Frans A M Leermakers

List of Publications by Year
in descending order

267 papers	7,290 citations	66250 44 h-index	107981 68 g-index
274 all docs	274 docs citations	274 times ranked	5892 citing authors

#	Article	IF	Citations
1	Charged Polymeric Brushes: Structure and Scaling Relations. Macromolecules, 1994, 27, 3249-3261.	2.2	240
2	Configuration of terminally attached chains at the solid/solvent interface: self-consistent field theory and a Monte Carlo model. Macromolecules, 1987, 20, 1692-1696.	2.2	230
3	On the Theory of Grafted Weak Polyacids. Macromolecules, 1994, 27, 3087-3093.	2.2	199
4	Analytical Self-Consistent-Field Model of Weak Polyacid Brushes. Macromolecules, 1995, 28, 3562-3569.	2.2	190
5	Double-Faced Micelles from Water-Soluble Polymers. Angewandte Chemie - International Edition, 2006, 45, 6673-6676.	7.2	174
6	Tethered Adsorbing Chains: Neutron Reflectivity and Surface Pressure of Spread Diblock Copolymer Monolayers. Langmuir, 1995, 11, 4467-4473.	1.6	148
7	Charged Lipid Vesicles: Effects of Salts on Bending Rigidity, Stability, and Size. Biophysical Journal, 2004, 87, 3882-3893.	0.2	128
8	Statistical thermodynamics of association colloids. I. Lipid bilayer membranes. Journal of Chemical Physics, 1988, 89, 3264-3274.	1.2	127
9	Self-Consistent-Field Modeling of Adsorbed Î²-Casein: Effects of pH and Ionic Strength on Surface Coverage and Density Profile. Journal of Colloid and Interface Science, 1996, 178, 681-693.	5.0	122
10	Bending Rigidity and Induced Persistence Length of Molecular Bottle Brushes:Â A Self-Consistent-Field Theory. Macromolecules, 2005, 38, 8891-8901.	2.2	122
11	Modeling the structure of a polydisperse polymer brush. Polymer, 2009, 50, 305-316.	1.8	104
12	Structure and Dynamics of Polyelectrolyte Complex Coacervates Studied by Scattering of Neutrons, X-rays, and Light. Macromolecules, 2013, 46, 4596-4605.	2.2	96
13	Room-Temperature Ionic Liquids: Excluded Volume and Ion Polarizability Effects in the Electrical Double-Layer Structure and Capacitance. Physical Review Letters, 2009, 103, 117801.	2.9	95
14	Screening in Solutions of Star-Branched Polyelectrolytes. Macromolecules, 1999, 32, 2365-2377.	2.2	93
15	Field Theoretical Analysis of Driving Forces for the Uptake of Proteins by Like-Charged Polyelectrolyte Brushes: Effects of Charge Regulation and Patchiness. Langmuir, 2010, 26, 249-259.	1.6	86
16	Electrical Double-Layer Capacitance in Room Temperature Ionic Liquids: Ion-Size and Specific Adsorption Effects. Journal of Physical Chemistry B, 2010, 114, 11149-11154.	1.2	79
17	Self-consistent-field modelling of adsorbed casein Interaction between two protein-coated surfaces. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1785-1790.	1.7	78
18	Self-Assembled Structures of Amphiphilic Ionic Block Copolymers: Theory, Self-Consistent Field Modeling and Experiment. Advances in Polymer Science, 2011, , 57-129.	0.4	78

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19	On the Mechanism of Uptake of Globular Proteins by Polyelectrolyte Brushes:Â A Two-Gradient Self-Consistent Field Analysis. Langmuir, 2007, 23, 3937-3946.	1.6	77
20	Statistical thermodynamics of association colloids. III. The gel to liquid phase transition of lipid bilayer membranes. Journal of Chemical Physics, 1988, 89, 6912-6924.	1.2	76
21	Theory of the Collapse of the Polyelectrolyte Brush. Macromolecules, 1996, 29, 8260-8270.	2.2	71
22	Dendritic versus Linear Polymer Brushes: Self-Consistent Field Modeling, Scaling Theory, and Experiments. Macromolecules, 2010, 43, 9555-9566.	2.2	65
23	On the Two-Population Structure of Brushes Made of Arm-Grafted Polymer Stars. Macromolecules, 2012, 45, 7260-7273.	2.2	65
24	Wetting of a Polymer Brush by a Chemically Identical Polymer Melt:â€‰ Phase Diagram and Film Stability. Langmuir, 2002, 18, 8871-8880.	1.6	62
25	Statistical thermodynamics of association colloids. 2. Lipid vesicles. The Journal of Physical Chemistry, 1989, 93, 7417-7426.	2.9	61
26	Why Surfaces Modified by Flexible Polymers Often Have a Finite Contact Angle for Good Solvents. Langmuir, 2006, 22, 1722-1728.	1.6	60
27	Modeling of Ionization and Conformations of Starlike Weak Polyelectrolytes. Macromolecules, 2014, 47, 4004-4016.	2.2	58
28	Grafted Adsorbing Polymers:â€‰ Scaling Behavior and Phase Transitions. Macromolecules, 1999, 32, 487-498.	2.2	56
29	Statistical thermodynamics of association colloids: V. critical micelle concentration, micellar size and shape. Journal of Colloid and Interface Science, 1990, 136, 231-241.	5.0	54
30	Ultrastrong Anchoring Yet Barrierâ€Free Adsorption of Composite Microgels at Liquid Interfaces. Advanced Materials Interfaces, 2014, 1, 1300121.	1.9	54
31	Self-consistent-field modelling of casein adsorption Comparison of results for Î±s1-casein and Î²-casein. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 425-432.	1.7	51
32	A Self-Consistent Field Analysis of the Neurofilament Brush with Amino-Acid Resolution. Biophysical Journal, 2007, 93, 1421-1430.	0.2	51
33	Dendron brushes and dendronized polymers: a theoretical outlook. Soft Matter, 2014, 10, 2093-2101.	1.2	51
34	Adsorption of Weak Polyelectrolytes on Surfaces with a Variable Charge. Self-Consistent-Field Calculations. Langmuir, 1997, 13, 4413-4421.	1.6	50
35	Coexistence of Spheres and Rods in Micellar Solution of Dodecyldimethylamine Oxide. Journal of Physical Chemistry B, 2004, 108, 5980-5988.	1.2	49
36	Electrostatic Interactions between Double Layers:Â Influence of Surface Roughness, Regulation, and Chemical Heterogeneities. Langmuir, 2004, 20, 5052-5065.	1.6	48

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37	Competitive Adsorption of Nonionic Surfactant and Nonionic Polymer on Silica. Langmuir, 2007, 23, 5532-5540.	1.6	48
38	Block copolymer adsorption studied by dynamic scanning angle reflectometry. Macromolecules, 1991, 24, 718-730.	2.2	47
39	On the Structure of Polymeric Micelles: Self-Consistent-Field Theory and Universal Properties for Volume Fraction Profiles. Macromolecules, 1995, 28, 3434-3443.	2.2	47
40	Multiblock Copolymers and Colloidal Stability. Journal of Colloid and Interface Science, 1994, 167, 124-134.	5.0	45
41	Adsorption of Semiflexible Polymers. Macromolecules, 1996, 29, 1172-1178.	2.2	45
42	Long Minority Chains in a Polymer Brush:Â A First-Order Adsorption Transition. Macromolecules, 1999, 32, 2004-2015.	2.2	45
43	Pearl-Necklace Structures in Coreâ"Shell Molecular Brushes: Experiments, Monte Carlo Simulations, and Self-Consistent Field Modeling. Macromolecules, 2008, 41, 4020-4028.	2.2	45
44	Self-consistent-field modeling of complex molecules with united atom detail in inhomogeneous systems. Cyclic and branched foreign molecules in dimyristoylphosphatidylcholine membranes. Journal of Chemical Physics, 1999, 110, 6560-6579.	1.2	44
45	Adhesion and Friction Properties of Polymer Brushes: Fluoro versus Nonfluoro Polymer Brushes at Varying Thickness. Langmuir, 2014, 30, 2068-2076.	1.6	44
46	Chain stiffness and bond correlations in polymer brushes. Journal of Chemical Physics, 1994, 101, 8214-8223.	1.2	42
47	Pair Potentials between Polymer-Coated Mesoscopic Particles. Langmuir, 1994, 10, 4514-4516.	1.6	41
48	Modeling the Structure and Antifouling Properties of a Polymer Brush of Grafted Comb-Polymers. Macromolecules, 2011, 44, 2334-2342.	2.2	41
49	Effect of the Ionic Strength and pH on the Equilibrium Structure of a Neurofilament Brush. Biophysical Journal, 2007, 93, 1452-1463.	0.2	39
50	Molecular Mechanism of the Renneting Process of Casein Micelles in Skim Milk, Examined by Viscosity and Light-Scattering Experiments and Simulated by Model SCF Calculations. Langmuir, 1999, 15, 6304-6313.	1.6	37
51	Molecular dynamics simulations of hydrated unsaturated lipid bilayers in the liquid-crystal phase and comparison to self-consistent field modeling. Physical Review E, 2003, 67, 011909.	0.8	37
52	Interaction of Particles with a Polydisperse Brush: A Self-Consistent-Field Analysis. Macromolecules, 2009, 42, 5881-5891.	2.2	37
53	Surfactantâ€"polymer interactions: molecular architecture does matter. Soft Matter, 2015, 11, 2504-2511.	1.2	37
54	Self-Consistent-Field Lattice Gas Model for the Surface Ordering Transition ofn-Hexadecane. Physical Review Letters, 1996, 76, 82-85.	2.9	35

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55	Self-consistent-field modeling of hydrated unsaturated lipid bilayers in the liquid-crystal phase and comparison to molecular dynamics simulations. Physical Review E, 2003, 67, 011910.	0.8	35
56	Adsorption of Molecular Brushes with Polyelectrolyte Backbones onto Oppositely Charged Surfaces: A Self-Consistent Field Theory. Langmuir, 2008, 24, 7232-7244.	1.6	35
57	Dendritic Spherical Polymer Brushes: Theory and Self-Consistent Field Modeling. Macromolecules, 2013, 46, 4651-4662.	2.2	35
58	The effects of local stiffness disparity on the surface segregation from binary polymer blends. Journal of Chemical Physics, 1995, 103, 10332-10346.	1.2	34
59	Adsorption of Comb Polymers. Macromolecules, 1996, 29, 1000-1005.	2.2	34
60	Self-Consistent-Field Analysis of Poly(ethylene oxide)â^'Poly(propylene oxide)â^'Poly(ethylene oxide) Surfactants:Â Micellar Structure, Critical Micellization Concentration, Critical Micellization Temperature, and Cloud Point. Langmuir, 2002, 18, 10467-10474.	1.6	34
61	The influence of charge ratio on transient networks of polyelectrolyte complex micelles. Soft Matter, 2012, 8, 104-117.	1.2	34
62	Influence of solution composition on fouling of anion exchange membranes desalinating polymer-flooding produced water. Journal of Colloid and Interface Science, 2019, 557, 381-394.	5.0	34
63	Adsorption Theory for Polydisperse Polymers. Macromolecules, 1994, 27, 4810-4816.	2.2	33
64	Thermodynamics and mechanics of bilayer membranes. Physical Review E, 2000, 62, 8453-8461.	0.8	33
65	Bending Moduli and Spontaneous Curvature. 2. Bilayers and Monolayers of Pure and Mixed Ionic Surfactants. Langmuir, 1994, 10, 1084-1092.	1.6	32
66	Coexistence of Crew-Cut and Starlike Spherical Micelles Composed of Copolymers with an Annealed Polyelectrolyte Block. Macromolecules, 2006, 39, 3628-3641.	2.2	32
67	Coverage and Disruption of Phospholipid Membranes by Oxide Nanoparticles. Langmuir, 2014, 30, 14581-14590.	1.6	32
68	Theoretical and experimental investigations of adsorbed protein structure at a fluid interface. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 994-998.	0.9	31
69	Polyelectrolytes tethered to a similarly charged surface. Journal of Chemical Physics, 2001, 114, 7700-7712.	1.2	31
70	Equilibrium Capillary Forces with Atomic Force Microscopy. Physical Review Letters, 2007, 99, 104504.	2.9	31
71	Structure of Multiresponsive Brush-Decorated Nanoparticles: A Combined Electrokinetic, DLS, and SANS Study. Langmuir, 2015, 31, 4779-4790.	1.6	31
72	Detailed Modeling of the Volume Fraction Profile of Adsorbed Polymer Layers Using Small-Angle Neutron Scattering. Langmuir, 2004, 20, 4480-4488.	1.6	30

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73	Entropic Stabilization and Equilibrium Size of Lipid Vesicles. Langmuir, 2007, 23, 6315-6320.	1.6	29
74	On the Curvature Energy of a Thin Membrane Decorated by Polymer Brushes. Macromolecules, 2008, 41, 478-488.	2.2	29
75	Theory of Brushes Formed by Î·-Shaped Macromolecules at Solidâ€“Liquid Interfaces. Langmuir, 2015, 31, 6514-6522.	1.6	29
76	Modelling the amorphous phase of a melt crystallized, semicrystalline polymer: segment distribution, chain stiffness, and deformation. Polymer, 1984, 25, 1577-1588.	1.8	28
77	Statistical thermodynamics of association colloids. IV. Inhomogeneous membrane systems. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1024, 139-151.	1.4	28
78	Adsorption of Charged Block Copolymers: Effect on Colloidal Stability. Macromolecules, 1995, 28, 1626-1634.	2.2	28
79	Self-Consistent-Field Prediction for the Persistence Length of Wormlike Micelles of Nonionic Surfactants. Journal of Physical Chemistry B, 2003, 107, 10912-10918.	1.2	28
80	How the projection domains of NF-L and Î±-internexin determine the conformations of NF-M and NF-H in neurofilaments. European Biophysics Journal, 2010, 39, 1323-1334.	1.2	28
81	Collapse of Polyelectrolyte Star. Theory and Modeling. Macromolecules, 2012, 45, 2145-2160.	2.2	27
82	Interactions between Brushes of Root-Tethered Dendrons. Macromolecules, 2014, 47, 6932-6945.	2.2	27
83	Brushes of Cycled Macromolecules: Structure and Lubricating Properties. Macromolecules, 2016, 49, 8758-8767.	2.2	27
84	Bioflocculants from wastewater: Insights into adsorption affinity, flocculation mechanisms and mixed particle flocculation based on biopolymer size-fractionation. Journal of Colloid and Interface Science, 2021, 581, 533-544.	5.0	27
85	Predictions of copolymer micelle behavior in immiscible solvents. Langmuir, 1992, 8, 429-436.	1.6	26
86	Depletion Zones in Polyelectrolyte Systems: Polydispersity Effects and Colloidal Stability. Langmuir, 1995, 11, 2996-3006.	1.6	26
87	Electrostatic hierarchical co-assembly in aqueous solutions of two oppositely charged double hydrophilic diblock copolymers. European Polymer Journal, 2009, 45, 2913-2925.	2.6	26
88	Ideal Mixing in Multicomponent Brushes of Branched Polymers. Macromolecules, 2015, 48, 8025-8035.	2.2	26
89	Modeling of the electrolyte ion-phospholipid layer interaction. Langmuir, 1994, 10, 1199-1206.	1.6	25
90	Adsorption of Tethered Polyelectrolytes onto Oppositely Charged Solidâ”Liquid Interfaces. Langmuir, 2001, 17, 1277-1293.	1.6	25

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91	Molecular modeling of lipid bilayers and the effect of protein-like inclusions. Physical Chemistry Chemical Physics, 2005, 7, 1996.	1.3	25
92	Stabilization of Polymersome Vesicles by an Interpenetrating Polymer Network. Macromolecules, 2007, 40, 329-333.	2.2	25
93	Complex coacervate core micro-emulsions. Soft Matter, 2008, 4, 1473.	1.2	25
94	Self-Consistent Field Modeling of Poly(ethylene oxide) Adsorption onto Silica:â€‰ The Multiple Roles of Electrolytes. Langmuir, 2008, 24, 1930-1942.	1.6	25
95	Pluronic polymersomes stabilized by core cross-linked polymer micelles. Soft Matter, 2009, 5, 4042.	1.2	25
96	Behavior of Weak Polyelectrolyte Brushes in Mixed Salt Solutions. Macromolecules, 2018, 51, 1198-1206.	2.2	25
97	On the self-similar structure of adsorbed polymer layers: dependence of the density profile on molecular weight and solution concentration. Macromolecules, 1992, 25, 3449-3453.	2.2	24
98	Exactly solved polymer models with conformational escape transitions of a coil-to-flower type. Europhysics Letters, 2002, 58, 292-298.	0.7	24
99	An Annealed Polyelectrolyte Brush in a Polarâ^'Nonpolar Binary Solvent:Â Effect of pH and Ionic Strength. Macromolecules, 2002, 35, 4739-4752.	2.2	24
100	Self-Consistent Field Modeling of Linear Nonionic Micelles. Journal of Physical Chemistry B, 2006, 110, 6300-6311.	1.2	24
101	Bending rigidity of mixed phospholipid bilayers and the equilibrium radius of corresponding vesicles. Physical Review E, 2007, 76, 011903.	0.8	24
102	Counterion Localization in Solutions of Starlike Polyelectrolytes and Colloidal Polyelectrolyte Brushes: A Self-Consistent Field Theory. Langmuir, 2008, 24, 10026-10034.	1.6	24
103	Gentle Immobilization of Nonionic Polymersomes on Solid Substrates. Langmuir, 2008, 24, 76-82.	1.6	24
104	Self-Consistent-Field Analysis of the Micellization of Carboxy-Modified Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td (oxid B, 2006, 110, 465-477.	1.2	23
105	Opposing Effects of Cation Binding and Hydration on the Bending Rigidity of Anionic Lipid Bilayers. Journal of Physical Chemistry B, 2007, 111, 7127-7132.	1.2	23
106	Phase behavior of flowerlike micelles in a SCF cell model. European Physical Journal E, 2008, 25, 163-173.	0.7	23
107	Comparison of Various Models to Describe the Chargeâ^'pH Dependence of Poly(acrylic acid). Journal of Chemical & Engineering Data, 2011, 56, 1602-1612.	1.0	23
108	Self-Assembly of Lysine-Based Dendritic Surfactants Modeled by the Self-Consistent Field Approach. Langmuir, 2018, 34, 1613-1626.	1.6	23

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109	Wetting Transition in a Polymer Brush:Â Polymer Droplet Coexisting with Two Film Thicknesses. Langmuir, 2000, 16, 3478-3481.	1.6	22
110	Capillary Adhesion in the Limit of Saturation:â€‰ Thermodynamics, Self-Consistent Field Modeling and Experiment. Langmuir, 2008, 24, 1308-1317.	1.6	22
111	Temperature effects in the mechanical desorption of an infinitely long lattice chain: Re-entrant phase diagrams. Journal of Chemical Physics, 2009, 130, 174704.	1.2	22
112	Persistence length of dendronized polymers: the self-consistent field theory. Soft Matter, 2015, 11, 9367-9378.	1.2	22
113	Adsorption of Polymers on Heterogeneous Surfaces. Macromolecules, 1994, 27, 1915-1921.	2.2	21
114	Modeling the interactions between phospholipid bilayer membranes with and without additives. The Journal of Physical Chemistry, 1995, 99, 17282-17293.	2.9	21
115	Thermodynamic derivation of mechanical expressions for interfacial parameters. Physical Chemistry Chemical Physics, 1999, 1, 4987-4994.	1.3	21
116	Effect of a Polymer Brush on Capillary Condensation. Langmuir, 2001, 17, 4459-4466.	1.6	21
117	Self-Consistent Field Model of Inhomogeneous Adsorption of Nonionic Surfactants onto Polystyrene Latex. Langmuir, 2003, 19, 878-887.	1.6	21
118	The Polymer Brush Model of Neurofilament Projections: Effect of Protein Composition. Biophysical Journal, 2010, 98, 462-469.	0.2	21
119	Pickering Emulsions: Wetting and Colloidal Stability of Hairy Particlesâ€”A Self-Consistent Field Theory. Langmuir, 2011, 27, 6574-6583.	1.6	21
120	Liquid Crystals of Self-Assembled DNA Bottlebrushes. Journal of Physical Chemistry B, 2015, 119, 4084-4092.	1.2	21
121	Modeling of Triblock Terpolymer Micelles with a Segregated Corona. Macromolecules, 2008, 41, 3668-3677.	2.2	20
122	Dendron and Hyperbranched Polymer Brushes in Good and Poor Solvents. Langmuir, 2017, 33, 1315-1325.	1.6	20
123	Modeling of Polyelectrolyte Adsorption from Micellar Solutions onto Biomimetic Substrates. Journal of Physical Chemistry B, 2017, 121, 8638-8651.	1.2	20
124	Self-consistent field theory for wetting of binary polymerâ€“solvent mixtures on rigid and soft interfaces. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 579-587.	1.7	19
125	First-order coil-to-flower transition of a polymer chain pinned near a stepwise external potential: Numerical, analytical, and scaling analysis. Journal of Chemical Physics, 2001, 115, 1586-1595.	1.2	19
126	A Self-Consistent-Field Analysis of the Surface Structure and Surface Tension of Partially Fluorinated Copolymers:â€‰ The Influence of Polymer Architecture. Macromolecules, 2002, 35, 5670-5680.	2.2	19

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127	Confinement-Induced Phase Behavior and Adsorption Regulation of Ionic Surfactants in the Aqueous Film between Charged Solids. Journal of Physical Chemistry B, 2004, 108, 15033-15042.	1.2	19
128	Small monodisperse unilamellar vesicles from binary copolymer mixtures. Soft Matter, 2009, 5, 4169.	1.2	19
129	On the polyelectrolyte brush model of neurofilaments. Soft Matter, 2009, 5, 2836.	1.2	19
130	Polymers at the Water/Air Interface, Surface Pressure Isotherms, and Molecularly Detailed Modeling. Langmuir, 2010, 26, 11850-11861.	1.6	19
131	Linking lipid architecture to bilayer structure and mechanics using self-consistent field modelling. Journal of Chemical Physics, 2014, 140, 065102.	1.2	19
132	One-step mild biorefinery of functional biomolecules from microalgae extracts. Reaction Chemistry and Engineering, 2018, 3, 182-187.	1.9	19
133	Amphiphilic Polymer Brush in a Mixture of Incompatible Liquids. Numerical Self-Consistent-Field Calculations. Macromolecules, 2000, 33, 1072-1081.	2.2	18
134	Depletion interaction measured by colloidal probe atomic force microscopy. Physical Chemistry Chemical Physics, 2004, 6, 4432.	1.3	18
135	Association Colloids and their Equilibrium Modelling. Fundamentals of Interface and Colloid Science, 2005, 5, 4.1-4.123.	0.1	18
136	Surface forces in a confined polymer melt: Self-consistent field analysis of full and restricted equilibrium cases. Physical Review E, 2005, 72, 021807.	0.8	18
137	Modeling of Confinement-Induced Phase Transitions for Surfactant Layers on Amphiphilic Surfaces. Langmuir, 2005, 21, 11534-11545.	1.6	18
138	New ends to the tale of tails: adsorption of comb polymers and the effect on colloidal stability. Soft Matter, 2009, 5, 1448.	1.2	18
139	Self-Assembled Structures of PMAAâ€“PMMA Block Copolymers: Synthesis, Characterization, and Self-Consistent Field Computations. Macromolecules, 2015, 48, 1194-1203.	2.2	18
140	Structure of Mixed Brushes Made of Arm-Grafted Polymer Stars and Linear Chains. Macromolecules, 2015, 48, 2263-2276.	2.2	18
141	Diblock Copolymer Adsorption on Small Particles. Langmuir, 1994, 10, 1331-1333.	1.6	17
142	Can Linear Micelles Bridge between Two Surfaces?. Journal of Physical Chemistry B, 2006, 110, 18415-18423.	1.2	17
143	Mechanical Unfolding of a Homopolymer Globule Studied by Self-Consistent Field Modeling. Macromolecules, 2009, 42, 5360-5371.	2.2	17
144	On the edge energy of lipid membranes and the thermodynamic stability of pores. Journal of Chemical Physics, 2015, 142, 034101.	1.2	17

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145	Responsive polymer brushes for controlled nanoparticle exposure. Nanoscale, 2015, 7, 17871-17878.	2.8	17
146	Modeling the Effect of Structural Details of Nonionic Surfactants on Micellization in Solution and Adsorption onto Hydrophobic Surfaces. Langmuir, 2002, 18, 8706-8713.	1.6	16
147	Thermally sensitive dual fluorescent polymeric micelles for probing cell properties. Soft Matter, 2011, 7, 11211.	1.2	16
148	Structure and properties of polydisperse polyelectrolyte brushes studied by self-consistent field theory. Soft Matter, 2018, 14, 6230-6242.	1.2	16
149	Brush Theory of Tethered Chains with a Charged Group at the Free End. Macromolecules, 1997, 30, 584-589.	2.2	15
150	The Adsorption of Nonionic Surfactants in Hydrophilic Cylindrical Pores. 2. Mean Field Lattice Calculations. Langmuir, 1997, 13, 6618-6625.	1.6	15
151	Adsorption of Nonionic Surfactants in Hydrophilic Cylindrical Pores. 1. A Thermodynamic Analysis. Langmuir, 1997, 13, 6452-6460.	1.6	15
152	Confinement-Induced Phase Transition and Hysteresis in Colloidal Forces for Surfactant Layers on Hydrophobic Surfaces. Langmuir, 2005, 21, 10089-10095.	1.6	15
153	Triggered Templated Assembly of Protein Polymersomes. Angewandte Chemie - International Edition, 2010, 49, 9947-9950.	7.2	15
154	Interfacial Tension and Wettability in Waterâ€“Carbon Dioxide Systems: Experiments and Self-consistent Field Modeling. Journal of Physical Chemistry B, 2013, 117, 8524-8535.	1.2	15
155	Interaction forces and lubrication of dendronized surfaces. Current Opinion in Colloid and Interface Science, 2017, 27, 50-56.	3.4	15
156	Effects of feed composition on the fouling on cation-exchange membranes desalinating polymer-flooding produced water. Journal of Colloid and Interface Science, 2021, 584, 634-646.	5.0	15
157	Self-Consistent Field Modeling of Adsorption from Polymer/Surfactant Mixtures. Langmuir, 2008, 24, 6712-6720.	1.6	14
158	Particles Decorated by an Ionizable Thermoresponsive Polymer Brush in Water: Experiments and Self-Consistent Field Modeling. Journal of Physical Chemistry B, 2014, 118, 3192-3206.	1.2	14
159	Bending Moduli and Spontaneous Curvature of the Monolayer in a Surfactant Bilayer. Journal of Physical Chemistry B, 2005, 109, 14251-14256.	1.2	13
160	Comparison between Inhomogeneous Adsorption of Charged Surfactants on Airâ^'Water and on Solidâ^'Water Interfaces by Self-Consistent Field Theory. Langmuir, 2008, 24, 6496-6503.	1.6	13
161	Formation of nanotapes by co-assembly of triblock peptide copolymers and polythiophenes in aqueous solution. Soft Matter, 2009, 5, 1668.	1.2	13
162	Field theoretical modeling of the coexistence of micelles and vesicles in binary copolymer mixtures. Soft Matter, 2009, 5, 4173.	1.2	13

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163	Molecular modeling of proteinlike inclusions in lipid bilayers: Lipid-mediated interactions. Physical Review E, 2010, 81, 021915.	0.8	13
164	Analytical theory of finite-size effects in mechanical desorption of a polymer chain. Journal of Chemical Physics, 2010, 132, 064110.	1.2	13
165	PMMA Highlights the Layering Transition of PDMS in Langmuir Films. Langmuir, 2011, 27, 2501-2508.	1.6	13
166	Self-Organization of Polyurethane Pre-Polymers as Studied by Self-Consistent Field Theory. Macromolecular Theory and Simulations, 2016, 25, 16-27.	0.6	13
167	Comment on "Thermodynamics of the separation of biomaterials in two-phase aqueous polymer systems: effect of the phase-forming polymers". Macromolecules, 1988, 21, 1876-1877.	2.2	12
168	On the Pressure in Mean-Field Lattice Models. Langmuir, 1999, 15, 8609-8617.	1.6	12
169	Polymerâ^'Surface Interactions in Bridging Escape and Localization Transitions. Macromolecules, 2002, 35, 8640-8649.	2.2	12
170	On the Escape Transition of a Tethered Gaussian Chain; Exact Results in Two Conjugate Ensembles. Macromolecular Symposia, 2006, 237, 73-80.	0.4	12
171	Persistence Length of Wormlike Micelles Composed of Ionic Surfactants:Â Self-Consistent-Field Predictions. Journal of Physical Chemistry B, 2007, 111, 8158-8168.	1.2	12
172	Self-Consistent Field Modeling of Non-ionic Surfactants at the Silicaâ^'Water Interface:â€‰ Incorporating Molecular Detail. Langmuir, 2008, 24, 3960-3969.	1.6	12
173	Self-consistent field predictions for quenched spherical biocompatible triblock copolymer micelles. Soft Matter, 2013, 9, 7515.	1.2	12
174	Force and Scale Dependence of the Elasticity of Self-Assembled DNA Bottle Brushes. Macromolecules, 2018, 51, 204-212.	2.2	12
175	Plasticity in colloidal gel strands. Soft Matter, 2019, 15, 6447-6454.	1.2	12
176	Semi-flexible polymers at a liquidâ€“liquid interface: Self-consistent field calculations. Journal of Chemical Physics, 1998, 109, 4592-4601.	1.2	11
177	Wetting of a Polymer Brush, a System with Pronounced Critical Wetting. Langmuir, 2000, 16, 7082-7087.	1.6	11
178	Self-limiting aggregation of phospholipid vesicles. Soft Matter, 2020, 16, 2379-2389.	1.2	11
179	Interaction of Silica Nanoparticles with Phospholipid Membranes. Chemistry Letters, 2012, 41, 1322-1324.	0.7	10
180	Interactions between nodes in a physical gel network of telechelic polymers; self-consistent field calculations beyond the cell model. Physical Chemistry Chemical Physics, 2015, 17, 9001-9014.	1.3	10

#	Article	IF	Citations
181	The rolling transition of a Gaussian chain end-grafted at a penetrable surface. Journal of Chemical Physics, 2000, 112, 7238-7246.	1.2	9
182	Confinement-Induced Symmetry Breaking of Interfacial Surfactant Layers. Journal of Physical Chemistry B, 2006, 110, 8756-8763.	1.2	9
183	Polymer Compatibility in Two Dimensions. Modeling of Phase Behavior of Mixed Polymethacrylate Langmuir Films. Langmuir, 2012, 28, 5614-5621.	1.6	9
184	Loss of bottlebrush stiffness due to free polymers. Soft Matter, 2016, 12, 8004-8014.	1.2	9
185	Temperature-Induced Re-Entrant Morphological Transitions in Block-Copolymer Micelles. Langmuir, 2019, 35, 2680-2691.	1.6	9
186	Electroresponsive Polyelectrolyte Brushes Studied by Self-Consistent Field Theory. Polymers, 2020, 12, 898.	2.0	9
187	Critical Point Wetting for Binary Two-Phase Polymerâ˜Solvent Mixtures on Solid Interfaces. Langmuir, 1997, 13, 5751-5755.	1.6	8
188	Molar mass effects in reversed-phase gradient polymer-elution chromatography of oligomers. Chromatographia, 2002, 55, 533-540.	0.7	8
189	Negative compressibility for a polymer chain squeezed between two pistons going through the escape transition. Journal of Statistical Mechanics: Theory and Experiment, 2004, 2004, P10001.	0.9	8
190	Bending rigidities of surfactant bilayers using self-consistent field theory. Journal of Chemical Physics, 2013, 138, 154109.	1.2	8
191	Structure and lubrication of solvent-free dendron brushes. Polymer, 2017, 120, 223-235.	1.8	8
192	Microphase Segregation of Diblock Copolymers Studied by the Self-Consistent Field Theory of Scheutjens and Fleer. Polymers, 2018, 10, 78.	2.0	8
193	First-order wetting transition at finite contact angle. Physical Review E, 2002, 66, 051801.	0.8	7
194	Molecular modelling of chain end effects in separating oligomers by reversed-phase gradient polymer elution chromatography; adsorption transition as revealed by a self-consistent-field theory for polymer adsorption. Journal of Chromatography A, 2002, 959, 37-47.	1.8	7
195	On the charge overcompensation of quenched polyelectrolyte stars electrostatically adsorbed onto a quenched oppositely charged planar surface. Journal of Chemical Physics, 2003, 118, 969-980.	1.2	7
196	When tethered chains meet free ones; the stability of polymer wetting films on polymer brushes. Macromolecular Symposia, 2003, 191, 69-80.	0.4	7
197	Self-Consistent Field Analysis of Ionic Surfactant Adsorption Regulation in the Aqueous Film between Two Neutral Solids. Journal of Physical Chemistry B, 2004, 108, 3633-3643.	1.2	7
198	Symmetric Liquid-Liquid Interface with a Nonzero Spontaneous Curvature. Physical Review Letters, 2006, 97, 066103.	2.9	7

#	Article	IF	Citations
199	Interaction of cholesterol-like molecules in polyunsaturated phosphatidylcholine lipid bilayers as revealed by a self-consistent field theory. Physical Review E, 2007, 76, 031904.	0.8	7
200	Micellization of Telechelic Associative Polymers:Â Self-Consistent Field Modeling and Comparison with Scaling Concepts. Journal of Physical Chemistry B, 2007, 111, 2903-2909.	1.2	7
201	Comprehensive theory for star-like polymer micelles; combining classical nucleation and polymer brush theory. Physical Chemistry Chemical Physics, 2008, 10, 5308.	1.3	7
202	Molecular modeling of intermolecular and intramolecular excluded volume interactions for polymers at interfaces. Journal of Chemical Physics, 2009, 131, 244115.	1.2	7
203	(Homo)polymer-mediated colloidal stability of micellar solutions. Soft Matter, 2020, 16, 1560-1571.	1.2	7
204	Computer modeling of the membrane-solution interface of liquid membrane ion-selective electrodes. Electroanalysis, 1995, 7, 877-883.	1.5	6
205	Continuum formulation of the Scheutjens-Fleer lattice statistical theory for homopolymer adsorption from solution. Journal of Chemical Physics, 2005, 123, 174901.	1.2	6
206	On the Binding of Calcium by Micelles Composed of Carboxy-Modified Pluronics Measured by Means of Differential Potentiometric Titration and Modeled with a Self-Consistent-Field Theory. Langmuir, 2006, 22, 10932-10941.	1.6	6
207	Modeling of Charged Amphiphilic Copolymer Stars near Hydrophobic Surfaces. Langmuir, 2009, 25, 11516-11527.	1.6	6
208	Hybrid Monte Carlo Self-Consistent Field Approach to Model a Thin Layer of a Polyelectrolyte Gel near an Adsorbing Surface. Journal of Physical Chemistry A, 2012, 116, 6574-6581.	1.1	6
209	Sign Switch of Gaussian Bending Modulus for Microemulsions: A Self-Consistent Field Analysis Exploring Scale Invariant Curvature Energies. Physical Review Letters, 2018, 120, 028003.	2.9	6
210	A Hybrid Monte Carlo Self-Consistent Field Model of Physical Gels of Telechelic Polymers. Journal of Chemical Theory and Computation, 2018, 14, 6532-6543.	2.3	6
211	SCF Theory of Uniformly Charged Dendrimers: Impact of Asymmetry of Branching, Generation Number, and Salt Concentration. Macromolecules, 2020, 53, 7298-7311.	2.2	6
212	Colloidal particles interacting with a polymer brush: a self-consistent field theory. Physical Chemistry Chemical Physics, 2022, 24, 8463-8476.	1.3	6
213	The Equilibrium Structure of Micelles. , 1989, , 43-60.		5
214	Wetting by polymers of a liquidâ€“liquid interface: Effects of short-range interactions and of chain stiffness. Journal of Chemical Physics, 1999, 110, 6491-6499.	1.2	5
215	Coil-to-Flower Transition of a Polymer Chain Pinned near a Stepwise External Potential:Â Finite Size Effects. Macromolecules, 2001, 34, 8294-8302.	2.2	5
216	Wetting transitions in symmetrical polymer blends. Journal of Chemical Physics, 2001, 114, 4267-4276.	1.2	5

#	Article	IF	Citations
217	Analysis of the Longitudinal Structure of a Collapsed Molecular Bottle Brush Using a Self-Consistent Field Approach. International Journal of Polymer Analysis and Characterization, 2007, 12, 47-55.	0.9	5
218	On the curvature dependence of the interfacial tension in a symmetric three-component interface. Physical Chemistry Chemical Physics, 2007, 9, 167-179.	1.3	5
219	Modeling of the 3RS tau protein with self-consistent field method and Monte Carlo simulation. Soft Matter, 2010, 6, 5533.	1.2	5
220	Depletion profiles for dilute solutions of linear chains, stars and H-branched molecules by self-consistent field calculations and Monte Carlo simulations. Soft Matter, 2011, 7, 10258.	1.2	5
221	Mobility of fluorescently labeled polymer micelles in living cells. Soft Matter, 2011, 7, 1214-1218.	1.2	5
222	On the collapse transition of a polymer brush: the case of lateral mobility. Soft Matter, 2013, 9, 3341-3348.	1.2	5
223	Complex coacervates formed across liquid interfaces: A self-consistent field analysis. Advances in Colloid and Interface Science, 2017, 239, 17-30.	7.0	5
224	Structure and Colloidal Stability of Adsorption Layers of Macrocycle, Linear, Comb, Star, and Dendritic Macromolecules. Macromolecules, 2020, 53, 7322-7334.	2.2	5
225	Theory of Microphase Segregation in ABA Triblock Comb-Shaped Copolymers: Lamellar Mesophase. Macromolecules, 2021, 54, 4747-4759.	2.2	5
226	Calculation of Concentration and Electrostatic Potential Profiles at Liquid-Membrane/Water and Liquid/Liquid Interfaces.. Analytical Sciences, 1998, 14, 137-140.	0.8	4
227	Nanowires Formed by the Coâ€Assembly of a Negatively Charged Lowâ€Molecular Weight Gelator and a Zwitterionic Polythiophene. ChemPhysChem, 2010, 11, 1956-1960.	1.0	4
228	A self-consistent field study of a hydrocarbon droplet at the airâ€“water interface. Physical Chemistry Chemical Physics, 2012, 14, 4917.	1.3	4
229	Design of block-copolymer-based micelles for active and passive targeting. Physical Review E, 2016, 94, 042503.	0.8	4
230	Impact of Macromolecular Architecture on Bending Rigidity of Dendronized Surfaces. Macromolecules, 2018, 51, 3315-3329.	2.2	4
231	Dendron Brushes in Polymer Medium: Interpenetration and Depletion. Macromolecules, 2020, 53, 387-397.	2.2	4
232	Turning autophobic wetting on biomimetic surfaces into complete wetting by wetting additives. Soft Matter, 2020, 16, 4823-4839.	1.2	4
233	Structural and mechanical parameters of lipid bilayer membranes using a lattice refined self-consistent field theory. Physical Chemistry Chemical Physics, 2021, 23, 5152-5175.	1.3	4
234	Self-consistent field modeling of mesomorphic phase changes of monoolein and phospholipids in response to additives. Physical Chemistry Chemical Physics, 2021, 23, 14093-14108.	1.3	4

#	Article	IF	Citations
235	Wetting of a fluid interface by a homopolymer: A system with a rich prewetting behavior. Journal of Chemical Physics, 1999, 111, 2797-2808.	1.2	3
236	Interaction between two solid surfaces across PDMS: influence of chain length and end group. Composite Interfaces, 2005, 12, 805-815.	1.3	3
237	Colloidal Stability Influenced by Inhomogeneous Surfactant Assemblies in Confined Spaces. Journal of Physical Chemistry B, 2009, 113, 11186-11193.	1.2	3
238	Formation and structure of ionomer complexes from grafted polyelectrolytes. Colloid and Polymer Science, 2011, 289, 889-902.	1.0	3
239	Direct evaluation of the saddle splay modulus of a liquid-liquid interface using the classical mean field lattice model. Journal of Chemical Physics, 2013, 138, 124103.	1.2	3
240	Interaction of a Hydrophobic Weak Polyelectrolyte Star with an Apolar Surface. Langmuir, 2014, 30, 48-54.	1.6	3
241	Reentrant Stabilization of Grafted Nanoparticles in Polymer Solutions. Journal of Physical Chemistry B, 2015, 119, 12938-12946.	1.2	3
242	Unfolding of a comb-like polymer in a poor solvent: translation of macromolecular architecture in the forceâ€“deformation spectra. Soft Matter, 2017, 13, 9147-9161.	1.2	3
243	Self-Consistent Field Modeling of Homopolymers at Interfaces in the Long Chain Length Limit. Polymer Science - Series C, 2018, 60, 18-24.	0.8	3
244	Long Tails with Flower-like Conformations Undergo an Escape Transition in Homopolymer Adsorption Layers. Macromolecules, 2020, 53, 3900-3906.	2.2	3
245	Computer modeling of polymer stars in variable solvent conditions: a comparison of MD simulations, self-consistent field (SCF) modeling and novel hybrid Monte Carlo SCF approach. Soft Matter, 2021, 17, 580-591.	1.2	3
246	Polymer adsorption on heterogeneous surfaces. Macromolecular Symposia, 1994, 81, 195-197.	0.4	2
247	Micellization at Surfaces. Theory of Polydisperse Rodlike Micelles. Langmuir, 1998, 14, 2693-2701.	1.6	2
248	A liquid CO2-compatible hydrocarbon surfactant: experiment and modelling. Physical Chemistry Chemical Physics, 2013, 15, 19879.	1.3	2
249	Electrostatic stiffening and induced persistence length for coassembled molecular bottlebrushes. Physical Review E, 2018, 97, 032501.	0.8	2
250	Coarseâ€Grained Dendrimers in a Good Solvent: Comparison of Monte Carlo Simulations, Selfâ€Consistent Field Theory, and a Hybrid Modeling Strategy. Macromolecular Theory and Simulations, 2019, 28, 1800064.	0.6	2
251	Step-wise linking of vesicles by combining reversible and irreversible linkers â€“ towards total control on vesicle aggregate sizes. Soft Matter, 2020, 16, 6773-6783.	1.2	2
252	Self-Consistent Field Modeling of Pulling a Test-Chain away from or Pushing It into a Polymer Adsorption Layer. Polymers, 2020, 12, 1684.	2.0	2

#	Article	IF	Citations
253	Entropy estimates of a hard sphere system by data compression of Monte Carlo simulation data. Soft Matter, 2020, 16, 3740-3745.	1.2	2
254	Modeling of the Electrified Interface of Liquid Membrane Ion-Selective Electrodes. Journal of Physical Chemistry B, 1999, 103, 852-859.	1.2	1
255	Molecular Modelling of Biological Membranes: Structure and Permeation Properties. , 2004, , 15-111.		1
256	Steady-state analysis of polymer adsorption at and transport across an interface between two polymer phases. Faraday Discussions, 2005, 129, 315.	1.6	1
257	Block Copolymer Micellisation in a Common Solvent Modeled by Selfâ€Consistent Field Calculations. Macromolecular Symposia, 2009, 278, 57-66.	0.4	1
258	Three-gradient regular solution model for simple liquids wetting complex surface topologies. Beilstein Journal of Nanotechnology, 2016, 7, 1377-1396.	1.5	1
259	Enhanced stiffness of silkâ€like fibers by loop formation in the corona leads to stronger gels. Biopolymers, 2016, 105, 795-801.	1.2	1
260	Bending moduli of dendritic polymer brushes in a good solvent. Polymer Science - Series A, 2017, 59, 772-783.	0.4	1
261	Elastic properties of symmetric liquid-liquid interfaces. Physical Review E, 2019, 100, 062801.	0.8	1
262	Non-linear elasticity effects and stratification in brushes of branched polyelectrolytes. Journal of Chemical Physics, 2019, 151, 214902.	1.2	1
263	Self-Consistent Field Analysis of Molecular Bottle-Brushes with Primary and Secondary Side Chains: Induced Persistence Length and Lateral Thickness. Polymer Science - Series C, 2018, 60, 160-171.	0.8	0
264	Virtual Special Issue in memory of Hans Lyklema (1930â€“2017). Advances in Colloid and Interface Science, 2020, 282, 102201.	7.0	0
265	The physics of microemulsions extracted from modeling balanced tensionless surfactant-loaded liquidâ€“liquid interfaces. Journal of Chemical Physics, 2020, 152, 094902.	1.2	0
266	Theory of Yâ€•and Combâ€Shaped Polymer Brushes: The Parabolic Potential Framework. Macromolecular Theory and Simulations, 0, , 2100037.	0.6	0
267	Gerard Fleer: straightforward on random walks. Advances in Colloid and Interface Science, 2010, 159, 95-8.	7.0	0