Igal Szleifer

List of Publications by Year
in descending order

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238 papers	18,436 citations	14655 66 h-index	14208 128 g-index
251 all docs	251 docs citations	251 times ranked	19967 citing authors

#	Article	IF	Citations
1	Emerging applications of stimuli-responsive polymer materials. Nature Materials, 2010, 9, 101-113.	27.5	5,007
2	Prevention of Protein Adsorption by Tethered Poly(ethylene oxide) Layers:â€‰ Experiments and Single-Chain Mean-Field Analysis. Langmuir, 1998, 14, 176-186.	3.5	407
3	Protein Adsorption on Surfaces with Grafted Polymers. Biophysical Journal, 1997, 72, 595-612.	0.5	396
4	Molecular theory of curvature elasticity in surfactant films. Journal of Chemical Physics, 1990, 92, 6800-6817.	3.0	337
5	Polymers and carbon nanotubesâ€"dimensionality, interactions and nanotechnology. Polymer, 2005, 46, 7803-7818.	3.8	276
6	Behavior of Surface-Anchored Poly(acrylic acid) Brushes with Grafting Density Gradients on Solid Substrates:â€‰ 1. Experiment. Macromolecules, 2007, 40, 8756-8764.	4.8	252
7	Kinetic and thermodynamic control of protein adsorption. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 9037-9041.	7.1	241
8	How and Why Nanoparticleâ€™s Curvature Regulates the Apparent pK_a of the Coating Ligands. Journal of the American Chemical Society, 2011, 133, 2192-2197.	13.7	208
9	Transport mechanisms in nanopores and nanochannels: can we mimic nature?. Materials Today, 2015, 18, 131-142.	14.2	206
10	Selective Dispersion of Single-Walled Carbon Nanotubes in the Presence of Polymers:Â the Role of Molecular and Colloidal Length Scales. Journal of the American Chemical Society, 2004, 126, 14850-14857.	13.7	204
11	Chain organization and thermodynamics in micelles and bilayers. I. Theory. Journal of Chemical Physics, 1985, 83, 3597-3611.	3.0	194
12	Curvature Elasticity of Pure and Mixed Surfactant Films. Physical Review Letters, 1988, 60, 1966-1969.	7.8	190
13	Prompting Physicians to Address a Daily Checklist and Process of Care and Clinical Outcomes. American Journal of Respiratory and Critical Care Medicine, 2011, 184, 680-686.	5.6	189
14	Biocompatible Nanoscale Dispersion of Single-Walled Carbon Nanotubes Minimizes in vivo Pulmonary Toxicity. Nano Letters, 2010, 10, 1664-1670.	9.1	183
15	Polymers and proteins: interactions at interfaces. Current Opinion in Solid State and Materials Science, 1997, 2, 337-344.	11.5	176
16	Weak polyelectrolytes tethered to surfaces: Effect of geometry, acidâ€"base equilibrium and electrical permittivity. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2638-2662.	2.1	171
17	Responsive Polymers End-Tethered in Solid-State Nanochannels: When Nanoconfinement Really Matters. Journal of the American Chemical Society, 2010, 132, 12404-12411.	13.7	171
18	Determination of the chemical potentials of polymeric systems from Monte Carlo simulations. Physical Review Letters, 1991, 66, 2935-2938.	7.8	162

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19	Physical Adsorption of Block Copolymers to SWNT and MWNT:Â A Nonwrapping Mechanism. Macromolecules, 2007, 40, 3676-3685.	4.8	155
20	Kinetics and Thermodynamics of Protein Adsorption: A Generalized Molecular Theoretical Approach. Biophysical Journal, 2001, 80, 2568-2589.	0.5	150
21	Behavior of Surface-Anchored Poly(acrylic acid) Brushes with Grafting Density Gradients on Solid Substrates:â€‰ 2. Theory. Macromolecules, 2007, 40, 8765-8773.	4.8	149
22	Surface-Grafted Polysarcosine as a Peptoid Antifouling Polymer Brush. Langmuir, 2012, 28, 16099-16107.	3.5	146
23	Kinetics of Protein Adsorption and Desorption on Surfaces with Grafted Polymers. Biophysical Journal, 2005, 89, 1516-1533.	0.5	144
24	Aggregation Behavior of a Lattice Model for Amphiphiles. Langmuir, 1997, 13, 5022-5031.	3.5	139
25	Effect of charge, hydrophobicity, and sequence of nucleoporins on the translocation of model particles through the nuclear pore complex. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3363-3368.	7.1	139
26	Electrostatic Unfolding and Interactions of Albumin Driven by pH Changes: A Molecular Dynamics Study. Journal of Physical Chemistry B, 2014, 118, 921-930.	2.6	138
27	Geometric curvature controls the chemical patchiness and self-assembly of nanoparticles. Nature Nanotechnology, 2013, 8, 676-681.	31.5	136
28	Tethered Polymer Layers. Advances in Chemical Physics, 2007, , 165-260.	0.3	133
29	Molecular Theory of Weak Polyelectrolyte Gels: The Role of pH and Salt Concentration. Macromolecules, 2011, 44, 147-158.	4.8	125
30	Tethered polymer layers: phase transitions and reduction of protein adsorption. Macromolecular Rapid Communications, 2000, 21, 423-448.	3.9	119
31	Lysozyme Adsorption on Polyethylene Surfaces: Why Are Long Simulations Needed?. Langmuir, 2011, 27, 12074-12081.	3.5	118
32	On lyotropic behavior of molecular bottle-brushes: A Monte Carlo computer simulation study. Journal of Chemical Physics, 1997, 107, 3267-3276.	3.0	117
33	Monte Carlo calculation of phase equilibria for a bead-spring polymeric model. Macromolecules, 1994, 27, 400-406.	4.8	114
34	Antifouling Glycocalyx-Mimetic Peptoids. Journal of the American Chemical Society, 2013, 135, 13015-13022.	13.7	113
35	Statistical thermodynamic theory of grafted polymeric layers. Journal of Chemical Physics, 1993, 98, 5006-5018.	3.0	110
36	Self-organization of grafted polyelectrolyte layers via the coupling of chemical equilibrium and physical interactions. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5300-5305.	7.1	108

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37	Membrane curvature enables N-Ras lipid anchor sorting to liquid-ordered membrane phases. Nature Chemical Biology, 2015, 11, 192-194.	8.0	108
38	Monolayers of diblock copolymer at the air-water interface: the attractive monomer-surface case. European Physical Journal B, 1998, 3, 365-375.	1.5	104
39	Covalent-supramolecular hybrid polymers as muscle-inspired anisotropic actuators. Nature Communications, 2018, 9, 2395.	12.8	102
40	Stimuli-responsive polymers grafted to nanopores and other nano-curved surfaces: structure, chemical equilibrium and transport. Soft Matter, 2012, 8, 7292.	2.7	99
41	Molecular dynamics simulations of ice growth from supercooled water. Molecular Physics, 2005, 103, 2957-2967.	1.7	98
42	Molecular Dynamics Simulation of Lysozyme Adsorption/Desorption on Hydrophobic Surfaces. Journal of Physical Chemistry B, 2012, 116, 10189-10194.	2.6	97
43	Phase Behavior and Charge Regulation of Weak Polyelectrolyte Grafted Layers. Physical Review Letters, 2007, 98, 018302.	7.8	96
44	Protein adsorption on tethered polymer layers: effect of polymer chain architecture and composition. Physica A: Statistical Mechanics and Its Applications, 1997, 244, 370-388.	2.6	92
45	Chain packing statistics and thermodynamics of amphiphile monolayers. The Journal of Physical Chemistry, 1990, 94, 5081-5089.	2.9	91
46	Effect of Side Chain Rigidity on the Elasticity of Comb Copolymer Cylindrical Brushes:Â A Monte Carlo Simulation Study. Macromolecules, 1999, 32, 4439-4443.	4.8	91
47	Chain organization and thermodynamics in micelles and bilayers. II. Model calculations. Journal of Chemical Physics, 1985, 83, 3612-3620.	3.0	90
48	Morphology Control of Hairy Nanopores. ACS Nano, 2011, 5, 4737-4747.	14.6	89
49	Ion Transport and Molecular Organization Are Coupled in Polyelectrolyte-Modified Nanopores. Journal of the American Chemical Society, 2011, 133, 17753-17763.	13.7	88
50	Surface tension, line tension, and wetting. Molecular Physics, 1992, 75, 925-943.	1.7	86
51	Salt-Induced Depression of Lower Critical Solution Temperature in a Surface-Grafted Neutral Thermoresponsive Polymer. Macromolecular Rapid Communications, 2006, 27, 697-701.	3.9	86
52	On the Structure and Pressure of Tethered Polymer Layers in Good Solvent. Macromolecules, 1995, 28, 3197-3204.	4.8	82
53	Pressure isotherms, phase transition, instability, and structure of tethered polymers in good, Î˜, and poor solvents. Journal of Chemical Physics, 1994, 100, 3210-3223.	3.0	81
54	Transport Rectification in Nanopores with Outer Membranes Modified with Surface Charges and Polyelectrolytes. ACS Nano, 2013, 7, 9085-9097.	14.6	81

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55	Size and Structure of Spontaneously Forming Liposomes in Lipid/PEG-Lipid Mixtures. Biophysical Journal, 2002, 83, 2419-2439.	0.5	80
56	Chain statistics in micelles and bilayers: Effects of surface roughness and internal energy. Journal of Chemical Physics, 1986, 85, 5345-5358.	3.0	79
57	The Role of Solution Conditions in the Bacteriophage PP7 Capsid Charge Regulation. Biophysical Journal, 2014, 107, 1970-1979.	0.5	79
58	Molecular Design of Antifouling Polymer Brushes Using Sequenceâ€Specific Peptoids. Advanced Materials Interfaces, 2015, 2, 1400225.	3.7	77
59	Extended conformations of isolated molecular bottle-brushes: Influence of side-chain topology. Macromolecular Theory and Simulations, 1998, 7, 211-216.	1.4	76
60	Effect of Molecular Structure on the Adsorption of Protein on Surfaces with Grafted Polymers. Langmuir, 2002, 18, 5497-5510.	3.5	76
61	Phase Diagram of a Ternary Mixture of Cholesterol and Saturated and Unsaturated Lipids Calculated from a Microscopic Model. Physical Review Letters, 2006, 96, 098101.	7.8	73
62	Spontaneous liposome formation induced by grafted poly(ethylene oxide) layers: Theoretical prediction and experimental verification. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 1032-1037.	7.1	72
63	Macromolecular Crowding as a Regulator of Gene Transcription. Biophysical Journal, 2014, 106, 1801-1810.	0.5	72
64	Statistical thermodynamics of molecular organization in mixed micelles and bilayers. Journal of Chemical Physics, 1987, 86, 7094-7109.	3.0	71
65	Aggregation and Self-Assembly of Amphiphilic Block Copolymers in Aqueous Dispersions of Carbon Nanotubes. Langmuir, 2008, 24, 4625-4632.	3.5	71
66	Statistical thermodynamics of polymers near surfaces. Current Opinion in Colloid and Interface Science, 1996, 1, 416-423.	7.4	69
67	Prevention of protein adsorption by flexible and rigid chain molecules. Colloids and Surfaces B: Biointerfaces, 2000, 18, 169-182.	5.0	69
68	Structural and thermodynamic properties of endâ€grafted polymers on curved surfaces. Journal of Chemical Physics, 1995, 102, 8662-8669.	3.0	66
69	An Experimentalâ€“Theoretical Analysis of Protein Adsorption on Peptidomimetic Polymer Brushes. Langmuir, 2012, 28, 2288-2298.	3.5	66
70	Albumin Hydrogels Formed by Electrostatically Triggered Self-Assembly and Their Drug Delivery Capability. Biomacromolecules, 2014, 15, 3625-3633.	5.4	65
71	Molecular Theory of Chemically Modified Electrodes by Redox Polyelectrolytes under Equilibrium Conditions:â€‰ Comparison with Experiment. Journal of Physical Chemistry C, 2008, 112, 458-471.	3.1	64
72	The Global Relationship between Chromatin Physical Topology, Fractal Structure, and Gene Expression. Scientific Reports, 2017, 7, 41061.	3.3	64

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73	Design of Multifunctional Nanogate in Response to Multiple External Stimuli Using Amphiphilic Diblock Copolymer. Journal of the American Chemical Society, 2017, 139, 6422-6430.	13.7	64
74	The effects of chemical fixation on the cellular nanostructure. Experimental Cell Research, 2017, 358, 253-259.	2.6	64
75	Structural Effects and Translocation of Doxorubicin in a DPPC/Chol Bilayer: The Role of Cholesterol. Biophysical Journal, 2011, 101, 378-385.	0.5	62
76	Dissipative self-assembly of particles interacting through time-oscillatory potentials. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9751-9756.	7.1	62
77	Controlled release of proteins from polymer-modified surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 5769-5774.	7.1	61
78	Temperature dependence of ice critical nucleus size. Journal of Chemical Physics, 2011, 135, 034508.	3.0	60
79	Mesoporous Hybrid Thin Film Membranes with PMETAC@Silica Architectures: Controlling Ionic Gating through the Tuning of Polyelectrolyte Density. Chemistry of Materials, 2015, 27, 808-821.	6.7	60
80	Structure and tension of the interface between dilute polymer solutions. Journal of Chemical Physics, 1989, 90, 7524-7534.	3.0	59
81	Statistical thermodynamics of amphiphile chains in micelles. Proceedings of the National Academy of Sciences of the United States of America, 1984, 81, 4601-4605.	7.1	58
82	Optical Properties of Responsive Hybrid Au@Polymer Nanoparticles. ACS Nano, 2012, 6, 8397-8406.	14.6	58
83	Competitive adsorption in model charged protein mixtures: Equilibrium isotherms and kinetics behavior. Journal of Chemical Physics, 2003, 119, 1053-1065.	3.0	57
84	Ligandâ''Receptor Interactions in Tethered Polymer Layers. Langmuir, 2005, 21, 11342-11351.	3.5	56
85	Label-free imaging of the native, living cellular nanoarchitecture using partial-wave spectroscopic microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6372-E6381.	7.1	56
86	A Molecular Theory of Polymer Gels. Macromolecules, 2002, 35, 1373-1380.	4.8	55
87	Phase separation of saturated and mono-unsaturated lipids as determined from a microscopic model. Journal of Chemical Physics, 2005, 122, 044904.	3.0	55
88	Self-Assembly of Model Nonionic Amphiphilic Molecules. Langmuir, 1999, 15, 7901-7911.	3.5	54
89	Specific Salt Effects on Poly(ethylene oxide) Electrolyte Solutions. Macromolecules, 2011, 44, 1719-1727.	4.8	54
90	Monte Carlo simulation and molecular theory of tethered polyelectrolytes. Journal of Chemical Physics, 2007, 126, 244902.	3.0	53

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91	Crowding-Induced Structural Alterations of Random-Loop Chromosome Model. Physical Review Letters, 2011, 106, 168102.	7.8	52
92	Ionic Conductance of Polyelectrolyte-Modified Nanochannels: Nanoconfinement Effects on the Coupled Protonation Equilibria of Polyprotic Brushes. Journal of Physical Chemistry C, 2016, 120, 4789-4798.	3.1	52
93	Redox and Acidâ^'Base Coupling in Ultrathin Polyelectrolyte Films. Langmuir, 2008, 24, 2869-2877.	3.5	51
94	Stability of Superparamagnetic Iron Oxide Nanoparticles at Different pH Values: Experimental and Theoretical Analysis. Langmuir, 2012, 28, 6246-6255.	3.5	51
95	Molecular theory of weak polyelectrolyte thin films. Soft Matter, 2012, 8, 1344-1354.	2.7	51
96	A new meanâ€field theory for dilute polymer solutions: Phase diagram, conformational behavior and interfacial properties. Journal of Chemical Physics, 1990, 92, 6940-6952.	3.0	50
97	Monte Carlo simulation of the collapseâ€coil transition in homopolymers. Journal of Chemical Physics, 1992, 97, 6802-6808.	3.0	50
98	The Role of Hydrogen Bonding in Tethered Polymer Layers. Journal of Physical Chemistry B, 2008, 112, 16238-16248.	2.6	49
99	Experimental and theoretical investigation of chain length and surface coverage on fouling of surface grafted polypeptoids. Biointerphases, 2009, 4, FA22-FA32.	1.6	49
100	Interleaflet Coupling and Domain Registry in Phase-Separated Lipid Bilayers. Biophysical Journal, 2011, 100, 996-1004.	0.5	48
101	Utilizing polymers for shaping the interfacial behavior of carbon nanotubes. Soft Matter, 2006, 2, 24-28.	2.7	47
102	Enhanced binding of antibodies generated during chronic HIV infection to mucus component MUC16. Mucosal Immunology, 2016, 9, 1549-1558.	6.0	47
103	Macrogenomic engineering via modulation of the scaling of chromatin packing density. Nature Biomedical Engineering, 2017, 1, 902-913.	22.5	47
104	Monte Carlo simulations of chain molecules in confined environments. Journal of Chemical Physics, 1995, 102, 9069-9076.	3.0	46
105	Effects of block copolymerâ€™s architecture on its association with lipid membranes: Experiments and simulations. Journal of Chemical Physics, 2007, 127, 114904.	3.0	46
106	Phase Behavior of Grafted Polymers in Poor Solvents. Europhysics Letters, 1994, 28, 19-24.	2.0	44
107	Ions at the ice/vapor interface. Chemical Physics Letters, 2007, 436, 99-103.	2.6	44
108	Structure and Interactions of Aggrecans: Statistical Thermodynamic Approach. Biophysical Journal, 2008, 95, 4570-4583.	0.5	43

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109	Phase Behavior of Lipid Bilayers under Tension. Biophysical Journal, 2012, 102, 517-522.	0.5	43
110	How Does Confinement Change Ligandâ€“Receptor Binding Equilibrium? Protein Binding in Nanopores and Nanochannels. Journal of the American Chemical Society, 2015, 137, 12539-12551.	13.7	43
111	Molecular dynamics simulation of ice growth from supercooled pure water and from salt solution. Annals of Glaciology, 2006, 44, 113-117.	1.4	40
112	Born energy, acid-base equilibrium, structure and interactions of end-grafted weak polyelectrolyte layers. Journal of Chemical Physics, 2014, 140, 024910.	3.0	39
113	Competitive calcium ion binding to end-tethered weak polyelectrolytes. Soft Matter, 2018, 14, 2365-2378.	2.7	38
114	Structure and dynamics of nanoconfined water and aqueous solutions. European Physical Journal E, 2021, 44, 136.	1.6	38
115	Streptavidinâ€'Biotin Binding in the Presence of a Polymer Spacer. A Theoretical Description. Langmuir, 2009, 25, 12283-12292.	3.5	37
116	Nanoscale chromatin imaging and analysis platform bridges 4D chromatin organization with molecular function. Science Advances, 2021, 7, .	10.3	37
117	Disordered chromatin packing regulates phenotypic plasticity. Science Advances, 2020, 6, eaax6232.	10.3	34
118	Transport in nanopores and nanochannels: some fundamental challenges and nature-inspired solutions. Materials Today Advances, 2020, 5, 100047.	5.2	34
119	Phase transitions in thin films of symmetric binary polymer mixtures. Molecular Physics, 1994, 81, 867-872.	1.7	33
120	The influence of chromosome density variations on the increase in nuclear disorder strength in carcinogenesis. Physical Biology, 2011, 8, 015004.	1.8	33
121	What is the role of curvature on the properties of nanomaterials for biomedical applications?. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2016, 8, 334-354.	6.1	33
122	Second virial coefficients of chain molecules: A Monte Carlo study. Molecular Physics, 1994, 81, 851-866.	1.7	32
123	Physical and data structure of 3D genome. Science Advances, 2020, 6, eaay4055.	10.3	32
124	pH-Controlled Nanoaggregation in Amphiphilic Polymer Co-networks. ACS Nano, 2013, 7, 2693-2704.	14.6	31
125	Nonmonotonic Diffusion of Particles Among Larger Attractive Crowding Spheres. Physical Review Letters, 2014, 113, 138302.	7.8	31
126	Adsorption of model charged proteins on charged surfaces with grafted polymers. Molecular Physics, 2002, 100, 2993-3003.	1.7	30

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127	Depletion Effect on Polymers Induced by Small Depleting Spheres. Journal of Physical Chemistry C, 2010, 114, 20864-20869.	3.1	30
128	Halide Affinity for the Waterâ^'Air Interface in Aqueous Solutions of Mixtures of Sodium Salts. Journal of Physical Chemistry A, 2011, 115, 5895-5899.	2.5	30
129	Hypercapnia Alters Expression of Immune Response, Nucleosome Assembly and Lipid Metabolism Genes in Differentiated Human Bronchial Epithelial Cells. Scientific Reports, 2018, 8, 13508.	3.3	30
130	Control of Carbon Nanotubeâ^'Surface Interactions:Â The Role of Grafted Polymers. Langmuir, 2005, 21, 12072-12075.	3.5	29
131	New insight into the electrochemical desorption of alkanethiol SAMs on gold. Physical Chemistry Chemical Physics, 2012, 14, 12355.	2.8	29
132	Non-monotonic swelling of surface grafted hydrogels induced by pH and/or salt concentration. Journal of Chemical Physics, 2014, 141, 124909.	3.0	29
133	Ligandâ^'Receptor Interactions between Surfaces: The Role of Binary Polymer Spacers. Langmuir, 2008, 24, 10324-10333.	3.5	28
134	Relationship between dynamical entropy and energy dissipation far from thermodynamic equilibrium. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16339-16343.	7.1	28
135	Differential Mechanisms of Tenofovir and Tenofovir Disoproxil Fumarate Cellular Transport and Implications for Topical Preexposure Prophylaxis. Antimicrobial Agents and Chemotherapy, 2016, 60, 1667-1675.	3.2	28
136	Nanocompartmentalization of the Nuclear Pore Lumen. Biophysical Journal, 2020, 118, 219-231.	0.5	28
137	Behavior of ligand binding assays with crowded surfaces: Molecular model of antigen capture by antibody-conjugated nanoparticles. PLoS ONE, 2017, 12, e0185518.	2.5	28
138	Cluster Structure and Corralling Effect Driven by Interaction Mismatch in Two Dimensional Mixtures. Physical Review Letters, 2006, 96, 028701.	7.8	26
139	Stability and Liquid-Liquid Phase Separation in Mixed Saturated Lipid Bilayers. Biophysical Journal, 2009, 96, 3977-3986.	0.5	26
140	How protonation modulates the interaction between proteins and pH-responsive hydrogel films. Current Opinion in Colloid and Interface Science, 2019, 41, 27-39.	7.4	26
141	Lysozyme adsorption in pH-responsive hydrogel thin-films: the non-trivial role of acidâ€“base equilibrium. Soft Matter, 2015, 11, 6669-6679.	2.7	25
142	The Greater Genomic Landscape: The Heterogeneous Evolution of Cancer. Cancer Research, 2016, 76, 5605-5609.	0.9	25
143	Calculating Partition Coefficients of Chain Anchors in Liquid-Ordered and Liquid-Disordered Phases. Biophysical Journal, 2010, 98, 1883-1892.	0.5	24
144	Adsorption of Superparamagnetic Iron Oxide Nanoparticles on Silica and Calcium Carbonate Sand. Langmuir, 2014, 30, 784-792.	3.5	24

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145	Enveloping of Charged Proteins by Lipid Bilayers. Journal of Physical Chemistry B, 2004, 108, 1491-1496.	2.6	23
146	Tunable Diacetylene Polymerized Shell Microbubbles as Ultrasound Contrast Agents. Langmuir, 2012, 28, 3766-3772.	3.5	23
147	Structural transitions and dipole moment of water clusters (H2O)n=4â€“100. Journal of Chemical Physics, 2010, 133, 024506.	3.0	22
148	The Rate of Energy Dissipation Determines Probabilities of Nonâ€equilibrium Assemblies. Angewandte Chemie - International Edition, 2013, 52, 10304-10308.	13.8	22
149	Self-Organized Polyelectrolyte End-Grafted Layers Under Nanoconfinement. ACS Nano, 2014, 8, 9998-10008.	14.6	22
150	Adsorption and protonation of peptides and proteins in pH responsive gels. Journal Physics D: Applied Physics, 2016, 49, 323001.	2.8	22
151	Mechanical properties of a collagen fibril under simulated degradation. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 549-557.	3.1	22
152	Statistical mechanics of solvent induced forces and vibrational frequency shifts. Low density expansions and Monte Carlo simulations. Journal of Chemical Physics, 1993, 99, 9954-9961.	3.0	21
153	Stability and Phase Separation in Mixed Monopolar Lipid/Bolalipid Layers. Biophysical Journal, 2007, 93, 2609-2621.	0.5	21
154	Effects of the Salt Concentration on Charge Regulation in Tethered Polyacid Monolayers. Langmuir, 2011, 27, 4679-4689.	3.5	21
155	Structural and Dynamical Characteristics of Peptoid Oligomers with Achiral Aliphatic Side Chains Studied by Molecular Dynamics Simulation. Journal of Physical Chemistry B, 2011, 115, 10967-10975.	2.6	21
156	On the stability of nanoparticles coated with polyelectrolytes in high salinity solutions. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1689-1699.	2.1	21
157	Anomalies in supercooled NaCl aqueous solutions: A microscopic perspective. Journal of Chemical Physics, 2011, 134, 244510.	3.0	20
158	How to optimize binding of coated nanoparticles: coupling of physical interactions, molecular organization and chemical state. Biomaterials Science, 2013, 1, 814.	5.4	20
159	Controlling swelling/deswelling of stimuli-responsive hydrogel nanofilms in electric fields. Soft Matter, 2016, 12, 8359-8366.	2.7	20
160	Time Dependence of Lysozyme Adsorption on End-Grafted Polymer Layers of Variable Grafting Density and Length. Langmuir, 2012, 28, 2122-2130.	3.5	19
161	Effect of calcium ions on the interactions between surfaces end-grafted with weak polyelectrolytes. Journal of Chemical Physics, 2018, 149, 163309.	3.0	19
162	Surfactant driven surface anchoring transitions in liquid crystal thin films. Soft Matter, 2010, 6, 5482.	2.7	18

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163	Analysis of three-dimensional chromatin packing domains by chromatin scanning transmission electron microscopy (ChromSTEM). Scientific Reports, 2022, 12, .	3.3	18
164	Structure and tension of the boundary between surface phases. Molecular Physics, 1993, 80, 729-739.	1.7	17
165	An isotopic effect in self-assembly of amphiphilic block copolymers: the role of hydrogen bonds. Soft Matter, 2009, 5, 5003.	2.7	17
166	Mode specific elastic constants for the gel, liquid-ordered, and liquid-disordered phases of DPPC/DOPC/cholesterol model lipid bilayers. Faraday Discussions, 2013, 161, 177-191.	3.2	17
167	Halide and sodium ion parameters for modeling aqueous solutions in TIP5P-Ew water. Chemical Physics Letters, 2010, 489, 113-117.	2.6	16
168	Orderâ€“disorder transition induced by surfactant micelles in single-walled carbon nanotubes dispersions. Soft Matter, 2010, 6, 5289.	2.7	16
169	Interacting nanoparticles with functional surface groups. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 852-862.	2.1	16
170	Multimodal interference-based imaging of nanoscale structure and macromolecular motion uncovers UV induced cellular paroxysm. Nature Communications, 2019, 10, 1652.	12.8	16
171	Theoretical Modeling of Chemical Equilibrium in Weak Polyelectrolyte Layers on Curved Nanosystems. Polymers, 2020, 12, 2282.	4.5	16
172	Voltage-Triggered Structural Switching of Polyelectrolyte-Modified Nanochannels. Macromolecules, 2020, 53, 2616-2626.	4.8	16
173	Quantitatively Modeling the Equilibrium Properties of Thiol-Decorated Gold Nanoparticles. Langmuir, 2008, 24, 8448-8451.	3.5	15
174	The water supercooled regime as described by four common water models. Journal of Chemical Physics, 2013, 139, 024506.	3.0	15
175	Molecular and Thermodynamic Factors Explain the Passivation Properties of Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 31, 11491-11501.	3.5	15
176	Controlling the hydration rate of a hydrophilic matrix in the core of an intravaginal ring determines antiretroviral release. Journal of Controlled Release, 2016, 224, 176-183.	9.9	15
177	Dynamics of dissipative self-assembly of particles interacting through oscillatory forces. Faraday Discussions, 2016, 186, 399-418.	3.2	15
178	Routes for nanoparticle translocation through polymer-brush-modified nanopores. Journal of Physics Condensed Matter, 2018, 30, 274006.	1.8	15
179	Dynamic Crowding Regulates Transcription. Biophysical Journal, 2020, 118, 2117-2129.	0.5	15
180	Analytical theory and Monte Carlo simulations of gel formation of charged chains. Soft Matter, 2009, 5, 629-636.	2.7	14

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181	Equilibrium Adsorption of Hexahistidine on pH-Responsive Hydrogel Nanofilms. Langmuir, 2014, 30, 15335-15344.	3.5	14
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