Andrey Milchev

List of Publications by Year
in descending order

262	7,165	57758	91884
papers	citations	44 h-index	69 g-index

267	267	267	3811
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Capillary Rise in Nanopores: Molecular Dynamics Evidence for the Lucas-Washburn Equation. Physical Review Letters, 2007, 99, 054501.	7.8	246
2	Effect of disorder on diffusion and viscosity in condensed systems. Journal of Non-Crystalline Solids, 1988, 104, 253-260.	3.1	237
3	Polymer brushes on flat and curved surfaces: How computer simulations can help to test theories and to interpret experiments. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1515-1555.	2.1	190
4	Fluctuations and lack of self-averaging in the kinetics of domain growth. European Physical Journal B, 1986, 63, 521-535.	1.5	183
5	Static and Dynamic Properties of Adsorbed Chains at Surfaces:Â Monte Carlo Simulation of a Bead-Spring Model. Macromolecules, 1996, 29, 343-354.	4.8	178
6	Offâ€lattice Monte Carlo simulation of dilute and concentrated polymer solutions under theta conditions. Journal of Chemical Physics, 1993, 99, 4786-4798.	3.0	145
7	Polymer translocation through a nanopore induced by adsorption: Monte Carlo simulation of a coarse-grained model. Journal of Chemical Physics, 2004, 121, 6042-6051.	3.0	127
8	Polymer brushes in solvents of variable quality: Molecular dynamics simulations using explicit solvent. Journal of Chemical Physics, 2007, 127, 084905.	3.0	126
9	Single-polymer dynamics under constraints: scaling theory and computer experiment. Journal of Physics Condensed Matter, 2011, 23, 103101.	1.8	126
10	Polymer translocation through a nanopore: A showcase of anomalous diffusion. Physical Review E, 2007, 76, 010801.	2.1	122
11	Formation of Block Copolymer Micelles in Solution:Â A Monte Carlo Study of Chain Length Dependence. Macromolecules, 2001, 34, 1881-1893.	4.8	117
12	Driven polymer translocation through a nanopore: A manifestation of anomalous diffusion. Europhysics Letters, 2007, 79, 18002.	2.0	109
13	Polymer brushes under flow and in other out-of-equilibrium conditions. Soft Matter, 2011, 7, 7159.	2.7	97
14	A new offâ€lattice Monte Carlo model for polymers: A comparison of static and dynamic properties with the bondâ€fluctuation model and application to random media. Journal of Chemical Physics, 1993, 98, 6526-6539.	3.0	96
15	Dynamical Monte Carlo study of equilibrium polymers: Static properties. Journal of Chemical Physics, 1998, 109, 834-845.	3.0	93
16	Spherical polymer brushes under good solvent conditions: Molecular dynamics results compared to density functional theory. Journal of Chemical Physics, 2010, 133, 184901.	3.0	93
17	Scaling exponents of forced polymer translocation through a nanopore. European Physical Journal E, 2009, 29, 423-429.	1.6	86
18	A polymer chain trapped between two parallel repulsive walls: A Monte-Carlo test of scaling behavior. European Physical Journal B, 1998, 3, 477-484.	1.5	82

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19	Simulation Studies on the Dynamics of Polymers at Interfaces. Annual Review of Materials Research, 1996, 26, 107-134.	5.5	74
20	Finite-size scaling analysis of the ?4 field theory on the square lattice. Journal of Statistical Physics, 1986, 44, 749-784.	1.2	72
21	Semidilute and Concentrated Polymer Solutions near Attractive Walls:â€‰ Dynamic Monte Carlo Simulation of Density and Pressure Profiles of a Coarse-Grained Model. Macromolecules, 1997, 30, 1194-1204.	4.8	71
22	Polymer brushes in cylindrical pores: Simulation versus scaling theory. Journal of Chemical Physics, 2006, 125, 034905.	3.0	68
23	Polymer chains confined into tubes with attractive walls: A Monte Carlo simulation. Macromolecular Theory and Simulations, 1994, 3, 305-323.	1.4	67
24	Interface Localization-Delocalization in a Double Wedge: A New Universality Class with Strong Fluctuations and Anisotropic Scaling. Physical Review Letters, 2003, 90, 136101.	7.8	63
25	The electrostatic persistence length of polymers beyond the OSF limit. European Physical Journal E, 2002, 8, 3-14.	1.6	61
26	Dewetting of thin polymer films adsorbed on solid substrates: A Monte Carlo simulation of the early stages. Journal of Chemical Physics, 1997, 106, 1978-1989.	3.0	60
27	Forced translocation of a polymer: Dynamical scaling versus molecular dynamics simulation. Physical Review E, 2012, 85, 041801.	2.1	59
28	Conformations of Random Polyampholytes. Physical Review Letters, 2000, 85, 4305-4308.	7.8	56
29	Polymer melt droplets adsorbed on a solid wall: A Monte Carlo simulation. Journal of Chemical Physics, 2001, 114, 8610-8618.	3.0	56
30	Excess free energy of nanoparticles in a polymer brush. Polymer, 2008, 49, 3611-3618.	3.8	56
31	Dynamical Monte Carlo study of equilibrium polymers. II. The role of rings. Journal of Chemical Physics, 2000, 113, 6992-7005.	3.0	54
32	Fractional Brownian motion approach to polymer translocation: The governing equation of motion. Physical Review E, 2011, 83, 011802.	2.1	54
33	Title is missing!. Journal of Computer-Aided Materials Design, 2002, 9, 33-74.	0.7	53
34	Monte Carlo study of living polymers with the bond-fluctuation method. Physical Review E, 1995, 51, 5905-5910.	2.1	51
35	Formation and equilibrium properties of living polymer brushes. Journal of Chemical Physics, 2000, 112, 1606-1615.	3.0	51
36	A new insight into the isotropicâ€“nematic phase transition in lyotropic solutions of semiflexible polymers: density-functional theory tested by molecular dynamics. Soft Matter, 2016, 12, 4944-4959.	2.7	51

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37	Structure of Polymer Brushes in Cylindrical Tubes: A Molecular Dynamics Simulation. Macromolecular Theory and Simulations, 2006, 15, 573-583.	1.4	48
38	Computer Simulation Studies of Chain Dynamics in Polymer Brushes. Macromolecules, 2012, 45, 4381-4393.	4.8	48
39	Monte Carlo simulation of micelle formation in block copolymer solutions. Macromolecular Theory and Simulations, 1998, 7, 649-658.	1.4	47
40	Wedge filling and interface delocalization in finite Ising lattices with antisymmetric surface fields. Physical Review E, 2003, 68, 031601.	2.1	47
41	Monte Carlo study of semiflexible living polymers. Physical Review E, 1995, 52, 6431-6441.	2.1	46
42	Structure and dynamics of a polymer melt at an attractive surface. European Physical Journal E, 2012, 35, 97.	1.6	45
43	Anomalous Fluctuations of Nematic Order in Solutions of Semiflexible Polymers. Physical Review Letters, 2016, 116, 187801.	7.8	45
44	Osmotic pressure, atomic pressure and the virial equation of state of polymer solutions: Monte Carlo simulations of a bead-spring model. Macromolecular Theory and Simulations, 1994, 3, 915-929.	1.4	44
45	Universal properties of a single polymer chain in slit: Scaling versus molecular dynamics simulations. Journal of Chemical Physics, 2008, 128, 234902.	3.0	44
46	Capillary Filling in Microchannels with Wall Corrugations: A Comparative Study of the Concusâ˜Finn Criterion by Continuum, Kinetic, and Atomistic Approaches. Langmuir, 2009, 25, 12653-12660.	3.5	43
47	Escape transition of a polymer chain: Phenomenological theory and Monte Carlo simulations. Physical Chemistry Chemical Physics, 1999, 1, 2083-2091.	2.8	41
48	Monte-Carlo simulation of the Cahn-Hillard model of spinodal decomposition. Acta Metallurgica, 1988, 36, 377-383.	2.1	40
49	Wetting behavior of nanodroplets: The limits of Young's rule validity. Europhysics Letters, 2001, 56, 695-701.	2.0	40
50	Semiflexible polymer brushes and the brush-mushroom crossover. Soft Matter, 2015, 11, 2604-2616.	2.7	40
51	Dynamics of Polymer Chains Confined in Slit-Like Pores. Journal De Physique II, 1996, 6, 21-31.	0.9	39
52	Evidence of thin-film precursors formation in hydrokinetic and atomistic simulations of nano-channel capillary filling. Europhysics Letters, 2008, 84, 44003.	2.0	39
53	The effect of anharmonicity in epitaxial interfaces. Surface Science, 1984, 136, 503-518.	1.9	38
54	Monte Carlo study of a lattice gas model with non- additive lateral interactions. Surface Science, 1985, 164, 1-18.	1.9	38

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55	Anomalous Diffusion and Relaxation of Collapsed Polymer Chains. Europhysics Letters, 1994, 26, 671-676.	2.0	38
56	Absorption/expulsion of oligomers and linear macromolecules in a polymer brush. Journal of Chemical Physics, 2010, 132, .	3.0	38
57	The effect of anharmonicity in epitaxial interfaces. Surface Science, 1984, 136, 519-531.	1.9	37
58	A model for adsorption of O on Mo(110): Phase transitions with nonuniversal behavior. Journal of Chemical Physics, 1991, 94, 3958-3973.	3.0	37
59	Nanoinclusions in polymer brushes with explicit solvent â€“ A molecular dynamics investigation. Journal of Colloid and Interface Science, 2009, 336, 51-58.	9.4	37
60	Semiflexible polymers under good solvent conditions interacting with repulsive walls. Journal of Chemical Physics, 2016, 144, 174902.	3.0	37
61	Molecular Dynamics Simulations of Capillary Rise Experiments in Nanotubes Coated with Polymer Brushes. Langmuir, 2008, 24, 1232-1239.	3.5	36
62	Semiflexible Polymers in Spherical Confinement: Bipolar Orientational Order Versus Tennis Ball States. Physical Review Letters, 2017, 118, 217803.	7.8	36
63	Dependence of the diffusion coefficient on the energy distribution of random barriers. Physical Review E, 1995, 52, 3623-3631.	2.1	34
64	Diffusion of a polymer chain in porous media. Physical Review E, 1997, 55, 1704-1712.	2.1	34
65	Ejection of a Polymer Chain from a Nanopore: Theory and Computer Experiment. Macromolecules, 2010, 43, 6877-6885.	4.8	34
66	Escape transition of a compressed polymer mushroom under good solvent conditions. Europhysics Letters, 1999, 47, 675-680.	2.0	33
67	Droplet spreading: A Monte Carlo test of Tannerâ€™s law. Journal of Chemical Physics, 2002, 116, 7691-7694.	3.0	33
68	Dynamical Monte Carlo study of equilibrium polymers: Effects of high density and ring formation. Physical Review E, 2000, 61, 2959-2966.	2.1	32
69	Forced-Induced Desorption of a Polymer Chain Adsorbed on an Attractive Surface: Theory and Computer Experiment. Macromolecules, 2009, 42, 2236-2250.	4.8	31
70	Diffusion in a random medium: A Monte Carlo study. Physical Review E, 1993, 47, 2303-2307.	2.1	30
71	Adsorption of living polymers on a solid surface: A Monte Carlo simulation. Journal of Chemical Physics, 1996, 104, 9161-9168.	3.0	30
72	Adsorption of Multiblock and Random Copolymer on a Solid Surface: Critical Behavior and Phase Diagram. Macromolecules, 2008, 41, 2920-2930.	4.8	30

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73	Polymer nanodroplets adsorbed on nanocylinders: A Monte Carlo study. Journal of Chemical Physics, 2002, 117, 6852-6862.	3.0	29
74	Nematic order in solutions of semiflexible polymers: Hairpins, elastic constants, and the nematic-smectic transition. Journal of Chemical Physics, 2018, 149, 174909.	3.0	29
75	Surface Microdynamics Phase Transition and Internal Structure of High-Density, Ultrathin PHEMA-b-PNIPAM Diblock Copolymer Brushes on Silicone Rubber. Macromolecules, 2013, 46, 5260-5278.	4.8	28
76	The effect of anharmonicity in epitaxial interfaces. Surface Science, 1984, 145, 313-328.	1.9	27
77	The quasichemical approximation for a lattice gas model with nonadditive lateral interactions. Journal of Chemical Physics, 1983, 78, 1994-1998.	3.0	26
78	Monomer-mediated relaxation in living polymers. Physical Review E, 1997, 56, 1946-1953.	2.1	26
79	Computational confirmation of scaling predictions for equilibrium polymers. Europhysics Letters, 1998, 41, 291-296.	2.0	26
80	Nanodroplets on a solid plane: wetting and spreading in a Monte Carlo simulation. Computer Physics Communications, 2002, 146, 38-53.	7.5	26
81	Polymer chains in a soft nanotube: A Monte Carlo Study. Journal of Chemical Physics, 2006, 124, 024909.	3.0	26
82	Dynamics of single semiflexible polymers in dilute solution. Journal of Chemical Physics, 2016, 145, 234903.	3.0	26
83	The quadratic response of a Fermi gas: Electronic charge density of valence electrons in zincblende semiconductors. Physica Status Solidi (B): Basic Research, 1976, 77, 571-579.	1.5	25
84	A unified model description of mobile and localized adsorption. Surface Science, 1981, 108, 25-37.	1.9	25
85	Temperature dependence of the configurational entropy of undercooled melts and the nature of glass transition. Journal of Macromolecular Science - Physics, 1982, 21, 583-615.	1.0	25
86	Phase transitions in polydisperse polymer melts. Polymer, 1993, 34, 362-368.	3.8	25
87	Momentum-dependent interfacial tension in polymer solutions. Europhysics Letters, 2002, 59, 81-86.	2.0	25
88	Localization of a multiblock copolymer at a selective interface: Scaling predictions and Monte Carlo verification. Journal of Chemical Physics, 2005, 122, 094907.	3.0	25
89	Driven translocation of a polymer: Fluctuations at work. Physical Review E, 2013, 87, .	2.1	25
90	Nucleation and growth kinetics of Ag7NO11 on a platinum single crystal electrode. Journal of Applied Electrochemistry, 1988, 18, 614-618.	2.9	24

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91	Adsorption of a polyelectrolyte chain on a charged surface: a Monte Carlo simulation of scaling behaviour. Journal of Physics Condensed Matter, 1999, 11, 9907-9923.	1.8	24
92	Structural properties of concave cylindrical brushes interacting with free chains. Soft Matter, 2011, 7, 5669.	2.7	24
93	Anomalous structure and scaling of ring polymer brushes. Europhysics Letters, 2011, 95, 28003.	2.0	24
94	Semiflexible polymers grafted to a solid planar substrate: Changing the structure from polymer brush to â€œpolymer bristleâ€• Journal of Chemical Physics, 2012, 136, 194901.	3.0	24
95	Structure and dynamics of polymer melt confined between two solid surfaces: A molecular dynamics study. Journal of Chemical Physics, 2014, 141, 044907.	3.0	24
96	Influence of potassium sodium tartrate on the initial stage of silver electrodeposition. Journal of Applied Electrochemistry, 1991, 21, 170-174.	2.9	23
97	Crossover Dynamics for Polymer Simulation in Porous Media. Physical Review Letters, 1997, 79, 2356-2358.	7.8	23
98	Polymer Brushes on Flat and Curved Substrates: Scaling Concepts and Computer Simulations. Macromolecular Symposia, 2007, 252, 47-57.	0.7	23
99	Polymer desorption under pulling: A dichotomic phase transition. Physical Review E, 2009, 79, 030802.	2.1	23
100	Thermal breakage and self-healing of a polymer chain under tensile stress. Journal of Chemical Physics, 2010, 132, 204902.	3.0	23
101	Semiflexible Polymers in the Bulk and Confined by Planar Walls. Polymers, 2016, 8, 296.	4.5	23
102	Stiffness-guided motion of a droplet on a solid substrate. Journal of Chemical Physics, 2017, 146, 244705.	3.0	23
103	Polymer nanodroplets forming liquid bridges in chemically structured slit pores: A computer simulation. Journal of Chemical Physics, 2004, 121, 12632.	3.0	22
104	Densely Packed Semiflexible Macromolecules in a Rigid Spherical Capsule. Macromolecules, 2018, 51, 2002-2016.	4.8	22
105	How does stiffness of polymer chains affect their adsorption transition?. Journal of Chemical Physics, 2020, 152, 064901.	3.0	22
106	The quadratic response of a fermi gas. Buildingâ€up of the covalent bonding in zineblende semiconductors. A nondiagonal density matrix treatment. Physica Status Solidi (B): Basic Research, 1977, 79, 549-558.	1.5	21
107	Role of percolation in diffusion on random lattices. Physical Review E, 1995, 52, 3570-3576.	2.1	20
108	A Monte-Carlo study of equilibrium polymers in a shear flow. European Physical Journal B, 1999, 12, 241-251.	1.5	20

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109	Adsorption kinetics of a single polymer on a solid plane. Physical Review E, 2008, 77, 061603.	2.1	20
110	Pulling an adsorbed polymer chain off a solid surface. European Physical Journal E, 2009, 29, 285-297.	1.6	20
111	Polymer chain scission at constant tension â€"An example of force-induced collective behaviour. Europhysics Letters, 2011, 94, 48003.	2.0	20
112	Polymer Detachment Kinetics from Adsorbing Surface: Theory, Simulation and Similarity to Infiltration into Porous Medium. Macromolecules, 2012, 45, 4371-4380.	4.8	20
113	Polymer solutions confined in slit-like pores with attractive walls: An off-lattice Monte Carlo study of static properties and chain dynamics. Journal of Computer-Aided Materials Design, 1996, 2, 167-181.	0.7	19
114	Flow and transport in brush-coated capillaries: A molecular dynamics simulation. Physics of Fluids, 2008, 20, 092102.	4.0	19
115	Thermal degradation of unstrained single polymer chain: Non-linear effects at work. Journal of Chemical Physics, 2011, 134, 224901.	3.0	19
116	Unconventional ordering behavior of semi-flexible polymers in dense brushes under compression. Soft Matter, 2014, 10, 3783.	2.7	19
117	Conformations and orientational ordering of semiflexible polymers in spherical confinement. Journal of Chemical Physics, 2017, 146, 194907.	3.0	19
118	Smectic C and Nematic Phases in Strongly Adsorbed Layers of Semiflexible Polymers. Nano Letters, 2017, 17, 4924-4928.	9.1	19
119	Linear Dimensions of Adsorbed Semiflexible Polymers: What Can Be Learned about Their Persistence Length?. Physical Review Letters, 2019, 123, 128003.	7.8	19
120	Understanding the properties of liquid-crystalline polymers by computational modeling. JPhys Materials, 2020, 3, 032008.	4.2	19
121	Formation of Surface Micelles from Adsorbed Asymmetric Block Copolymers:Â A Monte Carlo Study. Langmuir, 1999, 15, 3232-3241.	3.5	18
122	Thermal Degradation of Adsorbed Bottle-Brush Macromolecules: A Molecular Dynamics Simulation. Macromolecules, 2011, 44, 3981-3987.	4.8	18
123	Entropic Unmixing in Nematic Blends of Semiflexible Polymers. ACS Macro Letters, 2020, 9, 1779-1784.	4.8	18
124	Frenkel-Kontorova model with anharmonic interactions. Physical Review B, 1988, 38, 2808-2812.	3.2	17
125	A monte carlo lattice study of living polymers in a confined geometry. Macromolecular Theory and Simulations, 1997, 6, 1177-1190.	1.4	17
126	Dynamics of a Spreading Nanodroplet: A Molecular Dynamic Simulation. Macromolecular Theory and Simulations, 2003, 12, 573-581.	1.4	17

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127	Polymer brushes with nanoinclusions under shear: A molecular dynamics investigation. Biomicrofluidics, 2010, 4, 32202.	2.4	17
128	Star polymers confined in a nanoslit: a simulation test of scaling and self-consistent field theories. Soft Matter, 2013, 9, 10522.	2.7	17
129	Bending or buckling: Compression-induced phase transition in a semi-flexible polymer brush. Europhysics Letters, 2013, 102, 58003.	2.0	17
130	A unified model description of mobile and localized adsorption. Surface Science, 1981, 108, 38-48.	1.9	16
131	Dynamics of a stretched nonlinear polymer chain. Journal of Chemical Physics, 2008, 129, 154908.	3.0	16
132	Anomalous diffusion of a tethered membrane: A Monte Carlo investigation. Physical Review E, 2008, 77, 041906.	2.1	16
133	The escape transition of a polymer: A unique case of non-equivalence between statistical ensembles. European Physical Journal E, 2009, 29, 9-25.	1.6	16
134	Force spectroscopy of polymer desorption: theory and molecular dynamics simulations. Soft Matter, 2014, 10, 2785.	2.7	16
135	Deformation-induced damage and recovery in model hydrogels â€“ A molecular dynamics simulation. Journal of the Mechanics and Physics of Solids, 2016, 94, 372-387.	4.8	16
136	Semiflexible polymers confined in a slit pore with attractive walls: two-dimensional liquid crystalline order versus capillary nematization. Soft Matter, 2017, 13, 1888-1903.	2.7	16
137	The smectic phase in semiflexible polymer materials: A large scale molecular dynamics study. Computational Materials Science, 2019, 166, 230-239.	3.0	16
138	Frequencyâ€•and waveâ€vectorâ€dependent dielectric function of a model semiconductor. Physica Status Solidi (B): Basic Research, 1978, 90, 679-688.	1.5	15
139	Thomasâ€Fermi Approximation for the Valence Electron Densities in Cubic Semiconductors and Insulators. Physica Status Solidi (B): Basic Research, 1981, 108, 511-520.	1.5	15
140	Theory of epitaxy in a Frank-van der Merwe model with anharmonic interactions. Thin Solid Films, 1985, 126, 83-93.	1.8	15
141	Frenkel-Kontorova model with anharmonic interactions. Physical Review B, 1986, 33, 2062-2065.	3.2	15
142	Forced imbibitionâ€”a tool for separate determination of Laplace pressure and drag force in capillary filling experiments. Physical Chemistry Chemical Physics, 2008, 10, 1867.	2.8	15
143	Hydrokinetic simulations of nanoscopic precursor films in rough channels. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P06007.	2.3	15
144	Stretching of Free Chains Confined in Concave Brush-Coated Nanocylinders. Macromolecules, 2012, 45, 2580-2587.	4.8	15

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145	Capillary Nematization of Semiflexible Polymers. Macromolecular Theory and Simulations, 2017, 26, 1600036.	1.4	15
146	On the Influence of Amorphization on Atomic Diffusion in Condensed Systems. Physica Status Solidi (B): Basic Research, 1983, 120, 123-130.	1.5	14
147	Solitary waves in a Frenkel-Kontorova model with non-convex interactions. Physica D: Nonlinear Phenomena, 1990, 41, 262-274.	2.8	14
148	Spinodal decomposition in adiabatically closed systems: theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 158, 307-312.	2.1	14
149	Monte Carlo study of the molecular-weight distribution of living polymers. Physical Review E, 1997, 55, 2020-2022.	2.1	14
150	Comment on â€˜Anomalous dynamics of unbiased polymer translocation through a narrow poreâ€™ and other recent papers by D Panja, G Barkema and R Ball. Journal of Physics Condensed Matter, 2009, 21, 098001.	1.8	14
151	Controlling the Interactions between Soft Colloids via Surface Adsorption. Macromolecules, 2013, 46, 3648-3653.	4.8	14
152	Mechanical Response of Hybrid Cross-Linked Networks to Uniaxial Deformation: A Molecular Dynamics Model. Macromolecules, 2014, 47, 8795-8807.	4.8	14
153	Phase Separation and Nematic Order in Lyotropic Solutions: Two Types of Polymers with Different Stiffnesses in a Common Solvent. Journal of Physical Chemistry B, 2021, 125, 956-969.	2.6	14
154	Thermodynamic functions of both simple (monomeric) and polymeric melts: MFA approach and Monte Carlo simulation. Journal of Macromolecular Science - Physics, 1996, 35, 763-794.	1.0	13
155	Copolymer adsorption kinetics at a selective liquid-liquid interface: Scaling theory and computer experiment. Europhysics Letters, 2006, 73, 204-210.	2.0	13
156	Tension enhancement in branched macromolecules upon adhesion on a solid substrate. Europhysics Letters, 2012, 97, 58003.	2.0	13
157	Breakup threshold of solitons in systems with nonconvex interactions. Physical Review B, 1990, 42, 6727-6729.	3.2	12
158	Effect of temperature on biased random walks in disordered media. Physical Review E, 1997, 56, R29-R31.	2.1	12
159	Interface stability and copolymers: Application to food systems. Food Hydrocolloids, 2007, 21, 870-878.	10.7	12
160	The effect of realistic forces in finite epitaxial islands: Equilibrium structure, stability limits and substrate-induced dissociation of migrating clusters. Surface Science, 1985, 156, 392-403.	1.9	11
161	A Monte Carlo study of diffusion in "living polymers". Europhysics Letters, 1996, 33, 341-346.	2.0	11
162	Osmotic pressure of solutions containing flexible polymers subject to an annealed molecular weight distribution. Europhysics Letters, 2001, 54, 58-64.	2.0	11

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163	Polymer depletion interaction between a colloid particle and a wall: A Monte Carlo study. Journal of Chemical Physics, 2002, 117, 5415-5420.	3.0	11
164	Polymer depletion interaction between parallel walls –A Monte Carlo study. European Physical Journal E, 2002, 8, 531-537.	1.6	11
165	Phase transitions in nanosystems caused by interface motion: The Ising bipyramid with competing surface fields. Physical Review E, 2005, 72, 031603.	2.1	11
166	Structure, dynamics, and phase transitions of tethered membranes: A Monte Carlo simulation study. Journal of Chemical Physics, 2007, 127, 194903.	3.0	11
167	Adsorption and structure formation of semiflexible polymers on spherical surfaces. Polymer, 2018, 145, 463-472.	3.8	11
168	2-D phase transitions. Electrochimica Acta, 1983, 28, 941-946.	5.2	10
169	Interaction of dislocations with a local defect in an atomic chain with a nonconvex interparticle potential. Physical Review B, 1990, 41, 4240-4246.	3.2	10
170	A new boundary-controlled phase transition: Phase separation in an Ising bi-pyramid with competing surface fields. Europhysics Letters, 2005, 70, 348-354.	2.0	10
171	Kinetics of Copolymer Localization at a Selective Liquidâ^'Liquid Interface. Macromolecules, 2006, 39, 1234-1244.	4.8	10
172	Dynamic Compression of in Situ Grown Living Polymer Brush: Simulation and Experiment. Macromolecules, 2012, 45, 9827-9840.	4.8	10
173	Polymer chain in a flow through a porous medium: A Monte Carlo simulation. Physical Review E, 1997, 56, 7043-7052.	2.1	9
174	Polymer droplets on substrates with striped surface domains: molecular dynamics simulations of equilibrium structure and liquid bridge rupture. Journal of Physics Condensed Matter, 2005, 17, S4199-S4211.	1.8	9
175	Monte Carlo simulations of phase transitions of systems in nanoscopic confinement. Computer Physics Communications, 2007, 177, 140-145.	7.5	9
176	Local Viscosity in the Vicinity of a Wall Coated by Polymer Brush from Greenâ€“Kubo Relations. Macromolecular Theory and Simulations, 2008, 17, 313-318.	1.4	9
177	Capillary Rise in Nanotubes Coated with Polymer Brushes. Annals of the New York Academy of Sciences, 2009, 1161, 537-548.	3.8	9
178	Molecular Dynamic Study of the Structure and Dynamics of Polymer Melt at Solid Surfaces. Soft Materials, 2014, 12, S56-S70.	1.7	9
179	Critical adsorption of a single macromolecule in polymer brushes. Soft Matter, 2014, 10, 5974-5990.	2.7	9
180	Effects of polymer stiffness on surface tension and pressure in confinement. Journal of Chemical Physics, 2015, 143, 064701.	3.0	9

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181	A Monte Carlo Study of Thermodynamic Relaxation in Living Polymers. Journal De Physique II, 1995, 5, 343-347.	0.9	9
182	Thirdâ€Order Contribution to the Effective Ionâ€“Ion Interaction and Formation of Angular Forces in Crystalline Solids. I. General Formulation of the Expression for the Total Energy. Physica Status Solidi (B): Basic Research, 1978, 87, 227-237.	1.5	8
183	Biased random walk in energetically disordered lattices. Physical Review E, 1998, 58, 2788-2795.	2.1	8
184	Growth kinetics of single copper crystals: the concentration dependence. Russian Journal of Electrochemistry, 2010, 46, 607-610.	0.9	8
185	Method for wettability characterization based on contact line pinning. Physical Review E, 2010, 81, 041603.	2.1	8
186	Adsorption of Oligomers and Polymers into a Polymer Brush Formed from Grafted Ring Polymers. Macromolecules, 2013, 46, 8724-8731.	4.8	8
187	Efficient Separation of Long Polymer Chains by Contour Length and Architecture. ACS Macro Letters, 2013, 2, 879-881.	4.8	8
188	Arm Retraction Dynamics and Bistability of a Three-Arm Star Polymer in a Nanopore. Macromolecules, 2014, 47, 2156-2168.	4.8	8
189	Molecular weight effects on interfacial properties of linear and ring polymer melts: A molecular dynamics study. Journal of Chemical Physics, 2016, 145, 194902.	3.0	8
190	Thermodynamic Behaviour of a Simple Liquidâ€”MFA with non-additive Lateral Interactions. Physics and Chemistry of Liquids, 1981, 11, 25-46.	1.2	7
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