

Gary W Slater

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181
papers

4,994
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39
h-index

61
g-index

185
ext. papers

5,307
ext. citations

3.9
avg, IF

5.71
L-index

#	Paper	IF	Citations
181	Diffusing diffusivity: a model for anomalous, yet Brownian, diffusion. <i>Physical Review Letters</i> , 2014 , 113, 098302	7.4	220
180	On the reptation theory of gel electrophoresis. <i>Biopolymers</i> , 1986 , 25, 431-454	2.2	185
179	Diffusion coefficient of DNA molecules during free solution electrophoresis. <i>Electrophoresis</i> , 2001 , 22, 2424-32	3.6	159
178	Quantitative analysis of the three regimes of DNA electrophoresis in agarose gels. <i>Biopolymers</i> , 1988 , 27, 509-24	2.2	154
177	Self-trapping and anomalous dispersion of DNA in electrophoresis. <i>Physical Review Letters</i> , 1987 , 58, 2428-2431	7.4	128
176	Modeling the separation of macromolecules: a review of current computer simulation methods. <i>Electrophoresis</i> , 2009 , 30, 792-818	3.6	116
175	New biased-reptation model for charged polymers. <i>Physical Review Letters</i> , 1985 , 55, 1579-1582	7.4	105
174	End-labeled free-solution electrophoresis of DNA. <i>Electrophoresis</i> , 2005 , 26, 331-50	3.6	96
173	Reptation, entropic trapping, percolation, and rouse dynamics of polymers in "random" environments. <i>Physical Review Letters</i> , 1995 , 75, 164-167	7.4	96
172	Bidirectional Transport of Polyelectrolytes Using Self-Modulating Entropic Ratchets. <i>Physical Review Letters</i> , 1997 , 78, 1170-1173	7.4	90
171	Molecular detrapping and band narrowing with high frequency modulation of pulsed field electrophoresis. <i>Nucleic Acids Research</i> , 1990 , 18, 569-75	20.1	90
170	Free-solution electrophoresis of DNA. <i>Journal of Chromatography A</i> , 1998 , 806, 113-121	4.5	84
169	Theory of DNA Sequencing Using Free-Solution Electrophoresis of Protein-DNA Complexes. <i>Analytical Chemistry</i> , 1994 , 66, 1777-1780	7.8	83
168	Theory of DNA electrophoresis: a look at some current challenges. <i>Electrophoresis</i> , 2000 , 21, 3873-87	3.6	82
167	Theory of band broadening for DNA gel electrophoresis and sequencing. <i>Electrophoresis</i> , 1993 , 14, 1-7	3.6	82
166	Theory of Capillary Electrophoretic Separation of DNA Using Ultradilute Polymer Solutions. <i>Macromolecules</i> , 1996 , 29, 1006-1009	5.5	79
165	Entropic Trapping of DNA During Gel Electrophoresis: Effect of Field Intensity and Gel Concentration. <i>Physical Review Letters</i> , 1997 , 79, 1945-1948	7.4	75

164	Electrophoretic Separation of Long Polyelectrolytes in Submolecular-Size Constrictions: A Monte Carlo Study. <i>Macromolecules</i> , 2002 , 35, 4791-4800	5.5	75
163	Separating DNA sequencing fragments without a sieving matrix. <i>Electrophoresis</i> , 1999 , 20, 2501-9	3.6	73
162	On the stretching of DNA in the reptation theories of gel electrophoresis. <i>Biopolymers</i> , 1987 , 26, 863-72.2.2		70
161	Flow-induced chain scission as a physical route to narrowly distributed, high molar mass polymers. <i>Polymer</i> , 2004 , 45, 1223-1234	3.9	66
160	Agency Working in Britain: Character, Consequences and Regulation. <i>British Journal of Industrial Relations</i> , 2005 , 43, 249-271	1.6	63
159	Theory of DNA electrophoresis (approximately 1999-2002(1/2)). <i>Electrophoresis</i> , 2002 , 23, 3791-816	3.6	62
158	Electrophoresis of Composite Molecular Objects. 1. Relation between Friction, Charge, and Ionic Strength in Free Solution. <i>Macromolecules</i> , 2001 , 34, 44-52	5.5	62
157	A Monte Carlo algorithm to study polymer translocation through nanopores. I. Theory and numerical approach. <i>Journal of Chemical Physics</i> , 2008 , 128, 065103	3.9	59
156	DNA electrophoretic collisions with single obstacles. <i>Physical Review E</i> , 1994 , 50, 5033-5038	2.4	59
155	An exactly solvable Ogston model of gel electrophoresis: I. The role of the symmetry and randomness of the gel structure. <i>Electrophoresis</i> , 1996 , 17, 977-88	3.6	58
154	Modulation of Electroosmotic Flow Strength with End-Grafted Polymer Chains. <i>Macromolecules</i> , 2006 , 39, 1250-1260	5.5	54
153	Molar mass profiling of synthetic polymers by free-solution capillary electrophoresis of DNA-polymer conjugates. <i>Analytical Chemistry</i> , 2001 , 73, 1795-803	7.8	54
152	Why can we not sequence thousands of DNA bases on a polyacrylamide gel?. <i>Electrophoresis</i> , 1992 , 13, 574-82	3.6	53
151	Polymer translocation in the presence of excluded volume and explicit hydrodynamic interactions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006 , 359, 261-264	2.3	51
150	Recent developments in DNA electrophoretic separations. <i>Electrophoresis</i> , 1998 , 19, 1525-41	3.6	49
149	A Monte Carlo algorithm to study polymer translocation through nanopores. II. Scaling laws. <i>Journal of Chemical Physics</i> , 2008 , 128, 205103	3.9	47
148	Entropic trapping and electrophoretic drift of a polyelectrolyte down a channel with a periodically oscillating width. <i>Physical Review E</i> , 1996 , 53, 4969-4980	2.4	47
147	A model of the DNA transient orientation overshoot during gel electrophoresis. <i>Journal of Chemical Physics</i> , 1990 , 92, 709-721	3.9	45

146	The theory of DNA separation by capillary electrophoresis. <i>Current Opinion in Biotechnology</i> , 2003 , 14, 58-64	11.4	44
145	An exactly solvable Ogston model of gel electrophoresis. II. Sieving through periodic gels. <i>Electrophoresis</i> , 1996 , 17, 1407-15	3.6	44
144	Diffusion, Joule heating, and band broadening in capillary gel electrophoresis of DNA. <i>Electrophoresis</i> , 1995 , 16, 75-83	3.6	43
143	Polyandry and Incest Avoidance in the Cooperative Stripe-Backed Wren of Venezuela. <i>Behaviour</i> , 1993 , 124, 227-247	1.4	39
142	Simulating the entropic collapse of coarse-grained chromosomes. <i>Biophysical Journal</i> , 2015 , 108, 810-820	0.9	35
141	Ogston gel electrophoretic sieving: how is the fractional volume available to a particle related to its mobility and diffusion coefficient(s)? <i>Electrophoresis</i> , 1995 , 16, 11-5	3.6	35
140	Electrophoresis: When hydrodynamics matter. <i>Current Opinion in Colloid and Interface Science</i> , 2012 , 17, 74-82	7.6	34
139	Nondriven polymer translocation through a nanopore: computational evidence that the escape and relaxation processes are coupled. <i>Physical Review E</i> , 2009 , 79, 021802	2.4	34
138	Molecular dynamics simulations of optimal dynamic uncharged polymer coatings for quenching electro-osmotic flow. <i>Physical Review Letters</i> , 2009 , 102, 108304	7.4	33
137	Effect of nonparallel alternating fields on the mobility of DNA in the biased reptation model of gel electrophoresis. <i>Electrophoresis</i> , 1989 , 10, 413-28	3.6	33
136	An Exactly Solvable Ogston Model of Gel Electrophoresis. 7. Diffusion and Mobility of Hard Spherical Particles in Three-Dimensional Gels. <i>Macromolecules</i> , 2001 , 34, 3437-3445	5.5	31
135	Interfacing solid-state nanopores with gel media to slow DNA translocations. <i>Electrophoresis</i> , 2015 , 36, 1759-67	3.6	29
134	Mapping the variation of the translocation scaling exponent with nanopore width. <i>Physical Review E</i> , 2010 , 81, 051802	2.4	29
133	DNA gel electrophoresis: the reptation model(s). <i>Electrophoresis</i> , 2009 , 30 Suppl 1, S181-7	3.6	29
132	Building reliable lattice Monte Carlo models for real drift and diffusion problems. <i>Physical Review E</i> , 2004 , 70, 015103	2.4	29
131	Scrambling of bands in gel electrophoresis of DNA. <i>Nucleic Acids Research</i> , 1988 , 16, 5427-37	20.1	29
130	Memory effects during the unbiased translocation of a polymer through a nanopore. <i>Journal of Chemical Physics</i> , 2012 , 136, 154903	3.9	28
129	Sequence effects on the forced translocation of heteropolymers through a small channel. <i>Journal of Chemical Physics</i> , 2008 , 128, 175103	3.9	28

128	A metric to search for relevant words. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003 , 329, 309-327	3.3	28
127	Influence of Charged Polymer Coatings on Electro-Osmotic Flow: Molecular Dynamics Simulations. <i>Macromolecules</i> , 2011 , 44, 9455-9463	5.5	27
126	Control and Quenching of Electroosmotic Flow with End-Grafted Polymer Chains. <i>Macromolecules</i> , 2005 , 38, 6752-6754	5.5	27
125	Numerically exact diffusion coefficients for lattice systems with periodic boundary conditions. I. Theory. <i>Journal of Chemical Physics</i> , 1999 , 110, 6050-6056	3.9	27
124	Structure of polyelectrolyte brushes subject to normal electric fields. <i>Langmuir</i> , 2013 , 29, 2359-70	4	26
123	Translocation of "rod-coil" polymers: probing the structure of single molecules within nanopores. <i>Physical Review Letters</i> , 2013 , 110, 048101	7.4	25
122	Free-solution electrophoresis of DNA modified with drag-tags at both ends. <i>Electrophoresis</i> , 2006 , 27, 1702-12	3.6	25
121	Theory of capillary electrophoretic separations of DNA-polymer complexes. <i>Electrophoresis</i> , 1995 , 16, 2137-42	3.6	25
120	Exactly solvable Ogston model of gel electrophoresis. <i>Journal of Chromatography A</i> , 1997 , 772, 39-48	4.5	24
119	Effective Debye length in closed nanoscopic systems: a competition between two length scales. <i>Electrophoresis</i> , 2006 , 27, 686-93	3.6	24
118	Simulations of free-solution electrophoresis of polyelectrolytes with a finite Debye length using the Debye-Hückel approximation. <i>Physical Review Letters</i> , 2012 , 109, 098302	7.4	23
117	Using an incremental mean first passage approach to explore the viscosity dependent dynamics of the unbiased translocation of a polymer through a nanopore. <i>Journal of Chemical Physics</i> , 2012 , 136, 204902	3.9	23
116	An exactly solvable Ogston model of gel electrophoresis: VIII. Nonconducting gel fibers, curved field lines, and the Nernst-Einstein relation. <i>Electrophoresis</i> , 2001 , 22, 2631-8	3.6	23
115	Numerically exact diffusion coefficients for lattice systems with periodic boundary conditions. II. Numerical approach and applications. <i>Journal of Chemical Physics</i> , 1999 , 110, 6057-6065	3.9	23
114	Migration of DNA through gels. <i>Methods in Enzymology</i> , 1996 , 270, 272-95	1.7	23
113	An exactly solvable Ogston model of gel electrophoresis IV: sieving through periodic three-dimensional gels. <i>Electrophoresis</i> , 1998 , 19, 1560-5	3.6	22
112	Profiling solid-phase synthesis products by free-solution conjugate capillary electrophoresis. <i>Bioconjugate Chemistry</i> , 2002 , 13, 663-70	6.3	22
111	An exactly solvable Ogston model of gel electrophoresis. V. Attractive gel-analyte interactions and their effects on the Ferguson plot. <i>Electrophoresis</i> , 2000 , 21, 823-33	3.6	22

110	Gel electrophoretic mobility of single-stranded DNA: the two reptation field-dependent factors. <i>Electrophoresis</i> , 2000 , 21, 1464-70	3.6	22
109	Labour market regulation and the "competition state" – an analysis of the implementation of the Agency Working Regulations in the UK. <i>Work, Employment and Society</i> , 2016 , 30, 590-606	3	21
108	Translocation of a polymer through a nanopore across a viscosity gradient. <i>Physical Review E</i> , 2013 , 87, 042604	2.4	21
107	Implicit method for simulating electrohydrodynamics of polyelectrolytes. <i>Physical Review Letters</i> , 2010 , 105, 148301	7.4	21
106	Visions of the future, the legacy of the past: demystifying the weightless economy ¹ 1. A version of this article was presented in New Delhi, India, on 4 December 2008, to a joint conference of the Economic and Social Research Council (ESRC) and the Indian Council of Social Science Research on Economic Restructuring, Higher Education and Social Equality. View all notes. <i>Labor History</i> , 2010 , 51, 7-27	0.4	21
105	Solid phase DNA amplification: a simple Monte Carlo Lattice model. <i>Biophysical Journal</i> , 2003 , 85, 2075-869		21
104	Exactly solvable Ogston model of gel electrophoresis. IX. Generalizing the lattice model to treat high field intensities. <i>Journal of Chemical Physics</i> , 2002 , 117, 6745-6756	3.9	21
103	An exactly solvable Ogston model of gel electrophoresis. VI. Towards a theory for macromolecules. <i>Electrophoresis</i> , 2001 , 22, 673-83	3.6	20
102	Trapping electrophoresis and ratchets: a theoretical study for DNA-protein complexes. <i>Biophysical Journal</i> , 1998 , 75, 1228-36	2.9	20
101	Translocation of a polymer through a nanopore starting from a confining nanotube. <i>Electrophoresis</i> , 2015 , 36, 682-91	3.6	19
100	Particle trapping and self-focusing in temporally asymmetric ratchets with strong field gradients. <i>Physical Review E</i> , 1997 , 56, 3446-3450	2.4	19
99	Interpreting the Weibull fitting parameters for diffusion-controlled release data. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2017 , 486, 486-496	3.3	19
98	Coarse-grained molecular dynamics simulations of depletion-induced interactions for soft matter systems. <i>Journal of Chemical Physics</i> , 2014 , 141, 244910	3.9	18
97	Solid phase DNA amplification: a Brownian dynamics study of crowding effects. <i>Biophysical Journal</i> , 2005 , 89, 32-42	2.9	18
96	Electrophoresis of Composite Molecular Objects. 2. Competition between Sieving and Frictional Effects in Polymer Solutions. <i>Macromolecules</i> , 2001 , 34, 5280-5286	5.5	18
95	Electric field gradients and band sharpening in DNA gel electrophoresis. <i>Electrophoresis</i> , 1988 , 9, 643-6	3.6	18
94	An incremental mean first passage analysis for a quasistatic model of polymer translocation through a nanopore. <i>Journal of Chemical Physics</i> , 2011 , 134, 154905	3.9	17
93	Operational-modes of field-flow fractionation in microfluidic channels. <i>Journal of Chromatography A</i> , 2012 , 1233, 100-8	4.5	16

92	Using a PÉlet number for the translocation of a polymer through a nanopore to tune coarse-grained simulations to experimental conditions. <i>Physical Review E</i> , 2015 , 91, 022601	2.4	15
91	Capillary electrophoresis sequencing of small ssDNA molecules versus the Ogston regime: fitting data and interpreting parameters. <i>Electrophoresis</i> , 2004 , 25, 2177-85	3.6	15
90	Deformation, Stretching, and Relaxation of Single-Polymer Chains: Fundamentals and Examples#View all notes. <i>Soft Materials</i> , 2004 , 2, 155-182	1.7	15
89	Relaxation length of a polymer chain in a quenched disordered medium. <i>Physical Review E</i> , 1999 , 60, 3170-3	2.4	15
88	Preferences, Power, and the Determination of Working Hours. <i>Journal of Economic Issues</i> , 2005 , 39, 75-90.8		14
87	Free Energy of a Polymer in Slit-like Confinement from the Odijk Regime to the Bulk. <i>Macromolecules</i> , 2016 , 49, 9266-9271	5.5	14
86	Field-flow fractionation and hydrodynamic chromatography on a microfluidic chip. <i>Analytical Chemistry</i> , 2013 , 85, 5981-8	7.8	13
85	The gel edge electric field gradients in denaturing polyacrylamide gel electrophoresis. <i>Electrophoresis</i> , 1998 , 19, 627-34	3.6	13
84	The Electroosmotic Flow (EOF). <i>Methods in Molecular Biology</i> , 2010 , 583, 121-34	1.4	12
83	Combinatorial design of passive drug delivery platforms. <i>International Journal of Pharmaceutics</i> , 2007 , 339, 91-102	6.5	12
82	A simulation model of biofilms with autonomous cells: I. Analysis of a two-dimensional version. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006 , 362, 382-402	3.3	12
81	An exactly solvable Ogston model of gel electrophoresis: X. Application to high-field separation techniques. <i>Electrophoresis</i> , 2003 , 24, 441-51	3.6	12
80	Random walk and diffusion of hard spherical particles in quenched systems: Reaching the continuum limit on a lattice. <i>Journal of Chemical Physics</i> , 2000 , 113, 9109-9112	3.9	12
79	Trapping gel electrophoresis of end-labeled DNA: an analytical model for mobility and diffusion. <i>Electrophoresis</i> , 1995 , 16, 704-12	3.6	12
78	Optimizing End-Labeled Free-Solution Electrophoresis by Increasing the Hydrodynamic Friction of the Drag Tag. <i>Macromolecules</i> , 2009 , 42, 5352-5359	5.5	11
77	Molecular deformation and free-solution electrophoresis of DNA-uncharged polymer conjugates at high field strengths: theoretical predictions. Part 1: hydrodynamic segregation. <i>Electrophoresis</i> , 2007 , 28, 674-82	3.6	11
76	Universal interpolating function for the dispersion coefficient of DNA fragments in sieving matrices. <i>Electrophoresis</i> , 2006 , 27, 1453-61	3.6	11
75	A theoretical study of an empirical function for the mobility of DNA fragments in sieving matrices. <i>Electrophoresis</i> , 2002 , 23, 1410-6	3.6	11

74	Simulation of reduced band broadening during single-stranded DNA pulsed field electrophoresis in polyacrylamide gels. <i>Electrophoresis</i> , 1994 , 15, 120-7	3.6	11
73	Electrophoretic resolution versus fluctuations of the lateral dimensions of a capillary. <i>Electrophoresis</i> , 1995 , 16, 771-9	3.6	11
72	On the limits of near-equilibrium DNA gel electrophoretic sequencing. <i>Electrophoresis</i> , 1993 , 14, 961-6	3.6	11
71	Electrophoresis Theories. <i>Chromatographia CE Series</i> , 1997 , 24-66		11
70	The molecular end effect and its critical impact on the behavior of charged-uncharged polymer conjugates during free-solution electrophoresis. <i>Electrophoresis</i> , 2005 , 26, 1659-67	3.6	10
69	A Nonequilibrium Molecular Dynamics Simulation of the Time-Dependent Orientational Coupling between Long and Short Chains in a Bimodal Polymer Melt upon Uniaxial Stretching. <i>Macromolecules</i> , 1999 , 32, 6348-6358	5.5	10
68	Systematic characterization of drug release profiles from finite-sized hydrogels. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008 , 387, 5387-5402	3.3	9
67	Fearing the Worst? Threat, Participation and Workplace Productivity. <i>Economic and Industrial Democracy</i> , 2006 , 27, 369-398	1.1	9
66	Deformation, Stretching, and Relaxation of Single-Polymer Chains: Fundamentals and Examples. <i>Soft Materials</i> , 2003 , 1, 365-391	1.7	9
65	Saturation and entropic trapping of monodisperse polymers in porous media. <i>Journal of Chemical Physics</i> , 2002 , 117, 4042-4046	3.9	9
64	A computer simulation of trapping electrophoresis. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1992 , 30, 1451-1457	2.6	9
63	Highly driven polymer translocation from a cylindrical cavity with a finite length. <i>Journal of Chemical Physics</i> , 2017 , 146, 054903	3.9	8
62	Comments concerning: Monte Carlo simulations for the study of drug release from matrices with high and low diffusivity areas. <i>International Journal of Pharmaceutics</i> , 2009 , 365, 214-5	6.5	8
61	The importance of introducing a waiting time for Lattice Monte Carlo simulations of a polymer translocation process. <i>Computer Physics Communications</i> , 2011 , 182, 29-32	4.2	8
60	Continuities within paradigmatic change. <i>European Societies</i> , 2004 , 6, 511-534	1.9	8
59	Branched polymeric labels used as drag-tags in free-solution electrophoresis of ssDNA. <i>Electrophoresis</i> , 2005 , 26, 4003-15	3.6	8
58	On Using DNA-Trapping Electrophoresis To Increase the Resolution of DNA Sequencing Gels. <i>Macromolecules</i> , 1998 , 31, 6499-6505	5.5	8
57	The size of a polymer chain in an imperfect array of obstacles: Monte Carlo results. <i>Journal of Chemical Physics</i> , 1998 , 108, 3310-3312	3.9	8

56	Pulsed-field-trapping electrophoresis: a computer simulation study. <i>Electrophoresis</i> , 1996 , 17, 623-32	3.6	8
55	Simple model of trapping electrophoresis with complicated transient dynamics. <i>Physical Review E</i> , 1994 , 49, 5885-5888	2.4	8
54	Construction of approximate entropic forces for finitely extensible nonlinear elastic (FENE) polymers. <i>Macromolecular Theory and Simulations</i> , 1994 , 3, 695-704	1.5	8
53	No automation please, we're British: technology and the prospects for work. <i>Cambridge Journal of Regions, Economy and Society</i> , 2020 , 13, 117-134	3.3	7
52	Theory of end-labeled free-solution electrophoresis: is the end effect important?. <i>Electrophoresis</i> , 2014 , 35, 596-604	3.6	7
51	Biomolecule transport across biomembranes in the presence of crowding: polymer translocation driven by concentration and disorder gradients. <i>Physical Review E</i> , 2014 , 90, 020601	2.4	7
50	Controlling Grafted Polymers inside Cylindrical Tubes. <i>Macromolecules</i> , 2013 , 46, 1221-1230	5.5	7
49	Molecular deformation and free-solution electrophoresis of DNA-uncharged polymer conjugates at high field strengths: theoretical predictions Part 2: Stretching. <i>Electrophoresis</i> , 2007 , 28, 3837-44	3.6	7
48	The diffusion coefficient of a polymer in an array of obstacles is a non-monotonic function of the degree of disorder in the medium. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007 , 364, 448-452	2.3	7
47	Reptation Dynamics with Random Local Interactions. <i>Macromolecules</i> , 1998 , 31, 181-192	5.5	7
46	Physical confinement signals regulate the organization of stem cells in three dimensions. <i>Journal of the Royal Society Interface</i> , 2016 , 13,	4.1	6
45	Hydrodynamic chromatography and field flow fractionation in finite aspect ratio channels. <i>Journal of Chromatography A</i> , 2014 , 1339, 219-23	4.5	6
44	Can slip walls improve field-flow fractionation or hydrodynamic chromatography?. <i>Journal of Chromatography A</i> , 2012 , 1256, 206-12	4.5	6
43	Economic Well-being and British Regions: The Problem with GDP Per Capita. <i>Review of Social Economy</i> , 2009 , 67, 483-505	0.4	6
42	Optimizing the accuracy of lattice Monte Carlo algorithms for simulating diffusion. <i>Physical Review E</i> , 2012 , 85, 016709	2.4	6
41	A theoretical study of the possible use of electroosmotic flow to extend the read length of DNA sequencing by end-labeled free solution electrophoresis. <i>Electrophoresis</i> , 2006 , 27, 1693-701	3.6	6
40	Electrophoresis in the presence of gradients: I. Viscosity gradients. <i>Electrophoresis</i> , 2002 , 23, 1822-32	3.6	6
39	Generalized Taylor-Aris dispersion analysis of spatially periodic lattice Monte Carlo models: Effect of discrete time. <i>Journal of Chemical Physics</i> , 2003 , 119, 6979-6980	3.9	6

38	A new set of Monte Carlo moves for lattice random-walk models of biased diffusion. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005 , 355, 283-296	3.3	6
37	Generalized rouse model for polymer melt dynamics. <i>Die Makromolekulare Chemie Rapid Communications</i> , 1987 , 8, 51-58		6
36	Electrophoretic mobility of partially denatured DNA in a gel: qualitative and semiquantitative differences between bubbles and split ends. <i>Electrophoresis</i> , 2012 , 33, 1341-8	3.6	5
35	Computer simulations of time-dependent suppression of EOF by polymer coatings. <i>Microfluidics and Nanofluidics</i> , 2012 , 13, 91-97	2.8	5
34	Quantitative predictions for DNA two-dimensional display according to size and nucleotide sequence composition. <i>Electrophoresis</i> , 2008 , 29, 1264-72	3.6	5
33	A new theoretical approach to study the effects of active molecules on lipid bilayer properties: The cholesterol problem. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981 , 86, 256-258 ²⁻³		5
32	Anomalous electrophoresis, self-trapping and freezing of partially charged polyelectrolytes. <i>Journal De Physique II</i> , 1992 , 2, 1149-1158		5
31	Voltage-driven translocation: Defining a capture radius. <i>Journal of Chemical Physics</i> , 2019 , 151, 244902	3.9	5
30	Capture of rod-like molecules by a nanopore: Defining an "orientational capture radius". <i>Journal of Chemical Physics</i> , 2020 , 152, 144902	3.9	5
29	Langevin dynamics simulations of driven polymer translocation into a cross-linked gel. <i>Electrophoresis</i> , 2017 , 38, 653-658	3.6	4
28	Electrophoresis of Heteropolymers. Effect of Stiffness. <i>Macromolecules</i> , 2015 , 48, 5899-5913	5.5	4
27	Workplace relations, unemployment and finance-dominated capitalism. <i>Review of Keynesian Economics</i> , 2014 , 2, 134-146	0.8	4
26	A Simulation Model of Biofilms with Autonomous Cells, 2 - Explicit Representation of the Extracellular Polymeric Substance. <i>Macromolecular Theory and Simulations</i> , 2011 , 20, 571-583	1.5	4
25	Biased random walks on a lattice: exact numerical method to study the effect of alternating fields in disordered and asymmetric systems of obstacles. <i>Physical Review E</i> , 2008 , 78, 065701	2.4	4
24	Effective molecular diffusion coefficient in a two-phase gel medium. <i>Journal of Chemical Physics</i> , 2006 , 124, 204903	3.9	4
23	Models of local behavior of DNA electrophoresis peak parameters. <i>Electrophoresis</i> , 1999 , 20, 1443-54	3.6	4
22	Static structure factor of charged reptating polymer chains. <i>Macromolecules</i> , 1986 , 19, 2356-2366	5.5	4
21	Reducing the variance in the translocation times by prestretching the polymer. <i>Physical Review E</i> , 2018 , 98, 022501	2.4	4

20	Translocation of a polymer through a nanopore modulated by a sticky site. <i>Journal of Chemical Physics</i> , 2013 , 138, 094906	3.9	3
19	Static structure factor and shape of reptating telehelical ionomers in electric fields. <i>Macromolecules</i> , 1993 , 26, 1905-1913	5.5	3
18	Radius of gyration of charged reptating chains in electric fields. <i>Macromolecules</i> , 1991 , 24, 6715-6720	5.5	3
17	Using fitting functions to estimate the diffusion coefficient of drug molecules in diffusion-controlled release systems. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2021 , 567, 125681	3.3	3
16	Diffusion coefficient of DNA molecules during free solution electrophoresis 2001 , 22, 2424		3
15	Rotation-Induced Macromolecular Spooling of DNA. <i>Physical Review X</i> , 2017 , 7,	9.1	2
14	Gel electrophoresis of DNA partially denatured at the ends: what are the dominant conformations?. <i>Electrophoresis</i> , 2013 , 34, 745-52	3.6	2
13	Physical interpretation of the L(r) parameter in the theory for the gel electrophoresis of partially denatured DNA. <i>Electrophoresis</i> , 2010 , 31, 3446-9	3.6	2
12	The Poverty of Flexibility. <i>International Review of Applied Economics</i> , 2002 , 16, 243-251	1	2
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