Alexander Y Grosberg

List of Publications by Year
in descending order

197	13,184	23500 58	24179 110
papers	citations	h-index	g-index

202	202	202	7745
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reentrant transitions in a mixture of small and big particles interacting via soft repulsive potential. Physical Review E, 2022, 105, L032604.	0.8	0
2	Nonlinear Shear Rheology of Entangled Polymer Rings. Macromolecules, 2021, 54, 2811-2827.	2.2	51
3	Scaling Conjecture Regarding the Number of Unknots among Polygons of Nâ‰«1 Edges. Physics, 2021, 3, 664-668.	0.5	0
4	Tethered tracer in a mixture of hot and cold Brownian particles: can activity pacify fluctuations?. Soft Matter, 2021, 17, 9528-9539.	1.2	4
5	Human bloodsucking parasite in service of materials science. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18-20.	3.3	10
6	Non-equilibrium interaction between catalytic colloids: boundary conditions and penetration depth. Soft Matter, 2020, 16, 7414-7420.	1.2	0
7	Comment on â€œOsmotic pressure of compressed lattice knotsâ€• Physical Review E, 2020, 101, 016501.	0.8	0
8	Three-body problem for Langevin dynamics with different temperatures. Physical Review E, 2020, 101, 032131.	0.8	9
9	Nanorheology of Polymer Solutions: A Scaling Theory. Macromolecules, 2019, 52, 6927-6934.	2.2	5
10	Generalized Flory Theory for Rotational Symmetry Breaking of Complex Macromolecules. Physical Review Letters, 2019, 122, 128003.	2.9	2
11	Dynamical Response of Passive and Active Particles to Time-Periodic Mechanical Forcing. Journal of Statistical Physics, 2019, 175, 640-663.	0.5	1
12	Confining annealed branched polymers inside spherical capsids. Journal of Biological Physics, 2018, 44, 133-145.	0.7	1
13	Memory effects in active particles with exponentially correlated propulsion. Physical Review E, 2018, 97, 012602.	0.8	7
14	Dissipation in a System Driven by Two Different Thermostats. Polymer Science - Series C, 2018, 60, 118-121.	0.8	12
15	Freely Jointed Polymers Made of Droplets. Physical Review Letters, 2018, 121, 138002.	2.9	64
16	Flory theory of randomly branched polymers. Soft Matter, 2017, 13, 1223-1234.	1.2	52
17	The confinement of an annealed branched polymer by a potential well. Low Temperature Physics, 2017, 43, 101-109.	0.2	4
18	In celebration of Ilya Lifshitz. Physics Today, 2017, 70, 44-50.	0.3	1

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19	Pressure and flow of exponentially self-correlated active particles. Physical Review E, 2017, 96, 052605.	0.8	28
20	Extruding Loops to Make Loopy Globules?. Biophysical Journal, 2016, 110, 2133-2135.	0.2	10
21	Scale-Dependent Viscosity in Polymer Fluids. Journal of Physical Chemistry B, 2016, 120, 6383-6390.	1.2	11
22	Direct observation of DNA knots using a solid-state nanopore. Nature Nanotechnology, 2016, 11, 1093-1097.	15.6	214
23	Vingt ans aprÃ¨s (Twenty years after). Physics of Life Reviews, 2016, 18, 139-143.	1.5	3
24	Equilibrium self-assembly of small RNA viruses. Physical Review E, 2016, 93, 032405.	0.8	44
25	Do knots self-tighten for entropic reasons?. Polymer Science - Series A, 2016, 58, 864-872.	0.4	11
26	Ensemble View of RNAs and Proteins: Loops, Knots, Territories, and Evolution. Biophysical Journal, 2016, 110, 2289-2290.	0.2	3
27	Sequence Dependence of Viral RNA Encapsidation. Journal of Physical Chemistry B, 2016, 120, 6038-6050.	1.2	9
28	Minimal Surfaces on Unconcatenated Polymer Rings in Melt. ACS Macro Letters, 2016, 5, 750-754.	2.3	63
29	Facilitated diffusion of proteins through crumpled fractal DNA globules. Physical Review E, 2015, 92, 012702.	0.8	7
30	Perturbative theory for Brownian vortexes. Physical Review E, 2015, 91, 062144.	0.8	11
31	Nonequilibrium statistical mechanics of mixtures of particles in contact with different thermostats. Physical Review E, 2015, 92, 032118.	0.8	125
32	Understanding the dynamics of rings in the melt in terms of the annealed tree model. Journal of Physics Condensed Matter, 2015, 27, 064117.	0.7	52
33	On enumeration of Hilbert-like curves. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 195001.	0.7	1
34	The expected total curvature of random polygons. American Journal of Mathematics, 2015, 137, 411-438.	0.5	5
35	Observation of DNA Knots Using Solid-State Nanopores. Biophysical Journal, 2015, 108, 166a.	0.2	6
36	From statistics of regular tree-like graphs to distribution function and gyration radius of branched polymers. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 345003.	0.7	11

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37	Artificial rheotaxis. Science Advances, 2015, 1, e1400214.	4.7	131
38	The tyranny of correspondence principle. Physics of Life Reviews, 2014, 11, 178-180.	1.5	2
39	Annealed lattice animal model and Flory theory for the melt of non-concatenated rings: towards the physics of crumpling. Soft Matter, 2014, 10, 560-565.	1.2	102
40	From a melt of rings to chromosome territories: the role of topological constraints in genome folding. Reports on Progress in Physics, 2014, 77, 022601.	8.1	246
41	Network Formation by Cross-Hybridization of Complementary Strands to Grafted ssDNA. ACS Macro Letters, 2014, 3, 191-193.	2.3	3
42	Chromatin Hydrodynamics. Biophysical Journal, 2014, 106, 1871-1881.	0.2	112
43	Two cases of reciprocal relations for electric and hydrodynamic currents: A rigid polymer in a nano-channel and a polyelectrolyte gel. Journal of Chemical Physics, 2013, 139, 024902.	1.2	1
44	Electrophoretic capture of a DNA chain into a nanopore. Physical Review E, 2013, 87, 042722.	0.8	37
45	Fast Translocation of Proteins through Solid State Nanopores. Nano Letters, 2013, 13, 658-663.	4.5	316
46	A novel family of space-filling curves in their relation to chromosome conformation in eukaryotes. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 6375-6388.	1.2	20
47	Exact expressions for the mobility and electrophoretic mobility of a weakly charged sphere in a simple electrolyte. Europhysics Letters, 2013, 104, 68004.	0.7	6
48	Response to â€œComment on â€˜Molecular dynamics simulation study of nonconcatenated ring polymers in a melt. I. Staticsâ€• [J. Chem. Phys. 139, 217101 (2013)]. Journal of Chemical Physics, 2013, 139, 217102.	1.2	3
49	Comparing the results of lattice and off-lattice simulations for the melt of nonconcatenated rings. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 065002.	0.7	22
50	Kinetics of DNA-coated sticky particles. Physical Review E, 2013, 88, 022304.	0.8	22
51	Electrophoresis of a DNA coil near a nanopore. Physical Review E, 2013, 87, 042723.	0.8	14
52	Polygamous particles. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18731-18736.	3.3	34
53	Rheology of Ring Polymer Melts: From Linear Contaminants to Ring-Linear Blends. Physical Review Letters, 2012, 108, 038301.	2.9	179
54	What about a theory?. Physics of Life Reviews, 2012, 9, 172-173.	1.5	1

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55	How two meters of DNA fit into a cell nucleus: Polymer models with topological constraints and experimental data. Polymer Science - Series C, 2012, 54, 1-10.	0.8	28
56	Propagation of tension along a polymer chain. Physical Review E, 2012, 86, 011803.	0.8	29
57	Reply to Comment on â€˜Modeling the conductance and DNA blockade of solid-state nanoporesâ€™. Nanotechnology, 2012, 23, 088002.	1.3	3
58	OPTIMAL LINEAGE PRINCIPLE FOR AGE-STRUCTURED POPULATIONS. Evolution; International Journal of Organic Evolution, 2012, 66, 115-134.	1.1	40
59	Force-Driven Polymer Translocation through a Nanopore: An Old Problem Revisited. Journal of Physical Chemistry B, 2011, 115, 14127-14135.	1.2	88
60	Modeling the conductance and DNA blockade of solid-state nanopores. Nanotechnology, 2011, 22, 315101.	1.3	380
61	Energy conservation versus conservation of energy. Physics of Life Reviews, 2011, 8, 293-295.	1.5	2
62	Molecular dynamics simulation study of nonconcatenated ring polymers in a melt. I. Statics. Journal of Chemical Physics, 2011, 134, 204904.	1.2	284
63	Molecular dynamics simulation study of nonconcatenated ring polymers in a melt. II. Dynamics. Journal of Chemical Physics, 2011, 134, 204905.	1.2	210
64	CRUMPLED GLOBULE MODEL OF DNA PACKING IN CHROMOSOMES: FROM PREDICTIONS TO OPEN QUESTIONS. , 2011, , .		1
65	Non-conservative forces in optical tweezers and Brownian vortexes. Proceedings of SPIE, 2010, , .	0.8	0
66	Electrostatic focusing of unlabelled DNA into nanoscale pores using a salt gradient. Nature Nanotechnology, 2010, 5, 160-165.	15.6	625
67	Minimal model for Brownian vortexes. Physical Review E, 2010, 82, 021123.	0.8	14
68	DNA capture into a nanopore: Interplay of diffusion and electrohydrodynamics. Journal of Chemical Physics, 2010, 133, 165102.	1.2	127
69	Maximization of the connectivity repertoire as a statistical principle governing the shapes of dendritic arbors. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12536-12541.	3.3	117
70	A few notes about polymer knots. Polymer Science - Series A, 2009, 51, 70-79.	0.4	17
71	Brownian vortexes. Physical Review E, 2009, 80, 010401.	0.8	45
72	Statistics of polymer rings in the melt: a numerical simulation study. Physical Biology, 2009, 6, 025013.	0.8	170

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73	First passage time distribution for the 1D diffusion of particles with internal degrees of freedom. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434011.	0.7	9
74	The random search problem: trends and perspectives. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 430301.	0.7	15
75	Adsorption kinetics of a single polymer on a solid plane. Physical Review E, 2008, 77, 061603.	0.8	20
76	Are DNA Transcription Factor Proteins Maxwellian Demons?. Biophysical Journal, 2008, 95, 1151-1156.	0.2	49
77	Total Curvature and Total Torsion of a Freely Jointed Circular Polymer with <i>n</i> â‰« 1 Segments. Macromolecules, 2008, 41, 4524-4527.	2.2	15
78	Heteropolymer sequence design and preferential solvation of hydrophilic monomers: Application of random energy model. Physical Review E, 2007, 75, 041921.	0.8	2
79	Metastable Tight Knots in a Wormlike Polymer. Physical Review Letters, 2007, 99, 217801.	2.9	77
80	How Long Does It Take to Pull an Ideal Polymer into a Small Hole?. Physical Review Letters, 2006, 96, 228105.	2.9	57
81	How Proteins Search for Their Specific Sites on DNA: The Role of DNA Conformation. Biophysical Journal, 2006, 90, 2731-2744.	0.2	160
82	Worm-like polymer loops and Fourier knots. Journal of Physics A, 2006, 39, L507-L513.	1.6	6
83	The abundance of unknots in various models of polymer loops. Journal of Physics A, 2006, 39, 9081-9092.	1.6	13
84	Statistics of Knots, Geometry of Conformations, and Evolution of Proteins. PLoS Computational Biology, 2006, 2, e45.	1.5	134
85	Conductivity of a suspension of nanowires in a weakly conducting medium. Physical Review B, 2006, 73, .	1.1	18
86	Polymer-Population Mapping and Localization in the Space of Phenotypes. Physical Review Letters, 2006, 97, 068101.	2.9	22
87	First passage times and asymmetry of DNA translocation. Physical Review E, 2005, 72, 061918.	0.8	44
88	Limits of analogy between self-avoidance and topology-driven swelling of polymer loops. Physical Review E, 2005, 72, 061803.	0.8	37
89	Practical Applicability of the Jarzynski Relation in Statistical Mechanics:Â A Pedagogical Exampleâ€. Journal of Physical Chemistry B, 2005, 109, 6805-6811.	1.2	93
90	Solvation versus freezing in a heteropolymer globule. Physical Review E, 2004, 70, 021802.	0.8	4

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91	Topologically driven swelling of a polymer loop. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13431-13435.	3.3	98
92	Fractal and statistical properties of large compact polymers: a computational study. Polymer, 2004, 45, 717-731.	1.8	90
93	Multiple-contact adsorption of target molecules by heteropolymer gelsâ€. Macromolecular Symposia, 2004, 207, 1-16.	0.4	11
94	Multiple point adsorption in a heteropolymer gel and the Tanaka approach to imprinting: experiment and theory. Progress in Polymer Science, 2003, 28, 1489-1515.	11.8	78
95	Effects of Ligand Binding on Relative Stability of Subchain Conformations of Weakly ChargedN-Isopropylacrylamide Gels in Swollen and Shrunken States. Macromolecules, 2003, 36, 9115-9121.	2.2	19
96	Design of toy proteins capable of rearranging conformations in a mechanical fashion. Journal of Chemical Physics, 2003, 118, 5201-5212.	1.2	8
97	Chain length dependence of the state diagram of a single stiff-chain macromolecule: Theory and Monte Carlo simulation. Journal of Chemical Physics, 2003, 118, 3392-3400.	1.2	77
98	A few remarks evoked by Binhi and Savin's review on magnetobiology. Physics-Uspekhi, 2003, 46, 1113-1116.	0.8	12
99	Winding angle distribution for planar random walk, polymer ring entangled with an obstacle, and all that: Spitzerâ€“Edwardsâ€“Pragerâ€“Frisch model revisited. Journal of Physics A, 2003, 36, 8955-8981.	1.6	37
100	LOW TEMPERATURE PHYSICS AT ROOM TEMPERATURE IN WATER: CHARGE INVERSION IN CHEMICAL AND BIOLOGICAL SYSTEMS. International Journal of High Speed Electronics and Systems, 2002, 12, 235-265.	0.3	4
101	A Few Disconnected Notes Related to Levinthal Paradox. Journal of Biomolecular Structure and Dynamics, 2002, 20, 317-321.	2.0	8
102	Protein folding and the secret of life. Physics World, 2002, 15, 26-27.	0.0	0
103	Colloquium: The physics of charge inversion in chemical and biological systems. Reviews of Modern Physics, 2002, 74, 329-345.	16.4	988
104	Electrophoresis of a charge-inverted macroion complex: Molecular-dynamics study. European Physical Journal E, 2002, 7, 371-379.	0.7	44
105	Bridging the Time Scale Gap: How Does Foldable Polymer Navigate Its Conformation Space?. Lecture Notes in Physics, 2002, , 129-142.	0.3	1
106	Simultaneous Multiple-Point Adsorption of Aluminum Ions and Charged Molecules by a Polyampholyte Thermosensitive Gel:Â Controlling Frustrations in a Heteropolymer Gel. Langmuir, 2001, 17, 3616-3622.	1.6	42
107	Effect of Reversible Cross-linker, N,Nâ€˜-Bis(acryloyl)cystamine, on Calcium Ion Adsorption by Imprinted Gels. Langmuir, 2001, 17, 4431-4436.	1.6	67
108	Reversible adsorption of calcium ions by imprinted temperature sensitive gels. Journal of Chemical Physics, 2001, 114, 2812-2816.	1.2	69

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109	Giant charge inversion of a macroion due to multivalent counterions and monovalent coions: Molecular dynamics study. Journal of Chemical Physics, 2001, 115, 567-574.	1.2	73
110	Primary sequences of proteinlike copolymers:â€ƒLevy-flightâ€"type long-range correlations. Physical Review E, 2001, 64, 040903.	0.8	77
111	Free Energy Self-Averaging in Protein-Sized Random Heteropolymers. Physical Review Letters, 2001, 87, 078104.	2.9	13
112	Salt effects on multiple-point adsorption of target molecules by heteropolymer gel. Journal of Chemical Physics, 2001, 115, 1596-1600.	1.2	19
113	Shape imprinting due to variable disulfide bonds in polyacrylamide gels. Journal of Chemical Physics, 2001, 114, 10551-10556.	1.2	10
114	Lateral Correlation of Multivalent Counterions is the Universal Mechanism of Charge Inversion. , 2001, , 469-486.		1
115	Gel catalysts that switch on and off. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 9861-9864.	3.3	63
116	Topological repulsion between polymer globules. Journal of Chemical Physics, 2000, 112, 6434-6442.	1.2	36
117	Critical Exponents for Random Knots. Physical Review Letters, 2000, 85, 3858-3861.	2.9	145
118	Frustrations in Polymer Conformation in Gels and their Minimization through Molecular Imprinting. Physical Review Letters, 2000, 85, 5000-5003.	2.9	54
119	Unexpected Scenario of Glass Transition in Polymer Globules: An Exactly Enumerable Model. Physical Review Letters, 2000, 84, 2417-2420.	2.9	12
120	Macroions in Salty Water with Multivalent Ions: Giant Inversion of Charge. Physical Review Letters, 2000, 85, 1568-1571.	2.9	151
121	Heteropolymer freezing and design: Towards physical models of protein folding. Reviews of Modern Physics, 2000, 72, 259-314.	16.4	264
122	Random Walks in the Space of Conformations of Toy Proteins. Physical Review Letters, 2000, 84, 1828-1831.	2.9	10
123	Closed loops of nearly standard size: common basic element of protein structure. FEBS Letters, 2000, 466, 283-286.	1.3	145
124	Screening of a charged particle by multivalent counterions in salty water: Strong charge inversion. Journal of Chemical Physics, 2000, 113, 1110-1125.	1.2	161
125	Studies of the Thermal Volume Transition of Poly(N-isopropylacrylamide) Hydrogels by High-Sensitivity Differential Scanning Microcalorimetry. 2. Thermodynamic Functions. Macromolecules, 2000, 33, 8685-8692.	2.2	121
126	Polymer Gels That Memorize Elements of Molecular Conformation. Macromolecules, 2000, 33, 8693-8697.	2.2	126

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127	On the role of conformational geometry in protein folding. Journal of Chemical Physics, 1999, 111, 10375-10380.	1.2	28
128	Molecular dynamics of strongly coupled multichain Coulomb polymers in pure and salt-added Langevin fluids. Journal of Chemical Physics, 1999, 110, 8176-8188.	1.2	28
129	Coexistence of Native and Denatured Phases in a Single Proteinlike Molecule. Physical Review Letters, 1999, 83, 4670-4673.	2.9	8
130	First Order Phase Transition and Evidence for Frustrations in Polyampholytic Gels. Physical Review Letters, 1999, 82, 4863-4865.	2.9	69
131	A new hydrogel system undergoing a volume phase transition upon heating. Macromolecular Chemistry and Physics, 1999, 200, 1603-1607.	1.1	13
132	Reversible Molecular Adsorption Based on Multiple-Point Interaction by Shrinkable Gels. Science, 1999, 286, 1543-1545.	6.0	205
133	Studies of the Thermal Volume Transition of Poly(N-isopropylacrylamide) Hydrogels by High-Sensitivity Differential Scanning Microcalorimetry. 1. Dynamic Effects. Macromolecules, 1999, 32, 1471-1475.	2.2	70
134	Molecular Dynamics Simulations of Polyampholytesâ€. Langmuir, 1999, 15, 4052-4055.	1.6	12
135	Molecular dynamics of multichain Coulomb polymers and the effect of salt ions. , 1999, , .		2
136	Reversible molecular adsorption as a tool to observe freezing and to perform design of heteropolymer gels. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1998, 102, 1529-1533.	0.9	15
137	Models of protein interactions: how to choose one. Folding & Design, 1998, 3, 203-211.	4.5	12
138	On the transition coordinate for protein folding. Journal of Chemical Physics, 1998, 108, 334-350.	1.2	484
139	Pathways for protein folding: is a new view needed?. Current Opinion in Structural Biology, 1998, 8, 68-79.	2.6	244
140	On the properties of polymer globules in the high density limit. Journal of Chemical Physics, 1998, 108, 9144-9149.	1.2	11
141	Polymer topology. , 1998, , 176-193.		0
142	Il'ya Mikhailovich Lifshits (on the 80th anniversary of his birth). Physics-Uspekhi, 1997, 40, 225-226.	0.8	1
143	Molecular dynamics study of the structure organization in a strongly coupled chain of charged particles. Physical Review E, 1997, 56, 5798-5808.	0.8	24
144	Dependency of swelling on the length of subchain in poly(N,N-dimethylacrylamide)-based gels. Journal of Chemical Physics, 1997, 106, 2906-2910.	1.2	74

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145	Thermodynamics of the coil to frozen globule transition in heteropolymers. Journal of Chemical Physics, 1997, 107, 5118-5124.	1.2	28
146	Statistical mechanics of simple models of protein folding and design. Biophysical Journal, 1997, 73, 3192-3210.	0.2	122
147	Disordered polymers. Physics-Uspekhi, 1997, 40, 125-158.	0.8	17
148	On the theory of folding kinetics for short proteins. Folding & Design, 1997, 2, 109-114.	4.5	43
149	How to create polymers with protein-like capabilities: A theoretical suggestion. Physica D: Nonlinear Phenomena, 1997, 107, 316-321.	1.3	19
150	Equilibrium swelling properties of polyampholytic hydrogels. Journal of Chemical Physics, 1996, 104, 8713-8720.	1.2	162
151	Is Heteropolymer Freezing Well Described by the Random Energy Model?. Physical Review Letters, 1996, 76, 3987-3990.	2.9	47
152	Freezing Transition of Compact Polyampholytes. Physical Review Letters, 1996, 77, 3565-3568.	2.9	29
153	Flory-type theory of a knotted ring polymer. Physical Review E, 1996, 54, 6618-6622.	0.8	88
154	Random walks on braid groups: Brownian bridges, complexity and statistics. Journal of Physics A, 1996, 29, 2411-2433.	1.6	39
155	Enumeration of the Hamiltonian walks on a cubic sublattice. Journal of Physics A, 1996, 29, 4753-4753.	1.6	2
156	How accurate must potentials be for successful modeling of protein folding?. Journal of Chemical Physics, 1995, 103, 9482-9491.	1.2	66
157	Freezing transition of random heteropolymers consisting of an arbitrary set of monomers. Physical Review E, 1995, 51, 3381-3392.	0.8	44
158	Metastable Globules in Good Solvents: Topologically Stabilized State of Polymers. Europhysics Letters, 1995, 32, 505-510.	0.7	26
159	Phase diagram of an imprinted copolymer in a random external field. Journal of Physics A, 1995, 28, 3657-3666.	1.6	12
160	Phase Diagram of Heteropolymers with an Imprinted Conformation. Macromolecules, 1995, 28, 2218-2227.	2.2	42
161	Two-Stage Kinetics of Single-Chain Collapse. Polystyrene in Cyclohexane. Macromolecules, 1995, 28, 180-189.	2.2	208
162	Conformational Entropy of a Branched Polymer. Macromolecules, 1995, 28, 3718-3727.	2.2	18

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163	Polymer gels that can recognize and recover molecules. Faraday Discussions, 1995, 101, 201.	1.6	47
164	Fractality of DNA Texts. Journal of Biomolecular Structure and Dynamics, 1994, 12, 655-669.	2.0	27
165	Enumerations of the Hamiltonian walks on a cubic sublattice. Journal of Physics A, 1994, 27, 6231-6236.	1.6	50
166	Folding thermodynamics and kinetics of imprinted renaturable heteropolymers. Journal of Chemical Physics, 1994, 101, 8246-8257.	1.2	52
167	Phase transition in a heteropolymer chain at a selective interface. Physical Review E, 1994, 50, 1912-1921.	0.8	29
168	Nonrandomness in protein sequences: evidence for a physically driven stage of evolution?. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12972-12975.	3.3	109
169	Thermodynamic procedure to synthesize heteropolymers that can renature to recognize a given target molecule.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12976-12979.	3.3	83
170	On microphase segregation of interpenetrating polymer networks. Die Makromolekulare Chemie Theory and Simulations, 1993, 2, 517-522.	1.0	9
171	Crumpled Globule Model of the Three-Dimensional Structure of DNA. Europhysics Letters, 1993, 23, 373-378.	0.7	287
172	Polymer topology. , 1993, , 1-29.		32
173	Microphase separation in randomly branched polymers. Macromolecules, 1993, 26, 3598-3600.	2.2	6
174	Single-chain collapse or precipitation? Kinetic diagram of the states of a polymer solution. Macromolecules, 1993, 26, 4249-4251.	2.2	90
175	Two types of topological constraints in polymer networks. Macromolecules, 1993, 26, 3200-3204.	2.2	9
176	Globular state of branched random heteropolymers. Journal of Physics A, 1993, 26, 1037-1049.	1.6	16
177	Polymers with annealed and quenched branchings belong to different universality classes. Macromolecules, 1993, 26, 1293-1295.	2.2	50
178	Averaged Kauffman Invariant and Quasi-Knot Concept for Linear Polymers. Europhysics Letters, 1992, 20, 613-619.	0.7	14
179	Algebraic invariants of knots and disordered Potts model. Journal of Physics A, 1992, 25, 4659-4672.	1.6	30
180	Dynamics of Double Stranded DNA Reptation From Bacteriophage. Journal of Biomolecular Structure and Dynamics, 1992, 9, 911-920.	2.0	46

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182	Quantitative theory of the globule-to-coil transition. 2. Density-density correlation in a globule and the hydrodynamic radius of a macromolecule. Macromolecules, 1992, 25, 1980-1990.	2.2	47
183	Quantitative theory of the globule-to-coil transition. 4. Comparison of theoretical results with experimental data. Macromolecules, 1992, 25, 1996-2003.	2.2	78
184	Quantitative theory of the globule-to-coil transition. 3. Globule-globule interaction and polymer solution binodal and spinodal curves in the globular range. Macromolecules, 1992, 25, 1991-1995.	2.2	47
185	Topological constraints in polymer network strong collapse. Macromolecules, 1991, 24, 2789-2793.	2.2	38
186	Fluctuations and mass action law breakdown in statistical thermodynamics of small systems. Journal of Chemical Physics, 1991, 95, 7541-7547.	1.2	18
187	The structure of the nematicâ€“isotropic interface in polymer systems. Liquid Crystals, 1991, 10, 539-553.	0.9	15
188	The role of topological constraints in the kinetics of collapse of macromolecules. Journal De Physique, 1988, 49, 2095-2100.	1.8	374
189	On the Compact Form of Linear Duplex DNA: Globular States of the Uniform Elastic (Persistent) Macromolecule. Journal of Biomolecular Structure and Dynamics, 1986, 3, 859-872.	2.0	49
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191	On the Toroidal Condensed State of Closed Circular DNA. Journal of Biomolecular Structure and Dynamics, 1985, 3, 515-520.	2.0	10
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193	On the theory of Î¨-condensation. Biopolymers, 1982, 21, 2413-2432.	1.2	59
194	On the direct renormalization group procedure for a polymer chain. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 78, 163-166.	0.9	4
195	Volume interactions in the statistical physics of a polymer macromolecule. Uspekhi Fizicheskikh Nauk, 1979, 22, 123-142.	0.3	38
196	Some problems of the statistical physics of polymer chains with volume interaction. Reviews of Modern Physics, 1978, 50, 683-713.	16.4	668
197	After-Action of the Ideas of I.M. Lifshitz in Polymer and Biopolymer Physics. , 0, , 189-210.		4