

# Kevin D Dorfman

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

168  
papers

4,263  
citations

36  
h-index

57  
g-index

183  
ext. papers

4,832  
ext. citations

5.5  
avg, IF

5.99  
L-index

#	Paper	IF	Citations
168	Alternating Gyroid in Block Polymer Blends.. <i>ACS Macro Letters</i> , <b>2022</b> , 11, 643-650	6.6	3
167	Free Energy Trajectory for Escape of a Single Chain from a Diblock Copolymer Micelle.. <i>ACS Macro Letters</i> , <b>2021</b> , 10, 1570-1575	6.6	1
166	Interactions between two knots in nanochannel-confined DNA molecules. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 154901	3.9	1
165	Dynamics of DNA-Bridged Dumbbells in Concentrated, Shear-Banding Polymer Solutions. <i>Macromolecules</i> , <b>2021</b> , 54, 4186-4197	5.5	1
164	Diffusion of Knotted DNA Molecules in Nanochannels in the Extended de Gennes Regime. <i>Macromolecules</i> , <b>2021</b> , 54, 4211-4218	5.5	4
163	Modeling of Quasi-Static Floating-Gate Transistor Biosensors. <i>ACS Sensors</i> , <b>2021</b> , 6, 1910-1917	9.2	2
162	The C36 Laves phase in diblock polymer melts. <i>Soft Matter</i> , <b>2021</b> , 17, 8950-8959	3.6	1
161	Complex Phase Behavior in Particle-Forming AB/AB? Diblock Copolymer Blends with Variable Core Block Lengths. <i>Macromolecules</i> , <b>2021</b> , 54, 7088-7101	5.5	6
160	Open-source platform for block polymer formulation design using particle swarm optimization. <i>European Physical Journal E</i> , <b>2021</b> , 44, 115	1.5	1
159	Order and Disorder in ABCA' Tetrablock Terpolymers. <i>Journal of Physical Chemistry B</i> , <b>2020</b> , 124, 10266-10275	10.75	5
158	Glomerular filtration and podocyte tensional homeostasis: importance of the minor type IV collagen network. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2020</b> , 19, 2433-2442	3.8	3
157	Symmetry breaking in particle-forming diblock polymer/homopolymer blends. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 16764-16769	11.5	22
156	Open-source code for self-consistent field theory calculations of block polymer phase behavior on graphics processing units. <i>European Physical Journal E</i> , <b>2020</b> , 43, 15	1.5	10
155	Limitations of the equivalent neutral polymer assumption for theories describing nanochannel-confined DNA. <i>Physical Review E</i> , <b>2020</b> , 101, 012501	2.4	1
154	Microfluidic opportunities in printed electrolyte-gated transistor biosensors. <i>Biomicrofluidics</i> , <b>2020</b> , 14, 011301	3.2	11
153	Origins of the suppression of fibril formation in grafted methylcellulose solutions. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	2
152	Erratum to Predicting the phase behavior of ABAC tetrablock terpolymers: Sensitivity to Flory-Huggins interaction parameters [Polymer, 154 (2018), 305B14]. <i>Polymer</i> , <b>2020</b> , 210, 123038	3.9	1

151	Diffusion of Knots along DNA Confined in Nanochannels. <i>Macromolecules</i> , <b>2020</b> , 53, 6461-6468	5.5	12
150	3D Printing-Enabled DNA Extraction for Long-Read Genomics. <i>ACS Omega</i> , <b>2020</b> , 5, 20817-20824	3.9	5
149	Extension distribution for DNA confined in a nanochannel near the Odijk regime. <i>Journal of Chemical Physics</i> , <b>2019</b> , 151, 114903	3.9	4
148	Hydrophobic catalysis and a potential biological role of DNA unstacking induced by environment effects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 17169-17174	11.5	46
147	Influence of charge sequence on the adsorption of polyelectrolytes to oppositely-charged polyelectrolyte brushes. <i>Soft Matter</i> , <b>2019</b> , 15, 5431-5442	3.6	7
146	Simulations corroborate telegraph model predictions for the extension distributions of nanochannel confined DNA. <i>Biomicrofluidics</i> , <b>2019</b> , 13, 044110	3.2	4
145	Detection and amplification of capacitance- and charge-based signals using printed electrolyte gated transistors with floating gates. <i>Flexible and Printed Electronics</i> , <b>2019</b> , 4, 044001	3.1	3
144	Simulating precursor steps for fibril formation in methylcellulose solutions. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	8
143	Microfluidic long DNA sample preparation from cells. <i>Lab on A Chip</i> , <b>2019</b> , 19, 281-290	7.2	7
142	Evaluation of Blob Theory for the Diffusion of DNA in Nanochannels. <i>Macromolecules</i> , <b>2018</b> , 51, 1748-1755	5.5	9
141	Interfacial Charge Contributions to Chemical Sensing by Electrolyte-Gated Transistors with Floating Gates. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 1335-1339	6.4	13
140	Hairpins in the conformations of a confined polymer. <i>Biomicrofluidics</i> , <b>2018</b> , 12, 024105	3.2	6
139	Entropic trap purification of long DNA. <i>Lab on A Chip</i> , <b>2018</b> , 18, 955-964	7.2	3
138	Origins of low-symmetry phases in asymmetric diblock copolymer melts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 847-854	11.5	61
137	Detection and Sourcing of Gluten in Grain with Multiple Floating-Gate Transistor Biosensors. <i>ACS Sensors</i> , <b>2018</b> , 3, 395-402	9.2	24
136	Evidence for the extended de Gennes regime of a semiflexible polymer in slit confinement. <i>Physical Review E</i> , <b>2018</b> , 97,	2.4	5
135	Odijk excluded volume interactions during the unfolding of DNA confined in a nanochannel. <i>Macromolecules</i> , <b>2018</b> , 51, 1172-1180	5.5	9
134	The Statistical Segment Length of DNA: Opportunities for Biomechanical Modeling in Polymer Physics and Next-Generation Genomics. <i>Journal of Biomechanical Engineering</i> , <b>2018</b> , 140,	2.1	6

133	Alpha-Synuclein Modulates the Physical Properties of DNA. <i>Chemistry - A European Journal</i> , <b>2018</b> , 24, 15685-15690	4.8	19
132	Role of Chain Length in the Formation of Frank-Kasper Phases in Diblock Copolymers. <i>Physical Review Letters</i> , <b>2018</b> , 121, 208002	7.4	26
131	Stable Frank-Kasper phases of self-assembled, soft matter spheres. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 10233-10238	11.5	69
130	Subdiffusion of loci and cytoplasmic particles are different in compressed cells. <i>Communications Biology</i> , <b>2018</b> , 1, 176	6.7	10
129	Measuring the wall depletion length of nanoconfined DNA. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 104901	3.9	11
128	Effect of edge disturbance on shear banding in polymeric solutions. <i>Journal of Rheology</i> , <b>2018</b> , 62, 1339-1345	4.4	4
127	Predicting the phase behavior of ABAC tetrablock terpolymers: Sensitivity to Flory-Huggins interaction parameters. <i>Polymer</i> , <b>2018</b> , 154, 305-314	3.9	13
126	Distribution of label spacings for genome mapping in nanochannels. <i>Biomicrofluidics</i> , <b>2018</b> , 12, 034115	3.2	8
125	Simulations of knotting of DNA during genome mapping. <i>Biomicrofluidics</i> , <b>2017</b> , 11, 024117	3.2	10
124	Thermal processing of diblock copolymer melts mimics metallurgy. <i>Science</i> , <b>2017</b> , 356, 520-523	33.3	159
123	Equilibration of Micelle-Polyelectrolyte Complexes: Mechanistic Differences between Static and Annealed Charge Distributions. <i>Journal of Physical Chemistry B</i> , <b>2017</b> , 121, 4631-4641	3.4	9
122	Morphological Consequences of Frustration in ABC Triblock Polymers. <i>Macromolecules</i> , <b>2017</b> , 50, 446-455	5.5	17
121	Wall depletion length of a channel-confined polymer. <i>Physical Review E</i> , <b>2017</b> , 95, 022501	2.4	8
120	Accelerating self-consistent field theory of block polymers in a variable unit cell. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 244902	3.9	14
119	Sequence-Dependent Persistence Length of Long DNA. <i>Physical Review Letters</i> , <b>2017</b> , 119, 227802	7.4	20
118	Role of growth rate on the orientational alignment of in a slit. <i>Royal Society Open Science</i> , <b>2017</b> , 4, 170463	3.3	11
117	Shear-banding and superdiffusivity in entangled polymer solutions. <i>Physical Review E</i> , <b>2017</b> , 96, 062503	2.4	11
116	One-Parameter Scaling Theory for DNA Extension in a Nanochannel. <i>Physical Review Letters</i> , <b>2017</b> , 119, 268102	7.4	23

115	Rapid conformational fluctuations in a model of methylcellulose. <i>Physical Review Materials</i> , <b>2017</b> , 1,	3.2	12
114	Broadly Accessible Self-Consistent Field Theory for Block Polymer Materials Discovery. <i>Macromolecules</i> , <b>2016</b> , 49, 4675-4690	5.5	100
113	Particle-directed assembly of semiflexible polymer chains. <i>Soft Matter</i> , <b>2016</b> , 12, 6214-22	3.6	1
112	A computational model of flow and species transport in the mesangium. <i>American Journal of Physiology - Renal Physiology</i> , <b>2016</b> , 310, F222-9	4.3	1
111	Operating and Sensing Mechanism of Electrolyte-Gated Transistors with Floating Gates: Building a Platform for Amplified Biodetection. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 108-117	3.8	40
110	Backfolding of DNA Confined in Nanotubes: Flory Theory versus the Two-State Cooperativity Model. <i>Macromolecules</i> , <b>2016</b> , 49, 1120-1126	5.5	22
109	The Backfolded Odijk Regime for Wormlike Chains Confined in Rectangular Nanochannels. <i>Polymers</i> , <b>2016</b> , 8,	4.5	18
108	Effect of excluded volume on the force-extension of wormlike chains in slit confinement. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 104902	3.9	4
107	Modeling the relaxation of internal DNA segments during genome mapping in nanochannels. <i>Biomicrofluidics</i> , <b>2016</b> , 10, 054117	3.2	7
106	Cornucopia of Nanoscale Ordered Phases in Sphere-Forming Tetrablock Terpolymers. <i>ACS Nano</i> , <b>2016</b> , 10, 4961-72	16.7	79
105	Cell-matrix interaction during strain-dependent remodelling of simulated collagen networks. <i>Interface Focus</i> , <b>2016</b> , 6, 20150069	3.9	17
104	Fast, Efficient, and Gentle Transfection of Human Adherent Cells in Suspension. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 8870-4	9.5	7
103	Rapid, Selective, Label-Free Aptameric Capture and Detection of Ricin in Potable Liquids Using a Printed Floating Gate Transistor. <i>ACS Sensors</i> , <b>2016</b> , 1, 1213-1216	9.2	38
102	Effect of Supercoiling on the Mechanical and Permeability Properties of Model Collagen IV Networks. <i>Annals of Biomedical Engineering</i> , <b>2015</b> , 43, 1695-705	4.7	5
101	Experimental evidence of weak excluded volume effects for nanochannel confined DNA. <i>ACS Macro Letters</i> , <b>2015</b> , 4, 759-763	6.6	36
100	Modeling the stretching of wormlike chains in the presence of excluded volume. <i>Soft Matter</i> , <b>2015</b> , 11, 5947-54	3.6	15
99	Evaluation of the Kirkwood approximation for the diffusivity of channel-confined DNA chains in the de Gennes regime. <i>Biomicrofluidics</i> , <b>2015</b> , 9, 024112	3.2	6
98	Kirkwood diffusivity of long semiflexible chains in nanochannel confinement. <i>Macromolecules</i> , <b>2015</b> , 48, 2829-2839	5.5	31

97	Thermodynamics of Aqueous Methylcellulose Solutions. <i>Macromolecules</i> , <b>2015</b> , 48, 7205-7215	5.5	46
96	Finite-size corrections for confined polymers in the extended de Gennes regime. <i>Physical Review E</i> , <b>2015</b> , 92, 062601	2.4	6
95	Measurements of DNA barcode label separations in nanochannels from time-series data. <i>Biomicrofluidics</i> , <b>2015</b> , 9, 064119	3.2	16
94	Distribution of distances between DNA barcode labels in nanochannels close to the persistence length. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 064902	3.9	40
93	Commensurability and finite size effects in lattice simulations of diblock copolymers. <i>Soft Matter</i> , <b>2015</b> , 11, 4862-7	3.6	17
92	Topological events in single molecules of E. coli DNA confined in nanochannels. <i>Analyst, The</i> , <b>2015</b> , 140, 4887-94	5	36
91	Shear-Induced Desorption of Isolated Polymer Molecules from a Planar Wall. <i>ACS Macro Letters</i> , <b>2015</b> , 4, 271-274	6.6	13
90	Label-free DNA sensing platform with low-voltage electrolyte-gated transistors. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 1861-6	7.8	55
89	Comparison of microfabricated hexagonal and lamellar post arrays for DNA electrophoresis. <i>Electrophoresis</i> , <b>2014</b> , 35, 654-61	3.6	5
88	Assessing corrections to the Fick-Jacobs equation. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 044118	3.9	22
87	Measuring bacterial adaptation dynamics at the single-cell level using a microfluidic chemostat and time-lapse fluorescence microscopy. <i>Analyst, The</i> , <b>2014</b> , 139, 5254-62	5	13
86	Persistent super-diffusive motion of Escherichia coli chromosomal loci. <i>Nature Communications</i> , <b>2014</b> , 5, 3854	17.4	57
85	The Odijk Regime in Slits. <i>Macromolecules</i> , <b>2014</b> , 47, 3672-3684	5.5	34
84	Hydrodynamics of DNA confined in nanoslits and nanochannels. <i>European Physical Journal: Special Topics</i> , <b>2014</b> , 223, 3179-3200	2.3	16
83	Mixed confinement regimes during equilibrium confinement spectroscopy of DNA. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 214901	3.9	41
82	Backfolding of Wormlike Chains Confined in Nanochannels. <i>Macromolecules</i> , <b>2014</b> , 47, 8446-8458	5.5	66
81	Tilted hexagonal post arrays: DNA electrophoresis in anisotropic media. <i>Electrophoresis</i> , <b>2014</b> , 35, 405-11	3.6	3
80	Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 084905	3.9	48

79	Tilted post arrays for separating long DNA. <i>Biomicrofluidics</i> , <b>2014</b> , 8, 034115	3.2	5
78	Ratchet nanofiltration of DNA. <i>Lab on A Chip</i> , <b>2013</b> , 13, 3741-6	7.2	7
77	Role of order during Ogston sieving of DNA in colloidal crystals. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 7769-76	7.8	6
76	Mechanical response of wild-type and Alport murine lens capsules during osmotic swelling. <i>Experimental Eye Research</i> , <b>2013</b> , 113, 87-91	3.7	14
75	Is DNA a Good Model Polymer?. <i>Macromolecules</i> , <b>2013</b> , 46,	5.5	84
74	Entropic depletion of DNA in triangular nanochannels. <i>Biomicrofluidics</i> , <b>2013</b> , 7, 24102	3.2	17
73	The Fluid Mechanics of Genome Mapping. <i>AIChE Journal</i> , <b>2013</b> , 59, 346-354	3.6	18
72	Beyond gel electrophoresis: microfluidic separations, fluorescence burst analysis, and DNA stretching. <i>Chemical Reviews</i> , <b>2013</b> , 113, 2584-667	68.1	144
71	Extension of DNA in a nanochannel as a rod-to-coil transition. <i>Physical Review Letters</i> , <b>2013</b> , 110, 208103	7.4	83
70	Microfluidic chemostat for measuring single cell dynamics in bacteria. <i>Lab on A Chip</i> , <b>2013</b> , 13, 947-54	7.2	98
69	Revisiting blob theory for DNA diffusivity in slitlike confinement. <i>Physical Review Letters</i> , <b>2013</b> , 110, 168105	7.4	42
68	Short-time movement of E. coli chromosomal loci depends on coordinate and subcellular localization. <i>Nature Communications</i> , <b>2013</b> , 4, 3003	17.4	84
67	Dynamics of polymer adsorption from dilute solution in shear flow near a planar wall. <i>Journal of Chemical Physics</i> , <b>2013</b> , 139, 174905	3.9	9
66	Adsorption of single polymer molecules in shear flow near a planar wall. <i>Journal of Chemical Physics</i> , <b>2013</b> , 138, 034905	3.9	9
65	Modeling the relaxation time of DNA confined in a nanochannel. <i>Biomicrofluidics</i> , <b>2013</b> , 7, 54118	3.2	31
64	Relationship between frequency and deflection angle in the DNA prism. <i>Physical Review E</i> , <b>2013</b> , 87, 012723	7.3	3
63	DNA electrophoresis in a nanofence array. <i>Lab on A Chip</i> , <b>2012</b> , 12, 1463-70	7.2	26
62	Mobility of a semiflexible chain confined in a nanochannel. <i>Physical Review Letters</i> , <b>2012</b> , 108, 228105	7.4	43

61	Physical descriptions of the bacterial nucleoid at large scales, and their biological implications. <i>Reports on Progress in Physics</i> , <b>2012</b> , 75, 076602	14.4	51
60	Statistical properties of the electrophoretic collision of a long DNA molecule with a small obstacle. <i>Electrophoresis</i> , <b>2012</b> , 33, 1013-20	3.6	8
59	Telescopic time-scale bridging for modeling dispersion in rapidly oscillating flows. <i>AIChE Journal</i> , <b>2012</b> , 58, 1987-1997	3.6	
58	Resolution limit for DNA barcodes in the Odijk regime. <i>Biomicrofluidics</i> , <b>2012</b> , 6, 14101-141019	3.2	23
57	Experimental study of the effect of disorder on DNA dynamics in post arrays during electrophoresis. <i>Physical Review E</i> , <b>2012</b> , 86, 041909	2.4	9
56	A model of strain-dependent glomerular basement membrane maintenance and its potential ramifications in health and disease. <i>Journal of Biomechanical Engineering</i> , <b>2012</b> , 134, 081006	2.1	8
55	Continuous-time random walk models of DNA electrophoresis in a post array: part I. Evaluation of existing models. <i>Electrophoresis</i> , <b>2011</b> , 32, 573-80	3.6	14
54	Continuous-time random walk models of DNA electrophoresis in a post array: part II. Mobility and sources of band broadening. <i>Electrophoresis</i> , <b>2011</b> , 32, 581-7	3.6	10
53	Moving beyond Watson-Crick models of coarse grained DNA dynamics. <i>Journal of Chemical Physics</i> , <b>2011</b> , 135, 205102	3.9	45
52	Simulation of DNA Extension in Nanochannels. <i>Macromolecules</i> , <b>2011</b> , 44, 6594-6604	5.5	162
51	Plasma thinned nanopost arrays for DNA electrophoresis. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2011</b> , 29, 011025	2.9	15
50	Onset of channeling during DNA electrophoresis in a sparse ordered post array. <i>Biomicrofluidics</i> , <b>2010</b> , 4, 13203	3.2	23
49	Analysis of a DNA simulation model through hairpin melting experiments. <i>Journal of Chemical Physics</i> , <b>2010</b> , 133, 125101	3.9	13
48	Elasticity of the porcine lens capsule as measured by osmotic swelling. <i>Journal of Biomechanical Engineering</i> , <b>2010</b> , 132, 091008	2.1	9
47	Rapid ejection of giant Pluronic L121 vesicles from spreading double emulsion droplets. <i>Langmuir</i> , <b>2010</b> , 26, 9666-72	4	8
46	DNA electrophoresis in microfabricated devices. <i>Reviews of Modern Physics</i> , <b>2010</b> , 82, 2903-2947	40.5	139
45	DNA electrophoresis in confined, periodic geometries: a new lakes-straits model. <i>Journal of Chemical Physics</i> , <b>2010</b> , 133, 234104	3.9	5
44	Electrophoretic collision of a DNA molecule with a small elliptical obstacle. <i>Electrophoresis</i> , <b>2010</b> , 31, 860-7	3.6	11



43	Collision of a long DNA molecule with an isolated nanowire. <i>Electrophoresis</i> , <b>2010</b> , 31, 3675-80	3.6	9
42	Giant biocompatible and biodegradable PEG-PMCL vesicles and microcapsules by solvent evaporation from double emulsion droplets. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 351, 140-50	9.3	31
41	Brownian dynamics simulations of electrophoretic DNA separations in a sparse ordered post array. <i>Journal of Chromatography A</i> , <b>2010</b> , 1217, 5522-8	4.5	17
40	DNA unhooking from a single post as a deterministic process: insights from translocation modeling. <i>Physical Review E</i> , <b>2009</b> , 79, 031928	2.4	8
39	DNA electrophoresis in a sparse ordered post array. <i>Physical Review E</i> , <b>2009</b> , 79, 061904	2.4	34
38	TAYLOR-ARIS DISPERSION DURING LUBRICATION FLOW IN A PERIODIC CHANNEL. <i>Chemical Engineering Communications</i> , <b>2009</b> , 197, 39-50	2.2	6
37	HOWARD BRENNER'S LEGACY SO FAR. <i>Chemical Engineering Communications</i> , <b>2009</b> , 197, 1-2	2.2	
36	A boundary element method/Brownian dynamics approach for simulating DNA electrophoresis in electrically insulating microfabricated devices. <i>Electrophoresis</i> , <b>2009</b> , 30, 1482-9	3.6	6
35	Coupled flow and reaction during natural convection PCR. <i>Microfluidics and Nanofluidics</i> , <b>2009</b> , 6, 121-130	3.8	25
34	Brownian dynamics simulations of single-stranded DNA hairpins. <i>Journal of Chemical Physics</i> , <b>2009</b> , 130, 095101	3.9	36
33	Coarse-Grained Brownian Dynamics Simulations of the 10-23 DNAzyme. <i>Biophysical Journal</i> , <b>2009</b> , 97, 2785-93	2.9	18
32	Electrophoretic separation of DNA in gels and nanostructures. <i>Lab on A Chip</i> , <b>2009</b> , 9, 2508-23	7.2	61
31	Combined electrophoretic and electro-osmotic transport through channels of periodically varying cross section. <i>Physics of Fluids</i> , <b>2008</b> , 20, 037102	4.4	8
30	Comment on "Taylor dispersion with absorbing boundaries: a stochastic approach". <i>Physical Review Letters</i> , <b>2008</b> , 100, 029401; discussion 029403	7.4	2
29	Theory of band broadening during cycling temperature capillary electrophoresis. <i>Electrophoresis</i> , <b>2007</b> , 28, 665-73	3.6	5
28	Electrophoretic transport through channels of periodically varying cross section. <i>Physics of Fluids</i> , <b>2007</b> , 19, 037101	4.4	43
27	Force-driven transport through periodic entropy barriers. <i>Europhysics Letters</i> , <b>2007</b> , 80, 50009	1.6	77
26	Nonequilibrium transport of rigid macromolecules in periodically constricted geometries. <i>Physical Review Letters</i> , <b>2007</b> , 98, 098106	7.4	33

25	Band Broadening During High-Throughput Mutation Detection in Microchannels <b>2007</b> , 155		
24	Automated microdroplet platform for sample manipulation and polymerase chain reaction. <i>Analytical Chemistry</i> , <b>2006</b> , 78, 7722-8	7.8	92
23	DNA electrophoresis in microfluidic post arrays under moderate electric fields. <i>Physical Review E</i> , <b>2006</b> , 73, 061922	2.4	20
22	Measurement of the surface concentration for bioassay kinetics in microchannels. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 833-9	7.8	14
21	Contamination-free continuous flow microfluidic polymerase chain reaction for quantitative and clinical applications. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 3700-4	7.8	91
20	Motion of single long DNA molecules through arrays of magnetic columns. <i>Electrophoresis</i> , <b>2005</b> , 26, 362-75	3.6	37
19	Droplet fusion by alternating current (AC) field electrocoalescence in microchannels. <i>Electrophoresis</i> , <b>2005</b> , 26, 3706-15	3.6	166
18	Polymerase chain reaction in natural convection systems: A convection-diffusion-reaction model. <i>Europhysics Letters</i> , <b>2005</b> , 71, 1008-1014	1.6	20
17	Non-markovian transport of DNA in microfluidic post arrays. <i>Physical Review Letters</i> , <b>2005</b> , 94, 198105	7.4	28
16	Semiphenomenological model for the dispersion of DNA during electrophoresis in a microfluidic array of posts. <i>Physical Review E</i> , <b>2004</b> , 69, 011901	2.4	24
15	Model of RecA-mediated homologous recognition. <i>Physical Review Letters</i> , <b>2004</b> , 93, 268102	7.4	14
14	Exact lattice calculations of dispersion coefficients in the presence of external fields and obstacles. <i>European Physical Journal E</i> , <b>2004</b> , 15, 71-82	1.5	10
13	Quantitative microfluidic separation of DNA in self-assembled magnetic matrixes. <i>Analytical Chemistry</i> , <b>2004</b> , 76, 3770-6	7.8	96
12	Anomalous sedimentation of a small Brownian sphere in a vertical circular cylinder of periodically varying radius. <i>Physics of Fluids</i> , <b>2003</b> , 15, 1082-1085	4.4	1
11	Convective dispersion without molecular diffusion. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2003</b> , 322, 180-194	3.3	11
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