 54, 6355-6371	5.5	1
192	Role of electrostatic interactions in charge regulation of weakly dissociating polyacids. *Progress in Polymer Science*, **2021**, 112, 101322	29.6	12
191	Investigation of delayed formation of wax deposits in polyethylene pipe using a flow-loop. *Journal of Petroleum Science and Engineering*, **2021**, 196, 108104	4.4	1
190	An experimentally validated heat and mass transfer model for wax deposition from flowing oil onto a cold surface. *AICHE Journal*, **2021**, 67, e17063	3.6	6
189	Linear viscoelasticity and time-temperature-salt and other superpositions in polyelectrolyte coacervates. *Journal of Rheology*, **2021**, 65, 77-102	4.1	9
188	Strategy for reducing molecular ensemble size for efficient rheological modeling of commercial polymers. *Journal of Rheology*, **2021**, 65, 43-57	4.1	0
187	Brownian Dynamics Simulations of Telechelic Polymers Transitioning between Hydrophobic Surfaces. *Macromolecules*, **2021**, 54, 8612-8621	5.5	2
186	Extracting free energies of counterion binding to polyelectrolytes by molecular dynamics simulations. *Journal of Chemical Physics*, **2021**, 155, 114902	3.9	1
185	Surfactant desorption and scission free energies for cylindrical and spherical micelles from umbrella-sampling molecular dynamics simulations. *Journal of Colloid and Interface Science*, **2021**, 599, 773-784	9.3	4
184	Transitioning from underdamped to overdamped behavior in theory and in Langevin simulations of desorption of a particle from a Lennard-Jones potential. *Journal of Rheology*, **2021**, 65, 1235-1243	4.1	0
183	Predictions of polymer migration in a dilute solution between rotating eccentric cylinders. *Journal of Rheology*, **2021**, 65, 1311-1325	4.1	2
182	Determining threadlike micelle lengths from rheometry. *Journal of Rheology*, **2021**, 65, 59-71	4.1	7
181	Characterizing the rheology, slip, and velocity profiles of lamellar gel networks. *Journal of Rheology* , **2020**, 64, 851-862	4.1	9

180	Experimental Investigation of Time-Dependent Thickness and Composition of Multicomponent Wax Deposits on Cold Surfaces. *Energy & Fuels*, **2020**, 34, 12330-12339	4.1	
179	Overcharging of polyelectrolyte complexes: an entropic phenomenon. *Soft Matter*, **2020**, 16, 10640-10656	3.6	6
178	Analysis of Partitioning of Salt through Doping of Polyelectrolyte Complex Coacervates. *Macromolecules*, **2020**, 53, 6928-6945	5.5	16
177	A slip-spring simulation model for predicting linear and nonlinear rheology of entangled wormlike micellar solutions. *Journal of Rheology*, **2020**, 64, 1045-1061	4.1	6
176	Effect of Flow-Induced Nematic Order on Polyethylene Crystal Nucleation. *Macromolecules*, **2020**, 53, 7650-7657	5.5	7
175	Letter to the Editor: Modeling the nonmonotonic time-dependence of viscosity bifurcation in thixotropic yield-stress fluids. *Journal of Rheology*, **2019**, 63, 673-675	4.1	7
174	Salt- and pH-induced swelling of a poly(acrylic acid) brush via quartz crystal microbalance w/dissipation (QCM-D). *Soft Matter*, **2019**, 15, 7838-7851	3.6	13
173	Unraveling Dynamics of Entangled Polymers in Strong Extensional Flows. *Macromolecules*, **2019**, 52, 1296-1307	5.5	9
172	From well-entangled to partially-entangled wormlike micelles. *Soft Matter*, **2019**, 15, 642-655	3.6	27
171	A review of thixotropy and its rheological modeling. *Journal of Rheology*, **2019**, 63, 477-501	4.1	91
170	Slip-Spring and Kink Dynamics Models for Fast Extensional Flow of Entangled Polymeric Fluids. *Polymers*, **2019**, 11,	4.5	5
169	Inertial migration of neutrally buoyant prolate and oblate spheroids in plane Poiseuille flow using dissipative particle dynamics simulations. *Computational Materials Science*, **2019**, 162, 178-185	3.2	6
168	Nonlinear elastic behavior and anisotropic electronic properties of two-dimensional borophene. *Journal of Applied Physics*, **2019**, 125, 145107	2.5	16
167	Determining the Dilution Exponent for Entangled 1,4-Polybutadienes Using Blends of Near-Monodisperse Star with Unentangled, Low Molecular Weight Linear Polymers. *Macromolecules*, **2019**, 52, 1757-1771	5.5	6
166	Search for the Source of an Apparent Interfacial Resistance To Mass Transfer of CnEm Surfactants To the Water/Oil Interface. *Langmuir*, **2019**, 35, 2898-2908	4	5
165	Modeling Intercolloidal Interactions Induced by Adsorption of Mobile Telechelic Polymers onto Particle Surfaces. *Macromolecules*, **2019**, 52, 5357-5365	5.5	8
164	A metastable nematic precursor accelerates polyethylene oligomer crystallization as determined by atomistic simulations and self-consistent field theory. *Journal of Chemical Physics*, **2019**, 150, 244903	3.9	13
163	Assessing the Range of Validity of Current Tube Models through Analysis of a Comprehensive Set of Star−Linear 1,4-Polybutadiene Polymer Blends. *Macromolecules*, **2019**, 52, 7831-7846	5.5	3

162	Time-dependent shear rate inhomogeneities and shear bands in a thixotropic yield-stress fluid under transient shear. *Soft Matter*, **2019**, 15, 7956-7967	3.6	15
161	Multiscale Modeling of Sub-Entanglement-Scale Chain Stretching and Strain Hardening in Deformed Polymeric Glasses. *Macromolecules*, **2019**, 52, 9248-9260	5.5	4
160	Mechanism of Wax Deposition on Cold Surfaces: Gelation and Deposit Aging. *Energy & Fuels*, **2019**, 33, 3776-3786	4.1	26
159	A molecular dynamics simulation of the structure of sodium lauryl ether sulfate and poly(vinyl alcohol) at the air/water interface. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 563, 84-94	5.1	9
158	Inertio-capillary cross-streamline drift of droplets in Poiseuille flow using dissipative particle dynamics simulations. *Soft Matter*, **2018**, 14, 2267-2280	3.6	12
157	Bridging Dynamics of Telechelic Polymers between Solid Surfaces. *Macromolecules*, **2018**, 51, 2125-2137	5.5	7
156	Multiple relaxation modes in suspensions of colloidal particles bridged by telechelic polymers. *Journal of Rheology*, **2018**, 62, 477-490	4.1	9
155	A multimode structural kinetics constitutive equation for the transient rheology of thixotropic elasto-viscoplastic fluids. *Journal of Rheology*, **2018**, 62, 321-342	4.1	35
154	Scission Free Energies for Wormlike Surfactant Micelles: Development of a Simulation Protocol, Application, and Validation for Personal Care Formulations. *Langmuir*, **2018**, 34, 1564-1573	4	19
153	Effect of Surface Charge and Hydrophobicity on Phospholipid-Nanoparticle Corona Formation: A Molecular Dynamics Simulation Study. *Colloids and Interface Science Communications*, **2018**, 25, 7-11	5.4	13
152	Injectable drug depot engineered to release multiple ophthalmic therapeutic agents with precise time profiles for postoperative treatment following ocular surgery. *Acta Biomaterialia*, **2018**, 73, 90-102	10.8	14
151	Prediction of striped cylindrical micelles (SCMs) formed by dodecyl-β-d-maltoside (DDM) surfactants. *Soft Matter*, **2018**, 14, 2694-2700	3.6	3
150	Shear-Induced Alignment of Janus Particle Lamellar Structures. *Langmuir*, **2018**, 34, 1051-1060	4	4
149	Nonmonotonic Scission and Branching Free Energies as Functions of Hydrotrope Concentration for Charged Micelles. *Physical Review Letters*, **2018**, 121, 038001	7.4	16
148	Structure and Rheology of Molten Polymers **2018**,		66
147	A novel hybrid population balance–Brownian dynamics method for simulating the dynamics of polymer-bridged colloidal latex particle suspensions. *Journal of Rheology*, **2018**, 62, 235-247	4.1	9
146	Elongation thinning and morphology deformation of nanoparticle-filled polypropylene/polystyrene blends in elongational flow. *Journal of Rheology*, **2018**, 62, 11-23	4.1	11
145	Tension-Induced Nematic Phase Separation in Bidisperse Homopolymer Melts. *ACS Central Science*, **2018**, 4, 1545-1550	16.8	7

144	A transport model and constitutive equation for oppositely charged polyelectrolyte mixtures with application to layer-by-layer assembly. *Journal of Chemical Physics*, **2018**, 149, 194901	3.9	1
143	Role of electrostatic correlations in polyelectrolyte charge association. *Journal of Chemical Physics*, **2018**, 149, 163335	3.9	33
142	Stretch and Breakage of Wormlike Micelles under Uniaxial Strain: A Simulation Study and Comparison with Experimental Results. *Langmuir*, **2018**, 34, 12600-12608	4	8
141	A nonlinear kinetic-rheology model for reversible scission and deformation of unentangled wormlike micelles. *Journal of Rheology*, **2018**, 62, 1419-1427	4.1	10
140	Inertial migration of a rigid sphere in plane Poiseuille flow as a test of dissipative particle dynamics simulations. *Journal of Chemical Physics*, **2018**, 149, 164912	3.9	4
139	Direct All-Atom Molecular Dynamics Simulations of the Effects of Short Chain Branching on Polyethylene Oligomer Crystal Nucleation. *Macromolecules*, **2018**, 51, 4762-4769	5.5	17
138	Computational Modeling of Hydroxypropyl-Methylcellulose Acetate Succinate (HPMCAS) and Phenytoin Interactions: A Systematic Coarse-Graining Approach. *Molecular Pharmaceutics*, **2017**, 14, 733-745	5.6	17
137	A framework for multi-scale simulation of crystal growth in the presence of polymers. *Soft Matter*, **2017**, 13, 1904-1913	3.6	14
136	Nucleation of urea from aqueous solution: Structure, critical size, and rate. *Journal of Chemical Physics*, **2017**, 146, 134501	3.9	12
135	Multiscale Modeling of the Effects of Salt and Perfume Raw Materials on the Rheological Properties of Commercial Threadlike Micellar Solutions. *Journal of Physical Chemistry B*, **2017**, 121, 2468-2485	3.4	42
134	Janus particle rotator-to-lamellar nucleation and growth kinetics. *Journal of Chemical Physics*, **2017**, 146, 094901	3.9	2
133	Assessing the Efficacy of Poly(N-isopropylacrylamide) for Drug Delivery Applications Using Molecular Dynamics Simulations. *Molecular Pharmaceutics*, **2017**, 14, 478-491	5.6	27
132	Phase diagram of Janus particles: The missing dimension of pressure anisotropy. *Journal of Chemical Physics*, **2017**, 147, 064510	3.9	2
131	Rheological State Diagrams for Rough Colloids in Shear Flow. *Physical Review Letters*, **2017**, 119, 158001	7.4	75
130	Multiscale Computational Modeling of the Nanostructure of Solid Dispersions of Hydroxypropyl Methylcellulose Acetate Succinate (HPMCAS) and Phenytoin. *Molecular Pharmaceutics*, **2017**, 14, 3422-3435	5.6	10
129	Concentration, salt and temperature dependence of strain hardening of step shear in CTAB/NaSal surfactant solutions. *Journal of Rheology*, **2017**, 61, 967-977	4.1	6
128	Stress-gradient-induced polymer migration in Taylor-Couette flow. *Soft Matter*, **2017**, 13, 5942-5949	3.6	5
127	Controlled Levitation of Colloids through Direct Current Electric Fields. *Langmuir*, **2017**, 33, 10861-10867	4	2

126	Efficient estimation of binding free energies between peptides and an MHC class II molecule using coarse-grained molecular dynamics simulations with a weighted histogram analysis method. *Journal of Computational Chemistry*, **2017**, 38, 2007-2019	3.5	14
125	Growth Kinetics in Layer-by-Layer Assemblies of Organic Nanoparticles and Polyelectrolytes. *ChemPhysChem*, **2017**, 18, 128-141	3.2	7
124	Coarse-grained modeling of crystal growth and polymorphism of a model pharmaceutical molecule. *Soft Matter*, **2016**, 12, 8246-8255	3.6	16
123	Rotator-to-Lamellar Phase Transition in Janus Colloids Driven by Pressure Anisotropy. *Physical Review Letters*, **2016**, 117, 128001	7.4	7
122	Modeling the Hydrophobicity of Nanoparticles and Their Interaction with Lipids and Proteins. *Langmuir*, **2016**, 32, 13084-13094	4	21
121	The effect of wall depletion and hydrodynamic interactions on stress-gradient-induced polymer migration. *Soft Matter*, **2016**, 12, 5883-97	3.6	7
120	Challenging Tube and Slip-Link Models: Predicting the Linear Rheology of Blends of Well-Characterized Star and Linear 1,4-Polybutadienes. *Macromolecules*, **2016**, 49, 4964-4977	5.5	25
119	Adsorption of Plasma Proteins onto PEGylated Lipid Bilayers: The Effect of PEG Size and Grafting Density. *Biomacromolecules*, **2016**, 17, 1757-65	6.9	48
118	Rich Janus colloid phase behavior under steady shear. *Soft Matter*, **2016**, 12, 4071-81	3.6	30
117	A Systematic Coarse-Grained Model for Methylcellulose Polymers: Spontaneous Ring Formation at Elevated Temperature. *Macromolecules*, **2016**, 49, 1490-1503	5.5	43
116	A unified multicomponent stress-diffusion model of drug release from non-biodegradable polymeric matrix tablets. *Journal of Controlled Release*, **2016**, 224, 43-58	11.7	12
115	Kinetic modeling and design of colloidal lock and key assembly. *Journal of Colloid and Interface Science*, **2016**, 463, 242-57	9.3	9
114	Anisotropic self-assembly and gelation in aqueous methylcellulose□heory and modeling. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 1624-1636	2.6	30
113	A Molecular Thermodynamic Model of Complexation in Mixtures of Oppositely Charged Polyelectrolytes with Explicit Account of Charge Association/Dissociation. *Macromolecules*, **2016**, 49, 9706-9719	5.5	77
112	Stress-gradient-induced polymer migration: Perturbation theory and comparisons to stochastic simulations. *Journal of Rheology*, **2016**, 60, 327-343	4.1	8
111	Quantitative nonlinear thixotropic model with stretched exponential response in transient shear flows. *Journal of Rheology*, **2016**, 60, 1301-1315	4.1	26
110	A hybrid Brownian dynamics/constitutive model for yielding, aging, and rejuvenation in deforming polymeric glasses. *Soft Matter*, **2016**, 12, 6757-70	3.6	7
109	Reversible and Irreversible Adsorption Energetics of Poly(ethylene glycol) and Sorbitan Poly(ethoxylate) at a Water/Alkane Interface. *Langmuir*, **2015**, 31, 7503-11	4	20

108	Determination of characteristic lengths and times for wormlike micelle solutions from rheology using a mesoscopic simulation method. *Journal of Rheology*, **2015**, 59, 903-934	4.1	27
107	Modeling the Adsorption of Rheology Modifiers onto Latex Particles Using Coarse-Grained Molecular Dynamics (CG-MD) and Self-Consistent Field Theory (SCFT). *Macromolecules*, **2015**, 48, 8045-8054	5.5	17
106	Brownian dynamics simulations of coagulation of dilute uniform and anisotropic particles under shear flow spanning low to high Peclet numbers. *Journal of Chemical Physics*, **2015**, 142, 024108	3.9	6
105	A Coarse-Grained Implicit Solvent Model for Poly(ethylene oxide), CnEm Surfactants, and Hydrophobically End-Capped Poly(ethylene oxide) and Its Application to Micelle Self-Assembly and Phase Behavior. *Macromolecules*, **2015**, 48, 7709-7718	5.5	32
104	Nonadditivity of nanoparticle interactions. *Science*, **2015**, 350, 1242477	33.3	327
103	Multiscale Molecular Dynamics Simulations of Model Hydrophobically Modified Ethylene Oxide Urethane Micelles. *Journal of Physical Chemistry B*, **2015**, 119, 12540-51	3.4	12
102	Binding kinetics of lock and key colloids. *Journal of Chemical Physics*, **2015**, 142, 174909	3.9	28
101	Universal Relaxation Behavior of Entangled 1,4-Polybutadiene Melts in the Transition Frequency Region. *Macromolecules*, **2015**, 48, 4122-4131	5.5	25
100	Coarse-grained molecular dynamics simulation of self-assembly and surface adsorption of ionic surfactants using an implicit water model. *Langmuir*, **2015**, 31, 1262-71	4	57
99	Potentials of mean force and escape times of surfactants from micelles and hydrophobic surfaces using molecular dynamics simulations. *Langmuir*, **2015**, 31, 1336-43	4	38
98	Relationship between Polyelectrolyte Bulk Complexation and Kinetics of Their Layer-by-Layer Assembly. *Macromolecules*, **2015**, 48, 400-409	5.5	39
97	Transport and deposition patterns in drying sessile droplets. *AICHE Journal*, **2014**, 60, 1538-1571	3.6	215
96	A mesoscopic simulation method for predicting the rheology of semi-dilute wormlike micellar solutions. *Journal of Rheology*, **2014**, 58, 681-721	4.1	42
95	Constitutive model that shows extension thickening for entangled solutions and extension thinning for melts. *Journal of Rheology*, **2014**, 58, 255-279	4.1	53
94	Molecular dynamics simulations of structure-property relationships of Tween 80 surfactants in water and at interfaces. *Journal of Physical Chemistry B*, **2014**, 118, 12907-18	3.4	38
93	Phase behavior of Janus colloids determined by sedimentation equilibrium. *Soft Matter*, **2014**, 10, 4593-602	3.8	32
92	Dissipative particle dynamics simulation of dilute polymer solutions: Inertial effects and hydrodynamic interactions. *Journal of Rheology*, **2014**, 58, 1039-1058	4.1	18
91	Systematic Coarse-Graining of the Dynamics of Self-Attractive Semiflexible Polymers. *Macromolecules*, **2014**, 47, 1494-1502	5.5	19

90	Molecular View of Polymer/Water Interfaces in Latex Paint. *Macromolecules*, **2014**, 47, 6441-6452	5.5	15
89	Molecular dynamics simulations of sodium dodecyl sulfate micelles in water-the effect of the force field. *Journal of Physical Chemistry B*, **2014**, 118, 3864-80	3.4	111
88	Assessing the efficiency of polymeric excipients by atomistic molecular dynamics simulations. *Molecular Pharmaceutics*, **2014**, 11, 1676-86	5.6	44
87	pH and Salt Effects on the Associative Phase Separation of Oppositely Charged Polyelectrolytes. *Polymers*, **2014**, 6, 1414-1436	4.5	84
86	Effects of excluded volume and hydrodynamic interactions on the behavior of isolated bead-rod polymer chains in shearing flow. *AICHE Journal*, **2014**, 60, 1400-1412	3.6	8
85	Analysis of solvation and gelation behavior of methylcellulose using atomistic molecular dynamics simulations. *Journal of Physical Chemistry B*, **2014**, 118, 13992-4008	3.4	25
84	How accurate are stochastic rotation dynamics simulations of polymer dynamics?. *Journal of Rheology*, **2013**, 57, 1177-1194	4.1	19
83	Assessment of mesoscopic particle-based methods in microfluidic geometries. *Journal of Chemical Physics*, **2013**, 139, 084109	3.9	7
82	Explaining the Absence of High-Frequency Viscoelastic Relaxation Modes of Polymers in Dilute Solutions. *Macromolecules*, **2013**, 46, 1981-1992	5.5	2
81	Coarse-grained molecular dynamics simulation of tethered lipid assemblies. *Soft Matter*, **2013**, 9, 480-486	3.6	11
80	Tumbling and Deformation of Isolated Polymer Chains in Shearing Flow. *Macromolecules*, **2012**, 45, 9493-9499	5.5	32
79	Multiple regimes of deformation in shearing flow of isolated polymers. *Journal of Rheology*, **2012**, 56, 305-332	4.1	32
78	The lengths of thread-like micelles inferred from rheology. *Journal of Rheology*, **2012**, 56, 1363-1374	4.1	22
77	Neues von Kaffeeringen. *Angewandte Chemie*, **2012**, 124, 2596-2598	3.6	4
76	Re-shaping the coffee ring. *Angewandte Chemie - International Edition*, **2012**, 51, 2546-8	16.4	77
75	DRYING A SESSILE DROPLET: IMAGING AND ANALYSIS OF TRANSPORT AND DEPOSITION PATTERNS **2012**, 1-57		
74	Combined Synthesis, TGIC Characterization, and Rheological Measurement and Prediction of Symmetric H Polybutadienes and Their Blends with Linear and Star-Shaped Polybutadienes. *Macromolecules*, **2011**, 44, 7799-7809	5.5	52
73	Materials science. Predicting the flow of real polymers. *Science*, **2011**, 333, 1834-5	33.3	10

72	Molecular dynamics simulation of phase transitions in model lung surfactant monolayers. *Biochimica Et Biophysica Acta - Biomembranes*, **2011**, 1808, 2450-65	3.8	55
71	Complex Protein Patterns in Drying Droplets. *Materials Research Society Symposia Proceedings*, **2010**, 1273, 30101		9
70	Method for obtaining tube model parameters for commercial ethene/α-olefin copolymers. *Journal of Rheology*, **2010**, 54, 393-406	4.1	31
69	Comparing tube models for predicting the linear rheology of branched polymer melts. *Journal of Rheology*, **2010**, 54, 223-260	4.1	75
68	Brownian dynamics simulations of single polymer chains with and without self-entanglements in theta and good solvents under imposed flow fields. *Journal of Rheology*, **2010**, 54, 1061-1081	4.1	19
67	Explicit- and Implicit-Solvent Molecular Dynamics Simulations of Complex Formation between Polycations and Polyanions. *Macromolecules*, **2009**, 42, 8851-8863	5.5	41
66	Molecular dynamics simulations of threadlike cetyltrimethylammonium chloride micelles: effects of sodium chloride and sodium salicylate salts. *Journal of Physical Chemistry B*, **2009**, 113, 13697-710	3.4	89
65	Modeling the buildup of exponentially growing polyelectrolyte multilayer films. *Journal of Physical Chemistry B*, **2009**, 113, 4232-41	3.4	62
64	Coarse-grained molecular dynamics studies of the concentration and size dependence of fifth- and seventh-generation PAMAM dendrimers on pore formation in DMPC bilayer. *Journal of Physical Chemistry B*, **2008**, 112, 7778-84	3.4	146
63	Universal Scaling of Linear and Nonlinear Rheological Properties of Semidilute and Concentrated Polymer Solutions. *Macromolecules*, **2008**, 41, 8903-8915	5.5	41
62	The MARTINI Coarse-Grained Force Field: Extension to Proteins. *Journal of Chemical Theory and Computation*, **2008**, 4, 819-34	6.4	1717
61	Effect of Branch Point Position on the Linear Rheology of Asymmetric Star Polymers. *Macromolecules*, **2008**, 41, 6871-6872	5.5	18
60	Constraint Release in Entangled Binary Blends of Linear Polymers: A Molecular Dynamics Study. *Macromolecules*, **2008**, 41, 4945-4960	5.5	35
59	Effects of Bending and Torsional Potentials on High-Frequency Viscoelasticity of Dilute Polymer Solutions. *Macromolecules*, **2008**, 41, 3692-3700	5.5	8
58	Effect of Molecular Structure on Rheological Behavior of Nearly Monodisperse H-Shaped Polybutadienes. *AIP Conference Proceedings*, **2008**,	0	1
57	Using spring repulsions to model entanglement interactions in Brownian dynamics simulations of bead–spring chains. *Rheologica Acta*, **2008**, 47, 3-17	2.3	18
56	Determining polymer molecular weight distributions from rheological properties using the dual-constraint model. *Rheologica Acta*, **2008**, 47, 689-700	2.3	32
55	Coarse-Grained Brownian Dynamics Simulations of Electrophoresis of DNA Molecules from Generalized Reptation Models. *Macromolecules*, **2007**, 40, 366-378	5.5	5

54	Direct Molecular Dynamics Simulation of Branch Point Motion in Asymmetric Star Polymer Melts. *Macromolecules*, **2007**, 40, 3443-3449	5.5	48
53	Molecular Imaging of Shear-Induced Polymer Migration in Dilute Solutions near a Surface. *Macromolecules*, **2007**, 40, 8490-8499	5.5	13
52	Biophysics. Going with the flow. *Science*, **2007**, 318, 57-8	33.3	13
51	Advances in modeling of polymer melt rheology. *AICHE Journal*, **2007**, 53, 542-548	3.6	34
50	Looking inside the entanglement tube using molecular dynamics simulations. *Journal of Polymer Science, Part B: Polymer Physics*, **2007**, 45, 3240-3248	2.6	25
49	Perspectives on Current Issues Is Anthropic Selection Science?. *Physics in Perspective*, **2007**, 9, 58-69	0.3	2
48	Validity of the bead-spring model for describing the linear viscoelastic properties of single-strand DNA under strongly denaturing conditions. *Rheologica Acta*, **2007**, 46, 1153-1160	2.3	3
47	Implications of microscopic simulations of polymer melts for mean-field tube theories. *Molecular Physics*, **2007**, 105, 249-260	1.7	9
46	Concentration Dependence of Shear-Induced Polymer Migration in DNA Solutions near a Surface. *Macromolecules*, **2007**, 40, 8784-8787	5.5	11
45	Brownian dynamics simulations with stiff finitely extensible nonlinear elastic-Fraenkel springs as approximations to rods in bead-rod models. *Journal of Chemical Physics*, **2006**, 124, 044911	3.9	33
44	Transitional pathway to elastic turbulence in torsional, parallel-plate flow of a polymer solution. *Journal of Fluid Mechanics*, **2006**, 554, 191	3.7	29
43	Direct Calculation of the Tube Potential Confining Entangled Polymers. *Macromolecules*, **2006**, 39, 6737-6743	5.5	69
42	Identification of Topological Constraints in Entangled Polymer Melts Using the Bond-Fluctuation Model. *Macromolecules*, **2006**, 39, 2413-2417	5.5	54
41	Brownian Dynamics Modeling of Flow-Induced Birefringence and Chain Scission in Dilute Polymer Solutions in a Planar Cross-Slot Flow. *Macromolecules*, **2005**, 38, 1456-1468	5.5	26
40	Primitive Path Identification and Statistics in Molecular Dynamics Simulations of Entangled Polymer Melts. *Macromolecules*, **2005**, 38, 5761-5765	5.5	64
39	The scaling of zero-shear viscosities of semidilute polymer solutions with concentration. *Journal of Rheology*, **2005**, 49, 1117-1128	4.1	86
38	DNA configurations and concentration in shearing flow near a glass surface in a microchannel. *Journal of Rheology*, **2005**, 49, 127-138	4.1	73
37	Modeling the linear viscoelastic properties of metallocene-catalyzed high density polyethylenes with long-chain branching. *Journal of Rheology*, **2005**, 49, 523-536	4.1	32

36	Prediction of coil-stretch hysteresis for dilute polystyrene molecules in extensional flow. *Journal of Rheology*, **2005**, 49, 1081-1089	4.1	29
35	The rheology of dilute solutions of flexible polymers: Progress and problems. *Journal of Rheology*, **2005**, 49, 1-70	4.1	238
34	A hierarchical algorithm for predicting the linear viscoelastic properties of polymer melts with long-chain branching. *Rheologica Acta*, **2005**, 44, 319-330	2.3	87
33	A Mean Flow Model for Polymer and Fiber Turbulent Drag Reduction. *Applied Rheology*, **2005**, 15, 370-380	2.2	10
32	Principles for coarse-graining polymer molecules in simulations of polymer fluid mechanics. *Molecular Physics*, **2004**, 102, 341-351	1.7	17
31	Dynamics of vorticity stretching and breakup of isolated viscoelastic droplets in an immiscible viscoelastic matrix. *Rheologica Acta*, **2004**, 43, 246-256	2.3	16
30	DNA molecular configurations in flows near adsorbing and nonadsorbing surfaces. *Rheologica Acta*, **2004**, 44, 38-46	2.3	14
29	Tube Dilation and Reptation in Binary Blends of Monodisperse Linear Polymers. *Macromolecules*, **2004**, 37, 597-604	5.5	82
28	Modeling hydrodynamic interaction in Brownian dynamics: Simulations of extensional and shear flows of dilute solutions of high molecular weight polystyrene. *Journal of Rheology*, **2004**, 48, 995-1021	4.1	52
27	An Explanation for the High-Frequency Elastic Response of Dilute Polymer Solutions. *Macromolecules*, **2004**, 37, 5110-5114	5.5	22
26	Influence of dispersed-phase elasticity on steady-state deformation and breakup of droplets in simple shearing flow of immiscible polymer blends. *Journal of Rheology*, **2004**, 48, 843-862	4.1	37
25	Comprehensive constitutive model for immiscible blends of Newtonian polymers. *Journal of Rheology*, **2004**, 48, 319-348	4.1	28
24	Molecular engineering of peptides. *Chemistry and Biology*, **2003**, 10, 1005-6		2
23	Modeling hydrodynamic interaction in Brownian dynamics: simulations of extensional flows of dilute solutions of DNA and polystyrene. *Journal of Non-Newtonian Fluid Mechanics*, **2003**, 113, 147-191	2.7	116
22	Lattice Monte Carlo Simulations of Dilute Mixed Micelles. *Langmuir*, **2003**, 19, 10434-10442	4	23
21	Influence of weak elasticity of dispersed phase on droplet behavior in sheared polybutadiene/poly(dimethyl siloxane) blends. *Journal of Rheology*, **2003**, 47, 37-58	4.1	45
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