

# Roland G Winkler

## List of Publications by Year in descending order

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199  
papers

9,670  
citations

31902

53  
h-index

48187

88  
g-index

201  
all docs

201  
docs citations

201  
times ranked

5106  
citing authors

#	ARTICLE	IF	CITATIONS
1	Physics of microswimmersâ€™ single particle motion and collective behavior: a review. Reports on Progress in Physics, 2015, 78, 056601.	8.1	1,029
2	The 2020 motile active matter roadmap. Journal of Physics Condensed Matter, 2020, 32, 193001.	0.7	242
3	Collapse of Polyelectrolyte Macromolecules by Counterion Condensation and Ion Pair Formation: A Molecular Dynamics Simulation Study. Physical Review Letters, 1998, 80, 3731-3734.	2.9	240
4	Cooperative motion of active Brownian spheres in three-dimensional dense suspensions. Europhysics Letters, 2014, 105, 48004.	0.7	201
5	Computational models for active matter. Nature Reviews Physics, 2020, 2, 181-199.	11.9	192
6	Semidilute Polymer Solutions at Equilibrium and under Shear Flow. Macromolecules, 2010, 43, 10107-10116.	2.2	154
7	Low-Reynolds-number hydrodynamics of complex fluids by multi-particle-collision dynamics. Europhysics Letters, 2004, 68, 106-112.	0.7	144
8	Dynamic structure factor of semiflexible macromolecules in dilute solution. Journal of Chemical Physics, 1996, 104, 6355-6368.	1.2	142
9	Dynamic regimes of fluids simulated by multiparticle-collision dynamics. Physical Review E, 2005, 72, 016701.	0.8	142
10	Models and equilibrium properties of stiff molecular chains. Journal of Chemical Physics, 1994, 101, 8119-8129.	1.2	141
11	Polyelectrolyte Theory. Advances in Polymer Science, 0, , 67-111.	0.4	140
12	Star Polymers in Shear Flow. Physical Review Letters, 2006, 96, 188302.	2.9	138
13	Imaging material properties by resonant tapping-force microscopy: A model investigation. Physical Review B, 1996, 54, 8908-8912.	1.1	136
14	Forces affecting the substrate in resonant tapping force microscopy. Nanotechnology, 1995, 6, 40-44.	1.3	134
15	Dynamics of polymers in a particle-based mesoscopic solvent. Journal of Chemical Physics, 2005, 123, 144905.	1.2	133
16	Virial pressure in systems of spherical active Brownian particles. Soft Matter, 2015, 11, 6680-6691.	1.2	123
17	Active turbulence in a gas of self-assembled spinners. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12870-12875.	3.3	118
18	Cell-level canonical sampling by velocity scaling for multiparticle collision dynamics simulations. Journal of Computational Physics, 2010, 229, 168-177.	1.9	115

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19	Synchronization and bundling of anchored bacterial flagella. <i>Soft Matter</i> , 2012, 8, 4363.	1.2	111
20	Confined active Brownian particles: theoretical description of propulsion-induced accumulation. <i>New Journal of Physics</i> , 2018, 20, 015001.	1.2	111
21	Comparison of Ring and Linear Polyethylene from Molecular Dynamics Simulations. <i>Macromolecules</i> , 2006, 39, 3975-3977.	2.2	108
22	Semiflexible Polymers in Shear Flow. <i>Physical Review Letters</i> , 2006, 97, 128301.	2.9	107
23	Clustering of microswimmers: interplay of shape and hydrodynamics. <i>Soft Matter</i> , 2018, 14, 8590-8603.	1.2	105
24	Deformation of semiflexible chains. <i>Journal of Chemical Physics</i> , 2003, 118, 2919.	1.2	103
25	Dynamic properties of molecular chains with variable stiffness. <i>Journal of Chemical Physics</i> , 1995, 102, 7750-7757.	1.2	99
26	Diffusion and Segmental Dynamics of Double-Stranded DNA. <i>Physical Review Letters</i> , 2006, 97, 258101.	2.9	97
27	Chain Dynamics of Ring and Linear Polyethylene Melts from Molecular Dynamics Simulations. <i>Macromolecules</i> , 2011, 44, 2311-2315.	2.2	96
28	Conformational Properties of Active Semiflexible Polymers. <i>Polymers</i> , 2016, 8, 304.	2.0	95
29	Modelling the mechanics and hydrodynamics of swimming <i>E. coli</i> . <i>Soft Matter</i> , 2015, 11, 7867-7876.	1.2	94
30	Time-resolved structural evolution during the collapse of responsive hydrogels: The microgel-to-particle transition. <i>Science Advances</i> , 2018, 4, eaao7086.	4.7	90
31	The physics of active polymers and filaments. <i>Journal of Chemical Physics</i> , 2020, 153, 040901.	1.2	86
32	Active Polymers – Emergent Conformational and Dynamical Properties: A Brief Review. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 101014.	0.7	79
33	Hydrodynamic screening of star polymers in shear flow. <i>European Physical Journal E</i> , 2007, 23, 349-354.	0.7	77
34	Polyelectrolyte electrophoresis: Field effects and hydrodynamic interactions. <i>Europhysics Letters</i> , 2008, 83, 38004.	0.7	77
35	Physical Sensing of Surface Properties by Microswimmers – Directing Bacterial Motion via Wall Slip. <i>Scientific Reports</i> , 2015, 5, 9586.	1.6	77
36	Conformational and rheological properties of semiflexible polymers in shear flow. <i>Journal of Chemical Physics</i> , 2010, 133, 164905.	1.2	75

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37	Internal dynamics of semiflexible polymers with active noise. <i>Journal of Chemical Physics</i> , 2017, 146, 154903.	1.2	74
38	Molecular dynamics simulation study of adsorption of polymer chains with variable degree of rigidity. I. Static properties. <i>Journal of Chemical Physics</i> , 1996, 104, 4806-4813.	1.2	73
39	Complex formation in systems of oppositely charged polyelectrolytes: A molecular dynamics simulation study. <i>Physical Review E</i> , 2002, 66, 021802.	0.8	72
40	Modeling a spheroidal microswimmer and cooperative swimming in a narrow slit. <i>Soft Matter</i> , 2016, 12, 7372-7385.	1.2	72
41	Attractive Colloidal Rods in Shear Flow. <i>Physical Review Letters</i> , 2008, 101, 168302.	2.9	71
42	Nanopattern of Diblock Copolymers Selectively Adsorbed on a Plane Surface. <i>Langmuir</i> , 1999, 15, 7290-7298.	1.6	69
43	Hydrodynamic correlations in multiparticle collision dynamics fluids. <i>Physical Review E</i> , 2012, 86, 056711.	0.8	69
44	Dynamical and rheological properties of soft colloid suspensions. <i>Current Opinion in Colloid and Interface Science</i> , 2014, 19, 594-610.	3.4	68
45	Rod-like colloids and polymers in shear flow; a multi-particle-collision dynamics study. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S3941-S3954.	0.7	65
46	Direct observation of hydrodynamic instabilities in a driven non-uniform colloidal dispersion. <i>Soft Matter</i> , 2009, 5, 1340.	1.2	64
47	Migration of semiflexible polymers in microcapillary flow. <i>Europhysics Letters</i> , 2010, 91, 14001.	0.7	63
48	Synchronization, Slippage, and Unbundling of Driven Helical Flagella. <i>PLoS ONE</i> , 2013, 8, e70868.	1.1	61
49	Propagating interfaces in mixtures of active and passive Brownian particles. <i>New Journal of Physics</i> , 2016, 18, 123030.	1.2	61
50	Critical Adsorption of Polyelectrolytes onto Charged Spherical Colloids. <i>Physical Review Letters</i> , 2006, 96, 066103.	2.9	60
51	Intramolecular dynamics of linear macromolecules by fluorescence correlation spectroscopy. <i>Physical Review E</i> , 2006, 73, 041919.	0.8	59
52	Structure of Microgels with Debye-Hückel Interactions. <i>Polymers</i> , 2014, 6, 1602-1617.	2.0	59
53	Molecular dynamics simulation study of the adsorption of chain alkanes from solution onto graphite. <i>Journal of Chemical Physics</i> , 1993, 99, 5528-5534.	1.2	57
54	Mesoscale simulations of polymer dynamics in microchannel flows. <i>Europhysics Letters</i> , 2008, 83, 34007.	0.7	55

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55	Dramatic influence of patchy attractions on short-time protein diffusion under crowded conditions. <i>Science Advances</i> , 2016, 2, e1601432.	4.7	55
56	Contact Angle Microscopy on a Carbosilane Dendrimer with Hydroxyl End Groups: A Method for Mesoscopic Characterization of the Surface Structure. <i>Langmuir</i> , 1997, 13, 4172-4181.	1.6	53
57	Order-Disorder Transition in Surface-Induced Nanopattern of Diblock Copolymer Films. <i>Macromolecules</i> , 2000, 33, 150-157.	2.2	53
58	Stochastic dynamics simulations of polymethylene melts confined between solid surfaces. <i>Journal of Chemical Physics</i> , 1993, 98, 729-736.	1.2	52
59	Tapping Scanning Force Microscopy in Air Theory and Experiment. <i>Langmuir</i> , 1997, 13, 4699-4703.	1.6	52
60	Surface Micellar Nanopattern Formation of Adsorbed Diblock Copolymer Systems. <i>Macromolecules</i> , 1999, 32, 3495-3501.	2.2	51
61	Reconfigurable structure and tunable transport in synchronized active spinner materials. <i>Science Advances</i> , 2020, 6, eaaz8535.	4.7	51
62	Influence of stiffness on the dynamics of macromolecules in a melt. <i>Journal of Chemical Physics</i> , 1997, 106, 2469-2476.	1.2	50
63	Stress tensors of multiparticle collision dynamics fluids. <i>Journal of Chemical Physics</i> , 2009, 130, 074907.	1.2	50
64	Complexation of semiflexible chains with oppositely charged cylinder. <i>Journal of Chemical Physics</i> , 2004, 120, 9394-9400.	1.2	49
65	Hydration of beta-cyclodextrin: a molecular dynamics simulation study. <i>Journal of Computer-Aided Molecular Design</i> , 2000, 14, 659-667.	1.3	48
66	Enhanced Rotational Motion of Spherical Squirmer in Polymer Solutions. <i>Physical Review Letters</i> , 2020, 124, 068001.	2.9	47
67	Polyelectrolyte adsorption onto oppositely charged interfaces: unified approach for plane, cylinder, and sphere. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 11686.	1.3	46
68	Multiparticle collision dynamics: GPU accelerated particle-based mesoscale hydrodynamic simulations. <i>Computer Physics Communications</i> , 2014, 185, 495-503.	3.0	46
69	Tumbling of polymers in semidilute solution under shear flow. <i>Europhysics Letters</i> , 2011, 93, 54004.	0.7	45
70	Flow-Induced Helical Coiling of Semiflexible Polymers in Structured Microchannels. <i>Physical Review Letters</i> , 2012, 109, 178101.	2.9	44
71	Strong and weak adsorptions of polyelectrolyte chains onto oppositely charged spheres. <i>Journal of Chemical Physics</i> , 2006, 125, 064904.	1.2	43
72	Polyelectrolyte Adsorption onto Oppositely Charged Interfaces: Image-Charge Repulsion and Surface Curvature. <i>Journal of Physical Chemistry B</i> , 2012, 116, 9838-9845.	1.2	43

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73	Universal conformational properties of polymers in ionic nanogels. <i>Scientific Reports</i> , 2016, 6, 19836.	1.6	42
74	Hydrodynamics of discrete-particle models of spherical colloids: A multiparticle collision dynamics simulation study. <i>Physical Review E</i> , 2014, 90, 033314.	0.8	41
75	Thermostat for nonequilibrium multiparticle-collision-dynamics simulations. <i>Physical Review E</i> , 2015, 91, 013310.	0.8	41
76	Extended-phase-space isothermal molecular dynamics: Canonical harmonic oscillator. <i>Physical Review A</i> , 1992, 45, 2250-2255.	1.0	39
77	Stochastic Dynamics Simulations of n-Alkane Melts Confined between Solid Surfaces: Influence of Surface Properties and Comparison with Scheutjens-Fleer Theory. <i>Macromolecules</i> , 1995, 28, 165-173.	2.2	39
78	Semidilute solutions of ultra-soft colloids under shear flow. <i>Soft Matter</i> , 2012, 8, 4109.	1.2	38
79	Polymer Conformations in Ionic Microgels in the Presence of Salt: Theoretical and Mesoscale Simulation Results. <i>Polymers</i> , 2017, 9, 15.	2.0	38
80	Active Brownian filaments with hydrodynamic interactions: conformations and dynamics. <i>Soft Matter</i> , 2019, 15, 3957-3969.	1.2	38
81	Adsorption of Weakly Charged Polyelectrolytes onto Oppositely Charged Spherical Colloids. <i>Journal of Physical Chemistry B</i> , 2007, 111, 8486-8493.	1.2	37
82	Mesoscale hydrodynamic simulation of short polyelectrolytes in electric fields. <i>Journal of Chemical Physics</i> , 2009, 131, 234905.	1.2	37
83	Effect of hydrodynamic correlations on the dynamics of polymers in dilute solution. <i>Journal of Chemical Physics</i> , 2013, 138, 144902.	1.2	37
84	Finite size distribution and partition functions of Gaussian chains: maximum entropy approach. <i>Macromolecules</i> , 1992, 25, 6891-6896.	2.2	36
85	Dynamical and Rheological Properties of Ultrasoft Colloids under Shear Flow. <i>Macromolecules</i> , 2013, 46, 8026-8036.	2.2	36
86	Distribution functions and dynamical properties of stiff macromolecules. <i>Macromolecular Theory and Simulations</i> , 1997, 6, 1007-1035.	0.6	35
87	On the dynamics of polymer melts: Contribution of Rouse and bending modes. <i>Europhysics Letters</i> , 1999, 45, 488-494.	0.7	33
88	Integral equation theory approach to rodlike polyelectrolytes: Counterion condensation. <i>Journal of Chemical Physics</i> , 2001, 114, 10181-10188.	1.2	33
89	Simple Model for Overcharging of a Sphere by a Wrapped Oppositely Charged Asymmetrically Neutralized Polyelectrolyte: A Possible Effects of Helical Charge Distribution. <i>Journal of Physical Chemistry B</i> , 2005, 109, 2962-2969.	1.2	33
90	Active Brownian ring polymers. <i>Journal of Chemical Physics</i> , 2019, 150, 064913.	1.2	33

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91	Partition function and force extension relation for a generalized freely jointed chain. <i>Macromolecules</i> , 1993, 26, 6085-6091.	2.2	32
92	Diffusion and segmental dynamics of rodlike molecules by fluorescence correlation spectroscopy. <i>Journal of Chemical Physics</i> , 2007, 127, 054904.	1.2	32
93	Equivalence of statistical ensembles in stretching single flexible polymers. <i>Soft Matter</i> , 2010, 6, 6183.	1.2	32
94	Computer simulations of n-alkane melts. <i>Journal of Chemical Physics</i> , 1991, 95, 4709-4714.	1.2	31
95	Liquid benzene confined between graphite surfaces. A constant pressure molecular dynamics study. <i>Journal of Chemical Physics</i> , 1993, 99, 5405-5417.	1.2	31
96	Novel molecular dynamics simulations at constant pressure. <i>Molecular Physics</i> , 1992, 75, 669-688.	0.8	30
97	Hydrodynamic correlations and diffusion coefficient of star polymers in solution. <i>Journal of Chemical Physics</i> , 2014, 141, 084901.	1.2	30
98	Solvent Induced Inversion of Core-Shell Microgels. <i>ACS Macro Letters</i> , 2017, 6, 721-725.	2.3	30
99	Local stress and pressure in an inhomogeneous system of spherical active Brownian particles. <i>Scientific Reports</i> , 2019, 9, 6608.	1.6	30
100	Effects of thermal fluctuations and fluid compressibility on hydrodynamic synchronization of microrotors at finite oscillatory Reynolds number: a multiparticle collision dynamics simulation study. <i>Soft Matter</i> , 2014, 10, 5894-5904.	1.2	29
101	Nonequilibrium Forces between Dragged Ultrasoft Colloids. <i>Physical Review Letters</i> , 2011, 107, 158301.	2.9	28
102	Multi-Particle Collision Dynamics: A Particle-Based Mesoscale Simulation Approach to the Hydrodynamics of Complex Fluids. <i>Advances in Polymer Science</i> , 2008, , 1.	0.4	28
103	Synchronization of rigid microrotors by time-dependent hydrodynamic interactions. <i>Physical Review E</i> , 2013, 88, 023012.	0.8	27
104	Emergence of active turbulence in microswimmer suspensions due to active hydrodynamic stress and volume exclusion. <i>Communications Physics</i> , 2022, 5, .	2.0	27
105	Analytical Calculation of the Relaxation Dynamics of Partially Stretched Flexible Chain Molecules: Necessity of a Wormlike Chain Description. <i>Physical Review Letters</i> , 1999, 82, 1843-1846.	2.9	26
106	Hydrodynamic mechanisms of spinodal decomposition in confined colloid-polymer mixtures: A multiparticle collision dynamics study. <i>Journal of Chemical Physics</i> , 2013, 138, 054901.	1.2	26
107	Clustering and dynamics of particles in dispersions with competing interactions: theory and simulation. <i>Soft Matter</i> , 2018, 14, 92-103.	1.2	26
108	Equilibrium properties of polyampholytes in electric fields. <i>Journal of Chemical Physics</i> , 1997, 106, 2841-2849.	1.2	24

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109	Multi-particle collision dynamics simulations of sedimenting colloidal dispersions in confinement. <i>Faraday Discussions</i> , 2010, 144, 245-252.	1.6	24
110	Internal dynamics of microgels: A mesoscale hydrodynamic simulation study. <i>Journal of Chemical Physics</i> , 2016, 145, 244902.	1.2	24
111	Bacterial swarmer cells in confinement: a mesoscale hydrodynamic simulation study. <i>Soft Matter</i> , 2016, 12, 8316-8326.	1.2	24
112	Comment on "Chain Motion in an Unentangled Polyethylene Melt: A Critical Test of the Rouse Model by Molecular Dynamics Simulations and Neutron Spin Echo Spectroscopy". <i>Physical Review Letters</i> , 1999, 82, 2408-2408.	2.9	23
113	Conformational State Distributions and Catalytically Relevant Dynamics of A Hinge-Bending Enzyme Studied by Single-Molecule FRET and a Coarse-Grained Simulation. <i>Biophysical Journal</i> , 2014, 107, 1913-1923.	0.2	23
114	Self-Organized Structures of Attractive End-Functionalized Semiflexible Polymer Suspensions. <i>Macromolecules</i> , 2014, 47, 4118-4125.	2.2	23
115	Dynamic Structure Factor of Core-Shell Microgels: A Neutron Scattering and Mesoscale Hydrodynamic Simulation Study. <i>Macromolecules</i> , 2016, 49, 3608-3618.	2.2	23
116	From local to hydrodynamic friction in Brownian motion: A multiparticle collision dynamics simulation study. <i>Physical Review E</i> , 2016, 93, 032604.	0.8	23
117	Low Reynolds number hydrodynamics and mesoscale simulations. <i>European Physical Journal: Special Topics</i> , 2016, 225, 2079-2097.	1.2	23
118	Dynamics of flexible active Brownian dumbbells in the absence and the presence of shear flow. <i>Soft Matter</i> , 2016, 12, 3737-3749.	1.2	23
119	Strong and Weak Polyelectrolyte Adsorption onto Oppositely Charged Curved Surfaces. <i>Advances in Polymer Science</i> , 2013, , 1-56.	0.4	22
120	Active Brownian Filamentous Polymers under Shear Flow. <i>Polymers</i> , 2018, 10, 837.	2.0	22
121	Hydrodynamics in adaptive resolution particle simulations: Multiparticle collision dynamics. <i>Journal of Computational Physics</i> , 2016, 314, 14-34.	1.9	21
122	Influence of salt on the structure of polyelectrolyte solutions: An integral equation theory approach. <i>Journal of Chemical Physics</i> , 2003, 119, 2406-2413.	1.2	20
123	Conformations, hydrodynamic interactions, and instabilities of sedimenting semiflexible filaments. <i>Soft Matter</i> , 2015, 11, 7337-7344.	1.2	20
124	Influence of Polydispersity on the Dynamic Structure Factor of Macromolecules in Dilute Solution. <i>Macromolecules</i> , 1999, 32, 5956-5960.	2.2	19
125	Self-consistent integral equation theory for solutions of finite extensible semiflexible polyelectrolyte chains. <i>Journal of Chemical Physics</i> , 2003, 118, 6624-6633.	1.2	19
126	Universal properties of complexes formed by two oppositely charged flexible polyelectrolytes. <i>New Journal of Physics</i> , 2004, 6, 11-11.	1.2	19



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127	Backtracking of Colloids: A Multiparticle Collision Dynamics Simulation Study. <i>Journal of Physical Chemistry B</i> , 2011, 115, 14263-14268.	1.2	19
128	Mesoscale hydrodynamic modeling of a colloid in shear-thinning viscoelastic fluids under shear flow. <i>Journal of Chemical Physics</i> , 2011, 135, 134116.	1.2	19
129	Non-equilibrium relaxation and tumbling times of polymers in semidilute solution. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 284131.	0.7	19
130	Multiparticle collision dynamics simulations of viscoelastic fluids: Shear-thinning Gaussian dumbbells. <i>Journal of Chemical Physics</i> , 2013, 138, 104903.	1.2	19
131	Structure and Dynamics of a Compact State of a Multidomain Protein, the Mercuric Ion Reductase. <i>Biophysical Journal</i> , 2014, 107, 393-400.	0.2	19
132	Hydrodynamics of polymers in an active bath. <i>Physical Review E</i> , 2020, 101, 052612.	0.8	19
133	Analytical model for the microscopic nonaffine deformation of polymer networks. <i>Journal of Chemical Physics</i> , 1994, 101, 2532-2538.	1.2	18
134	Molecular dynamics simulations of n-Alkane melts confined between solid surfaces. <i>International Journal of Quantum Chemistry</i> , 1994, 52, 437-456.	1.0	18
135	Conformational and dynamical properties of ultra-soft colloids in semi-dilute solutions under shear flow. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 464103.	0.7	18
136	Steady state sedimentation of ultrasoft colloids. <i>Journal of Chemical Physics</i> , 2018, 148, 084901.	1.2	18
137	Semiflexible polymer conformation, distribution and migration in microcapillary flows. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 184117.	0.7	17
138	Effect of angular momentum conservation on hydrodynamic simulations of colloids. <i>Physical Review E</i> , 2015, 92, 013301.	0.8	17
139	Bulk viscosity of multiparticle collision dynamics fluids. <i>Physical Review E</i> , 2015, 91, 033309.	0.8	17
140	Microswimmers – From Single Particle Motion to Collective Behavior. <i>European Physical Journal: Special Topics</i> , 2016, 225, 2061-2064.	1.2	17
141	Comparative molecular dynamics simulation study of the benzene-graphite and the benzene-1,12-dodecanediol-graphite interface. <i>Journal of Chemical Physics</i> , 1994, 100, 3930-3939.	1.2	16
142	Simulation of complex fluids by multi-particle-collision dynamics. <i>Computer Physics Communications</i> , 2005, 169, 326-330.	3.0	16
143	Hydrodynamic interactions in squirmer dumbbells: active stress-induced alignment and locomotion. <i>Soft Matter</i> , 2020, 16, 10676-10687.	1.2	16
144	Rheotaxis of spheroidal squirmers in microchannel flow: Interplay of shape, hydrodynamics, active stress, and thermal fluctuations. <i>Physical Review Research</i> , 2020, 2, .	1.3	16

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145	Molecular dynamics simulation study of the dynamics of fluids in thin films. Journal of Chemical Physics, 1996, 104, 8103-8111.	1.2	15
146	Weak Shape Anisotropy Leads to a Nonmonotonic Contribution to Crowding, Impacting Protein Dynamics under Physiologically Relevant Conditions. Journal of Physical Chemistry B, 2018, 122, 12396-12402.	1.2	15
147	Wall entrapment of peritrichous bacteria: a mesoscale hydrodynamics simulation study. Soft Matter, 2020, 16, 4866-4875.	1.2	15
148	Time reversible and phase space conserving molecular dynamics at constant temperature. Journal of Chemical Physics, 1995, 102, 9018-9025.	1.2	14
149	Virial pressure of periodic systems with long range forces. Journal of Chemical Physics, 2002, 117, 2449-2450.	1.2	14
150	Reptation of polymer chains: A combined Monte Carlo and molecular-dynamics study. Physical Review B, 1993, 48, 581-584.	1.1	13
151	Remarks on the Interpretation of Dynamic Light Scattering from Gellan in Dilute Solution. Macromolecules, 1997, 30, 6974-6976.	2.2	13
152	Mesoscale hydrodynamics simulations of attractive rod-like colloids in shear flow. Journal of Physics Condensed Matter, 2008, 20, 404209.	0.7	13
153	Self-organization in suspensions of end-functionalized semiflexible polymers under shear flow. Journal of Chemical Physics, 2015, 143, 243117.	1.2	12
154	Dynamical Calculation of Entropy Elastic Forces in Molecular Chains. Europhysics Letters, 1989, 8, 493-497.	0.7	11
155	Topologically induced glass transition in dense polymer systems. Journal of Chemical Physics, 2000, 112, 3051-3062.	1.2	11
156	Conformational and dynamical properties of semiflexible polymers in the presence of active noise. AIP Conference Proceedings, 2017, , .	0.3	11
157	Active bath-induced localization and collapse of passive semiflexible polymers. Journal of Chemical Physics, 2021, 155, 044902.	1.2	11
158	Dynamics of active polar ring polymers. Physical Review E, 2022, 105, .	0.8	11
159	Dynamics of a polymer chain in an elongational flow. Physical Review E, 2000, 61, 2840-2847.	0.8	10
160	Semiflexible polymers under external fields confined to two dimensions. Journal of Chemical Physics, 2012, 137, 244909.	1.2	10
161	Scaffold Structures by Telechelic Rodlike Polymers: Nonequilibrium Structural and Rheological Properties under Shear Flow. Macromolecules, 2014, 47, 6946-6954.	2.2	10
162	Model calculation of the temperature dependence of triplet exciton E.S.R. line shapes for local exciton phonon interaction. Molecular Physics, 1987, 60, 1283-1313.	0.8	9

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163	Equilibrium and dynamical properties of gaussian stiff chain molecules. <i>Macromolecular Symposia</i> , 1994, 81, 91-99.	0.4	9
164	Microscopic Nonaffine Deformation of Polydisperse Polymer Networks. <i>Macromolecules</i> , 1995, 28, 5906-5909.	2.2	9
165	Non-Equilibrium Properties of Semidilute Polymer Solutions under Shear Flow. <i>Journal of Physics: Conference Series</i> , 2012, 392, 012003.	0.3	9
166	Hydrodynamics of binary-fluid mixtures – An augmented Multiparticle Collision Dynamics approach. <i>Europhysics Letters</i> , 2018, 121, 24003.	0.7	9
167	Random Copolymers with Short-Range Interaction in the Equilibrium State: Mean Field Approximation and Numerical Studies. <i>Physical Review Letters</i> , 1994, 73, 1602-1604.	2.9	8
168	Initial decay rate of the dynamic structure factor of polymer molecules in solution. <i>Journal of Chemical Physics</i> , 1998, 109, 5160-5161.	1.2	8
169	Hydrodynamic correlations in shear flow: Multiparticle-collision-dynamics simulation study. <i>Physical Review E</i> , 2015, 92, 053002.	0.8	8
170	Are the continuum and the lattice representation of freely jointed chains equivalent?. <i>Macromolecular Theory and Simulations</i> , 1994, 3, 575-583.	0.6	7
171	Mesoscale hydrodynamics simulations of particle suspensions under shear flow: From hard to ultrasoft colloids. <i>European Physical Journal: Special Topics</i> , 2013, 222, 2773-2786.	1.2	7
172	Role of fluid-density correlations in hydrodynamics: a multiparticle collision dynamics simulation study. <i>Soft Matter</i> , 2012, 8, 9886.	1.2	6
173	DNA Self-Assembly Mediated by Programmable Soft-Patchy Interactions. <i>ACS Nano</i> , 2020, 14, 13524-13535.	7.3	6
174	Path integral description of semiflexible active Brownian polymers. <i>Journal of Chemical Physics</i> , 2022, 156, 064105.	1.2	6
175	Deterministic chaos in the dynamics of a freely jointed molecular chain. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989, 141, 264-268.	0.9	5
176	Spatial correlations of hydrodynamic fluctuations in simple fluids under shear flow: A mesoscale simulation study. <i>Physical Review E</i> , 2017, 96, 062617.	0.8	5
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