

Kevin D Dorfman

List of Publications by Year in descending order

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176
papers

5,212
citations

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63
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183
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docs citations

183
times ranked

4044
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Thermal processing of diblock copolymer melts mimics metallurgy. <i>Science</i> , 2017, 356, 520-523. | 12.6 | 227 |
| 2 | Droplet fusion by alternating current (AC) field electrocoalescence in microchannels. <i>Electrophoresis</i> , 2005, 26, 3706-3715. | 2.4 | 177 |
| 3 | Simulation of DNA Extension in Nanochannels. <i>Macromolecules</i> , 2011, 44, 6594-6604. | 4.8 | 175 |
| 4 | Beyond Gel Electrophoresis: Microfluidic Separations, Fluorescence Burst Analysis, and DNA Stretching. <i>Chemical Reviews</i> , 2013, 113, 2584-2667. | 47.7 | 162 |
| 5 | DNA electrophoresis in microfabricated devices. <i>Reviews of Modern Physics</i> , 2010, 82, 2903-2947. | 45.6 | 155 |
| 6 | Broadly Accessible Self-Consistent Field Theory for Block Polymer Materials Discovery. <i>Macromolecules</i> , 2016, 49, 4675-4690. | 4.8 | 150 |
| 7 | Microfluidic chemostat for measuring single cell dynamics in bacteria. <i>Lab on A Chip</i> , 2013, 13, 947. | 6.0 | 134 |
| 8 | Short-time movement of E. coli chromosomal loci depends on coordinate and subcellular localization. <i>Nature Communications</i> , 2013, 4, 3003. | 12.8 | 113 |
| 9 | 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> , 2018, 115, 10233-10238. | 7.1 | 111 |
| 10 | Is DNA a Good Model Polymer?. <i>Macromolecules</i> , 2013, 46, 8369-8382. | 4.8 | 105 |
| 11 | Automated Microdroplet Platform for Sample Manipulation and Polymerase Chain Reaction. <i>Analytical Chemistry</i> , 2006, 78, 7722-7728. | 6.5 | 104 |
| 12 | Quantitative Microfluidic Separation of DNA in Self-Assembled Magnetic Matrixes. <i>Analytical Chemistry</i> , 2004, 76, 3770-3776. | 6.5 | 103 |
| 13 | 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> , 2018, 115, 847-854. | 7.1 | 101 |
| 14 | Contamination-Free Continuous Flow Microfluidic Polymerase Chain Reaction for Quantitative and Clinical Applications. <i>Analytical Chemistry</i> , 2005, 77, 3700-3704. | 6.5 | 100 |
| 15 | Cornucopia of Nanoscale Ordered Phases in Sphere-Forming Tetrablock Terpolymers. <i>ACS Nano</i> , 2016, 10, 4961-4972. | 14.6 | 93 |
| 16 | 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> , 2019, 116, 17169-17174. | 7.1 | 92 |
| 17 | Extension of DNA in a Nanochannel as a Rod-to-Coil Transition. <i>Physical Review Letters</i> , 2013, 110, 208103. | 7.8 | 87 |
| 18 | Force-driven transport through periodic entropy barriers. <i>Europhysics Letters</i> , 2007, 80, 50009. | 2.0 | 81 |

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|----|--|------|-----------|
| 19 | Persistent super-diffusive motion of Escherichia coli chromosomal loci. Nature Communications, 2014, 5, 3854. | 12.8 | 74 |
| 20 | Backfolding of Wormlike Chains Confined in Nanochannels. Macromolecules, 2014, 47, 8446-8458. | 4.8 | 72 |
| 21 | Electrophoretic separation of DNA in gels and nanostructures. Lab on A Chip, 2009, 9, 2508. | 6.0 | 66 |
| 22 | Label-Free DNA Sensing Platform with Low-Voltage Electrolyte-Gated Transistors. Analytical Chemistry, 2015, 87, 1861-1866. | 6.5 | 63 |
| 23 | Thermodynamics of Aqueous Methylcellulose Solutions. Macromolecules, 2015, 48, 7205-7215. | 4.8 | 60 |
| 24 | Physical descriptions of the bacterial nucleoid at large scales, and their biological implications. Reports on Progress in Physics, 2012, 75, 076602. | 20.1 | 58 |
| 25 | Frank-Kasper Phases in Block Polymers. Macromolecules, 2021, 54, 10251-10270. | 4.8 | 56 |
| 26 | Moving beyond Watson-Crick models of coarse grained DNA dynamics. Journal of Chemical Physics, 2011, 135, 205102. | 3.0 | 54 |
| 27 | Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. Journal of Chemical Physics, 2014, 140, 084905. | 3.0 | 50 |
| 28 | Rapid, Selective, Label-Free Aptameric Capture and Detection of Ricin in Potable Liquids Using a Printed Floating Gate Transistor. ACS Sensors, 2016, 1, 1213-1216. | 7.8 | 50 |
| 29 | Electrophoretic transport through channels of periodically varying cross section. Physics of Fluids, 2007, 19, 037101. | 4.0 | 46 |
| 30 | Mobility of a Semiflexible Chain Confined in a Nanochannel. Physical Review Letters, 2012, 108, 228105. | 7.8 | 46 |
| 31 | Operating and Sensing Mechanism of Electrolyte-Gated Transistors with Floating Gates: Building a Platform for Amplified Biodetection. Journal of Physical Chemistry C, 2016, 120, 108-117. | 3.1 | 46 |
| 32 | Revisiting Blob Theory for DNA Diffusivity in Slitlike Confinement. Physical Review Letters, 2013, 110, 168105. | 7.8 | 44 |
| 33 | Symmetry breaking in particle-forming diblock polymer/homopolymer blends. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16764-16769. | 7.1 | 44 |
| 34 | Mixed confinement regimes during equilibrium confinement spectroscopy of DNA. Journal of Chemical Physics, 2014, 140, 214901. | 3.0 | 43 |
| 35 | Distribution of distances between DNA barcode labels in nanochannels close to the persistence length. Journal of Chemical Physics, 2015, 142, 064902. | 3.0 | 43 |
| 36 | Experimental Evidence of Weak Excluded Volume Effects for Nanochannel Confined DNA. ACS Macro Letters, 2015, 4, 759-763. | 4.8 | 43 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Role of Chain Length in the Formation of Frank-Kasper Phases in Diblock Copolymers. <i>Physical Review Letters</i> , 2018, 121, 208002. | 7.8 | 42 |
| 38 | Motion of single long DNA molecules through arrays of magnetic columns. <i>Electrophoresis</i> , 2005, 26, 362-375. | 2.4 | 39 |
| 39 | Brownian dynamics simulations of single-stranded DNA hairpins. <i>Journal of Chemical Physics</i> , 2009, 130, 095101. | 3.0 | 39 |
| 40 | The Odijk Regime in Slits. <i>Macromolecules</i> , 2014, 47, 3672-3684. | 4.8 | 39 |
| 41 | Topological events in single molecules of <i>E. coli</i> DNA confined in nanochannels. <i>Analyst</i> , The, 2015, 140, 4887-4894. | 3.5 | 38 |
| 42 | Nonequilibrium Transport of Rigid Macromolecules in Periodically Constricted Geometries. <i>Physical Review Letters</i> , 2007, 98, 098106. | 7.8 | 36 |
| 43 | DNA electrophoresis in a sparse ordered post array. <i>Physical Review E</i> , 2009, 79, 061904. | 2.1 | 34 |
| 44 | Giant biocompatible and biodegradable PEG-PMCL vesicles and microcapsules by solvent evaporation from double emulsion droplets. <i>Journal of Colloid and Interface Science</i> , 2010, 351, 140-150. | 9.4 | 34 |
| 45 | Modeling the relaxation time of DNA confined in a nanochannel. <i>Biomicrofluidics</i> , 2013, 7, 054118. | 2.4 | 33 |
| 46 | Kirkwood Diffusivity of Long Semiflexible Chains in Nanochannel Confinement. <i>Macromolecules</i> , 2015, 48, 2829-2839. | 4.8 | 31 |
| 47 | Accelerating self-consistent field theory of block polymers in a variable unit cell. <i>Journal of Chemical Physics</i> , 2017, 146, 244902. | 3.0 | 31 |
| 48 | Generalized Taylor-Aris dispersion in discrete spatially periodic networks: Microfluidic applications. <i>Physical Review E</i> , 2002, 65, 021103. | 2.1 | 30 |
| 49 | Non-Markovian Transport of DNA in Microfluidic Post Arrays. <i>Physical Review Letters</i> , 2005, 94, 198105. | 7.8 | 30 |
| 50 | Detection and Sourcing of Gluten in Grain with Multiple Floating-Gate Transistor Biosensors. <i>ACS Sensors</i> , 2018, 3, 395-402. | 7.8 | 30 |
| 51 | Sequence-Dependent Persistence Length of Long DNA. <i>Physical Review Letters</i> , 2017, 119, 227802. | 7.8 | 29 |
| 52 | Alpha-Synuclein Modulates the Physical Properties of DNA. <i>Chemistry - A European Journal</i> , 2018, 24, 15685-15690. | 3.3 | 29 |
| 53 | Coupled flow and reaction during natural convection PCR. <i>Microfluidics and Nanofluidics</i> , 2009, 6, 121-130. | 2.2 | 28 |
| 54 | One-Parameter Scaling Theory for DNA Extension in a Nanochannel. <i>Physical Review Letters</i> , 2017, 119, 268102. | 7.8 | 28 |

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|----|---|-----|-----------|
| 55 | Semiphenomenological model for the dispersion of DNA during electrophoresis in a microfluidic array of posts. <i>Physical Review E</i> , 2004, 69, 011901. | 2.1 | 27 |
| 56 | Complex Phase Behavior in Particle-Forming AB/AB ² Diblock Copolymer Blends with Variable Core Block Lengths. <i>Macromolecules</i> , 2021, 54, 7088-7101. | 4.8 | 27 |
| 57 | DNA electrophoresis in a nanofence array. <i>Lab on A Chip</i> , 2012, 12, 1463. | 6.0 | 26 |
| 58 | Assessing corrections to the Fick–Jacobs equation. <i>Journal of Chemical Physics</i> , 2014, 141, 044118. | 3.0 | 25 |
| 59 | Backfolding of DNA Confined in Nanotubes: Flory Theory versus the Two-State Cooperativity Model. <i>Macromolecules</i> , 2016, 49, 1120-1126. | 4.8 | 25 |
| 60 | Polymerase chain reaction in natural convection systems: A convection-diffusion-reaction model. <i>Europhysics Letters</i> , 2005, 71, 1008-1014. | 2.0 | 24 |
| 61 | Open-source code for self-consistent field theory calculations of block polymer phase behavior on graphics processing units. <i>European Physical Journal E</i> , 2020, 43, 15. | 1.6 | 24 |
| 62 | Coarse-Grained Brownian Dynamics Simulations of the 10-23 DNAzyme. <i>Biophysical Journal</i> , 2009, 97, 2785-2793. | 0.5 | 23 |
| 63 | Onset of channeling during DNA electrophoresis in a sparse ordered post array. <i>Biomicrofluidics</i> , 2010, 4, 013203. | 2.4 | 23 |
| 64 | Resolution limit for DNA barcodes in the Odijk regime. <i>Biomicrofluidics</i> , 2012, 6, 014101. | 2.4 | 23 |
| 65 | The fluid mechanics of genome mapping. <i>AIChE Journal</i> , 2013, 59, 346-354. | 3.6 | 23 |
| 66 | Hydrodynamics of DNA confined in nanoslits and nanochannels. <i>European Physical Journal: Special Topics</i> , 2014, 223, 3179-3200. | 2.6 | 23 |
| 67 | “Vector Chromatography”: Modeling Micropatterned Separation Devices. <i>Journal of Colloid and Interface Science</i> , 2001, 238, 390-413. | 9.4 | 22 |
| 68 | DNA electrophoresis in microfluidic post arrays under moderate electric fields. <i>Physical Review E</i> , 2006, 73, 061922. | 2.1 | 22 |
| 69 | Commensurability and finite size effects in lattice simulations of diblock copolymers. <i>Soft Matter</i> , 2015, 11, 4862-4867. | 2.7 | 22 |
| 70 | Diffusion of Knots along DNA Confined in Nanochannels. <i>Macromolecules</i> , 2020, 53, 6461-6468. | 4.8 | 22 |
| 71 | Comment on “Taylor dispersion of a solute in a microfluidic channel” [J. Appl. Phys. 89, 4667 (2001)]. <i>Journal of Applied Physics</i> , 2001, 90, 6553-6554. | 2.5 | 21 |
| 72 | Dispersion by Pressure-Driven Flow in Serpentine Microfluidic Channels. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 4652-4662. | 3.7 | 21 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Entropic depletion of DNA in triangular nanochannels. <i>Biomicrofluidics</i> , 2013, 7, 024102. | 2.4 | 21 |
| 74 | The Backfolded Odijk Regime for Wormlike Chains Confined in Rectangular Nanochannels. <i>Polymers</i> , 2016, 8, 79. | 4.5 | 21 |
| 75 | Analysis of a DNA simulation model through hairpin melting experiments. <i>Journal of Chemical Physics</i> , 2010, 133, 125101. | 3.0 | 20 |
| 76 | Morphological Consequences of Frustration in ABC Triblock Polymers. <i>Macromolecules</i> , 2017, 50, 446-458. | 4.8 | 20 |
| 77 | Cell-matrix interaction during strain-dependent remodelling of simulated collagen networks. <i>Interface Focus</i> , 2016, 6, 20150069. | 3.0 | 19 |
| 78 | Interfacial Charge Contributions to Chemical Sensing by Electrolyte-Gated Transistors with Floating Gates. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1335-1339. | 4.6 | 19 |
| 79 | Microfluidic opportunities in printed electrolyte-gated transistor biosensors. <i>Biomicrofluidics</i> , 2020, 14, 011301. | 2.4 | 19 |
| 80 | Measuring bacterial adaptation dynamics at the single-cell level using a microfluidic chemostat and time-lapse fluorescence microscopy. <i>Analyst</i> , 2014, 139, 5254-5262. | 3.5 | 18 |
| 81 | Brownian dynamics simulations of electrophoretic DNA separations in a sparse ordered post array. <i>Journal of Chromatography A</i> , 2010, 1217, 5522-5528. | 3.7 | 17 |
| 82 | Measurements of DNA barcode label separations in nanochannels from time-series data. <i>Biomicrofluidics</i> , 2015, 9, 064119. | 2.4 | 17 |
| 83 | Model of RecA-Mediated Homologous Recognition. <i>Physical Review Letters</i> , 2004, 93, 268102. | 7.8 | 16 |
| 84 | Shear-Induced Desorption of Isolated Polymer Molecules from a Planar Wall. <i>ACS Macro Letters</i> , 2015, 4, 271-274. | 4.8 | 16 |
| 85 | Modeling the stretching of wormlike chains in the presence of excluded volume. <i>Soft Matter</i> , 2015, 11, 5947-5954. | 2.7 | 16 |
| 86 | Role of growth rate on the orientational alignment of <i>Escherichia coli</i> in a slit. <i>Royal Society Open Science</i> , 2017, 4, 170463. | 2.4 | 16 |
| 87 | Predicting the phase behavior of ABAC tetrablock terpolymers: Sensitivity to Flory-Huggins interaction parameters. <i>Polymer</i> , 2018, 154, 305-314. | 3.8 | 16 |
| 88 | Separation mechanisms underlying vector chromatography in microlithographic arrays. <i>Physical Review E</i> , 2002, 65, 052103. | 2.1 | 15 |
| 89 | Measurement of the Surface Concentration for Bioassay Kinetics in Microchannels. <i>Analytical Chemistry</i> , 2005, 77, 833-839. | 6.5 | 15 |
| 90 | Plasma thinned nanopost arrays for DNA electrophoresis. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011, 29, . | 2.1 | 15 |

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|-----|--|-----|-----------|
| 91 | Mechanical response of wild-type and Alport murine lens capsules during osmotic swelling. <i>Experimental Eye Research</i> , 2013, 113, 87-91. | 2.6 | 15 |
| 92 | Subdiffusion of loci and cytoplasmic particles are different in compressed <i>Escherichia coli</i> cells. <i>Communications Biology</i> , 2018, 1, 176. | 4.4 | 15 |
| 93 | Continuous-time random walk models of DNA electrophoresis in a post array: Part I. Evaluation of existing models. <i>Electrophoresis</i> , 2011, 32, 573-580. | 2.4 | 14 |
| 94 | Shear-banding and superdiffusivity in entangled polymer solutions. <i>Physical Review E</i> , 2017, 96, 062503. | 2.1 | 14 |
| 95 | Measuring the wall depletion length of nanoconfined DNA. <i>Journal of Chemical Physics</i> , 2018, 149, 104901. | 3.0 | 14 |
| 96 | Stability of the Double Gyroid Phase in Bottlebrush Diblock Copolymer Melts. <i>Macromolecules</i> , 2021, 54, 9063-9070. | 4.8 | 14 |
| 97 | Rapid conformational fluctuations in a model of methylcellulose. <i>Physical Review Materials</i> , 2017, 1, . | 2.4 | 14 |
| 98 | Influence of charge sequence on the adsorption of polyelectrolytes to oppositely-charged polyelectrolyte brushes. <i>Soft Matter</i> , 2019, 15, 5431-5442. | 2.7 | 13 |
| 99 | Electrophoretic collision of a DNA molecule with a small elliptical obstacle. <i>Electrophoresis</i> , 2010, 31, 860-867. | 2.4 | 12 |
| 100 | Elasticity of the Porcine Lens Capsule as Measured by Osmotic Swelling. <i>Journal of Biomechanical Engineering</i> , 2010, 132, 091008. | 1.3 | 12 |
| 101 | Simulations of knotting of DNA during genome mapping. <i>Biomicrofluidics</i> , 2017, 11, 024117. | 2.4 | 12 |
| 102 | Equilibration of Micelle-Polyelectrolyte Complexes: Mechanistic Differences between Static and Annealed Charge Distributions. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4631-4641. | 2.6 | 12 |
| 103 | Evaluation of Blob Theory for the Diffusion of DNA in Nanochannels. <i>Macromolecules</i> , 2018, 51, 1748-1755. | 4.8 | 12 |
| 104 | Convective dispersion without molecular diffusion. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003, 322, 180-194. | 2.6 | 11 |
| 105 | Rapid Ejection of Giant Pluronic L121 Vesicles from Spreading Double Emulsion Droplets. <i>Langmuir</i> , 2010, 26, 9666-9672. | 3.5 | 11 |
| 106 | Continuous-time random walk models of DNA electrophoresis in a post array: Part II. Mobility and sources of band broadening. <i>Electrophoresis</i> , 2011, 32, 581-587. | 2.4 | 11 |
| 107 | Dynamics of polymer adsorption from dilute solution in shear flow near a planar wall. <i>Journal of Chemical Physics</i> , 2013, 139, 174905. | 3.0 | 11 |
| 108 | Wall depletion length of a channel-confined polymer. <i>Physical Review E</i> , 2017, 95, 022501. | 2.1 | 11 |

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|-----|--|-----|-----------|
| 109 | Odijk Excluded Volume Interactions during the Unfolding of DNA Confined in a Nanochannel. <i>Macromolecules</i> , 2018, 51, 1172-1180. | 4.8 | 11 |
| 110 | Microfluidic long DNA sample preparation from cells. <i>Lab on A Chip</i> , 2019, 19, 281-290. | 6.0 | 11 |
| 111 | Diffusion of Knotted DNA Molecules in Nanochannels in the Extended de Gennes Regime. <i>Macromolecules</i> , 2021, 54, 4211-4218. | 4.8 | 11 |
| 112 | Laves Phase Field in a Diblock Copolymer Alloy. <i>Macromolecules</i> , 2022, 55, 2991-2998. | 4.8 | 11 |
| 113 | Exact lattice calculations of dispersion coefficients in the presence of external fields and obstacles. <i>European Physical Journal E</i> , 2004, 15, 71-82. | 1.6 | 10 |
| 114 | A Model of Strain-Dependent Glomerular Basement Membrane Maintenance and Its Potential Ramifications in Health and Disease. <i>Journal of Biomechanical Engineering</i> , 2012, 134, 081006. | 1.3 | 10 |
| 115 | Modeling the relaxation of internal DNA segments during genome mapping in nanochannels. <i>Biomicrofluidics</i> , 2016, 10, 054117. | 2.4 | 10 |
| 116 | Evidence for the extended de Gennes regime of a semiflexible polymer in slit confinement. <i>Physical Review E</i> , 2018, 97, . | 2.1 | 10 |
| 117 | 3D Printing-Enabled DNA Extraction for Long-Read Genomics. <i>ACS Omega</i> , 2020, 5, 20817-20824. | 3.5 | 10 |
| 118 | Glomerular filtration and podocyte tensional homeostasis: importance of the minor type IV collagen network. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 2433-2442. | 2.8 | 10 |
| 119 | Simulating precursor steps for fibril formation in methylcellulose solutions. <i>Physical Review Materials</i> , 2019, 3, . | 2.4 | 10 |
| 120 | Combined electrophoretic and electro-osmotic transport through channels of periodically varying cross section. <i>Physics of Fluids</i> , 2008, 20, . | 4.0 | 9 |
| 121 | Collision of a long DNA molecule with an isolated nanowire. <i>Electrophoresis</i> , 2010, 31, 3675-3680. | 2.4 | 9 |
| 122 | Experimental study of the effect of disorder on DNA dynamics in post arrays during electrophoresis. <i>Physical Review E</i> , 2012, 86, 041909. | 2.1 | 9 |
| 123 | Adsorption of single polymer molecules in shear flow near a planar wall. <i>Journal of Chemical Physics</i> , 2013, 138, 034905. | 3.0 | 9 |
| 124 | Finite-size corrections for confined polymers in the extended de Gennes regime. <i>Physical Review E</i> , 2015, 92, 062601. | 2.1 | 9 |
| 125 | Fast, Efficient, and Gentle Transfection of Human Adherent Cells in Suspension. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8870-8874. | 8.0 | 9 |
| 126 | The Statistical Segment Length of DNA: Opportunities for Biomechanical Modeling in Polymer Physics and Next-Generation Genomics. <i>Journal of Biomechanical Engineering</i> , 2018, 140, . | 1.3 | 9 |

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|-----|---|-----|-----------|
| 127 | Distribution of label spacings for genome mapping in nanochannels. <i>Biomicrofluidics</i> , 2018, 12, 034115. | 2.4 | 9 |
| 128 | Modeling DNA Electrophoresis in Microfluidic Entropic Trapping Devices. <i>Biomedical Microdevices</i> , 2002, 4, 237-244. | 2.8 | 8 |
| 129 | DNA unhooking from a single post as a deterministic process: Insights from translocation modeling. <i>Physical Review E</i> , 2009, 79, 031928. | 2.1 | 8 |
| 130 | Statistical properties of the electrophoretic collision of a long <scp>DNA</scp> molecule with a small obstacle. <i>Electrophoresis</i> , 2012, 33, 1013-1020. | 2.4 | 8 |
| 131 | Hairpins in the conformations of a confined polymer. <i>Biomicrofluidics</i> , 2018, 12, 024105. | 2.4 | 8 |
| 132 | TAYLOR-ARIS DISPERSION DURING LUBRICATION FLOW IN A PERIODIC CHANNEL. <i>Chemical Engineering Communications</i> , 2009, 197, 39-50. | 2.6 | 7 |
| 133 | Ratchet nanofiltration of DNA. <i>Lab on A Chip</i> , 2013, 13, 3741. | 6.0 | 7 |
| 134 | Interfacial geometry in particle-forming phases of diblock copolymers. <i>Physical Review Materials</i> , 2022, 6, . | 2.4 | 7 |
| 135 | Generalized Taylor–Aris Dispersion in Spatially Periodic Microfluidic Networks. <i>Chemical Reactions. SIAM Journal on Applied Mathematics</i> , 2003, 63, 962-986. | 1.8 | 6 |
| 136 | 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. | 3.0 | 6 |
| 137 | Theory of band broadening during cycling temperature capillary electrophoresis. <i>Electrophoresis</i> , 2007, 28, 665-673. | 2.4 | 6 |
| 138 | A boundary element method/Brownian dynamics approach for simulating DNA electrophoresis in electrically insulating microfabricated devices. <i>Electrophoresis</i> , 2009, 30, 1482-1489. | 2.4 | 6 |
| 139 | DNA electrophoresis in confined, periodic geometries: A new lakes-straits model. <i>Journal of Chemical Physics</i> , 2010, 133, 234104. | 3.0 | 6 |
| 140 | Role of Order during Ogston Sieving of DNA in Colloidal Crystals. <i>Analytical Chemistry</i> , 2013, 85, 7769-7776. | 6.5 | 6 |
| 141 | Evaluation of the Kirkwood approximation for the diffusivity of channel-confined DNA chains in the de Gennes regime. <i>Biomicrofluidics</i> , 2015, 9, 024112. | 2.4 | 6 |
| 142 | Entropic trap purification of long DNA. <i>Lab on A Chip</i> , 2018, 18, 955-964. | 6.0 | 6 |
| 143 | Effect of edge disturbance on shear banding in polymeric solutions. <i>Journal of Rheology</i> , 2018, 62, 1339-1345. | 2.6 | 6 |
| 144 | Order and Disorder in ABCA–Tetrablock Terpolymers. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10266-10275. | 2.6 | 6 |

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|-----|--|-----|-----------|
| 145 | Alternating Gyroid in Block Polymer Blends. ACS Macro Letters, 2022, 11, 643-650. | 4.8 | 6 |
| 146 | Stability of cubic single network phases in diblock copolymer melts. Journal of Polymer Science, 2022, 60, 2543-2552. | 3.8 | 6 |
| 147 | Exact computation of the mean velocity, molecular diffusivity, and dispersivity of a particle moving on a periodic lattice. Journal of Chemical Physics, 2003, 118, 8428-8436. | 3.0 | 5 |
| 148 | Tilted post arrays for separating long DNA. Biomicrofluidics, 2014, 8, 034115. | 2.4 | 5 |
| 149 | Comparison of microfabricated hexagonal and lamellar post arrays for <scp>DNA</scp> electrophoresis. Electrophoresis, 2014, 35, 654-661. | 2.4 | 5 |
| 150 | Effect of Supercoiling on the Mechanical and Permeability Properties of Model Collagen IV Networks. Annals of Biomedical Engineering, 2015, 43, 1695-1705. | 2.5 | 5 |
| 151 | Effect of excluded volume on the force-extension of wormlike chains in slit confinement. Journal of Chemical Physics, 2016, 144, 104902. | 3.0 | 5 |
| 152 | Simulations corroborate telegraph model predictions for the extension distributions of nanochannel confined DNA. Biomicrofluidics, 2019, 13, 044110. | 2.4 | 5 |
| 153 | Detection and amplification of capacitance- and charge-based signals using printed electrolyte gated transistors with floating gates. Flexible and Printed Electronics, 2019, 4, 044001. | 2.7 | 5 |
| 154 | Extension distribution for DNA confined in a nanochannel near the Odijk regime. Journal of Chemical Physics, 2019, 151, 114903. | 3.0 | 5 |
| 155 | The C36 Laves phase in diblock polymer melts. Soft Matter, 2021, 17, 8950-8959. | 2.7 | 5 |
| 156 | Interactions between two knots in nanochannel-confined DNA molecules. Journal of Chemical Physics, 2021, 155, 154901. | 3.0 | 5 |
| 157 | Free Energy Trajectory for Escape of a Single Chain from a Diblock Copolymer Micelle. ACS Macro Letters, 2021, 10, 1570-1575. | 4.8 | 5 |
| 158 | Stabilizing a Double Gyroid Network Phase with 2 nm Feature Size by Blending of Lamellar and Cylindrical Forming Block Oligomers. JACS Au, 2022, 2, 1405-1416. | 7.9 | 5 |
| 159 | Modeling of Quasi-Static Floating-Gate Transistor Biosensors. ACS Sensors, 2021, 6, 1910-1917. | 7.8 | 4 |
| 160 | Open-source platform for block polymer formulation design using particle swarm optimization. European Physical Journal E, 2021, 44, 115. | 1.6 | 4 |
| 161 | Relationship between frequency and deflection angle in the DNA prism. Physical Review E, 2013, 87, 012723. | 2.1 | 3 |
| 162 | Tilted hexagonal post arrays: <scp>DNA</scp> electrophoresis in anisotropic media. Electrophoresis, 2014, 35, 405-411. | 2.4 | 3 |

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|-----|---|-----|-----------|
| 163 | A computational model of flow and species transport in the mesangium. American Journal of Physiology - Renal Physiology, 2016, 310, F222-F229. | 2.7 | 3 |
| 164 | Dynamics of DNA-Bridged Dumbbells in Concentrated, Shear-Banding Polymer Solutions. Macromolecules, 2021, 54, 4186-4197. | 4.8 | 3 |
| 165 | Identifying a critical micelle temperature in simulations of disordered asymmetric diblock copolymer melts. Physical Review Materials, 2021, 5, . | 2.4 | 3 |
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