

# Rudolf Podgornik

## List of Publications by Year in descending order

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290  
papers

9,062  
citations

38660

50  
h-index

69108

77  
g-index

307  
all docs

307  
docs citations

307  
times ranked

5641  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Structure of DNA-Liposome Complexes. <i>Journal of the American Chemical Society</i> , 1997, 119, 832-833.	6.6	378
2	Long range interactions in nanoscale science. <i>Reviews of Modern Physics</i> , 2010, 82, 1887-1944.	16.4	359
3	Electrostatic correlation forces between surfaces with surface specific ionic interactions. <i>Journal of Chemical Physics</i> , 1989, 91, 5840-5849.	1.2	151
4	The action of interhelical forces on the organization of DNA double helices: fluctuation-enhanced decay of electrostatic double-layer and hydration forces. <i>Macromolecules</i> , 1989, 22, 1780-1786.	2.2	146
5	Parametrization of direct and soft steric-undulatory forces between DNA double helical polyelectrolytes in solutions of several different anions and cations. <i>Biophysical Journal</i> , 1994, 66, 962-971.	0.2	145
6	Perspective: Coulomb fluids—Weak coupling, strong coupling, in between and beyond. <i>Journal of Chemical Physics</i> , 2013, 139, 150901.	1.2	145
7	DNA-DNA interactions. <i>Current Opinion in Structural Biology</i> , 1998, 8, 309-313.	2.6	134
8	Charge-Fluctuation Forces between Rodlike Polyelectrolytes: Pairwise Summability Reexamined. <i>Physical Review Letters</i> , 1998, 80, 1560-1563.	2.9	134
9	Ion-specific hydration effects: Extending the Poisson-Boltzmann theory. <i>Current Opinion in Colloid and Interface Science</i> , 2011, 16, 542-550.	3.4	133
10	Equation of State for DNA Liquid Crystals: Fluctuation Enhanced Electrostatic Double Layer Repulsion. <i>Physical Review Letters</i> , 1997, 78, 895-898.	2.9	127
11	Thermal-mechanical fluctuations of fluid membranes in confined geometries: the case of soft confinement. <i>Langmuir</i> , 1992, 8, 557-562.	1.6	122
12	Energies and pressures in viruses: contribution of nonspecific electrostatic interactions. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 3746-3765.	1.3	120
13	Dielectric decrement as a source of ion-specific effects. <i>Journal of Chemical Physics</i> , 2011, 134, 074705.	1.2	111
14	Osmotic Properties of Poly(Ethylene Glycols): Quantitative Features of Brush and Bulk Scaling Laws. <i>Biophysical Journal</i> , 2003, 84, 350-355.	0.2	108
15	Equation of state for polymer liquid crystals: Theory and experiment. <i>Physical Review E</i> , 1999, 59, 999-1008.	0.8	104
16	On virus growth and form. <i>Physics Reports</i> , 2020, 847, 1-102.	10.3	104
17	Key Interacting Residues between RBD of SARS-CoV-2 and ACE2 Receptor: Combination of Molecular Dynamics Simulation and Density Functional Calculation. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 4425-4441.	2.5	100
18	Bond orientational order, molecular motion, and free energy of high-density DNA mesophases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 4261-4266.	3.3	98

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19	Beyond standard Poisson–Boltzmann theory: ion-specific interactions in aqueous solutions. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 424106.	0.7	98
20	Inhomogeneous coulomb fluid. A functional integral approach. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1988, 84, 611-631.	1.1	93
21	Many-body effects in the van der Waals–Casimir interaction between graphene layers. <i>Physical Review B</i> , 2011, 84, .	1.1	82
22	The Role of Solution Conditions in the Bacteriophage PP7 Capsid Charge Regulation. <i>Biophysical Journal</i> , 2014, 107, 1970-1979.	0.2	79
23	Refusing to Twist: Demonstration of a Line Hexatic Phase in DNA Liquid Crystals. <i>Physical Review Letters</i> , 2000, 84, 3105-3108.	2.9	78
24	Osmotic properties of DNA: Critical evaluation of counterion condensation theory. <i>Physical Review E</i> , 2001, 64, 021907.	0.8	77
25	Polyelectrolyte bridging interactions between charged macromolecules. <i>Current Opinion in Colloid and Interface Science</i> , 2006, 11, 273-279.	3.4	76
26	Role of electrostatic interactions in the assembly of empty spherical viral capsids. <i>Physical Review E</i> , 2007, 76, 061906.	0.8	76
27	General theory of asymmetric steric interactions in electrostatic double layers. <i>Soft Matter</i> , 2016, 12, 1219-1229.	1.2	76
28	Nonspecific interactions in spontaneous assembly of empty versus functional single-stranded RNA viruses. <i>Physical Review E</i> , 2008, 78, 051915.	0.8	71
29	Entropy-Driven Softening of Fluid Lipid Bilayers by Alamethicin. <i>Langmuir</i> , 2007, 23, 11705-11711.	1.6	70
30	Molecular mechanism and binding free energy of doxorubicin intercalation in DNA. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3877-3893.	1.3	70
31	Elastic moduli renormalization in self-interacting stretchable polyelectrolytes. <i>Journal of Chemical Physics</i> , 2000, 113, 9343-9350.	1.2	66
32	Strong-Coupling Electrostatics in the Presence of Dielectric Inhomogeneities. <i>Physical Review Letters</i> , 2008, 101, 188101.	2.9	66
33	Self-consistent-field theory for confined polyelectrolyte chains. <i>The Journal of Physical Chemistry</i> , 1992, 96, 884-896.	2.9	65
34	Universal Thermal Radiation Drag on Neutral Objects. <i>Physical Review Letters</i> , 2003, 91, 220801.	2.9	64
35	Electrical Conduction in Native Deoxyribonucleic Acid: Hole Hopping Transfer Mechanism?. <i>Physical Review Letters</i> , 2003, 90, 098101.	2.9	63
36	A Phenomenological One-Parameter Equation of State for Osmotic Pressures of PEG and Other Neutral Flexible Polymers in Good Solvents. <i>Journal of Physical Chemistry B</i> , 2009, 113, 3709-3714.	1.2	63

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37	Colloidal interactions mediated via polyelectrolytes. <i>Journal of Chemical Physics</i> , 1995, 102, 9423-9434.	1.2	62
38	Ions in Mixed Dielectric Solvents: Density Profiles and Osmotic Pressure between Charged Interfaces. <i>Journal of Physical Chemistry B</i> , 2009, 113, 6001-6011.	1.2	62
39	Colloidal interactions between monoclonal antibodies in aqueous solutions. <i>Journal of Colloid and Interface Science</i> , 2012, 384, 207-216.	5.0	61
40	Pseudo-Casimir Structural Force Drives Spinodal Dewetting in Nematic Liquid Crystals. <i>Physical Review Letters</i> , 2000, 84, 1228-1231.	2.9	60
41	van der Waals's London dispersion interactions for optically anisotropic cylinders: Metallic and semiconducting single-wall carbon nanotubes. <i>Physical Review B</i> , 2007, 76, .	1.1	59
42	Dielectric relaxation of DNA aqueous solutions. <i>Physical Review E</i> , 2007, 75, 021905.	0.8	59
43	Charge regulation with fixed and mobile charged macromolecules. <i>Current Opinion in Electrochemistry</i> , 2019, 13, 70-77.	2.5	55
44	Ion induced lamellar-lamellar phase transition in charged surfactant systems. <i>Journal of Chemical Physics</i> , 2006, 124, 224702.	1.2	54
45	On a Possible Microscopic Mechanism Underlying the Vapor Pressure Paradox. <i>Biophysical Journal</i> , 1997, 72, 942-952.	0.2	53
46	Colloidal DNA. <i>Current Opinion in Colloid and Interface Science</i> , 1998, 3, 534-539.	3.4	53
47	How simple can a model of an empty viral capsid be? Charge distributions in viral capsids. <i>Journal of Biological Physics</i> , 2012, 38, 657-671.	0.7	53
48	Intra- and intermolecular atomic-scale interactions in the receptor binding domain of SARS-CoV-2 spike protein: implication for ACE2 receptor binding. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 18272-18283.	1.3	53
49	Watching molecules crowd: DNA double helices under osmotic stress. <i>Biophysical Chemistry</i> , 1995, 57, 111-121.	1.5	52
50	Forces between CTAB-Covered Glass Surfaces Interpreted as an Interaction-Driven Surface Instability. <i>The Journal of Physical Chemistry</i> , 1995, 99, 9491-9496.	2.9	52
51	Nonadditivity in van der Waals interactions within multilayers. <i>Journal of Chemical Physics</i> , 2006, 124, 044709.	1.2	51
52	Degradation science: Mesoscopic evolution and temporal analytics of photovoltaic energy materials. <i>Current Opinion in Solid State and Materials Science</i> , 2015, 19, 212-226.	5.6	51
53	An analytic treatment of the first-order correction to the Poisson-Boltzmann interaction free energy in the case of counterion-only Coulomb fluid. <i>Journal of Physics A</i> , 1990, 23, 275-284.	1.6	50
54	Dressed counterions: Strong electrostatic coupling in the presence of salt. <i>Journal of Chemical Physics</i> , 2010, 132, 124701.	1.2	50

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55	RNA topology remodels electrostatic stabilization of viruses. <i>Physical Review E</i> , 2014, 89, 032707.	0.8	50
56	General theory of charge regulation and surface differential capacitance. <i>Journal of Chemical Physics</i> , 2018, 149, 104701.	1.2	50
57	Binding Interactions between Receptor-Binding Domain of Spike Protein and Human Angiotensin Converting Enzyme-2 in Omicron Variant. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 3915-3921.	2.1	49
58	Molecular fluctuations in the packing of polymeric liquid crystals. <i>Macromolecules</i> , 1990, 23, 2265-2269.	2.2	48
59	Fluctuation-Induced Interaction between Randomly Charged Dielectrics. <i>Physical Review Letters</i> , 2010, 104, 060601.	2.9	48
60	An electrostatic-surface stability interpretation of the "hydrophobic" force inferred to occur between mica plates in solutions of soluble surfactants. <i>Chemical Physics</i> , 1991, 154, 477-483.	0.9	47
61	Protein-DNA Interactions Determine the Shapes of DNA Toroids Condensed in Virus Capsids. <i>Biophysical Journal</i> , 2011, 100, 2209-2216.	0.2	47
62	Polyelectrolyte-mediated bridging interactions. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004, 42, 3539-3556.	2.4	46
63	Counterion-mediated electrostatic interactions between helical molecules. <i>Soft Matter</i> , 2009, 5, 868-877.	1.2	46
64	Adaptive Resolution Simulation of a DNA Molecule in Salt Solution. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 5035-5044.	2.3	46
65	pH Dependence of Charge Multipole Moments in Proteins. <i>Biophysical Journal</i> , 2017, 113, 1454-1465.	0.2	46
66	The free energy, enthalpy and entropy of hydration of phospholipid bilayer membranes and their difference on the interfacial separation. <i>Chemical Physics Letters</i> , 1982, 91, 193-196.	1.2	45
67	Electrostatic image effects for counterions between charged planar walls. <i>European Physical Journal E</i> , 2007, 23, 265-274.	0.7	45
68	Quantitative nanoscale electrostatics of viruses. <i>Nanoscale</i> , 2015, 7, 17289-17298.	2.8	45
69	Casimir force in liquid crystals close to the nematic-isotropic phase transition. <i>Chemical Physics Letters</i> , 1998, 295, 99-104.	1.2	43
70	Buckling, fluctuations, and collapse in semiflexible polyelectrolytes. <i>Physical Review E</i> , 1999, 60, 1956-1966.	0.8	43
71	Two-body polyelectrolyte-mediated bridging interactions. <i>Journal of Chemical Physics</i> , 2003, 118, 11286-11296.	1.2	43
72	Weak- and strong-coupling electrostatic interactions between asymmetrically charged planar surfaces. <i>Physical Review E</i> , 2008, 78, 061105.	0.8	42

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73	Electrostatic forces between charged surfaces in the presence of a polyelectrolyte chain. <i>The Journal of Physical Chemistry</i> , 1991, 95, 5249-5255.	2.9	41
74	The role of multipoles in counterion-mediated interactions between charged surfaces: strong and weak coupling. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 424103.	0.7	41
75	Dressed counterions: Polyvalent and monovalent ions at charged dielectric interfaces. <i>Physical Review E</i> , 2011, 84, 011502.	0.8	41
76	Charge regulation in ionic solutions: Thermal fluctuations and Kirkwood-Schumaker interactions. <i>Physical Review E</i> , 2015, 91, 022715.	0.8	41
77	Disentangling the Effects of Shape and Dielectric Response in van der Waals Interactions between Anisotropic Bodies. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19083-19094.	1.5	41
78	Implication of the solvent effect, metal ions and topology in the electronic structure and hydrogen bonding of human telomeric G-quadruplex DNA. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 21573-21585.	1.3	41
79	Quenched charge disorder and Coulomb interactions. <i>Physical Review E</i> , 2005, 72, 041402.	0.8	40
80	Thermodynamics of nanospheres encapsulated in virus capsids. <i>Physical Review E</i> , 2010, 81, 051919.	0.8	39
81	Synonymous Mutations Reduce Genome Compactness in Icosahedral ssRNA Viruses. <i>Biophysical Journal</i> , 2015, 108, 194-202.	0.2	39
82	Counterion-mediated weak and strong coupling electrostatic interaction between like-charged cylindrical dielectrics. <i>Journal of Chemical Physics</i> , 2010, 132, 224703.	1.2	38
83	Continuity of states between the cholesteric $\hat{a}'$ line hexatic transition and the condensation transition in DNA solutions. <i>Scientific Reports</i> , 2015, 4, 6877.	1.6	38
84	Effect of magnesium ions on the structure of DNA thin films: an infrared spectroscopy study. <i>Nucleic Acids Research</i> , 2016, 44, 8456-8464.	6.5	38
85	Positional, Reorientational, and Bond Orientational Order in DNA Mesophases. <i>Physical Review Letters</i> , 2001, 87, 218101.	2.9	36
86	Chirality-dependent properties of carbon nanotubes: electronic structure, optical dispersion properties, Hamaker coefficients and van der Waals–London dispersion interactions. <i>RSC Advances</i> , 2013, 3, 823-842.	1.7	36
87	Effects of RNA branching on the electrostatic stabilization of viruses. <i>Physical Review E</i> , 2016, 94, 022408.	0.8	36
88	Solvent structure effects in the macroscopic theory of van der Waals forces. <i>Journal of Chemical Physics</i> , 1987, 87, 5957-5967.	1.2	35
89	Statistical analysis of sizes and shapes of virus capsids and their resulting elastic properties. <i>Journal of Biological Physics</i> , 2013, 39, 215-228.	0.7	35
90	Bending Rigidities and Interdomain Forces in Membranes with Coexisting Lipid Domains. <i>Biophysical Journal</i> , 2015, 108, 2833-2842.	0.2	35

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91	Pseudo-Casimir effect in nematic liquid crystals in frustrating geometries. <i>Physical Review E</i> , 2000, 61, 5361-5371.	0.8	34
92	Symmetry effects in electrostatic interactions between two arbitrarily charged spherical shells in the Debye-Hückel approximation. <i>Journal of Chemical Physics</i> , 2013, 138, 074902.	1.2	34
93	Wetting-Driven Casimir Force in Nematic Liquid Crystals. <i>Physical Review Letters</i> , 1999, 82, 1189-1192.	2.9	33
94	Electronic Structure, Dielectric Response and Surface Charge Distribution of RGD (1FUV) Peptide. <i>Scientific Reports</i> , 2014, 4, 5605.	1.6	33
95	Electrostatic interactions between the SARS-CoV-2 virus and a charged electret fibre. <i>Soft Matter</i> , 2021, 17, 4296-4303.	1.2	33
96	Stability of elastic icosahedral shells under uniform external pressure: Application to viruses under osmotic pressure. <i>Physical Review E</i> , 2009, 79, 011919.	0.8	32
97	Field-theoretic description of charge regulation interaction. <i>European Physical Journal E</i> , 2014, 37, 5.	0.7	32
98	Determination of the second virial coefficient of bovine serum albumin under varying pH and ionic strength by composition-gradient multi-angle static light scattering. <i>Journal of Biological Physics</i> , 2015, 41, 85-97.	0.7	32
99	The Hydration Effect and Selectivity of Alkali Metal Ions on Poly(ethylene glycol) Models in Cyclic and Linear Topology. <i>Journal of Physical Chemistry A</i> , 2017, 121, 4721-4731.	1.1	32
100	Electrostatic disorder-induced interactions in inhomogeneous dielectrics. <i>Europhysics Letters</i> , 2006, 74, 712-718.	0.7	31
101	One-dimensional counterion gas between charged surfaces: Exact results compared with weak- and strong-coupling analyses. <i>Journal of Chemical Physics</i> , 2009, 130, 094504.	1.2	30
102	Impact of Hydrogen Bonding in the Binding Site between Capsid Protein and MS2 Bacteriophage ssRNA. <i>Journal of Physical Chemistry B</i> , 2017, 121, 6321-6330.	1.2	30
103	Charge regulating macro-ions in salt solutions: screening properties and electrostatic interactions. <i>Soft Matter</i> , 2018, 14, 6058-6069.	1.2	30
104	Partially Annealed Disorder and Collapse of Like-Charged Macroions. <i>Journal of Statistical Physics</i> , 2008, 133, 659-681.	0.5	29
105	Attraction between neutral dielectrics mediated by multivalent ions in an asymmetric ionic fluid. <i>Journal of Chemical Physics</i> , 2012, 137, 174704.	1.2	29
106	Asymmetric Coulomb fluids at randomly charged dielectric interfaces: Anti-fragility, overcharging and charge inversion. <i>Journal of Chemical Physics</i> , 2014, 141, 174704.	1.2	29
107	Dispersion interactions between optically anisotropic cylinders at all separations: Retardation effects for insulating and semiconducting single-wall carbon nanotubes. <i>Physical Review B</i> , 2009, 80, .	1.1	28
108	Stretching of Polyelectrolyte Chains by Oppositely Charged Aggregates. <i>Europhysics Letters</i> , 1993, 24, 501-506.	0.7	27

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109	From toroidal to rod-like condensates of semiflexible polymers. <i>Journal of Chemical Physics</i> , 2014, 140, 064902.	1.2	27
110	Order and interactions in DNA arrays: Multiscale molecular dynamics simulation. <i>Scientific Reports</i> , 2017, 7, 4775.	1.6	27
111	On a reformulation of the theory of Lifshitz–van der Waals interactions in multilayered systems. <i>Journal of Chemical Physics</i> , 2003, 119, 1070-1077.	1.2	26
112	Nonmonotonic fluctuation-induced interactions between dielectric slabs carrying charge disorder. <i>Journal of Chemical Physics</i> , 2010, 133, 174702.	1.2	26
113	Electrostatic interactions mediated by polarizable counterions: Weak and strong coupling limits. <i>Journal of Chemical Physics</i> , 2012, 137, 174903.	1.2	26
114	Electronic Structure and Partial Charge Distribution of Doxorubicin in Different Molecular Environments. <i>ChemPhysChem</i> , 2015, 16, 1451-1460.	1.0	26
115	Van der Waals interactions in a dielectric with continuously varying dielectric function. <i>Journal of Chemical Physics</i> , 2004, 121, 7467-7473.	1.2	25
116	Spontaneous symmetry breaking of charge-regulated surfaces. <i>Soft Matter</i> , 2018, 14, 985-991.	1.2	25
117	The one-dimensional Coulomb lattice fluid capacitor. <i>Journal of Chemical Physics</i> , 2012, 137, 064901.	1.2	24
118	From polymers to proteins: the effect of side chains and broken symmetry on the formation of secondary structures within a Wang–Landau approach. <i>Soft Matter</i> , 2016, 12, 4783-4793.	1.2	24
119	Thermodynamic Dissection of the Intercalation Binding Process of Doxorubicin to dsDNA with Implications of Ionic and Solvent Effects. <i>Journal of Physical Chemistry B</i> , 2020, 124, 7803-7818.	1.2	24
120	Polymer-Boundary Surface Interactions and Bilayer Curvature Elasticity. <i>Europhysics Letters</i> , 1993, 21, 245-251.	0.7	23
121	Screening and Fundamental Length Scales in Semidilute Na-DNA Aqueous Solutions. <i>Physical Review Letters</i> , 2006, 97, 098303.	2.9	23
122	Osmotic Pressure Induced Coupling between Cooperativity and Stability of a Helix-Coil Transition. <i>Physical Review Letters</i> , 2012, 109, 068101.	2.9	23
123	Size-dependent forced PEG partitioning into channels: VDAC, OmpC, and $\beta$ -hemolysin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 9003-9008.	3.3	23
124	Electrical conduction in macroscopically oriented deoxyribonucleic and hyaluronic acid samples. <i>Physical Review E</i> , 2005, 71, 041901.	0.8	22
125	Overscreening in a 1D lattice Coulomb gas model of ionic liquids. <i>Europhysics Letters</i> , 2012, 97, 28004.	0.7	22
126	Nonequilibrium Tuning of the Thermal Casimir Effect. <i>Physical Review Letters</i> , 2016, 116, 240602.	2.9	22



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127	Open-Boundary Molecular Dynamics of a DNA Molecule in a Hybrid Explicit/Implicit Salt Solution. <i>Biophysical Journal</i> , 2018, 114, 2352-2362.	0.2	22
128	Packing nanomechanics of viral genomes. <i>European Physical Journal E</i> , 2008, 26, 317-25.	0.7	21
129	Viscous compressible hydrodynamics at planes, spheres and cylinders with finite surface slip. <i>European Physical Journal E</i> , 2010, 32, 147-164.	0.7	21
130	Multivalent ion effects on electrostatic stability of virus-like nano-shells. <i>Journal of Chemical Physics</i> , 2013, 139, 154709.	1.2	21
131	Ultra-large-scale ab initio quantum chemical computation of bio-molecular systems: The case of spike protein of SARS-CoV-2 virus. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 1288-1301.	1.9	21
132	Wormlike chains in the large-dlimit. <i>Journal of Chemical Physics</i> , 2001, 114, 8637-8648.	1.2	20
133	Graded interface models for more accurate determination of van der Waals's London dispersion interactions across grain boundaries. <i>Physical Review B</i> , 2006, 74, .	1.1	20
134	Effects of dielectric disorder on van der Waals interactions in slab geometries. <i>Physical Review E</i> , 2010, 81, 051117.	0.8	20
135	Structure and dynamics of hyaluronic acid semidilute solutions: A dielectric spectroscopy study. <i>Physical Review E</i> , 2010, 82, 011922.	0.8	20
136	Forces between surfaces with surface-specific interactions in a dilute electrolyte. <i>Chemical Physics Letters</i> , 1989, 156, 71-75.	1.2	19
137	Confined nematic polymers: Order and packing in a nematic drop. <i>Physical Review E</i> , 2010, 82, 011708.	0.8	19
138	Molecular recognition by van der Waals interaction between polymers with sequence-specific polarizabilities. <i>Journal of Chemical Physics</i> , 2015, 142, 214904.	1.2	19
139	Hofmeister Effects in Monoclonal Antibody Solution Interactions. <i>Journal of Physical Chemistry B</i> , 2015, 119, 10375-10389.	1.2	19
140	The undulations of hydrated phospholipid multilayers may be due to water-mediated bilayer-bilayer interactions. <i>Chemical Physics Letters</i> , 1981, 84, 209-212.	1.2	18
141	Screwlike order, macroscopic chirality, and elastic distortions in high-density DNA mesophases. <i>Physical Review E</i> , 2007, 75, 030901.	0.8	18
142	Ionic cloud distribution close to a charged surface in the presence of salt. <i>Europhysics Letters</i> , 2008, 82, 48001.	0.7	18
143	Mutations of Omicron Variant at the Interface of the Receptor Domain Motif and Human Angiotensin-Converting Enzyme-2. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2870.	1.8	18
144	A variational approach to charged polymer chains: Polymer mediated interactions. <i>Journal of Chemical Physics</i> , 1993, 99, 7221-7231.	1.2	17

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145	Thermal Casimir effect between random layered dielectrics. <i>Physical Review A</i> , 2009, 79, .	1.0	17
146	Relaxation of the thermal Casimir force between net neutral plates containing Brownian charges. <i>Physical Review E</i> , 2014, 89, 032117.	0.8	17
147	Unified description of solvent effects in the helix-coil transition. <i>Physical Review E</i> , 2014, 89, 022723.	0.8	17
148	Optical properties and electronic transitions of DNA oligonucleotides as a function of composition and stacking sequence. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4589-4599.	1.3	17
149	van der Waals Interactions on the Mesoscale: Open-Science Implementation, Anisotropy, Retardation, and Solvent Effects. <i>Langmuir</i> , 2015, 31, 10145-10153.	1.6	17
150	Modulation of Elasticity and Interactions in Charged Lipid Multibilayers: Monovalent Salt Solutions. <i>Langmuir</i> , 2016, 32, 13546-13555.	1.6	17
151	DNA Equation of State: In Vitro vs In Viro. <i>Journal of Physical Chemistry B</i> , 2016, 120, 6051-6060.	1.2	17
152	Interactions between charged particles with bathing multivalent counterions: experiments vs. dressed ion theory. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10069-10080.	1.3	17
153	Anomalous multipole expansion: Charge regulation of patchy inhomogeneously charged spherical particles. <i>Journal of Chemical Physics</i> , 2018, 149, 163307.	1.2	17
154	Spontaneous Domain Formation in Spherically Confined Elastic Filaments. <i>Physical Review Letters</i> , 2019, 123, 047801.	2.9	17
155	Parametrization invariance and shape equations of elastic axisymmetric vesicles. <i>Physical Review E</i> , 1995, 51, 544-547.	0.8	15
156	Short-fragment Na-DNA dilute aqueous solutions: Fundamental length scales and screening. <i>Europhysics Letters</i> , 2008, 81, 68003.	0.7	15
157	Sample-to-sample fluctuations of electrostatic forces generated by quenched charge disorder. <i>Physical Review E</i> , 2011, 83, 011102.	0.8	15
158	Ordering of anisotropic polarizable polymer chains on the full many-body level. <i>Journal of Chemical Physics</i> , 2012, 136, 154905.	1.2	15
159	Sample-to-sample torque fluctuations in a system of coaxial randomly charged surfaces. <i>European Physical Journal E</i> , 2012, 35, 1-7.	0.7	15
160	Critical behavior of charge-regulated macro-ions. <i>Journal of Chemical Physics</i> , 2020, 153, 024901.	1.2	15
161	Phase Separation of Polyelectrolytes: The Effect of Charge Regulation. <i>Journal of Physical Chemistry B</i> , 2021, 125, 7863-7870.	1.2	15
162	First-Principles Simulation of Dielectric Function in Biomolecules. <i>Materials</i> , 2021, 14, 5774.	1.3	15

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163	Computational Design of Miniproteins as SARS-CoV-2 Therapeutic Inhibitors. International Journal of Molecular Sciences, 2022, 23, 838.	1.8	15
164	van der Waals interactions across stratified media. Journal of Chemical Physics, 2004, 120, 3401-3405.	1.2	14
165	Long-range many-body polyelectrolyte bridging interactions. Journal of Chemical Physics, 2005, 122, 204902.	1.2	14
166	On the connected-charges Thomson problem. Europhysics Letters, 2006, 75, 631-637.	0.7	14
167	Effective interactions between fluid membranes. Physical Review E, 2015, 92, 022112.	0.8	14
168	Static polarizability effects on counterion distributions near charged dielectric surfaces: A coarse-grained Molecular Dynamics study employing the Drude model. European Physical Journal: Special Topics, 2016, 225, 1693-1705.	1.2	14
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