Glenn H Fredrickson

List of Publications by Year
in descending order

193 papers	21,380 citations	20797 60 h-index	9579 142 g-index
204 all docs	204 docs citations	204 times ranked	10083 citing authors

#	Article	IF	Citations
1	Block Copolymer Thermodynamics: Theory and Experiment. Annual Review of Physical Chemistry, 1990, 41, 525-557.	4.8	3,581
2	Block Copolymersâ€"Designer Soft Materials. Physics Today, 1999, 52, 32-38.	0.3	2,749
3	Fluctuation effects in the theory of microphase separation in block copolymers. Journal of Chemical Physics, 1987, 87, 697-705.	1.2	1,241
4	Multiblock Polymers: Panacea or Pandoraâ€™s Box?. Science, 2012, 336, 434-440.	6.0	930
5	Field-Theoretic Computer Simulation Methods for Polymers and Complex Fluids. Macromolecules, 2002, 35, 16-39.	2.2	639
6	Composite mesostructures by nano-confinement. Nature Materials, 2004, 3, 816-822.	13.3	626
7	Evolution of Block Copolymer Lithography to Highly Ordered Square Arrays. Science, 2008, 322, 429-432.	6.0	584
8	Combinatorial Screening of Complex Block Copolymer Assembly with Self-Consistent Field Theory. Physical Review Letters, 1999, 83, 4317-4320.	2.9	501
9	Fluctuation effects in a symmetric diblock copolymer near the orderâ€"disorder transition. Journal of Chemical Physics, 1990, 92, 6255-6270.	1.2	417
10	Large fluctuations in polymer solutions under shear. Physical Review Letters, 1989, 62, 2468-2471.	2.9	370
11	Stability of the Gyroid Phase in Diblock Copolymers at Strong Segregation. Macromolecules, 2006, 39, 2449-2451.	2.2	333
12	Polymeric Bicontinuous Microemulsions. Physical Review Letters, 1997, 79, 849-852.	2.9	300
13	Surfactant-induced lyotropic behavior of flexible polymer solutions. Macromolecules, 1993, 26, 2825-2831.	2.2	270
14	Entropic Corrections to the Flory-Huggins Theory of Polymer Blends: Architectural and Conformational Effects. Macromolecules, 1994, 27, 2503-2511.	2.2	233
15	Hybrid Particle-Field Simulations of Polymer Nanocomposites. Physical Review Letters, 2006, 96, 250601.	2.9	219
16	Complete Phase Diagram for Liquidâ€"Liquid Phase Separation of Intrinsically Disordered Proteins. Journal of Physical Chemistry Letters, 2019, 10, 1644-1652.	2.1	204
17	Optimizing Chain Bridging in Complex Block Copolymers. Macromolecules, 2001, 34, 5317-5324.	2.2	170
18	Can a single function for Ï‡ account for block copolymer and homopolymer blend phase behavior?. Journal of Chemical Physics, 1998, 108, 2989-3000.	1.2	166

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19	Numerical Solution of Polymer Self-Consistent Field Theory. Multiscale Modeling and Simulation, 2004, 2, 452-474.	0.6	156
20	Broadly Accessible Self-Consistent Field Theory for Block Polymer Materials Discovery. Macromolecules, 2016, 49, 4675-4690.	2.2	150
21	Steady shear alignment of block copolymers near the isotropicâ€“lamellar transition. Journal of Rheology, 1994, 38, 1045-1067.	1.3	148
22	Complex coacervation: A field theoretic simulation study of polyelectrolyte complexation. Journal of Chemical Physics, 2008, 128, 224908.	1.2	147
23	Fluctuation-Induced First-Order Transition of an Isotropic System to a Periodic State. Physical Review Letters, 1988, 61, 2229-2232.	2.9	144
24	Allyl Glycidyl Ether-Based Polymer Electrolytes for Room Temperature Lithium Batteries. Macromolecules, 2013, 46, 8988-8994.	2.2	142
25	Phase equilibria in copolymer/homopolymer ternary blends: Molecular weight effects. Journal of Chemical Physics, 1990, 93, 2927-2938.	1.2	141
26	Collective and singleâ€chain correlations near the block copolymer orderâ€“disorder transition. Journal of Chemical Physics, 1991, 95, 1281-1289.	1.2	137
27	Conformational Asymmetry and Polymer-Polymer Thermodynamics. Macromolecules, 1994, 27, 1065-1067.	2.2	137
28	Continuous polydispersity in a self-consistent field theory for diblock copolymers. Journal of Chemical Physics, 2004, 121, 4974-4986.	1.2	137
29	Theory of polyelectrolyte complexationâ€”Complex coacervates are self-coacervates. Journal of Chemical Physics, 2017, 146, 224902.	1.2	133
30	Stability of the A15 phase in diblock copolymer melts. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13194-13199.	3.3	130
31	Defectivity in Laterally Confined Lamella-Forming Diblock Copolymers: Thermodynamic and Kinetic Aspects. Macromolecules, 2012, 45, 6253-6265.	2.2	129
32	Fluctuation Effects in Ternary AB + A + B Polymeric Emulsions. Macromolecules, 2003, 36, 9237-9248.	2.2	126
33	Improving Brush Polymer Infrared One-Dimensional Photonic Crystals via Linear Polymer Additives. Journal of the American Chemical Society, 2014, 136, 17374-17377.	6.6	118
34	Time-Dependent Reactive Coupling at Polymerâ^'Polymer Interfaces. Macromolecules, 1996, 29, 7386-7390.	2.2	114
35	Narrow equilibrium window for complex coacervation of tau and RNA under cellular conditions. ELife, 2019, 8, .	2.8	111
36	Semiflexible Polymers near Interfaces. Physical Review Letters, 1994, 73, 3235-3238.	2.9	105

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37	Poly(allyl glycidyl ether)â€A versatile and functional polyether platform. Journal of Polymer Science Part A, 2011, 49, 4498-4504.	2.5	104
38	Distribution of chain ends at the surface of a polymer melt: Compensation effects and surface tension. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 2373-2389.	2.4	97
39	Dehydration entropy drives liquid-liquid phase separation by molecular crowding. Communications Chemistry, 2020, 3, .	2.0	97
40	Investigation of the interfacial tension of complex coacervates using field-theoretic simulations. Journal of Chemical Physics, 2012, 136, 024903.	1.2	96
41	Free Energy Evaluation in Field-Theoretic Polymer Simulations. Physical Review Letters, 2008, 101, 138302.	2.9	95
42	Recent Developments in Fully Fluctuating Field-Theoretic Simulations of Polymer Melts and Solutions. Journal of Physical Chemistry B, 2016, 120, 7615-7634.	1.2	95
43	SCFT Simulations of Thin Film Blends of Block Copolymer and Homopolymer Laterally Confined in a Square Well. Macromolecules, 2009, 42, 5861-5872.	2.2	94
44	Cornucopia of Nanoscale Ordered Phases in Sphere-Forming Tetrablock Terpolymers. ACS Nano, 2016, 10, 4961-4972.	7.3	93
45	Synthesis and Self-Assembly of AB_{<i>n</i>} Miktoarm Star Polymers. ACS Macro Letters, 2020, 9, 396-403.	2.3	91
46	Molecular design of self-coacervation phenomena in block polyampholytes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8224-8232.	3.3	88
47	Block Copolymer Self Assembly during Rapid Solvent Evaporation: Insights into Cylinder Growth and Stability. ACS Macro Letters, 2014, 3, 16-20.	2.3	86
48	PCHE-based pentablock copolymers: Evolution of a new plastic. AICHE Journal, 2001, 47, 762-765.	1.8	84
49	Thermoreversible associating polymer networks. I. Interplay of thermodynamics, chemical kinetics, and polymer physics. Journal of Chemical Physics, 2009, 131, 224902.	1.2	83
50	Effect of Film Thickness and Domain Spacing on Defect Densities in Directed Self-Assembly of Cylindrical Morphology Block Copolymers. ACS Nano, 2012, 6, 2629-2641.	7.3	82
51	Supramolecular Diblock Copolymers:â€‰ A Field-Theoretic Model and Mean-Field Solution. Macromolecules, 2007, 40, 693-702.	2.2	80
52	The Role of Backbone Polarity on Aggregation and Conduction of Ions in Polymer Electrolytes. Journal of the American Chemical Society, 2020, 142, 7055-7065.	6.6	80
53	Microdomain Ordering in Laterally Confined Block Copolymer Thin Films. Macromolecules, 2007, 40, 9570-9581.	2.2	78
54	Shear banding in polymer solutions. Physics of Fluids, 2013, 25, .	1.6	78

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55	Introducing Variable Cell Shape Methods in Field Theory Simulations of Polymersâ€. Journal of Physical Chemistry B, 2005, 109, 6694-6700.	1.2	71
56	Fieldâ€theoretic simulations of polyelectrolyte complexation. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 3223-3230.	2.4	71
57	Miktoarm Stars via Grafting-Through Copolymerization: Self-Assembly and the Star-to-Bottlebrush Transition. Macromolecules, 2019, 52, 1794-1802.	2.2	71
58	Design of bicontinuous polymeric microemulsions. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 2775-2786.	2.4	69
59	Toward Strong Thermoplastic Elastomers with Asymmetric Miktoarm Block Copolymer Architectures. Macromolecules, 2014, 47, 2037-2043.	2.2	69
60	Chain Architecture Effects on Deformation and Fracture of Block Copolymers with Unentangled Matrices. Macromolecules, 2002, 35, 2157-2166.	2.2	67
61	Design of Soft and Strong Thermoplastic Elastomers Based on Nonlinear Block Copolymer Architectures Using Self-Consistent-Field Theory. Macromolecules, 2010, 43, 3479-3486.	2.2	67
62	Dynamics and rheology of inhomogeneous polymeric fluids: A complex Langevin approach. Journal of Chemical Physics, 2002, 117, 6810-6820.	1.2	63
63	Mechanisms of Asymmetric Membrane Formation in Nonsolvent-Induced Phase Separation. ACS Macro Letters, 2020, 9, 1617-1624.	2.3	59
64	Phase behavior of electrostatically complexed polyelectrolyte gels using an embedded fluctuation model. Soft Matter, 2015, 11, 1214-1225.	1.2	58
65	The proline-rich domain promotes Tau liquidâ€"liquid phase separation in cells. Journal of Cell Biology, 2020, 219, .	2.3	58
66	Diblock Copolymer Thin Films:Â A Field-Theoretic Simulation Study. Macromolecules, 2007, 40, 4075-4087.	2.2	55
67	A study of shear banding in polymer solutions. Physics of Fluids, 2014, 26, .	1.6	55
68	Design of Polymeric Zwitterionic Solid Electrolytes with Superionic Lithium Transport. ACS Central Science, 2022, 8, 169-175.	5.3	54
69	Interfacial Roughening Induced by the Reaction of End-Functionalized Polymers at a PS/P2VP Interface:Â Quantitative Analysis by DSIMS. Macromolecules, 2005, 38, 6106-6114.	2.2	53
70	Efficient field-theoretic simulation of polymer solutions. Journal of Chemical Physics, 2014, 141, 224115.	1.2	53
71	Statistical field theory description of inhomogeneous polarizable soft matter. Journal of Chemical Physics, 2016, 145, 154104.	1.2	53
72	A multi-fluid model for microstructure formation in polymer membranes. Soft Matter, 2017, 13, 3013-3030.	1.2	53

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73	Numerical Solutions of the Complex Langevin Equations in Polymer Field Theory. Multiscale Modeling and Simulation, 2008, 6, 1347-1370.	0.6	52
74	Influence of broken conformational symmetry on the surface enrichment of polymer blends. Journal of Chemical Physics, 1992, 97, 8941-8946.	1.2	51
75	Field-theoretic simulations of confined polymer solutions. Journal of Chemical Physics, 2003, 118, 9030-9036.	1.2	50
76	Theory of Diffusion-Controlled Reactions in Polymers under Flow. Macromolecules, 1996, 29, 2674-2685.	2.2	49
77	Theory of Polydisperse Inhomogeneous Polymers. Macromolecules, 2003, 36, 5415-5423.	2.2	48
78	Phase Morphologies in Reversibly Bonding Supramolecular Triblock Copolymer Blends. Macromolecules, 2007, 40, 8445-8454.	2.2	47
79	Small ion effects on self-coacervation phenomena in block polyampholytes. Journal of Chemical Physics, 2019, 151, 034904.	1.2	46
80	A multi-species exchange model for fully fluctuating polymer field theory simulations. Journal of Chemical Physics, 2014, 141, 174103.	1.2	45
81	Producing Small Domain Features Using Miktoarm Block Copolymers with Large Interaction Parameters. ACS Macro Letters, 2015, 4, 1287-1292.	2.3	45
82	Field-theoretic simulations in the Gibbs ensemble. Journal of Chemical Physics, 2010, 132, 024104.	1.2	44
83	Polymer field-theory simulations on graphics processing units. Computer Physics Communications, 2013, 184, 2102-2110.	3.0	43
84	Inverse Design of Bulk Morphologies in Multiblock Polymers Using Particle Swarm Optimization. Macromolecules, 2017, 50, 6702-6709.	2.2	43
85	Extreme Deflection of Phase Boundaries and Chain Bridging in A(BAâ€²)_{<i>n</i>} Miktoarm Star Polymers. Macromolecules, 2020, 53, 513-522.	2.2	43
86	Enhanced Block Copolymer Phase Separation Using Click Chemistry and Ionic Junctions. ACS Macro Letters, 2015, 4, 1332-1336.	2.3	42
87	Self-consistent field theory for diblock copolymers grafted to a sphere. Soft Matter, 2011, 7, 5128.	1.2	41
88	Creating Extremely Asymmetric Lamellar Structures via Fluctuation-Assisted Unbinding of Miktoarm Star Block Copolymer Alloys. Journal of the American Chemical Society, 2015, 137, 6160-6163.	6.6	41
89	Mixed Conductive Soft Solids by Electrostatically Driven Network Formation of a Conjugated Polyelectrolyte. Chemistry of Materials, 2018, 30, 1417-1426.	3.2	41
90	Processingâ€"structureâ€"mechanical property relationships of semicrystalline polyolefinâ€"based block copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1428-1437.	2.4	38

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91	Sequence Effects on Block Copolymer Self-Assembly through Tuning Chain Conformation and Segregation Strength Utilizing Sequence-Defined Polypeptoids. Macromolecules, 2019, 52, 1277-1286.	2.2	37
92	Complexation of a Conjugated Polyelectrolyte and Impact on Optoelectronic Properties. ACS Macro Letters, 2019, 8, 88-94.	2.3	37
93	Design of miscible polyolefin copolymer blends. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1203-1212.	2.4	36
94	Emergence of Hexagonally Close-Packed Spheres in Linear Block Copolymer Melts. Journal of the American Chemical Society, 2021, 143, 14106-14114.	6.6	36
95	Fractal Hole Growth in Strained Block Copolymer Films. Physical Review Letters, 1998, 81, 1861-1864.	2.9	35
96	Mass-transfer driven spinodal decomposition in a ternary polymer solution. Soft Matter, 2019, 15, 4614-4628.	1.2	35
97	Marangoni Flows during Nonsolvent Induced Phase Separation. ACS Macro Letters, 2018, 7, 582-586.	2.3	34
98	Architecture Effects in Complex Spherical Assemblies of (AB)_{<i>n</i>}-Type Block Copolymers. ACS Macro Letters, 2020, 9, 1745-1752.	2.3	34
99	Liquidâ€“liquid phase separation of Tau by self and complex coacervation. Protein Science, 2021, 30, 1393-1407.	3.1	34
100	Aperiodic â€œBricks and Mortarâ€ Mesophase: a New Equilibrium State of Soft Matter and Application as a Stiff Thermoplastic Elastomer. Macromolecules, 2015, 48, 5378-5384.	2.2	33
101	Efficient Synthesis of Asymmetric Miktoarm Star Polymers. Macromolecules, 2020, 53, 702-710.	2.2	33
102	Complete Photonic Band Gaps with Nonfrustrated ABC Bottlebrush Block Polymers. ACS Macro Letters, 2020, 9, 1074-1080.	2.3	33
103	Numerical coarse-graining of fluid field theories. Journal of Chemical Physics, 2010, 132, 034109.	1.2	32
104	Thermodynamic and kinetic aspects of defectivity in directed selfâ€assembly of cylinderâ€forming diblock copolymers in laterally confining thin channels. Journal of Applied Polymer Science, 2014, 131, .	1.3	32
105	Field-theoretic simulations of polymer solutions: Finite-size and discretization effects. Journal of Chemical Physics, 2005, 122, 014904.	1.2	30
106	Swarm Intelligence Platform for Multiblock Polymer Inverse Formulation Design. ACS Macro Letters, 2016, 5, 972-976.	2.3	30
107	Architectural effects on the stability limits ofABC block copolymers. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 849-864.	2.4	29
108	Supramolecular assembly in telechelic polymer blends. Journal of Chemical Physics, 2009, 131, 144906.	1.2	29

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109	Spectral collocation methods for polymer brushes. Journal of Chemical Physics, 2011, 134, 244905.	1.2	29
110	Selfâ€consistent field theory investigation of directed selfâ€assembly in cylindrical confinement. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 142-153.	2.4	29
111	Self-consistent field simulations of self- and directed-assembly in a mixed polymer brush. Soft Matter, 2011, 7, 8776.	1.2	28
112	Comparison of Pseudospectral Algorithms for Field-Theoretic Simulations of Polymers. Macromolecules, 2013, 46, 8383-8391.	2.2	28
113	Shear banding predictions for the two-fluid Rolie-Poly model. Journal of Rheology, 2016, 60, 927-951.	1.3	25
114	Field-Theoretic Study of Salt-Induced Order and Disorder in a Polarizable Diblock Copolymer. ACS Macro Letters, 2019, 8, 962-967.	2.3	25
115	Learning composition-transferable coarse-grained models: Designing external potential ensembles to maximize thermodynamic information. Journal of Chemical Physics, 2020, 153, 154116.	1.2	25
116	Rapid Generation of Block Copolymer Libraries Using Automated Chromatographic Separation. Journal of the American Chemical Society, 2020, 142, 9843-9849.	6.6	25
117	The effective Ï‡ parameter in polarizable polymeric systems: One-loop perturbation theory and field-theoretic simulations. Journal of Chemical Physics, 2018, 148, 204903.	1.2	22
118	End-to-End Distance Probability Distributions of Dilute Poly(ethylene oxide) in Aqueous Solution. Journal of the American Chemical Society, 2020, 142, 19631-19641.	6.6	22
119	Molecularly Informed Field Theories from Bottom-up Coarse-Graining. ACS Macro Letters, 2021, 10, 576-583.	2.3	22
120	On the Control of Surface Enrichment in Polymer Blends and Copolymers. Macromolecules, 1997, 30, 2167-2174.	2.2	21
121	Dynamics of polymers: A mean-field theory. Journal of Chemical Physics, 2014, 140, 084902.	1.2	21
122	Cyclic Solvent Annealing Improves Feature Orientation in Block Copolymer Thin Films. Macromolecules, 2016, 49, 1743-1751.	2.2	21
123	Defects and their removal in block copolymer thin film simulations. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2495-2511.	2.4	20
124	Macro- and Microphase Separation in Multifunctional Supramolecular Polymer Networks. Macromolecules, 2011, 44, 9411-9423.	2.2	20
125	The Hole Shrink Problem: Directed Self-Assembly Using Self-Consistent Field Theory. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2013, 26, 15-20.	0.1	20
126	Tracer diffusion in fluctuating block copolymer melts. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 163-171.	2.4	19

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127	Monomer Sequence Effects on Interfacial Width and Mixing in Self-Assembled Diblock Copolymers. Macromolecules, 2020, 53, 3262-3272.	2.2	19
128	Field-theoretic model of inhomogeneous supramolecular polymer networks and gels. Journal of Chemical Physics, 2010, 133, 174903.	1.2	18
129	Improved selfâ€assembly of poly(dimethylsiloxaneâ€<i>b</i>â€ethylene oxide) using a hydrogenâ€bonding additive. Journal of Polymer Science Part A, 2016, 54, 2200-2208.	2.5	17
130	Genetic Algorithm for Discovery of Globally Stable Phases in Block Copolymers. Macromolecules, 2016, 49, 6558-6567.	2.2	17
131	Coherent states field theory in supramolecular polymer physics. Journal of Chemical Physics, 2018, 148, 204904.	1.2	17
132	Deep learning and self-consistent field theory: A path towards accelerating polymer phase discovery. Journal of Computational Physics, 2021, 443, 110519.	1.9	17
133	Influence of conformational asymmetry on the surface enrichment of polymer blends II. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1343-1351.	2.4	16
134	Self-assembly in a mixed polymer brush with inhomogeneous grafting density composition. Soft Matter, 2013, 9, 5341.	1.2	16
135	Coherent states formulation of polymer field theory. Journal of Chemical Physics, 2014, 140, 024905.	1.2	16
136	Electrostatic Manipulation of Phase Behavior in Immiscible Charged Polymer Blends. Macromolecules, 2021, 54, 2604-2616.	2.2	16
137	Imperfect fluids and inheritance. Nature, 1998, 395, 323-324.	13.7	15
138	Fddd network phase in ABA triblock copolymer melts. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1112-1117.	2.4	15
139	Field-Theoretic Simulations of Fluctuation-Stabilized Aperiodic â€œBricks-and-Mortarâ€•Mesophase in Miktoarm Star Block Copolymer/Homopolymer Blends. Macromolecules, 2017, 50, 6263-6272.	2.2	15
140	Absence of Electrostatic Rigidity in Conjugated Polyelectrolytes with Pendant Charges. ACS Macro Letters, 2019, 8, 1147-1152.	2.3	15
141	The Role of Polymerâ€"Ion Interaction Strength on the Viscoelasticity and Conductivity of Solvent-Free Polymer Electrolytes. Macromolecules, 2020, 53, 10574-10581.	2.2	15
142	Numerical self-consistent field theory of multicomponent polymer blends in the Gibbs ensemble. Soft Matter, 2013, 9, 11288.	1.2	14
143	Theoretical prediction of an isotropic to nematic phase transition in bottlebrush homopolymer melts. Journal of Chemical Physics, 2019, 151, 094901.	1.2	14
144	Contrasting Dielectric Properties of Electrolyte Solutions with Polar and Polarizable Solvents. Physical Review Letters, 2019, 122, 128007.	2.9	14

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145	The hole shrink problem: Theoretical studies of directed self-assembly in cylindrical confinement. Proceedings of SPIE, 2013, , .	0.8	13
146	Phase Coexistence Calculations of Reversibly Bonded Block Copolymers: A Unit Cell Gibbs Ensemble Approach. Macromolecules, 2014, 47, 1865-1874.	2.2	13
147	SCFT Study of Diblock Copolymer Melts in Electric Fields: Selective Stabilization of Orthorhombic <i>Fddd</i> Network Phase. Macromolecules, 2018, 51, 3369-3378.	2.2	13
148	Direct free energy evaluation of classical and quantum many-body systems via field-theoretic simulation. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2201804119.	3.3	13
149	Flow effects in the polymer cyclization reaction. Macromolecular Theory and Simulations, 1997, 6, 169-180.	0.6	12
150	Orientational Preference in Multilayer Block Copolymer Nanomeshes with Respect to Layer-to-Layer Commensurability. Macromolecules, 2017, 50, 8258-8266.	2.2	12
151	Field-theoretic simulations: An emerging tool for probing soft material assembly. MRS Bulletin, 2018, 43, 371-378.	1.7	12
152	Linear Scaling Self-Consistent Field Theory with Spectral Contour Accuracy. ACS Macro Letters, 2019, 8, 1402-1406.	2.3	12
153	Optimized Phase Field Model for Diblock Copolymer Melts. Macromolecules, 2019, 52, 2878-2888.	2.2	11
154	Using Particle Swarm Optimization and Self-Consistent Field Theory to Discover Globally Stable Morphologies of Block Copolymers. Macromolecules, 2022, 55, 5249-5262.	2.2	11
155	Ionic Tunability of Conjugated Polyelectrolyte Solutions. Macromolecules, 2022, 55, 3437-3448.	2.2	11
156	Self-consistent field theory of directed self-assembly in laterally confined lamellae-forming diblock copolymers. , 2012, , .		10
157	Directed self-assembly of laterally confined lamellae-forming diblock copolymers: polydispersity and substrate interaction effects. Proceedings of SPIE, 2012, , .	0.8	10
158	Directed selfâ€assembly of linear arrays of block copolymer cylinders. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 317-326.	2.4	10
159	Computational Study of Directed Self-Assembly in Neutral Prepatterns for a Graphoepitaxial Pitch-Multiplication Application. Macromolecules, 2015, 48, 1256-1261.	2.2	10
160	A finite element approach to self-consistent field theory calculations of multiblock polymers. Journal of Computational Physics, 2017, 331, 280-296.	1.9	10
161	Does shear induced demixing resemble a thermodynamically driven instability?. Journal of Rheology, 2019, 63, 335-359.	1.3	10
162	Shear induced demixing in bidisperse and polydisperse polymer blends: Predictions from a multifluid model. Journal of Rheology, 2020, 64, 1391-1408.	1.3	10

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163	Connecting Solute Diffusion to Morphology in Triblock Copolymer Membranes. Macromolecules, 2020, 53, 2336-2343.	2.2	10
164	Reactions in microemulsions: Effect of thermal fluctuations on reaction kinetics. Journal of Chemical Physics, 2000, 113, 2901-2917.	1.2	9
165	Model for the rheology and nonlinear response of layered materials. Journal of Rheology, 2001, 45, 161-185.	1.3	9
166	Functional level-set derivative for a polymer self consistent field theory Hamiltonian. Journal of Computational Physics, 2017, 345, 207-223.	1.9	9
167	Quantitative Comparison of Field-Update Algorithms for Polymer SCFT and FTS. Macromolecules, 2021, 54, 9804-9814.	2.2	9
168	Self-Consistent Field Theory Predicts Universal Phase Behavior for Linear, Comb, and Bottlebrush Diblock Copolymers. Macromolecules, 2022, 55, 4237-4244.	2.2	9
169	Morphology reâ€entry in asymmetric PSâ€PIâ€PS' triblock copolymer and PS homopolymer blends. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 169-179.	2.4	8
170	Concentration fluctuations in polymer solutions under mixed flow. Journal of Rheology, 2017, 61, 711-730.	1.3	8
171	Non-intuitive Trends in Floryâ€"Huggins Interaction Parameters in Polyether-Based Polymers. Macromolecules, 2021, 54, 6670-6677.	2.2	8
172	Asymmetric Miktoarm Star Polymers as Polyester Thermoplastic Elastomers. Macromolecules, 2022, 55, 4929-4936.	2.2	8
173	Field-Theoretic Simulations of Multi-Cylinder Configurations in VIA Lithography. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2014, 27, 21-24.	0.1	7
174	The Hole Shrink Problem: Self-Consistent Field Theory for Directed Self-Assembly of Miktoarm Copolymers. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2014, 27, 37-39.	0.1	7
175	Effect of an electric field on the stability of binary dielectric fluid mixtures. Journal of Chemical Physics, 2020, 152, 234901.	1.2	7
176	Orderâ€"disorder transition in thin films of horizontally-oriented cylinder-forming block copolymers: thermal fluctuations vs. preferential wetting. Soft Matter, 2016, 12, 5915-5925.	1.2	6
177	A phase field model for dynamic simulations of reactive blending of polymers. Soft Matter, 2022, 18, 877-893.	1.2	6
178	Nucleation of the lamellar phase from the disordered phase of the renormalized Landau-Brazovskii model. Journal of Chemical Physics, 2018, 148, 054903.	1.2	5
179	Level-set strategy for inverse DSA-lithography. Journal of Computational Physics, 2018, 375, 1159-1178.	1.9	5
180	Numerical Simulation of Finite-Temperature Field Theory for Interacting Bosons. Physical Review Letters, 2020, 124, 070601.	2.9	5

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181	Self-consistent field theory study of polymer-mediated colloidal interactions in solution: Depletion effects and induced forces. Journal of Chemical Physics, 2021, 155, 154903.	1.2	5
182	Concentration and frequency-dependent trapping of reactive polymers. Journal of Chemical Physics, 1997, 106, 2458-2468.	1.2	4
183	Open-source platform for block polymer formulation design using particle swarm optimization. European Physical Journal E, 2021, 44, 115.	0.7	4
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