Michael Schick

List of Publications by Year
in descending order

79 papers	4,723 citations	117625 34 h-index	95266 68 g-index
87 all docs	87 docs citations	87 times ranked	2961 citing authors

#	Article	IF	Citations
1	A Theoretical Basis for Nanodomains. Journal of Membrane Biology, 2022, 255, 451-460.	2.1	3
2	Recent Experiments Support a Microemulsion Origin of Plasma Membrane Domains: Dependence of Domain Size on Physical Parameters. Membranes, 2020, 10, 167.	3.0	7
3	Model Plasma Membrane Exhibits a Microemulsion in Both Leaves Providing a Foundation for â€œRaftsâ€. Biophysical Journal, 2020, 118, 1019-1031.	0.5	19
4	Cholesterol-Dependent Bending Energy Is Important in Cholesterol Distribution of the Plasma Membrane. Biophysical Journal, 2019, 116, 2356-2366.	0.5	37
5	17. On the origin of â€œRaftsâ€ The plasma membrane as a microemulsion. , 2019, , 499-514.		1
6	Strongly Correlated Rafts in Both Leaves of an Asymmetric Bilayer. Journal of Physical Chemistry B, 2018, 122, 3251-3258.	2.6	18
7	Theories of Equilibrium Inhomogeneous Fluids. , 2018, , 125-140.		1
8	Orienting Thin Films of Lamellar Block Copolymer: The Combined Effect of Mobile Ions and Electric Field. Macromolecules, 2018, 51, 7881-7892.	4.8	7
9	The Effect of Solutes on the Temperature of Miscibility Transitions in Multicomponent Membranes. Biophysical Journal, 2017, 113, 1814-1821.	0.5	6
10	On the puzzling distribution of cholesterol in the plasma membrane. Chemistry and Physics of Lipids, 2016, 199, 35-38.	3.2	11
11	Shift in membrane miscibility transition temperature upon addition of short-chain alcohols. Physical Review E, 2016, 94, 062114.	2.1	3
12	Effect of mobile ions on the electric field needed to orient charged diblock copolymer thin films. Journal of Chemical Physics, 2015, 143, 134902.	3.0	9
13	Microemulsions, modulated phases and macroscopic phase separation: a unified picture of rafts. Essays in Biochemistry, 2015, 57, 21-32.	4.7	12
14	Macroscopic Phase Separation, Modulated Phases, and Microemulsions: A Unified Picture of Rafts. Biophysical Journal, 2014, 106, 1979-1985.	0.5	50
15	How Cholesterol Could Be Drawn to the Cytoplasmic Leaf of the Plasma Membrane by Phosphatidylethanolamine. Biophysical Journal, 2014, 107, 2337-2344.	0.5	34
16	Model of a Raft in Both Leaves of an Asymmetric Lipid Bilayer. Biophysical Journal, 2013, 105, 1406-1413.	0.5	52
17	Membrane heterogeneity: Manifestation of a curvature-induced microemulsion. Physical Review E, 2012, 85, 031902.	2.1	82
18	Phase Behavior of Lipid Bilayers under Tension. Biophysical Journal, 2012, 102, 517-522.	0.5	43

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19	Interleaflet Coupling and Domain Registry in Phase-Separated Lipid Bilayers. Biophysical Journal, 2011, 100, 996-1004.	0.5	48
20	Membrane Fusion: the Emergence of a New Paradigm. Journal of Statistical Physics, 2011, 142, 1317-1323.	1.2	27
21	An Alternate Path for Fusion and its Exploration by Field-Theoretic Means. Current Topics in Membranes, 2011, 68, 295-323.	0.9	8
22	Ionic effects on the electric field needed to orient dielectric lamellae. Journal of Chemical Physics, 2010, 132, 164903.	3.0	8
23	Calculating Partition Coefficients of Chain Anchors in Liquid-Ordered and Liquid-Disordered Phases. Biophysical Journal, 2010, 98, 1883-1892.	0.5	24
24	Thermodynamics and the Phase Diagrams of Block Copolymers in Electric Fields. Series in Sof Condensed Matter, 2009, , 197-214.	0.1	1
25	Phase Behavior of a Model Bilayer Membrane with Coupled Leaves. Biophysical Journal, 2008, 94, 869-877.	0.5	53
26	Line Tensions, Correlation Lengths, and Critical Exponents in Lipid Membranes Near Critical Points. Biophysical Journal, 2008, 95, 236-246.	0.5	305
27	Dependence of the energies of fusion on the intermembrane separation: Optimal and constrained. Journal of Chemical Physics, 2007, 127, 075102.	3.0	14
28	Block Copolymers in Electric Fields:Â A Comparison of Single-Mode and Self-Consistent-Field Approximations. Macromolecules, 2006, 39, 289-293.	4.8	36
29	Field Theoretic Study of Bilayer Membrane Fusion: II. Mechanism of a Stalk-Hole Complex. Biophysical Journal, 2006, 90, 915-926.	0.5	96
30	Phase Separation in Bilayer Lipid Membranes: Effects on the Inner Leaf Due to Coupling to the Outer Leaf. Biophysical Journal, 2006, 91, 2928-2935.	0.5	45
31	Biological and synthetic membranes: What can be learned from a coarse-grained description?. Physics Reports, 2006, 434, 113-176.	25.6	279
32	Biological physics in four lectures and three applications. Physica A: Statistical Mechanics and Its Applications, 2006, 369, 100-121.	2.6	1
33	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
34	Fusion of biological membranes. Pramana - Journal of Physics, 2005, 64, 1127-1134.	1.8	3
35	Phase separation of saturated and mono-unsaturated lipids as determined from a microscopic model. Journal of Chemical Physics, 2005, 122, 044904.	3.0	55
36	The central role of line tension in the fusion of biological membranes. Molecular Physics, 2005, 103, 3055-3059.	1.7	9

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37	Structural Changes of Diblock Copolymer Melts Due to an External Electric Field:Â A Self-Consistent-Field Theory Study. Macromolecules, 2005, 38, 5766-5773.	4.8	51
38	Field Theoretic Study of Bilayer Membrane Fusion. I. Hemifusion Mechanism. Biophysical Journal, 2004, 87, 3277-3290.	0.5	154
39	Coarse-grained models and collective phenomena in membranes: Computer simulation of membrane fusion. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 1441-1450.	2.1	72
40	A New Mechanism of Model Membrane Fusion Determined from Monte Carlo Simulation. Biophysical Journal, 2003, 85, 1611-1623.	0.5	143
41	New mechanism of membrane fusion. Journal of Chemical Physics, 2002, 116, 2342-2345.	3.0	84
42	Theory ofTjunctions and symmetric tilt grain boundaries in pure and mixed polymer systems. Journal of Chemical Physics, 2002, 117, 10315-10320.	3.0	31
43	Molecular theory of hydrophobic mismatch between lipids and peptides. Journal of Chemical Physics, 2002, 116, 10478-10484.	3.0	31
44	Theory of Tunable pH-Sensitive Vesicles of Anionic and Cationic Lipids or Anionic and Neutral Lipids. Biophysical Journal, 2001, 80, 1703-1711.	0.5	31
45	Distribution of lipids in nonlamellar phases of their mixtures. Journal of Chemical Physics, 2000, 112, 6063-6072.	3.0	12
46	Fluctuations in mixtures of lamellar- and nonlamellar-forming lipids. Journal of Chemical Physics, 2000, 112, 10599-10607.	3.0	7
47	Theory of Lipid Polymorphism: Application to Phosphatidylethanolamine and Phosphatidylserine. Biophysical Journal, 2000, 78, 34-46.	0.5	54
48	Polymer Brushes:Â From Self-Consistent Field Theory to Classical Theory. Macromolecules, 1998, 31, 5105-5122.	4.8	121
49	Phase Behavior of Binary Homopolymer/Diblock Blends:Â Temperature and Chain Length Dependence. Macromolecules, 1998, 31, 1109-1113.	4.8	76
50	Interfaces of Modulated Phases. Physical Review Letters, 1997, 79, 1058-1061.	7.8	62
51	Phase Behavior of Ternary Homopolymer/Diblock Blends:Â Microphase Unbinding in the Symmetric System. Macromolecules, 1997, 30, 3916-3920.	4.8	61
52	Phase Behavior of Ternary Homopolymer/Diblock Blends:Â Influence of Relative Chain Lengths. Macromolecules, 1997, 30, 137-144.	4.8	88
53	Wetting at a solid-liquid-liquid-vapor tetra point. Surface Science, 1997, 382, 178-181.	1.9	29
54	Simple Integral Equation for the Polymer Brush. Macromolecules, 1996, 29, 713-717.	4.8	18

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55	Ordered Phases in Rodâ^'Coil Diblock Copolymers. Macromolecules, 1996, 29, 8900-8903.	4.8	90
56	Effects of Polymer Brush Self-Assembly on Spreading and Thin Film Stability. Langmuir, 1996, 12, 4950-4959.	3.5	25
57	Wetting, Unbinding, and Ultralow Tensions in Amphiphilic Systems. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 272-278.	0.9	9
58	Self-assembly of block copolymers. Current Opinion in Colloid and Interface Science, 1996, 1, 329-336.	7.4	123
59	Bulk and interfacial thermodynamics of a symmetric, ternary homopolymerâ€"copolymer mixture: A Monte Carlo study. Journal of Chemical Physics, 1996, 105, 8885-8901.	3.0	106
60	Structure and nucleation of pores in polymeric bilayers: A Monte Carlo simulation. Journal of Chemical Physics, 1996, 105, 8282-8292.	3.0	64
61	Liquid phases of Langmuir monolayers. Journal of Chemical Physics, 1995, 102, 2080-2091.	3.0	33
62	Effects of fluctuations on the wetting transition in amphiphilic systems. Journal of Chemical Physics, 1995, 102, 7197-7203.	3.0	12
63	Effect of capillary wave fluctuations on wetting transitions in balanced amphiphilic systems. European Physical Journal B, 1995, 97, 189-192.	1.5	2
64	Stable and unstable phases of a diblock copolymer melt. Physical Review Letters, 1994, 72, 2660-2663.	7.8	1,236
65	Copolymers as amphiphiles in ternary mixtures: An analysis employing disorder, equimaxima, and Lifshitz lines. Journal of Chemical Physics, 1992, 96, 7728-7737.	3.0	91
66	Correlations in a rigidâ€"flexible diblock copolymer system. Journal of Chemical Physics, 1992, 96, 730-739.	3.0	77
67	Mixtures of rigid and flexible nematogenic polymers. Journal of Chemical Physics, 1992, 96, 721-729.	3.0	63
68	Lattice model of microemulsions: The effect of fluctuations in one and two dimensions. Physical Review A, 1990, 42, 2137-2149.	2.5	39
69	Simple model for ternary mixtures with nonionic surfactants. Journal of Chemical Physics, 1988, 89, 4368-4373.	3.0	13
70	Complete and incomplete wetting by adsorbed solids. Physical Review B, 1984, 30, 209-214.	3.2	106
71	Summary Abstract: Twoâ€dimensional physisorbed phases. Journal of Vacuum Science and Technology, 1981, 18, 501-502.	1.9	0
72	Rod-Like Brownian Particles in Shear Flow: Sections 3.10â€" 3.16. , 0, , 216-283.		2

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73	Comparison of Self-Consistent Field Theory and Monte Carlo Simulations. , 0, , 179-281.		3
74	Polymer Dynamics in Melts. , 0, , 17-85.		0
75	An Introduction to Soft Matter. , 0, , 1-16.		0
76	Phase Behavior of Rod-Like Viruses and Virusâ€"Sphere Mixtures. , 0, , 1-86.		0
77	Rod-Like Brownian Particles in Shear Flow: Sections 3.1â€" 3.9. , 0, , 147-216.		5
78	Field Theory of Polymerâ€"Colloid Interactions. , 0, , 87-146.		1
79	Self-Consistent Field Theory and Its Applications. , 0, , 87-178.		17