Gary W Slater

List of Publications by Year
in descending order

184 papers	5,628 citations	87401 40 h-index	116156 66 g-index
185 all docs	185 docs citations	185 times ranked	3184 citing authors

#	Article	IF	Citations
1	Capture and translocation of a rod-like molecule by a nanopore: orientation, charge distribution and hydrodynamics. Physical Chemistry Chemical Physics, 2022, 24, 6444-6452.	1.3	3
2	An empirical method to characterize displacement distribution functions for anomalous and transient diffusion. Physica A: Statistical Mechanics and Its Applications, 2022, 604, 127676.	1.2	0
3	Diffusivity interfaces in lattice Monte Carlo simulations: Modeling inhomogeneous delivery and release systems. Physical Review E, 2022, 105, .	0.8	2
4	Using fitting functions to estimate the diffusion coefficient of drug molecules in diffusion-controlled release systems. Physica A: Statistical Mechanics and Its Applications, 2021, 567, 125681.	1.2	10
5	An efficient kinetic Monte Carlo to study analyte capture by a nanopore: transients, boundary conditions and time-dependent fields. Physical Chemistry Chemical Physics, 2021, 23, 1489-1499.	1.3	5
6	Diffusion in an array of immobile anisotropic obstacles: The influence of local orientation, bottlenecks, and free volume in absence of dead-ends. Physica A: Statistical Mechanics and Its Applications, 2020, 539, 122924.	1.2	0
7	Electrophoretic ratcheting of spherical particles in well/channel microfluidic devices: Making particles move against the net field. Electrophoresis, 2020, 41, 621-629.	1.3	3
8	No automation please, weâ€™re British: technology and the prospects for work. Cambridge Journal of Regions, Economy and Society, 2020, 13, 117-134.	1.7	19
9	Capture of rod-like molecules by a nanopore: Defining an â€œorientational capture radiusâ€• Journal of Chemical Physics, 2020, 152, 144902.	1.2	16
10	Voltage-driven translocation: Defining a capture radius. Journal of Chemical Physics, 2019, 151, 244902.	1.2	11
11	Reducing the variance in the translocation times by prestretching the polymer. Physical Review E, 2018, 98, 022501.	0.8	6
12	Langevin dynamcis simulations of driven polymer translocation into a crossâ€linked gel. Electrophoresis, 2017, 38, 653-658.	1.3	4
13	Highly driven polymer translocation from a cylindrical cavity with a finite length. Journal of Chemical Physics, 2017, 146, 054903.	1.2	10
14	Rotation-Induced Macromolecular Spooling of DNA. Physical Review X, 2017, 7, .	2.8	2
15	Interpreting the Weibull fitting parameters for diffusion-controlled release data. Physica A: Statistical Mechanics and Its Applications, 2017, 486, 486-496.	1.2	32
16	Free Energy of a Polymer in Slit-like Confinement from the Odijk Regime to the Bulk. Macromolecules, 2016, 49, 9266-9271.	2.2	22
17	Physical confinement signals regulate the organization of stem cells in three dimensions. Journal of the Royal Society Interface, 2016, 13, 20160613.	1.5	11
18	Labour market regulation and the â€˜competition stateâ€™: an analysis of the implementation of the Agency Working Regulations in the UK. Work, Employment and Society, 2016, 30, 590-606.	1.9	29

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19	Interfacing solidâ€state nanopores with gel media to slow DNA translocations. Electrophoresis, 2015, 36, 1759-1767.	1.3	35
20	Translocation of a polymer through a nanopore starting from a confining nanotube. Electrophoresis, 2015, 36, 682-691.	1.3	21
21	Adverse-Mode FFF: Multi-Force Ideal Retention Theory. Chromatography (Basel), 2015, 2, 392-409.	1.2	0
22	Simulating the Entropic Collapse of Coarse-Grained Chromosomes. Biophysical Journal, 2015, 108, 810-820.	0.2	52
23	Using a PÃ©clet number for the translocation of a polymer through a nanopore to tune coarse-grained simulations to experimental conditions. Physical Review E, 2015, 91, 022601.	0.8	17
24	Electrophoretic Mobility of Polyelectrolytes within a Confining Well. ACS Macro Letters, 2015, 4, 472-476.	2.3	1
25	Electrophoresis of Heteropolymers. Effect of Stiffness. Macromolecules, 2015, 48, 5899-5913.	2.2	4
26	Coarse-grained molecular dynamics simulations of depletion-induced interactions for soft matter systems. Journal of Chemical Physics, 2014, 141, 244910.	1.2	21
27	Can gel concentration gradients improve twoâ€dimensional DNA displays?. Electrophoresis, 2014, 35, 736-745.	1.3	0
28	Theory of endâ€labeled freeâ€solution electrophoresis: Is the end effect important?. Electrophoresis, 2014, 35, 596-604.	1.3	8
29	Diffusing Diffusivity: A Model for Anomalous, yet Brownian, Diffusion. Physical Review Letters, 2014, 113, 098302.	2.9	310
30	Biomolecule transport across biomembranes in the presence of crowding: Polymer translocation driven by concentration and disorder gradients. Physical Review E, 2014, 90, 020601.	0.8	9
31	Hydrodynamic chromatography and field flow fractionation in finite aspect ratio channels. Journal of Chromatography A, 2014, 1339, 219-223.	1.8	7
32	Workplace relations, unemployment and finance-dominated capitalism. Review of Keynesian Economics, 2014, 2, 134-146.	0.5	5
33	Field-Flow Fractionation and Hydrodynamic Chromatography on a Microfluidic Chip. Analytical Chemistry, 2013, 85, 5981-5988.	3.2	19
34	Structure of Polyelectrolyte Brushes Subject to Normal Electric Fields. Langmuir, 2013, 29, 2359-2370.	1.6	31
35	Controlling Grafted Polymers inside Cylindrical Tubes. Macromolecules, 2013, 46, 1221-1230.	2.2	8
36	Translocation of a polymer through a nanopore modulated by a sticky site. Journal of Chemical Physics, 2013, 138, 094906.	1.2	3

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37	Translocation of â€œRod-Coilâ€•Polymers: Probing the Structure of Single Molecules within Nanopores. Physical Review Letters, 2013, 110, 048101.	2.9	29
38	Translocation of a polymer through a nanopore across a viscosity gradient. Physical Review E, 2013, 87, 042604.	0.8	25
39	Gel electrophoresis of DNA partially denatured at the ends: What are the dominant conformations?. Electrophoresis, 2013, 34, 745-752.	1.3	2
40	Memory effects during the unbiased translocation of a polymer through a nanopore. Journal of Chemical Physics, 2012, 136, 154903.	1.2	28
41	Using an incremental mean first passage approach to explore the viscosity dependent dynamics of the unbiased translocation of a polymer through a nanopore. Journal of Chemical Physics, 2012, 136, 204902.	1.2	26
42	Optimizing the accuracy of lattice Monte Carlo algorithms for simulating diffusion. Physical Review E, 2012, 85, 016709.	0.8	10
43	Can slip walls improve field-flow fractionation or hydrodynamic chromatography?. Journal of Chromatography A, 2012, 1256, 206-212.	1.8	6
44	Simulations of Free-Solution Electrophoresis of Polyelectrolytes with a Finite Debye Length Using the Debye-HÃ¼ckel Approximation. Physical Review Letters, 2012, 109, 098302.	2.9	25
45	Electrophoretic mobility of partially denatured DNA in a gel: Qualitative and semiquantitative differences between bubbles and split ends. Electrophoresis, 2012, 33, 1341-1348.	1.3	5
46	Computer simulations of time-dependent suppression of EOF by polymer coatings. Microfluidics and Nanofluidics, 2012, 13, 91-97.	1.0	5
47	Operational-modes of field-flow fractionation in microfluidic channels. Journal of Chromatography A, 2012, 1233, 100-108.	1.8	18
48	Electrophoresis: When hydrodynamics matter. Current Opinion in Colloid and Interface Science, 2012, 17, 74-82.	3.4	36
49	Influence of Charged Polymer Coatings on Electro-Osmotic Flow: Molecular Dynamics Simulations. Macromolecules, 2011, 44, 9455-9463.	2.2	30
50	International Yearbook of Industrial Statistics 2010. Industrial Relations Journal, 2011, 42, 404-405.	0.8	0
51	A Simulation Model of Biofilms with Autonomous Cells, 2 â€•Explicit Representation of the Extracellular Polymeric Substance. Macromolecular Theory and Simulations, 2011, 20, 571-583.	0.6	4
52	The importance of introducing a waiting time for Lattice Monte Carlo simulations of a polymer translocation process. Computer Physics Communications, 2011, 182, 29-32.	3.0	9
53	An incremental mean first passage analysis for a quasistatic model of polymer translocation through a nanopore. Journal of Chemical Physics, 2011, 134, 154905.	1.2	17
54	Visions of the future, the legacy of the past: demystifying the weightless economy1. Labor History, 2010, 51, 7-27.	0.4	25

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55	Detrapping particles in gel electrophoresis: A numerical study of different pulsed field sequences. Electrophoresis, 2010, 31, 3233-3246.	1.3	1
56	Physical interpretation of the <i>L</i>_r parameter in the theory for the gel electrophoresis of partially denatured DNA. Electrophoresis, 2010, 31, 3446-3449.	1.3	2
57	Mapping the variation of the translocation<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math>scaling exponent with nanopore width. Physical Review E, 2010, 81, 051802.	0.8	37
58	Implicit Method for Simulating Electrohydrodynamics of Polyelectrolytes. Physical Review Letters, 2010, 105, 148301.	2.9	22
59	The Electroosmotic Flow (EOF). Methods in Molecular Biology, 2010, 583, 121-134.	0.4	14
60	Nondriven polymer translocation through a nanopore: Computational evidence that the escape and relaxation processes are coupled. Physical Review E, 2009, 79, 021802.	0.8	38
61	Economic Well-being and British Regions: The Problem with GDP Per Capita. Review of Social Economy, 2009, 67, 483-505.	0.7	14
62	Modeling the separation of macromolecules: A review of current computer simulation methods. Electrophoresis, 2009, 30, 792-818.	1.3	126
63	DNA gel electrophoresis: The reptation model(s). Electrophoresis, 2009, 30, S181-7.	1.3	33
64	Comments concerning: Monte Carlo simulations for the study of drug release from matrices with high and low diffusivity areas. International Journal of Pharmaceutics, 2009, 365, 214-215.	2.6	11
65	Optimizing End-Labeled Free-Solution Electrophoresis by Increasing the Hydrodynamic Friction of the Drag Tag. Macromolecules, 2009, 42, 5352-5359.	2.2	11
66	Molecular Dynamics Simulations of Optimal Dynamic Uncharged Polymer Coatings for Quenching Electro-osmotic Flow. Physical Review Letters, 2009, 102, 108304.	2.9	34
67	Quantitative predictions for DNA twoâ€dimensional display according to size and nucleotide sequence composition. Electrophoresis, 2008, 29, 1264-1272.	1.3	5
68	Systematic characterization of drug release profiles from finite-sized hydrogels. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 5387-5402.	1.2	14
69	A Monte Carlo algorithm to study polymer translocation through nanopores. I. Theory and numerical approach. Journal of Chemical Physics, 2008, 128, 065103.	1.2	65
70	Sequence effects on the forced translocation of heteropolymers through a small channel. Journal of Chemical Physics, 2008, 128, 175103.	1.2	28
71	Biased random walks on a lattice: Exact numerical method to study the effect of alternating fields in disordered and asymmetric systems of obstacles. Physical Review E, 2008, 78, 065701.	0.8	5
72	A Monte Carlo algorithm to study polymer translocation through nanopores. II. Scaling laws. Journal of Chemical Physics, 2008, 128, 205103.	1.2	54

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73	Molecular deformation and free-solution electrophoresis of DNA-uncharged polymer conjugates at high field strengths: Theoretical predictions. Part 1: Hydrodynamic segregation. Electrophoresis, 2007, 28, 674-682.	1.3	12
74	Molecular deformation and freeâ€solution electrophoresis of DNAâ€uncharged polymer conjugates at high field strengths: Theoretical predictions Part 2: Stretching. Electrophoresis, 2007, 28, 3837-3844.	1.3	7
75	Combinatorial design of passive drug delivery platforms. International Journal of Pharmaceutics, 2007, 339, 91-102.	2.6	15
76	The diffusion coefficient of a polymer in an array of obstacles is a non-monotonic function of the degree of disorder in the medium. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 364, 448-452.	0.9	8
77	Effective molecular diffusion coefficient in a two-phase gel medium. Journal of Chemical Physics, 2006, 124, 204903.	1.2	4
78	Modulation of Electroosmotic Flow Strength with End-Grafted Polymer Chains. Macromolecules, 2006, 39, 1250-1260.	2.2	56
79	A simulation model of biofilms with autonomous cells: I. Analysis of a two-dimensional version. Physica A: Statistical Mechanics and Its Applications, 2006, 362, 382-402.	1.2	12
80	Polymer translocation in the presence of excluded volume and explicit hydrodynamic interactions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 359, 261-264.	0.9	53
81	Effective Debye length in closed nanoscopic systems: A competition between two length scales. Electrophoresis, 2006, 27, 686-693.	1.3	28
82	Universal interpolating function for the dispersion coefficient of DNA fragments in sieving matrices. Electrophoresis, 2006, 27, 1453-1461.	1.3	11
83	Free-solution electrophoresis of DNA modified with drag-tags at both ends. Electrophoresis, 2006, 27, 1702-1712.	1.3	26
84	A theoretical study of the possible use of electroosmotic flow to extend the read length of DNA sequencing by end-labeled free solution electrophoresis. Electrophoresis, 2006, 27, 1693-1701.	1.3	6
85	Fearing the Worst? Threat, Participation and Workplace Productivity. Economic and Industrial Democracy, 2006, 27, 369-398.	1.2	10
86	Preferences, Power, and the Determination of Working Hours. Journal of Economic Issues, 2005, 39, 75-90.	0.3	19
87	A new set of Monte Carlo moves for lattice random-walk models of biased diffusion. Physica A: Statistical Mechanics and Its Applications, 2005, 355, 283-296.	1.2	7
88	Agency Working in Britain: Character, Consequences and Regulation. British Journal of Industrial Relations, 2005, 43, 249-271.	0.8	77
89	End-labeled free-solution electrophoresis of DNA. Electrophoresis, 2005, 26, 331-350.	1.3	104
90	The molecular end effect and its critical impact on the behavior of charged-uncharged polymer conjugates during free-solution electrophoresis. Electrophoresis, 2005, 26, 1659-1667.	1.3	11

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91	Branched polymeric labels used as drag-tags in free-solution electrophoresis of ssDNA. Electrophoresis, 2005, 26, 4003-4015.	1.3	9
92	Control and Quenching of Electroosmotic Flow with End-Grafted Polymer Chains. Macromolecules, 2005, 38, 6752-6754.	2.2	29
93	Solid Phase DNA Amplification: A Brownian Dynamics Study of Crowding Effects. Biophysical Journal, 2005, 89, 32-42.	0.2	20
94	Building reliable lattice Monte Carlo models for real drift and diffusion problems. Physical Review E, 2004, 70, 015103.	0.8	30
95	Capillary electrophoresis sequencing of small ssDNA moleculesversus the Ogston regime: Fitting data and interpreting parameters. Electrophoresis, 2004, 25, 2177-2185.	1.3	16
96	Flow-induced chain scission as a physical route to narrowly distributed, high molar mass polymers. Polymer, 2004, 45, 1223-1234.	1.8	72
97	Deformation, Stretching, and Relaxation of Singleâ€Polymer Chains: Fundamentals and Examples#. Soft Materials, 2004, 2, 155-182.	0.8	15
98	Continuities within paradigmatic change. European Societies, 2004, 6, 511-534.	3.9	11
99	An exactly solvable Ogston model of gel electrophoresis:â€‚X. Application to high-field separation techniques. Electrophoresis, 2003, 24, 441-451.	1.3	13
100	A metric to search for relevant words. Physica A: Statistical Mechanics and Its Applications, 2003, 329, 309-327.	1.2	28
101	The theory of DNA separation by capillary electrophoresis. Current Opinion in Biotechnology, 2003, 14, 58-64.	3.3	47
102	Solid Phase DNA Amplification: A Simple Monte Carlo Lattice Model. Biophysical Journal, 2003, 85, 2075-2086.	0.2	23
103	Generalized Taylorâ€"Aris dispersion analysis of spatially periodic lattice Monte Carlo models: Effect of discrete time. Journal of Chemical Physics, 2003, 119, 6979-6980.	1.2	6
104	Deformation, Stretching, and Relaxation of Singleâ€Polymer Chains: Fundamentals and Examples. Soft Materials, 2003, 1, 365-391.	0.8	9
105	Exactly solvable Ogston model of gel electrophoresis. IX. Generalizing the lattice model to treat high field intensities. Journal of Chemical Physics, 2002, 117, 6745-6756.	1.2	21
106	The Poverty of Flexibility. International Review of Applied Economics, 2002, 16, 243-251.	1.3	2
107	Electrophoretic Separation of Long Polyelectrolytes in Submolecular-Size Constrictions:Â A Monte Carlo Study. Macromolecules, 2002, 35, 4791-4800.	2.2	77
108	Profiling Solid-Phase Synthesis Products by Free-Solution Conjugate Capillary Electrophoresis. Bioconjugate Chemistry, 2002, 13, 663-670.	1.8	25

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109	Saturation and entropic trapping of monodisperse polymers in porous media. Journal of Chemical Physics, 2002, 117, 4042-4046.	1.2	10
110	A theoretical study of an empirical function for the mobility of DNA fragments in sieving matrices. Electrophoresis, 2002, 23, 1410.	1.3	11
111	Electrophoresis in the presence of gradients: I. Viscosity gradients. Electrophoresis, 2002, 23, 1822.	1.3	8
112	Theory of DNA electrophoresis (â^¼ 1999â€Šâ€"2002â€ŠÂ½). Electrophoresis, 2002, 23, 3791-3816.	1.3	69
113	Electrophoresis of Composite Molecular Objects. 1. Relation between Friction, Charge, and Ionic Strength in Free Solution. Macromolecules, 2001, 34, 44-52.	2.2	66
114	An Exactly Solvable Ogston Model of Gel Electrophoresis. 7. Diffusion and Mobility of Hard Spherical Particles in Three-Dimensional Gels. Macromolecules, 2001, 34, 3437-3445.	2.2	34
115	Electrophoresis of Composite Molecular Objects. 2. Competition between Sieving and Frictional Effects in Polymer Solutions. Macromolecules, 2001, 34, 5280-5286.	2.2	19
116	Molar Mass Profiling of Synthetic Polymers by Free-Solution Capillary Electrophoresis of DNAâ^'Polymer Conjugates. Analytical Chemistry, 2001, 73, 1795-1803.	3.2	59
117	An exactly solvable Ogston model of gel electrophoresis VI. Towards a theory for macromolecules. Electrophoresis, 2001, 22, 673-683.	1.3	20
118	Diffusion coefficient of DNA molecules during free solution electrophoresis. Electrophoresis, 2001, 22, 2424-2432.	1.3	185
119	An exactly solvable Ogston model of gel electrophoresis: VIII. Nonconducting gel fibers, curved field lines, and the Nernst-Einstein relation. Electrophoresis, 2001, 22, 2631-2638.	1.3	23
120	An exactly solvable Ogston model of gel electrophoresis VI. Towards a theory for macromolecules. , 2001, 22, 673.		1
121	Diffusion coefficient of DNA molecules during free solution electrophoresis. , 2001, 22, 2424.		3
122	An exactly solvable Ogston model of gel electrophoresis. Attractive gel-analyte interactions and their effects on the Ferguson plot. Electrophoresis, 2000, 21, 823-833.	1.3	22
123	Gel electrophoretic mobility of single-stranded DNA: The two reptation field-dependent factors. Electrophoresis, 2000, 21, 1464-1470.	1.3	24
124	Theory of DNA electrophoresis: A look at some current challenges. Electrophoresis, 2000, 21, 3873-3887.	1.3	93
125	Random walk and diffusion of hard spherical particles in quenched systems: Reaching the continuum limit on a lattice. Journal of Chemical Physics, 2000, 113, 9109-9112.	1.2	13
126	An exactly solvable Ogston model of gel electrophoresis. Attractive gel-analyte interactions and their effects on the Ferguson plot. , 2000, 21, 823.		1

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127	Relaxation length of a polymer chain in a quenched disordered medium. Physical Review E, 1999, 60, 3170-3173.	0.8	17
128	Models of local behavior of DNA electrophoresis peak parameters. Electrophoresis, 1999, 20, 1443-1454.	1.3	5
129	Separating DNA sequencing fragments without a sieving matrix. Electrophoresis, 1999, 20, 2501-2509.	1.3	77
130	Numerically exact diffusion coefficients for lattice systems with periodic boundary conditions. II. Numerical approach and applications. Journal of Chemical Physics, 1999, 110, 6057-6065.	1.2	23
131	Numerically exact diffusion coefficients for lattice systems with periodic boundary conditions. I. Theory. Journal of Chemical Physics, 1999, 110, 6050-6056.	1.2	27
132	A Nonequilibrium Molecular Dynamics Simulation of the Time-Dependent Orientational Coupling between Long and Short Chains in a Bimodal Polymer Melt upon Uniaxial Stretching. Macromolecules, 1999, 32, 6348-6358.	2.2	11
133	Free-solution electrophoresis of DNA. Journal of Chromatography A, 1998, 806, 113-121.	1.8	89
134	The gel edge electric field gradients in denaturing polyacrylamide gel electrophoresis. Electrophoresis, 1998, 19, 627-634.	1.3	15
135	Recent developments in DNA electrophoretic separations. Electrophoresis, 1998, 19, 1525-1541.	1.3	52
136	An exactly solvable Ogston model of gel electrophoresis IV: Sieving through periodic three-dimensional gels. Electrophoresis, 1998, 19, 1560-1565.	1.3	22
137	Reptation Dynamics with Random Local Interactions. Macromolecules, 1998, 31, 181-192.	2.2	8
138	On Using DNA-Trapping Electrophoresis To Increase the Resolution of DNA Sequencing Gels. Macromolecules, 1998, 31, 6499-6505.	2.2	8
139	Trapping Electrophoresis and Ratchets: A Theoretical Study forDNA-Protein Complexes. Biophysical Journal, 1998, 75, 1228-1236.	0.2	21
140	The size of a polymer chain in an imperfect array of obstacles: Monte Carlo results. Journal of Chemical Physics, 1998, 108, 3310-3312.	1.2	8
141	Particle trapping and self-focusing in temporally asymmetric ratchets with strong field gradients. Physical Review E, 1997, 56, 3446-3450.	0.8	24
142	Bidirectional Transport of Polyelectrolytes Using Self-Modulating Entropic Ratchets. Physical Review Letters, 1997, 78, 1170-1173.	2.9	93
143	Entropic Trapping of DNA During Gel Electrophoresis: Effect of Field Intensity and Gel Concentration. Physical Review Letters, 1997, 79, 1945-1948.	2.9	78
144	Exactly solvable Ogston model of gel electrophoresis. Journal of Chromatography A, 1997, 772, 39-48.	1.8	25

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145	Electrophoresis Theories. Chromatographia CE Series, 1997, , 24-66.	0.1	13
146	[12] Migration of DNA through gels. Methods in Enzymology, 1996, 270, 272-295.	0.4	27
147	Theory of Capillary Electrophoretic Separation of DNA Using Ultradilute Polymer Solutions. Macromolecules, 1996, 29, 1006-1009.	2.2	83
148	Pulsed-field trapping electrophoresis: A computer simulation study. Electrophoresis, 1996, 17, 623-632.	1.3	8
149	An exactly solvable Ogston model of gel electrophoresis: I. The role of the symmetry and randomness of the gel structure. Electrophoresis, 1996, 17, 977-988.	1.3	62
150	An exactly solvable Ogston model of gel electrophoresis II. Sieving through periodic gels. Electrophoresis, 1996, 17, 1407-1415.	1.3	46
151	Entropic trapping and electrophoretic drift of a polyelectrolyte down a channel with a periodically oscillating width. Physical Review E, 1996, 53, 4969-4980.	0.8	52
152	Ogston gel electrophoretic sieving: How is the fractional volume available to a particle related to its mobility and diffusion coefficient(s)?. Electrophoresis, 1995, 16, 11-15.	1.3	40
153	Trapping gel electrophoresis of end-labeled DNA: An analytical model for mobility and diffusion. Electrophoresis, 1995, 16, 704-712.	1.3	12
154	Electrophoretic resolutionversus fluctuations of the lateral dimensions of a capillary. Electrophoresis, 1995, 16, 771-779.	1.3	13
155	Diffusion, Joule heating, and band broadening in capillary gel electrophoresis of DNA. Electrophoresis, 1995, 16, 75-83.	1.3	46
156	Theory of capillary electrophoretic separations of DNA-polymer complexes. Electrophoresis, 1995, 16, 2137-2142.	1.3	26
157	Reptation, Entropic Trapping, Percolation, and Rouse Dynamics of Polymers in â€œRandomâ€• Environments. Physical Review Letters, 1995, 75, 164-167.	2.9	106
158	Simple model of trapping electrophoresis with complicated transient dynamics. Physical Review E, 1994, 49, 5885-5888.	0.8	8
159	DNA electrophoretic collisions with single obstacles. Physical Review E, 1994, 50, 5033-5038.	0.8	61
160	Construction of approximate entropic forces for finitely extensible nonlinear elastic (FENE) polymers. Macromolecular Theory and Simulations, 1994, 3, 695-704.	0.6	8
161	Simulation of reduced band broadening during single-stranded DNA pulsed field electrophoresis in polyacrylamide gels. Electrophoresis, 1994, 15, 120-127.	1.3	13
162	Theory of DNA Sequencing Using Free-Solution Electrophoresis of Protein-DNA Complexes. Analytical Chemistry, 1994, 66, 1777-1780.	3.2	87

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163	Theory of band broadening for DNA gel electrophoresis and sequencing. Electrophoresis, 1993, 14, 1-7.	1.3	86
164	On the limits of near-equilibrium DNA gel electrophoretic sequencing. Electrophoresis, 1993, 14, 961-966.	1.3	11
165	Static structure factor and shape of reptating telehelic ionomers in electric fields. Macromolecules, 1993, 26, 1905-1913.	2.2	3
166	Polyandry and Incest Avoidance in the Cooperative Stripe-Backed Wren of Venezuela. Behaviour, 1993, 124, 227-247.	0.4	51
167	A computer simulation of trapping electrophoresis. Journal of Polymer Science, Part B: Polymer Physics, 1992, 30, 1451-1457.	2.4	9
168	Why can we not sequence thousands of DNA bases on a polyacrylamide gel?. Electrophoresis, 1992, 13, 574-582.	1.3	56
169	Anomalous electrophoresis, self-trapping and â€œfreezingâ€•of partially charged polyelectrolytes. Journal De Physique II, 1992, 2, 1149-1158.	0.9	6
170	Radius of gyration of charged reptating chains in electric fields. Macromolecules, 1991, 24, 6715-6720.	2.2	3
171	Generalized tube model of biased reptation for DNA-gel electrophoresis. Mathematical and Computer Modelling, 1990, 14, 494-499.	2.0	0
172	Molecular detrapping and band narrowing with high frequency modulation of pulsed field electrophoresis. Nucleic Acids Research, 1990, 18, 569-575.	6.5	105
173	A model of the DNA transient orientation overshoot during gel electrophoresis. Journal of Chemical Physics, 1990, 92, 709-721.	1.2	55
174	Effect of nonparallel alternating fields on the mobility of DNA in the biased reptation model of gel electrophoresis. Electrophoresis, 1989, 10, 413-428.	1.3	34
175	Quantitative analysis of the three regimes of DNA electrophoresis in agarose gels. Biopolymers, 1988, 27, 509-524.	1.2	164
176	Electric field gradients and band sharpening in DNA gel electrophoresis. Electrophoresis, 1988, 9, 643-646.	1.3	19
177	Scrambling of bands in gel electrophoresis of DNA. Nucleic Acids Research, 1988, 16, 5427-5437.	6.5	31
178	Self-trapping and anomalous dispersion of DNA in electrophoresis. Physical Review Letters, 1987, 58, 2428-2431.	2.9	138
179	Generalized rouse model for polymer melt dynamics. Die Makromolekulare Chemie Rapid Communications, 1987, 8, 51-58.	1.1	7
180	On the stretching of DNA in the reptation theories of gel electrophoresis. Biopolymers, 1987, 26, 863-872.	1.2	79

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181	Static structure factor of charged reptating polymer chains. Macromolecules, 1986, 19, 2356-2366.	2.2	5
182	On the reptation theory of gel electrophoresis. Biopolymers, 1986, 25, 431-454.	1.2	203
183	New Biased-Reptation Model For Charged Polymers. Physical Review Letters, 1985, 55, 1579-1582.	2.9	114
184	A new theoretical approach to study the effects of active molecules on lipid bilayer properties: The cholesterol problem. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 86, 256-258.	0.9	5