

# Qianqian Cao

## List of Publications by Year in descending order

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44  
papers

493  
citations

759233

12  
h-index

752698

20  
g-index

44  
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44  
docs citations

44  
times ranked

378  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of chain stiffness and salt concentration on responses of polyelectrolyte brushes under external electric field. <i>Biomicrofluidics</i> , 2011, 5, 44119-4411912.	2.4	34
2	Controlling electroosmotic flow by polymer coating: a dissipative particle dynamics study. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 977-990.	2.2	31
3	Electroosmotic flow in a nanofluidic channel coated with neutral polymers. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 1051-1062.	2.2	30
4	A Molecular Dynamics Study of Two Apposing Polyelectrolyte Brushes with Mono- and Multivalent Counterions. <i>Macromolecular Theory and Simulations</i> , 2009, 18, 441-452.	1.4	26
5	Interaction of double-stranded DNA with a nanosphere: a coarse-grained molecular dynamics simulation study. <i>Soft Matter</i> , 2011, 7, 506-514.	2.7	26
6	Modulation of electroosmotic flow by electric field-responsive polyelectrolyte brushes: a molecular dynamics study. <i>Microfluidics and Nanofluidics</i> , 2012, 12, 649-655.	2.2	26
7	Ion-Specific Effects on the Elongation Dynamics of a Nanosized Water Droplet in Applied Electric Fields. <i>Langmuir</i> , 2017, 33, 428-437.	3.5	26
8	Polyelectrolyte adsorption on an oppositely charged spherical polyelectrolyte brush. <i>Soft Matter</i> , 2013, 9, 5087.	2.7	25
9	Electroosmotic flow in nanochannels with voltage-controlled polyelectrolyte brushes: Dependence on grafting density and normal electric field. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 805-811.	2.1	21
10	Anomalous electrokinetics at hydrophobic surfaces: Effects of ion specificity and interfacial water structure. <i>Electrochimica Acta</i> , 2018, 259, 1011-1020.	5.2	20
11	Electrostatic binding of oppositely charged surfactants to spherical polyelectrolyte brushes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 9706.	2.8	15
12	Electroosmotic Flow in Mixed Polymer Brush-Grafted Nanochannels. <i>Polymers</i> , 2016, 8, 438.	4.5	15
13	Translocation of nanoparticles through a polymer brush-modified nanochannel. <i>Biomicrofluidics</i> , 2012, 6, 034101.	2.4	14
14	Self-assembled nanostructures of bottle-brush polyelectrolytes with oppositely charged surfactants: a computational simulation study. <i>Soft Matter</i> , 2011, 7, 6522.	2.7	12
15	Polyampholyte Brushes Grafted on the Surface of a Spherical Cavity: Effect of the Charged Monomer Sequence, Grafting Density, and Chain Stiffness. <i>Langmuir</i> , 2015, 31, 6375-6384.	3.5	12
16	Interactions of polyelectrolyte brushes with oppositely charged surfactants. <i>Colloid and Polymer Science</i> , 2011, 289, 1089-1102.	2.1	11
17	Dynamics and limitations of spontaneous polyelectrolyte intrusion into a charged nanocavity. <i>Physical Review E</i> , 2014, 90, 060601.	2.1	11
18	Thermophoresis of Nanodroplets in Deformed Carbon Nanotubes Due to Nanoindentation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 29750-29758.	3.1	11

#	ARTICLE	IF	CITATIONS
19	Molecular dynamics study of electrocoalescence of pure water and salty nanodroplets. <i>Journal of Molecular Liquids</i> , 2021, 332, 115895.	4.9	11
20	Electrostatic complexation of linear polyelectrolytes with soft spherical nanoparticles. <i>Chemical Physics Letters</i> , 2013, 586, 51-55.	2.6	10
21	Conformational Behavior of Bottle-Brush Polyelectrolytes with Charged and Neutral Side Chains. <i>Macromolecular Theory and Simulations</i> , 2010, 19, 298-308.	1.4	9
22	Nanopores with Solvent-Sensitive Polymer Brushes: A Dissipative Particle Dynamics Simulation. <i>Journal of Macromolecular Science - Physics</i> , 2012, 51, 275-287.	1.0	9
23	Anisotropic electrokinetic transport in channels modified with patterned polymer brushes. <i>Soft Matter</i> , 2019, 15, 4132-4145.	2.7	9
24	Molecular dynamics simulations of end-grafted polymers with charged side chains. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011, 49, 882-889.	2.1	8
25	Modulation of Electroosmotic Flow Using Polyelectrolyte Brushes: A Molecular Dynamics Study. <i>Macromolecular Theory and Simulations</i> , 2012, 21, 145-152.	1.4	7
26	DNA packaging in viral capsids with peptide arms. <i>Soft Matter</i> , 2017, 13, 600-607.	2.7	7
27	Contact dynamics of nanodroplets in carbon nanotubes: effects of electric field, tube radius, and salt ions. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	2.2	7
28	Electrohydrodynamics in nanochannels coated by mixed polymer brushes: effects of electric field strength and solvent quality. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2018, 26, 035003.	2.0	6
29	Insights into the hydrogen-bond cross-linking effects of small multiamine molecules on physical and mechanical properties of poly(vinyl alcohol) by molecular dynamics simulations. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2021, 29, 035012.	2.0	6
30	Charged Nanoparticle Transport in Polymer-Grafted Nanochannels. <i>Journal of Macromolecular Science - Physics</i> , 2013, 52, 852-860.	1.0	5
31	Hofmeister effect for electrokinetic transport at ordered DNA layers. <i>Microfluidics and Nanofluidics</i> , 2016, 20, 1.	2.2	5
32	Morphologies of spherical polyampholyte brushes: Effects of counterion valence and charged monomer sequence. <i>Polymer</i> , 2017, 113, 233-246.	3.8	5
33	Interaction and dynamics of two nanodroplets separated by monolayer graphene. <i>Journal of Molecular Liquids</i> , 2021, , 116987.	4.9	4
34	Electrophoresis of Bottle-Brush Polyelectrolytes in an Attractive Nanochannel. <i>Macromolecular Theory and Simulations</i> , 2012, 21, 492-499.	1.4	3
35	Effect of Counterion Valence on Conformational Behavior of Spherical Polyelectrolyte Brushes Confined between Two Parallel Walls. <i>Polymers</i> , 2018, 10, 363.	4.5	3
36	Transport of polymer-modified nanoparticles in nanochannels coated with polymers. <i>RSC Advances</i> , 2019, 9, 38944-38951.	3.6	3

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37	Impact of surface charge density and motor force upon polyelectrolyte packaging in viral capsids. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1054-1065.	2.1	2
38	Responsive behavior of polyampholyte brushes in electric fields. Modelling and Simulation in Materials Science and Engineering, 2016, 24, 085012.	2.0	2
39	Physical deposition behavior of charged amphiphilic diblock copolymers: Effect of charge distribution and electric field. Polymer Science - Series A, 2017, 59, 253-268.	1.0	2
40	Electrohydrodynamics of spherical polyampholyte-grafted nanoparticles: Multiscale simulations by coupling of molecular dynamics and lattice-boltzmann method. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1435-1448.	2.1	2
41	Understanding interactions between poly(styrene- <i>co</i> -sodium styrene sulfonate) and single-walled carbon nanotubes. Journal of Polymer Science, 2021, 59, 182-190.	3.8	2
42	Hybrid Particle-Continuum Simulations of Polymer Brushes in Shear Flow. Journal of Macromolecular Science - Physics, 2012, 51, 707-719.	1.0	0
43	Monte Carlo simulation of chromatin fibre confined in a nanochannel. E-Polymers, 2012, 12, .	3.0	0
44	Physical deposition behavior of stiff amphiphilic polyelectrolytes in an external electric field. Physica Scripta, 2017, 92, 085701.	2.5	0