Martin KrÃ¶ger

List of Publications by Year in descending order

242 papers	10,461 citations	36203 51 h-index	43802 91 g-index

260 all docs	260 docs citations	260 times ranked	7937 citing authors

#	Article	IF	Citations
1	Efficient generation of self-avoiding, semiflexible rotational isomeric chain ensembles in bulk, in confined geometries, and on surfaces. Computer Physics Communications, 2022, 270, 108176.	3.0	5
2	Forecast of Omicron Wave Time Evolution. Covid, 2022, 2, 216-229.	0.7	6
3	Validation and Refinement of Unified Analytic Model for Flexible and Semiflexible Polymer Melt Entanglement. Macromolecules, 2022, 55, 3613-3626.	2.2	11
4	Multi-Hamiltonian structure of the epidemics model accounting for vaccinations and a suitable test for the accuracy of its numerical solvers. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 225206.	0.7	4
5	SIR-Solution for Slowly Time-Dependent Ratio between Recovery and Infection Rates. Physics, 2022, 4, 504-524.	0.5	2
6	Combined dynamics of magnetization and particle rotation of a suspended superparamagnetic particle in the presence of an orienting field: Semi-analytical and numerical solution. Mathematical Models and Methods in Applied Sciences, 2022, 32, 1349-1383.	1.7	3
7	Epidemics Forecast From SIR-Modeling, Verification and Calculated Effects of Lockdown and Lifting of Interventions. Frontiers in Physics, 2021, 8, .	1.0	5
8	Computational design of shape memory polymer nanocomposites. Polymer, 2021, 217, 123476.	1.8	8
9	Analytical solution of the SIR-model for the temporal evolution of epidemics: part B. Semi-time case. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 175601.	0.7	38
10	Sticky Rouse Time Features the Self-Adhesion of Supramolecular Polymer Networks. Macromolecules, 2021, 54, 5053-5064.	2.2	12
11	Analytical Modeling of the Temporal Evolution of Epidemics Outbreaks Accounting for Vaccinations. Physics, 2021, 3, 386-426.	0.5	27
12	Drag on a spherical particle at the airâ€“liquid interface: Interplay between compressibility, Marangoni flow, and surface viscosities. Physics of Fluids, 2021, 33, .	1.6	15
13	Reasonable Limiting of 7-Day Incidence per Hundred Thousand and Herd Immunization in Germany and Other Countries. Covid, 2021, 1, 130-136.	0.7	4
14	Reconfigurable artificial microswimmers with internal feedback. Nature Communications, 2021, 12, 4762.	5.8	34
15	Drag on a spheroidal particle at clean and surfactant-laden interfaces: effects of particle aspect ratio, contact angle and surface viscosities. Journal of Fluid Mechanics, 2021, 924, .	1.4	2
16	Verification of the accuracy of the SIR model in forecasting based on the improved SIR model with a constant ratio of recovery to infection rate by comparing with monitored second wave data. Royal Society Open Science, 2021, 8, 211379.	1.1	8
17	Explicit formulae for the peak time of an epidemic from the SIR model. Which approximant to use?. Physica D: Nonlinear Phenomena, 2021, 425, 132981.	1.3	20
18	Insights from modeling into structure, entanglements, and dynamics in attractive polymer nanocomposites. Soft Matter, 2021, 17, 6362-6373.	1.2	18

#	Article	IF	Citations
19	Top Cited 2018â€“2019 Papers in the Section â€œPolymer Theory and Simulationâ€. Polymers, 2021, 13, 43.	2.0	0
20	Ionic Polymer Nanocomposites Subjected to Uniaxial Extension: A Nonequilibrium Molecular Dynamics Study. Polymers, 2021, 13, 4001.	2.0	8
21	Developments in Polymer Theory and Simulation. Polymers, 2020, 12, 30.	2.0	3
22	Gaussian Doubling Times and Reproduction Factors of the COVID-19 Pandemic Disease. Frontiers in Physics, 2020, 8, .	1.0	12
23	Polymer Conformations, Entanglements and Dynamics in Ionic Nanocomposites: A Molecular Dynamics Study. Polymers, 2020, 12, 2591.	2.0	8
24	Tuning Electrokinetic Flow, Ionic Conductance, and Selectivity in a Solid-State Nanopore Modified with a pH-Responsive Polyelectrolyte Brush: A Molecular Theory Approach. Journal of Physical Chemistry C, 2020, 124, 18513-18531.	1.5	12
25	Time Correlation Functions of Equilibrium and Nonequilibrium Langevin Dynamics: Derivations and Numerics Using Random Numbers. SIAM Review, 2020, 62, 901-935.	4.2	5
26	Dynamics of interacting magnetic nanoparticles: effective behavior from competition between Brownian and NÃ©el relaxation. Physical Chemistry Chemical Physics, 2020, 22, 22244-22259.	1.3	41
27	Atomistic Modeling of Plastic Deformation in Semicrystalline Polyethylene: Role of Interphase Topology, Entanglements, and Chain Dynamics. Macromolecules, 2020, 53, 4605-4617.	2.2	35
28	Covid-19 Predictions Using a Gauss Model, Based on Data from April 2. Physics, 2020, 2, 197-212.	0.5	46
29	Surface Rheology and Structure of Model Triblock Copolymers at a Liquidâ€“Vapor Interface: A Molecular Dynamics Study. Macromolecules, 2020, 53, 1245-1257.	2.2	5
30	Unified Analytic Expressions for the Entanglement Length, Tube Diameter, and Plateau Modulus of Polymer Melts. Physical Review Letters, 2020, 124, 147801.	2.9	28
31	A two-enzyme cascade reaction consisting of two reaction pathways. Studies in bulk solution for understanding the performance of a flow-through device with immobilised enzymes. RSC Advances, 2020, 10, 18655-18676.	1.7	9
32	Analytical solution of the SIR-model for the temporal evolution of epidemics. Part A: time-independent reproduction factor. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 505601.	0.7	61
33	First Consistent Determination of the Basic Reproduction Number for the First Covid-19 Wave in 71 Countries from the SIR-Epidemics Model with a Constant Ratio of Recovery to Infection Rate. Global Journal of Science Frontier Research, 2020, , 37-43.	0.1	1
34	Interplay between ligand mobility and nanoparticle geometry during cellular uptake of PEGylated liposomes and bicelles. Nanoscale, 2019, 11, 15971-15983.	2.8	9
35	Can one determine the density of an individual synthetic macromolecule?. Soft Matter, 2019, 15, 6547-6556.	1.2	0
36	Relaxation Behavior and Nonlinear Surface Rheology of PEOâ€“PPOâ€“PEO Triblock Copolymers at the Airâ€“Water Interface. Langmuir, 2019, 35, 14388-14396.	1.6	6

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37	Efficient hybrid algorithm for the dynamic creation of wormlike chains in solutions, brushes, melts and glasses. Computer Physics Communications, 2019, 241, 178-179.	3.0	6
38	Assessment of the Tumbling-Snake Model against Linear and Nonlinear Rheological Data of Bidisperse Polymer Blends. Polymers, 2019, 11, 376.	2.0	6
39	Hybrid Dendronized Polymers as Molecular Objects: Viscoelastic Properties in the Melt. Macromolecules, 2019, 52, 7331-7342.	2.2	8
40	Gasâ€“liquid phase equilibrium of a model Langmuir monolayer captured by a multiscale approach. Physical Chemistry Chemical Physics, 2019, 21, 2295-2306.	1.3	11
41	Emergence of stationary uphill currents in 2D Ising models: the role of reservoirs and boundary conditions. European Physical Journal: Special Topics, 2019, 228, 69-91.	1.2	3
42	Structure Elucidation of 2D Polymer Monolayers Based on Crystallization Estimates Derived from Tip-Enhanced Raman Spectroscopy (TERS) Polymerization Conversion Data. Journal of the American Chemical Society, 2019, 141, 9867-9871.	6.6	23
43	Modeling of Entangled Polymer Diffusion in Melts and Nanocomposites: A Review. Polymers, 2019, 11, 876.	2.0	47
44	3D Conformations of Thick Synthetic Polymer Chains Observed by Cryogenic Electron Microscopy. ACS Nano, 2019, 13, 3466-3473.	7.3	11
45	Polymer stiffness governs template mediated self-assembly of liposome-like nanoparticles: simulation, theory and experiment. Nanoscale, 2019, 11, 20179-20193.	2.8	8
46	Understanding two-dimensional polymerisation using Bragg and diffuse X-ray scattering. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e427-e427.	0.0	0
47	A Detailed Examination of the Topological Constraints of Lamellae-Forming Block Copolymers. Macromolecules, 2018, 51, 2110-2124.	2.2	19
48	Unraveling two-dimensional polymerization in the single crystal. Journal of Applied Crystallography, 2018, 51, 481-497.	1.9	25
49	Aggregation of polyethylene glycol polymers suppresses receptor-mediated endocytosis of PEGylated liposomes. Nanoscale, 2018, 10, 4545-4560.	2.8	60
50	Size of graphene sheets determines the structural and mechanical properties of 3D graphene foams. Nanotechnology, 2018, 29, 104001.	1.3	29
51	Dynamics and Wetting Behavior of Coreâ€“Shell Soft Particles at a Fluidâ€“Fluid Interface. Langmuir, 2018, 34, 15370-15382.	1.6	18
52	Ordering and Crystallization of Entangled Polyethylene Melts under Uniaxial Tension: A Molecular Dynamics Study. Macromolecules, 2018, 51, 9635-9648.	2.2	49
53	Combined Experimental and Simulation Studies of Cross-Linked Polymer Brushes under Shear. Macromolecules, 2018, 51, 10174-10183.	2.2	19
54	Surface Disentanglement and Slip in a Polymer Melt: A Molecular Dynamics Study. Macromolecules, 2018, 51, 8996-9010.	2.2	10

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55	Miscibility and Nanoparticle Diffusion in Ionic Nanocomposites. Polymers, 2018, 10, 1010.	2.0	15
56	From intermediate anisotropic to isotropic friction at large strain rates to account for viscosity thickening in polymer solutions. Journal of Chemical Physics, 2018, 148, 184903.	1.2	7
57	Tumbling-Snake Model for Polymeric Liquids Subjected to Biaxial Elongational Flows with a Focus on Planar Elongation. Polymers, 2018, 10, 329.	2.0	7
58	Pushing Synthesis toward the Maximum Generation Range of Dendritic Macromolecules. Macromolecules, 2018, 51, 5420-5429.	2.2	10
59	What causes the anomalous aggregation in pluronic aqueous solutions?. Soft Matter, 2018, 14, 7653-7663.	1.2	11
60	A Twoâ€Dimensional Polymer Synthesized at the Air/Water Interface. Angewandte Chemie, 2018, 130, 10744-10748.	1.6	10
61	A Twoâ€Dimensional Polymer Synthesized at the Air/Water Interface. Angewandte Chemie - International Edition, 2018, 57, 10584-10588.	7.2	61
62	Self-assembled coreâ€“polyethylene glycolâ€“lipid shell nanoparticles demonstrate high stability in shear flow. Physical Chemistry Chemical Physics, 2017, 19, 13294-13306.	1.3	23
63	Communication: Appearance of undershoots in start-up shear: Experimental findings captured by tumbling-snake dynamics. Journal of Chemical Physics, 2017, 146, 161101.	1.2	30
64	Molecular dynamics simulations of polymer crystallization under confinement: Entanglement effect. Polymer, 2017, 109, 71-84.	1.8	75
65	Non-constant link tension coefficient in the tumbling-snake model subjected to simple shear. Journal of Chemical Physics, 2017, 147, 174903.	1.2	13
66	Assessing numerical methods for molecular and particle simulation. Soft Matter, 2017, 13, 8565-8578.	1.2	14
67	Carbon Nanotube Length Governs the Viscoelasticity and Permeability of Buckypaper. Polymers, 2017, 9, 115.	2.0	17
68	Entanglement Recognition in Polymers. Chimia, 2017, 71, 779.	0.3	0
69	Influence of Chain Stiffness, Grafting Density and Normal Load on the Tribological and Structural Behavior of Polymer Brushes: A Nonequilibrium-Molecular-Dynamics Study. Polymers, 2016, 8, 254.	2.0	24
70	Self-assembly of core-polyethylene glycol-lipid shell (CPLS) nanoparticles and their potential as drug delivery vehicles. Nanoscale, 2016, 8, 14821-14835.	2.8	29
71	Entanglements and Crystallization of Concentrated Polymer Solutions: Molecular Dynamics Simulations. Macromolecules, 2016, 49, 9017-9025.	2.2	56
72	Solution of the complete Curtiss-Bird model for polymeric liquids subjected to simple shear flow. Journal of Chemical Physics, 2016, 144, 124905.	1.2	12

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73	Fast equilibration protocol for million atom systems of highly entangled linear polyethylene chains. Journal of Chemical Physics, 2016, 144, 154901.	1.2	30
74	Rheology and Packing of Dendronized Polymers. Macromolecules, 2016, 49, 7054-7068.	2.2	34
75	Boundaries steer the contraction of active gels. Nature Communications, 2016, 7, 13120.	5.8	50
76	Effect of Crosslinking on the Microtribological Behavior of Model Polymer Brushes. Tribology Letters, 2016, 63, 1.	1.2	22
77	Molecular simulation guided constitutive modeling on finite strain viscoelasticity of elastomers. Journal of the Mechanics and Physics of Solids, 2016, 88, 204-226.	2.3	87
78	Modeling of Polymer Structure and Conformations in Polymer Nanocomposites from Atomistic to Mesoscale: A Review. Polymer Reviews, 2016, 56, 385-428.	5.3	114
79	Influence of molecular architecture on the entanglement network: topological analysis of linear, long- and short-chain branched polyethylene melts via Monte Carlo simulations. Soft Matter, 2016, 12, 3770-3786.	1.2	27
80	Unraveling two-dimensional polymerization propagation from diffuse scattering. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s303-s304.	0.0	0
81	Poly(Nâ€isopropylacrylamide) Phase Diagrams: Fifty Years of Research. Angewandte Chemie - International Edition, 2015, 54, 15342-15367.	7.2	772
82	Simple, admissible, and accurate approximants of the inverse Langevin and Brillouin functions, relevant for strong polymer deformations and flows. Journal of Non-Newtonian Fluid Mechanics, 2015, 223, 77-87.	1.0	75
83	Modeling Nanosized Single Molecule Objects: Dendronized Polymers Adsorbed onto Mica. Journal of Physical Chemistry C, 2015, 119, 3746-3753.	1.5	11
84	Internal organization of macromonomers and dendronized polymers based on thiophene dendrons. Soft Matter, 2015, 11, 1116-1126.	1.2	5
85	Shape effect in cellular uptake of PEGylated nanoparticles: comparison between sphere, rod, cube and disk. Nanoscale, 2015, 7, 16631-16646.	2.8	268
86	Polymer Brushes under Shear: Molecular Dynamics Simulations Compared to Experiments. Langmuir, 2015, 31, 4798-4805.	1.6	53
87	Primitive-path statistics of entangled polymers: mapping multi-chain simulations onto single-chain mean-field models. New Journal of Physics, 2014, 16, 015027.	1.2	37
88	Pulling-force-induced elongation and alignment effects on entanglement and knotting characteristics of linear polymers in a melt. Physical Review E, 2014, 90, 042602.	0.8	15
89	Dynamic structure of unentangled polymer chains in the vicinity of non-attractive nanoparticles. Soft Matter, 2014, 10, 1723.	1.2	73
90	Dendronized Polymers: Molecular Objects between Conventional Linear Polymers and Colloidal Particles. ACS Macro Letters, 2014, 3, 991-998.	2.3	62

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91	Interactions in dendronized polymers: intramolecular dominates intermolecular. Soft Matter, 2014, 10, 1032.	1.2	16
92	The effect of polymer chain length on the mechanical properties of triblock copolymer gels. Chemical Physics Letters, 2014, 612, 157-161.	1.2	26
93	Endocytosis of PEGylated nanoparticles accompanied by structural and free energy changes of the grafted polyethylene glycol. Biomaterials, 2014, 35, 8467-8478.	5.7	176
94	Microscopic Origin of the Non-Newtonian Viscosity of Semiflexible Polymer Solutions in the Semidilute Regime. ACS Macro Letters, 2014, 3, 136-140.	2.3	29
95	Challenges in Multiscale Modeling of Polymer Dynamics. Polymers, 2013, 5, 751-832.	2.0	173
96	Application of full flow field reconstruction to a viscoelastic liquid in a 2D cross-slot channel. Journal of Non-Newtonian Fluid Mechanics, 2013, 192, 10-19.	1.0	2
97	Branching Defects in Dendritic Molecules: Coupling Efficiency and Congestion Effects. Macromolecules, 2013, 46, 7550-7564.	2.2	11
98	Computer simulation of dendronized polymers: organization and characterization at the atomistic level. RSC Advances, 2013, 3, 126-140.	1.7	26
99	Direct Observation of the Dynamics of Semiflexible Polymers in Shear Flow. Physical Review Letters, 2013, 110, 108302.	2.9	102
100	Effect of polymer solvent on the mechanical properties of entangled polymer gels: Coarse-grained molecular simulation. Polymer, 2013, 54, 2555-2564.	1.8	37
101	Synthetic regimes due to packing constraints in dendritic molecules confirmed by labelling experiments. Nature Communications, 2013, 4, 1993.	5.8	21
102	Computer Simulation of Fifth Generation Dendronized Polymers: Impact of Charge on Internal Organization. Journal of Physical Chemistry B, 2013, 117, 6007-6017.	1.2	20
103	Kinetics of gene derepression by ERK signaling. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10330-10335.	3.3	51
104	Writhe and mutual entanglement combine to give the entanglement length. Physical Review E, 2013, 88, 062604.	0.8	29
105	Effect of charge, hydrophobicity, and sequence of nucleoporins on the translocation of model particles through the nuclear pore complex. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3363-3368.	3.3	139
106	Nanoparticle Geometrical Effect on Structure, Dynamics and Anisotropic Viscosity of Polyethylene Nanocomposites. Macromolecules, 2012, 45, 2099-2112.	2.2	99
107	Fibers with Integrated Mechanochemical Switches: Minimalistic Design Principles Derived from Fibronectin. Biophysical Journal, 2012, 103, 1909-1918.	0.2	27
108	Viscoelasticity of carbon nanotube buckypaper: zippingâ€“unzipping mechanism and entanglement effects. Soft Matter, 2012, 8, 7822.	1.2	44

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109	Entanglements and Dynamics of Polymer Melts near a SWCNT. Macromolecules, 2012, 45, 7274-7281.	2.2	48
110	A predictive multiscale computational framework for viscoelastic properties of linear polymers. Polymer, 2012, 53, 5935-5952.	1.8	115
111	Nanoparticle Effect on the Dynamics of Polymer Chains and Their Entanglement Network. Physical Review Letters, 2012, 109, 118001.	2.9	160
112	Computational study on entanglement length and pore size of carbon nanotube buckypaper. Applied Physics Letters, 2012, 100, .	1.5	22
113	Thermoresponsive Cell Culture Substrates Based on PNIPAM Brushes Functionalized with Adhesion Peptides: Theoretical Considerations of Mechanism and Design. Langmuir, 2012, 28, 16623-16637.	1.6	32
114	Evolution of fivefold local symmetry during crystal nucleation and growth in dense hard-sphere packings. Soft Matter, 2012, 8, 844-858.	1.2	46
115	A theoretical evaluation of the effects of carbon nanotube entanglement and bundling on the structural and mechanical properties of buckypaper. Carbon, 2012, 50, 1793-1806.	5.4	97
116	Theoretical considerations on mechanisms of harvesting cells cultured on thermoresponsive polymer brushes. Biomaterials, 2012, 33, 4975-4987.	5.7	53
117	Collapse of Thermoresponsive Brushes and the Tuning of Protein Adsorption. Macromolecules, 2011, 44, 6986-7005.	2.2	85
118	Using Mesoscopic Models to Design Strong and Tough Biomimetic Polymer Networks. Langmuir, 2011, 27, 13796-13805.	1.6	20
119	Height and Width of Adsorbed Dendronized Polymers: Electron and Atomic Force Microscopy of Homologous Series. Macromolecules, 2011, 44, 6785-6792.	2.2	46
120	Influence of Nanorod Inclusions on Structure and Primitive Path Network of Polymer Nanocomposites at Equilibrium and Under Deformation. Macromolecules, 2011, 44, 1034-1045.	2.2	91
121	Adsorption of core-shell nanoparticles at liquidâ€“liquid interfaces. Soft Matter, 2011, 7, 7663.	1.2	78
122	Molecularly derived constitutive equation for low-molecular polymer melts from thermodynamically guided simulation. Journal of Rheology, 2011, 55, 69-93.	1.3	30
123	Smooth full field reconstruction of velocity and its gradients from noisy scattered velocimetry data in a cross-slot flow. Journal of Rheology, 2011, 55, 353-377.	1.3	9
124	Hard vs soft constraints in the full field reconstruction of incompressible flow kinematics from noisy scattered velocimetry data. Journal of Rheology, 2011, 55, 1187-1203.	1.3	5
125	Colloid-Brush Interactions: The Effect of Solvent Quality. Macromolecules, 2011, 44, 3622-3638.	2.2	69
126	Morphology Control of Hairy Nanopores. ACS Nano, 2011, 5, 4737-4747.	7.3	89

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127	Primitive chain network study on uncrosslinked and crosslinked cis-polyisoprene polymers. Polymer, 2011, 52, 5867-5878.	1.8	59
128	The Largest Synthetic Structure with Molecular Precision: Towards a Molecular Object. Angewandte Chemie - International Edition, 2011, 50, 737-740.	7.2	111
129	Ideal contribution to the macroscopic quasiequilibrium entropy of anisotropic fluids. Physical Review E, 2011, 83, 061713.	0.8	8
130	Rubik Cylinder Model for Dendronized Polymers. Journal of Computational and Theoretical Nanoscience, 2010, 7, 661-674.	0.4	2
131	Automated symbolic calculations in nonequilibrium thermodynamics. Computer Physics Communications, 2010, 181, 2149-2157.	3.0	30
132	From Dendrimers to Dendronized Polymers and Forests: Scaling Theory and its Limitations. Macromolecules, 2010, 43, 6213-6224.	2.2	80
133	Flow Effects on Melt Structure and Entanglement Network of Linear Polymers: Results from a Nonequilibrium Molecular Dynamics Simulation Study of a Polyethylene Melt in Steady Shear. Macromolecules, 2010, 43, 6886-6902.	2.2	152
134	Understanding Dynamics in Binary Mixtures of Entangled cis-1,4-Polybutadiene Melts at the Level of Primitive Path Segments by Mapping Atomistic Simulation Data onto the Tube Model. Macromolecules, 2010, 43, 8239-8250.	2.2	29
135	Quantifying chain reptation in entangled polymer melts: Topological and dynamical mapping of atomistic simulation results onto the tube model. Journal of Chemical Physics, 2010, 132, 124904.	1.2	101
136	Modelling and confocal microscopy of biopolymer mixtures in confined geometries. Soft Matter, 2010, 6, 2713.	1.2	12
137	Effect of network topology on phase separation in two-dimensional Lennard-Jones networks. Physical Review E, 2009, 79, 040401.	0.8	6
138	Boltzmann equation and hydrodynamic fluctuations. Physical Review E, 2009, 80, 051202.	0.8	20
139	Systematic time-scale-bridging molecular dynamics applied to flowing polymer melts. Physical Review E, 2009, 79, 011802.	0.8	48
140	Combined Molecular Algorithms for the Generation, Equilibration and Topological Analysis of Entangled Polymers: Methodology and Performance. International Journal of Molecular Sciences, 2009, 10, 5054-5089.	1.8	160
141	Flow of branched polymer melts in a lubricated cross-slot channel: a combined computational and experimental study. Rheologica Acta, 2009, 48, 97-108.	1.1	12
142	Ternary Protein Adsorption onto Brushes: Strong versus Weak. Langmuir, 2009, 25, 11621-11634.	1.6	61
143	Tuning Polymer Thickness: Synthesis and Scaling Theory of Homologous Series of Dendronized Polymers. Journal of the American Chemical Society, 2009, 131, 11841-11854.	6.6	130
144	Phase Behavior and Formation Dynamics of Helically Wound Networks: Generalized Janus Chain Model. Macromolecules, 2009, 42, 576-579.	2.2	9

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145	Detailed Atomistic Molecular Dynamics Simulations of Î±-Conotoxin AuIB in Water. Journal of Physical Chemistry B, 2009, 113, 5016-5024.	1.2	7
146	Structure, Dimensions, and Entanglement Statistics of Long Linear Polyethylene Chains. Journal of Physical Chemistry B, 2009, 113, 442-455.	1.2	60
147	Topological analysis of polymeric melts: Chain-length effects and fast-converging estimators for entanglement length. Physical Review E, 2009, 80, 031803.	0.8	260
148	Random packing of model polymers: local structure, topological hindrance and universal scaling. Soft Matter, 2009, 5, 1762.	1.2	45
149	Selfâ€Folding of Charged Single Dendronized Polymers. Advanced Materials, 2008, 20, 3204-3210.	11.1	31
150	Rheological and entanglement characteristics of linear-chain polyethylene liquids in planar Couette and planar elongational flows. Journal of Non-Newtonian Fluid Mechanics, 2008, 152, 168-183.	1.0	51
151	Consistent closure schemes for statistical models of anisotropic fluids. Journal of Non-Newtonian Fluid Mechanics, 2008, 149, 40-55.	1.0	52
152	Lubricated optical rheometer for the study of two-dimensional complex flows of polymer melts. Journal of Non-Newtonian Fluid Mechanics, 2008, 150, 43-55.	1.0	21
153	Lubricated cross-slot flow of a low density polyethylene melt. Journal of Non-Newtonian Fluid Mechanics, 2008, 154, 52-64.	1.0	15
154	Formation of double helical and filamentous structures in models of physical and chemical gels. Soft Matter, 2008, 4, 18-28.	1.2	26
155	Model of Microphase Separation in Two-Dimensional Gels. Macromolecules, 2008, 41, 3267-3275.	2.2	3
156	Dynamics of Branched Polymer Melts in Complex Kinematics Flows: A Computationalâ•Experimental Study. AIP Conference Proceedings, 2008, , .	0.3	0
157	Universal Scaling, Entanglements, and Knots of Model Chain Molecules. Physical Review Letters, 2008, 101, 265702.	2.9	49
158	Exact Linear Hydrodynamics from the Boltzmann Equation. Physical Review Letters, 2008, 100, 214503.	2.9	21
159	Nonaffine Deformation of Inherent Structure as a Static Signature of Cooperativity in Supercooled Liquids. Physical Review Letters, 2008, 101, 095501.	2.9	25
160	From atomistic simulation to the dynamics, structure and helical network formation of dendronized polymers: The Janus chain model. Journal of Chemical Physics, 2007, 127, 094904.	1.2	21
161	Filamentous networks in phase-separating two-dimensional gels. Europhysics Letters, 2007, 77, 58007.	0.7	17
162	Hyperbolicity of exact hydrodynamics for three-dimensional linearized Gradâ€™s equations. Physical Review E, 2007, 76, 022201.	0.8	17

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163	From hyperbolic regularization to exact hydrodynamics for linearized Gradâ€™s equations. Physical Review E, 2007, 75, 051204.	0.8	22
164	Derivation of Frank-Ericksen elastic coefficients for polydomain nematics from mean-field molecular theory for anisotropic particles. Journal of Chemical Physics, 2007, 127, 034903.	1.2	21
165	Primitive Path Networks Generated by Annealing and Geometrical Methods:Â Insights into Differences. Macromolecules, 2007, 40, 2897-2903.	2.2	188
166	Landmark Paper Index: Application to Rheological (Î-) Journals. Applied Rheology, 2007, 17, 66494-1-66494-6.	3.5	0
167	Primitive Path Identification and Entanglement Statistics in Polymer Melts:â€‰ Results from Direct Topological Analysis on Atomistic Polyethylene Models. Macromolecules, 2006, 39, 4207-4216.	2.2	146
168	Multiscale Modeling of Viscoelastic Materials Containing Rigid Nonrotating Inclusions. Multiscale Modeling and Simulation, 2006, 5, 759-785.	0.6	6
169	Landmark Paper Index: Definition and Application to Rheological (Î-) Journals. Applied Rheology, 2006, 16, 329-333.	3.5	4
170	Symbolic computation of the phoretic acceleration of convex particles suspended in a non-uniform gas. Computer Physics Communications, 2006, 175, 650-664.	3.0	2
171	Phoretic forces on convex particles from kinetic theory and nonequilibrium thermodynamics. Journal of Chemical Physics, 2006, 124, 044511.	1.2	5
172	Regular and Chaotic Flow Behavior and Orientational Dynamics of Tumbling Nematics. AIP Conference Proceedings, 2006, , .	0.3	0
173	Unifying kinetic approach to phoretic forces and torques onto moving and rotating convex particles. Journal of Chemical Physics, 2006, 125, 044105.	1.2	13
174	An extended FENE dumbbell model theory for concentration dependent shear-induced anisotropy in dilute polymer solutions: addenda. Journal of Non-Newtonian Fluid Mechanics, 2005, 125, 87-90.	1.0	5
175	Shortest multiple disconnected path for the analysis of entanglements in two- and three-dimensional polymeric systems. Computer Physics Communications, 2005, 168, 209-232.	3.0	387
176	Structure and rheology of model-ferrofluids under shear flow. Journal of Magnetism and Magnetic Materials, 2005, 289, 325-327.	1.0	25
177	Publication Specific Impact of Articles Published by Rheological Journals. Applied Rheology, 2005, 15, 406-409.	3.5	1
178	Magnetoviscosity of semidilute ferrofluids and the role of dipolar interactions: Comparison of molecular simulations and dynamical mean-field theory. Physical Review E, 2005, 71, 031205.	0.8	48
179	Anisotropy of the magnetoviscous effect in ferrofluids. Physical Review E, 2005, 71, 051201.	0.8	27
180	Anisotropic self-diffusion in ferrofluids studied via Brownian dynamics simulations. Physical Review E, 2005, 72, 031504.	0.8	22

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