Anna C Balazs

List of Publications by Year
in descending order

376 papers	18,881 citations	17440 63 h-index	16650 123 g-index
392 all docs	392 docs citations	392 times ranked	13279 citing authors

#	Article	IF	Citations
1	Nanoparticle Polymer Composites: Where Two Small Worlds Meet. Science, 2006, 314, 1107-1110.	12.6	2,332
2	Self-directed self-assembly of nanoparticle/copolymer mixtures. Nature, 2005, 434, 55-59.	27.8	912
3	Predicting the Mesophases of Copolymer-Nanoparticle Composites. Science, 2001, 292, 2469-2472.	12.6	701
4	Synthetic homeostatic materials with chemo-mechano-chemical self-regulation. Nature, 2012, 487, 214-218.	27.8	418
5	Self-Healing Polymer Films Based on Thiolâ€“Disulfide Exchange Reactions and Self-Healing Kinetics Measured Using Atomic Force Microscopy. Macromolecules, 2012, 45, 142-149.	4.8	407
6	Entropy-driven segregation of nanoparticles to cracks in multilayered composite polymer structures. Nature Materials, 2006, 5, 229-233.	27.5	331
7	Modeling the Interactions between Polymers and Clay Surfaces through Self-Consistent Field Theory. Macromolecules, 1998, 31, 8370-8381.	4.8	329
8	Block Copolymer-Directed Assembly of Nanoparticles:Â Forming Mesoscopically Ordered Hybrid Materials. Macromolecules, 2002, 35, 1060-1071.	4.8	279
9	Thermodynamic Behavior of Particle/Diblock Copolymer Mixtures:Â Simulation and Theory. Macromolecules, 2000, 33, 8085-8096.	4.8	250
10	Morphology of Ultrathin Supported Diblock Copolymer Films:Â Theory and Experiment. Macromolecules, 2000, 33, 5702-5712.	4.8	218
11	Pattern Formation and Shape Changes in Self-Oscillating Polymer Gels. Science, 2006, 314, 798-801.	12.6	218
12	Theoretical Phase Diagrams of Polymer/Clay Composites:Â The Role of Grafted Organic Modifiers. Macromolecules, 2000, 33, 1089-1099.	4.8	187
13	Using nanoparticles to create self-healing composites. Journal of Chemical Physics, 2004, 121, 5531-5540.	3.0	186
14	Generalization of the lattice-fluid model for specific interactions. Macromolecules, 1989, 22, 2325-2331.	4.8	185
15	Modeling the Phase Behavior of Polymerâ^'Clay Composites. Macromolecules, 1998, 31, 6676-6680.	4.8	185
16	Harnessing Janus Nanoparticles to Create Controllable Pores in Membranes. ACS Nano, 2008, 2, 1117-1122.	14.6	182
17	Modeling the Phase Behavior of Polymer/Clay Nanocomposites. Accounts of Chemical Research, 1999, 32, 651-657.	15.6	170
18	Equilibrium Orientation of Confined Diblock Copolymer Films. Macromolecules, 1997, 30, 3097-3103.	4.8	163

#	Article	IF	Citations
19	Redox Responsive Behavior of Thiol/Disulfide-Functionalized Star Polymers Synthesized via Atom Transfer Radical Polymerization. Macromolecules, 2010, 43, 4133-4139.	4.8	159
20	Forming Supramolecular Networks from Nanoscale Rods in Binary, Phase-Separating Mixtures. Science, 2000, 288, 1802-1804.	12.6	152
21	Macromolecules at surfaces: Research challenges and opportunities from tribology to biology. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 2755-2793.	2.1	151
22	Living Additive Manufacturing: Transformation of Parent Gels into Diversely Functionalized Daughter Gels Made Possible by Visible Light Photoredox Catalysis. ACS Central Science, 2017, 3, 124-134.	11.3	146
23	Modeling the Self-Assembly of Copolymer-Nanoparticle Mixtures Confined between Solid Surfaces. Physical Review Letters, 2003, 91, 136103.	7.8	140
24	Multi-Scale Model for Binary Mixtures Containing Nanoscopic Particles. Journal of Physical Chemistry B, 2000, 104, 3411-3422.	2.6	139
25	Effect of Nanoscopic Particles on the Mesophase Structure of Diblock Copolymers. Macromolecules, 2002, 35, 4855-4858.	4.8	133
26	Lateral instabilities in a grafted layer in a poor solvent. Macromolecules, 1993, 26, 1914-1921.	4.8	130
27	Designing synthetic vesicles that engulf nanoscopic particles. Journal of Chemical Physics, 2007, 127, 084703.	3.0	130
28	Designing Compatibilizers To Reduce Interfacial Tension in Polymer Blends. The Journal of Physical Chemistry, 1996, 100, 1449-1458.	2.9	129
29	An aptamer-functionalized chemomechanically modulated biomolecule catch-and-release system. Nature Chemistry, 2015, 7, 447-454.	13.6	128
30	Simulation of Hard Particles in a Phase-Separating Binary Mixture. Physical Review Letters, 1999, 82, 4026-4029.	7.8	126
31	Calculating Phase Diagrams of Polymerâ^'Platelet Mixtures Using Density Functional Theory:Â Implications for Polymer/Clay Composites. Macromolecules, 1999, 32, 5681-5688.	4.8	124
32	Forming Patterned Films with Tethered Diblock Copolymers. Macromolecules, 1996, 29, 6338-6348.	4.8	123
33	Self-Propelled Nanomotors Autonomously Seek and Repair Cracks. Nano Letters, 2015, 15, 7077-7085.	9.1	123
34	Folding kinetics of proteins and copolymers. Journal of Chemical Physics, 1992, 96, 768-780.	3.0	118
35	Designing Patterned Surfaces by Grafting Y-Shaped Copolymers. Macromolecules, 1996, 29, 2667-2673.	4.8	115
36	Stimuli-responsive behavior of composites integrating thermo-responsive gels with photo-responsive fibers. Materials Horizons, 2016, 3, 53-62.	12.2	114

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37	Modeling self-healing materials. Materials Today, 2007, 10, 18-23.	14.2	112
38	Predicting the Morphologies of Confined Copolymer/Nanoparticle Mixtures. Macromolecules, 2003, 36, 7730-7739.	4.8	111
39	Theoretical and computational modeling of self-oscillating polymer gels. Journal of Chemical Physics, 2007, 126, 124707.	3.0	107
40	Kinetically Trapped Co-continuous Polymer Morphologies through Intraphase Gelation of Nanoparticles. Nano Letters, 2011, 11, 1997-2003.	9.1	107
41	Using Nanocomposite Coatings To Heal Surface Defects. Macromolecules, 2004, 37, 9160-9168.	4.8	98
42	Lattice spring model of filled polymers and nanocomposites. Journal of Chemical Physics, 2002, 117, 7649-7658.	3.0	95
43	Modeling the Motion of Microcapsules on Compliant Polymeric Surfaces. Macromolecules, 2005, 38, 10244-10260.	4.8	92
44	Multiresponsive polymeric microstructures with encoded predetermined and self-regulated deformability. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12950-12955.	7.1	91
45	Self-Assembly of Tethered Diblocks in Selective Solvents. Macromolecules, 1996, 29, 8254-8259.	4.8	90
46	Entropically Driven Formation of Hierarchically Ordered Nanocomposites. Physical Review Letters, 2002, 89, 155503.	7.8	90
47	Effect of sequence distribution on the miscibility of polymer/copolymer blends. Macromolecules, 1985, 18, 2188-2191.	4.8	88
48	Modeling Polymer Gels Exhibiting Self-Oscillations Due to the Belousovâ^'Zhabotinsky Reaction. Macromolecules, 2006, 39, 2024-2026.	4.8	82
49	Modeling autonomously oscillating chemo-responsive gels. Progress in Polymer Science, 2010, 35, 155-173.	24.7	82
50	Newtonian fluid meets an elastic solid: Coupling lattice Boltzmann and lattice-spring models. Physical Review E, 2005, 71, 056707.	2.1	80
51	Harnessing Labile Bonds between Nanogel Particles to Create Self-Healing Materials. ACS Nano, 2009, 3, 885-892.	14.6	80
52	Three-dimensional model for chemoresponsive polymer gels undergoing the Belousov-Zhabotinsky reaction. Physical Review E, 2008, 78, 041406.	2.1	78
53	Convective flow reversal in self-powered enzyme micropumps. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2585-2590.	7.1	78
54	Compatibilizing A/B blends with AB diblock copolymers: Effect of copolymer molecular weight. Journal of Chemical Physics, 1995, 102, 8149-8157.	3.0	76

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55	Predicting the Mechanical and Electrical Properties of Nanocomposites Formed from Polymer Blends and Nanorods. Molecular Simulation, 2004, 30, 249-257.	2.0	75
56	Harnessing Interfacially-Active Nanorods to Regenerate Severed Polymer Gels. Nano Letters, 2013, 13, 6269-6274.	9.1	75
57	Adsorption of copolymer chains at liquid-liquid interfaces: effect of sequence distribution. Macromolecules, 1992, 25, 1357-1360.	4.8	73
58	Simulating the morphology and mechanical properties of filled diblock copolymers. Physical Review E, 2003, 67, 031802.	2.1	71
59	Microphase Separation in Comb Copolymers. Macromolecules, 1994, 27, 2496-2502.	4.8	66
60	Determining the phase behavior of nanoparticle-filled binary blends. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2389-2403.	2.1	64
61	Mechano-chemical oscillations and waves in reactive gels. Reports on Progress in Physics, 2012, 75, 066601.	20.1	64
62	Attraction between Surfaces in a Polymer Melt Containing Telechelic Chains:Â Guidelines for Controlling the Surface Separation in Intercalated Polymerâ˜Clay Composites. Langmuir, 1999, 15, 3935-3943.	3.5	63
63	Patterned Surfaces Segregate Compliant Microcapsules. Langmuir, 2007, 23, 983-987.	3.5	63
64	Shape- and size-dependent patterns in self-oscillating polymer gels. Soft Matter, 2011, 7, 3141.	2.7	63
65	Chemical Oscillators in Structured Media. Accounts of Chemical Research, 2012, 45, 2160-2168.	15.6	63
66	Self-regulated non-reciprocal motions in single-material microstructures. Nature, 2022, 605, 76-83.	27.8	63
67	Modeling the Dynamic Behavior of Diblock Copolymer/Particle Composites. Macromolecules, 2000, 33, 6140-6147.	4.8	61
68	Modeling the Self-Assembly of Lipids and Nanotubes in Solution: Forming Vesicles and Bicelles with Transmembrane Nanotube Channels. ACS Nano, 2011, 5, 4769-4782.	14.6	61
69	Using Light to Guide the Self-Sustained Motion of Active Gels. Langmuir, 2009, 25, 4298-4301.	3.5	60
70	Self-Assembly of Amphiphilic Nanoparticleâ˜Coil â€œTadpoleâ€•Macromolecules. Macromolecules, 2004, 37, 3536-3539.	4.8	59
71	Designing Synthetic, Pumping Cilia That Switch the Flow Direction in Microchannels. Langmuir, 2008, 24, 12102-12106.	3.5	59
72	Effect of Copolymer Architecture on the Efficiency of Compatibilizers. Macromolecules, 1995, 28, 6278-6283.	4.8	58

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73	Interactions of nanoscopic particles with phase-separating polymeric mixtures. Current Opinion in Colloid and Interface Science, 1999, 4, 443-448.	7.4	58
74	Kinetic model of phase separation in binary mixtures with hard mobile impurities. Physical Review E, 1999, 60, 4352-4359.	2.1	58
75	Force-Induced Globule-Coil Transition in Single Polystyrene Chains in Water. Journal of the American Chemical Society, 2007, 129, 10046-10047.	13.7	58
76	Harnessing catalytic pumps for directional delivery of microparticles in microchambers. Nature Communications, 2017, 8, 14384.	12.8	58
77	Effect of polymer architecture on the miscibility of polymer/clay mixtures. Polymer International, 2000, 49, 469-471.	3.1	57
78	Designing Compliant Substrates to Regulate the Motion of Vesicles. Physical Review Letters, 2006, 96, 148103.	7.8	57
79	Solutal and thermal buoyancy effects in self-powered phosphatase micropumps. Soft Matter, 2017, 13, 2800-2807.	2.7	57
80	Probing and repairing damaged surfaces with nanoparticle-containing microcapsules. Nature Nanotechnology, 2012, 7, 87-90.	31.5	56
81	Modeling the Photoinduced Reconfiguration and Directed Motion of Polymer Gels. Advanced Functional Materials, 2013, 23, 4601-4610.	14.9	56
82	Transformable Materials: Structurally Tailored and Engineered Macromolecular (STEM) Gels by Controlled Radical Polymerization. Macromolecules, 2018, 51, 3808-3817.	4.8	56
83	pH-Controlled Gating in Polymer Brushes. Macromolecules, 1994, 27, 6679-6682.	4.8	55
84	Chemo-responsive, self-oscillating gels that undergo biomimetic communication. Chemical Society Reviews, 2013, 42, 7257.	38.1	54
85	Modeling the Interactions between Polymer-Coated Surfaces. Journal of Physical Chemistry B, 1997, 101, 10614-10624.	2.6	53
86	Computer Simulation of Morphologies and Optical Properties of Filled Diblock Copolymers. Macromolecules, 2003, 36, 9631-9637.	4.8	52
87	Healing substrates with mobile, particle-filled microcapsules: designing a â€˜repair and goâ€™ system. Journal of the Royal Society Interface, 2007, 4, 349-357.	3.4	52
88	Using Nanoparticle-Filled Microcapsules for Site-Specific Healing of Damaged Substrates: Creating a â€œRepair-and-Goâ€•System. ACS Nano, 2010, 4, 1115-1123.	14.6	52
89	UV patternable thin film chemistry for shape and functionally versatile self-oscillating gels. Soft Matter, 2013, 9, 1231-1243.	2.7	52
90	Exploiting gradients in cross-link density to control the bending and self-propelled motion of active gels. Journal of Materials Chemistry, 2011, 21, 8360.	6.7	51

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91	Controlling the dynamic behavior of heterogeneous self-oscillating gels. Journal of Materials Chemistry, 2012, 22, 13625.	6.7	51
92	Scaling theory for end-functionalized polymers confined between two surfaces: Predictions for fabricating polymer/clay nanocomposites. Journal of Chemical Physics, 2000, 112, 4365-4375.	3.0	50
93	Designing Oscillating Cilia That Capture or Release Microscopic Particles. Langmuir, 2010, 26, 2963-2968.	3.5	50
94	Modeling the response of dual cross-linked nanoparticle networks to mechanical deformation. Soft Matter, 2013, 9, 109-121.	2.7	50
95	Equilibrium behavior of confined triblock copolymer films. Macromolecular Theory and Simulations, 1998, 7, 249-255.	1.4	49
96	Mechanical Resuscitation of Chemical Oscillations in Belousovâ€“Zhabotinsky Gels. Advanced Functional Materials, 2012, 22, 2535-2541.	14.9	49
97	Harnessing Fluid-Driven Vesicles To Pick Up and Drop Off Janus Particles. ACS Nano, 2013, 7, 1224-1238.	14.6	49
98	Contrasting the compatibilizing activity of comb and linear copolymers. Macromolecules, 1994, 27, 720-724.	4.8	48
99	Mechanically induced chemical oscillations and motion in responsive gels. Soft Matter, 2007, 3, 1138.	2.7	48
100	Modeling free radical polymerization using dissipative particle dynamics. Polymer, 2015, 72, 217-225.	3.8	48
101	Three-dimensional simulations of diblock copolymer/particle composites. Polymer, 2002, 43, 461-466.	3.8	47
102	Copolymer/copolymer blends: effect of sequence distribution on miscibility. Macromolecules, 1985, 18, 2784-2786.	4.8	45
103	Designing smart systems to selectively entrap and burst microcapsules. Soft Matter, 2007, 3, 1500.	2.7	45
104	Interactions between Polymer-Coated Surfaces in Poor Solvents. 1. Surfaces Grafted with A and B Homopolymers. Macromolecules, 1996, 29, 7559-7570.	4.8	43
105	Predicting the self-assembled morphology and mechanical properties of mixtures of diblocks and rod-like nanoparticles. Composite Interfaces, 2003, 10, 343-368.	2.3	43
106	Modeling the release of nanoparticles from mobile microcapsules. Journal of Chemical Physics, 2006, 125, 224712.	3.0	43
107	Designing communicating colonies of biomimetic microcapsules. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12417-12422.	7.1	43
108	Chemically-mediated communication in self-oscillating, biomimetic cilia. Journal of Materials Chemistry, 2012, 22, 241-250.	6.7	43

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109	Modeling copolymer adsorption on laterally heterogeneous surfaces. Physical Review Letters, 1991, 66, 620-623.	7.8	42
110	Random copolymers as effective compatibilizing agents. Physical Review E, 1995, 52, 5061-5064.	2.1	42
111	Flow injection of polymers into nanopores. Soft Matter, 2009, 5, 4575.	2.7	42
112	Pattern recognition with â€œmaterials that computeâ€• Science Advances, 2016, 2, e1601114.	10.3	42
113	A two-dimensional self-consistent-field model for grafted chains: determining the properties of grafted homopolymers in poor solvents. Macromolecules, 1993, 26, 4736-4738.	4.8	41
114	Using Copolymer Mixtures To Compatibilize Immiscible Homopolymer Blends. Macromolecules, 1996, 29, 7581-7587.	4.8	41
115	Self-assembly of mixtures of nanorods in binary, phase-separating blends. Soft Matter, 2011, 7, 595-607.	2.7	41
116	Chemical pumps and flexible sheets spontaneously form self-regulating oscillators in solution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	41
117	Polymer adsorption on laterally heterogeneous surfaces: a Monte Carlo computer model. Macromolecules, 1991, 24, 714-717.	4.8	40
118	Periodic Droplet Formation in Chemically Patterned Microchannels. Physical Review Letters, 2003, 91, 108303.	7.8	40
119	Exploiting Photoinduced Reactions in Polymer Blends to Create Hierarchically Ordered, Defect-Free Materials. Langmuir, 2006, 22, 2620-2628.	3.5	40
120	Tailoring the structure of polymer networks with iniferter-mediated photo-growth. Polymer Chemistry, 2016, 7, 2955-2964.	3.9	40
121	Spinodal decomposition of a binary fluid with fixed impurities. Journal of Chemical Physics, 2001, 115, 3779-3784.	3.0	39
122	Healing Surface Defects with Nanoparticle-Filled Polymer Coatings:â€‰ Effect of Particle Geometry. Macromolecules, 2005, 38, 10138-10147.	4.8	39
123	Reductive elimination of HH, HCH3, and CH3CH3 from bis(phosphine)platinum(II), -palladium(II), and -nickel(II) complexes: a theoretical study using the SCF-X.alpha.-SW method. Inorganic Chemistry, 1982, 21, 2162-2174.	4.0	38
124	Effect of molecular architecture on the adsorption of copolymers. Macromolecules, 1991, 24, 168-176.	4.8	38
125	Macrophase and Microphase Separation in Random Comb Copolymers. Macromolecules, 1995, 28, 3450-3462.	4.8	38
126	Forming transmembrane channels using end-functionalized nanotubes. Nanoscale, 2011, 3, 240-250.	5.6	38

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127	Using patterned substrates to promote mixing in microchannels. Physical Review E, 2002, 65, 031502.	2.1	36
128	Modeling the flow of fluid/particle mixtures in microchannels: Encapsulating nanoparticles within monodisperse droplets. Journal of Chemical Physics, 2005, 123, 224706.	3.0	36
129	Designing autonomously motile gels that follow complex paths. Soft Matter, 2010, 6, 768-773.	2.7	36
130	Polymer adsorption on chemically heterogeneous substrates. Macromolecules, 1991, 24, 4918-4925.	4.8	35
131	Predicting the morphology of nanostructured composites. Current Opinion in Solid State and Materials Science, 2003, 7, 27-33.	11.5	35
132	Modeling Microcapsules That Communicate through Nanoparticles To Undergo Self-Propelled Motion. ACS Nano, 2008, 2, 471-476.	14.6	35
133	Propulsion and Trapping of Microparticles by Active Cilia Arrays. Langmuir, 2012, 28, 3217-3226.	3.5	35
134	Ductility, toughness and strain recovery in self-healing dual cross-linked nanoparticle networks studied by computer simulations. Progress in Polymer Science, 2015, 40, 121-137.	24.7	35
135	STEM Gels by Controlled Radical Polymerization. Trends in Chemistry, 2020, 2, 341-353.	8.5	35
136	Modeling the dynamic fracture of polymer blends processed under shear. Physical Review B, 2004, 69, .	3.2	34
137	Behavior of tethered polyelectrolytes in poor solvents. Journal of Chemical Physics, 1998, 108, 1175-1183.	3.0	33
138	Binary hard sphere mixtures in block copolymer melts. Physical Review E, 2002, 66, 031801.	2.1	33
139	Modeling the interactions between deformable capsules rolling on a compliant surface. Soft Matter, 2006, 2, 499.	2.7	33
140	Emergent or Just Complex?. Science, 2009, 325, 1632-1634.	12.6	33
141	Computational Design of Active, Self-Reinforcing Gels. Journal of Physical Chemistry B, 2010, 114, 6316-6322.	2.6	33
142	Strain recovery and self-healing in dual cross-linked nanoparticle networks. Polymer Chemistry, 2013, 4, 4927.	3.9	33
143	Cooperative, Reversible Selfâ€Assembly of Covalently Preâ€Linked Proteins into Giant Fibrous Structures. Angewandte Chemie - International Edition, 2014, 53, 8050-8055.	13.8	32
144	Fight the flow: the role of shear in artificial rheotaxis for individual and collective motion. Nanoscale, 2019, 11, 10944-10951.	5.6	32

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145	A computer simulation for the aggregation of associating polymers. Macromolecules, 1987, 20, 1999-2003.	4.8	31
146	Miscibility in ternary mixtures containing a copolymer and two homopolymers. Effect of sequence distribution. Macromolecules, 1989, 22, 4260-4267.	4.8	31
147	Phase separation of a binary fluid in the presence of immobile particles: A lattice Boltzmann approach. Journal of Chemical Physics, 2002, 116, 6305-6310.	3.0	31
148	Effect of particle size and shape on the orderâ€“disorder phase transition in diblock copolymers. Journal of Chemical Physics, 2003, 119, 3529-3534.	3.0	31
149	Reconfigurable assemblies of active, autochemotactic gels. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 431-436.	7.1	31
150	Structurally Tailored and Engineered Macromolecular (STEM) Gels as Soft Elastomers and Hard/Soft Interfaces. Macromolecules, 2018, 51, 9184-9191.	4.8	31
151	Pattern Formation in Binary Fluids Confined between Rough, Chemically Heterogeneous Surfaces. Physical Review Letters, 2004, 93, 184501.	7.8	30
152	Harnessing Light to Create Defect-Free, Hierarchically Structured Polymeric Materials. Langmuir, 2005, 21, 10912-10915.	3.5	30
153	Designing a Simple Ratcheting System to Sort Microcapsules by Mechanical Properties. Langmuir, 2006, 22, 6739-6742.	3.5	30
154	Stackable, Covalently Fused Gels: Repair and Composite Formation. Macromolecules, 2015, 48, 1169-1178.	4.8	30
155	Self-Organization of Fluids in a Multienzymatic Pump System. Langmuir, 2019, 35, 3724-3732.	3.5	30
156	Modeling Self-Assembly and Phase Behavior in Complex Mixtures. Annual Review of Physical Chemistry, 2007, 58, 211-233.	10.8	29
157	Compression of two polymerâ€coated surfaces in poor solvents. Journal of Chemical Physics, 1996, 105, 706-713.	3.0	28
158	Modeling the morphology and mechanical properties of sheared ternary mixtures. Journal of Chemical Physics, 2005, 122, 194906.	3.0	28
159	Micromechanical Simulation of the Deformation and Fracture of Polymer Blends. Macromolecules, 2005, 38, 488-500.	4.8	28
160	Modeling polymer grafted nanoparticle networks reinforced by high-strength chains. Soft Matter, 2014, 10, 1374-1383.	2.7	28
161	Photoactivated Structurally Tailored and Engineered Macromolecular (STEM) gels as precursors for materials with spatially differentiated mechanical properties. Polymer, 2017, 126, 224-230.	3.8	28
162	Macro- vs microphase separation in copolymer/homopolymer mixtures. Macromolecules, 1993, 26, 2860-2865.	4.8	27

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163	Phase behavior of end-functionalized polymers confined between two surfaces. Journal of Chemical Physics, 2000, 113, 2479-2483.	3.0	27
164	Dynamics of ternary mixtures with photosensitive chemical reactions: Creating three-dimensionally ordered blends. Physical Review E, 2006, 74, 011502.	2.1	27
165	Modeling the Transport of Nanoparticle-Filled Binary Fluids through Micropores. Langmuir, 2012, 28, 11410-11421.	3.5	27
166	Fibers with Integrated Mechanochemical Switches: Minimalistic Design Principles Derived from Fibronectin. Biophysical Journal, 2012, 103, 1909-1918.	0.5	27
167	Role of Parallel Reformable Bonds in the Self-Healing of Cross-Linked Nanogel Particles. Langmuir, 2011, 27, 3991-4003.	3.5	26
168	Designing self-propelled, chemically active sheets: Wrappers, flappers, and creepers. Science Advances, 2018, 4, eaav1745.	10.3	26
169	Models for the surface adsorption of triblock copolymers. Macromolecules, 1990, 23, 839-848.	4.8	25
170	Miscible Polymer Blends: Local interaction energy theories and simulations. Advanced Materials, 1992, 4, 198-205.	21.0	25
171	A â€œJumping Micelleâ€•Phase Transition. Macromolecules, 1996, 29, 7637-7640.	4.8	25
172	Phase Separation under Shear of Binary Mixtures Containing Hard Particles. Langmuir, 1999, 15, 4952-4956.	3.5	25
173	Chemomechanical synchronization in heterogeneous self-oscillating gels. Physical Review E, 2008, 77, 046210.	2.1	25
174	Controlling chemical oscillations in heterogeneous Belousov-Zhabotinsky gels via mechanical strain. Physical Review E, 2009, 79, 046214.	2.1	25
175	Interactions of End-functionalized Nanotubes with Lipid Vesicles: Spontaneous Insertion and Nanotube Self-Organization. Current Nanoscience, 2011, 7, 699-715.	1.2	25
176	Self-assembly of a binary mixture of particles and diblock copolymers. Faraday Discussions, 2003, 123, 121-131.	3.2	24
177	Fork in the Road:â€‰Patterned Surfaces Direct Microcapsules to Make a Decision. Langmuir, 2007, 23, 10887-10890.	3.5	24
178	Twist again: Dynamically and reversibly controllable chirality in liquid crystalline elastomer microposts. Science Advances, 2020, 6, eaay5349.	10.3	24
179	Behavior of confined telechelic chains under shear. Journal of Chemical Physics, 2000, 113, 2025-2031.	3.0	23
180	Theoretical model of interfacial polymerization. Journal of Chemical Physics, 2004, 121, 11440.	3.0	23

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181	Economy at the nanoscale. Nature Materials, 2007, 6, 94-95.	27.5	23
182	Global signaling of localized impact in chemo-responsive gels. Soft Matter, 2009, 5, 1835.	2.7	23
183	Photocontrol over the Disorder-to-Order Transition in Thin Films of Polystyrene-block-poly(methyl methacrylate) Block Copolymers Containing Photodimerizable Anthracene Functionality. Journal of the American Chemical Society, 2011, 133, 17217-17224.	13.7	23
184	Harnessing surface-bound enzymatic reactions to organize microcapsules in solution. Science Advances, 2016, 2, e1501835.	10.3	23
185	Convective Self-Sustained Motion in Mixtures of Chemically Active and Passive Particles. Langmuir, 2017, 33, 7873-7880.	3.5	23
186	Modeling the Behavior of Random Copolymer Brushes. Macromolecules, 1995, 28, 4753-4755.	4.8	22
187	Effect of Composition on the Compatibilizing Activity of Comb Copolymers. Macromolecules, 1996, 29, 1059-1061.	4.8	22
188	Interactions between Polymer-Coated Surfaces in Poor Solvents. 2. Surfaces Coated with AB Diblock Copolymers. Macromolecules, 1996, 29, 8904-8911.	4.8	22
189	Creating Localized Mixing Stations within Microfluidic Channels. Langmuir, 2001, 17, 7186-7190.	3.5	22
190	Effect of hydrodynamic interactions on the evolution of chemically reactive ternary mixtures. Journal of Chemical Physics, 2004, 121, 6052-6063.	3.0	22
191	Designing Bioinspired Artificial Cilia to Regulate Particleâ€“Surface Interactions. Journal of Physical Chemistry Letters, 2014, 5, 1691-1700.	4.6	22
192	Conformations of Bridging Polyelectrolytes in Poor Solvent:Â Single-Chain Self-Consistent Field Calculations. Langmuir, 2001, 17, 5111-5117.	3.5	21
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