Anna C Balazs

List of Publications by Year
in descending order

376 papers	18,881 citations	20036 63 h-index	18944 123 g-index
392 all docs	392 docs citations	392 times ranked	15379 citing authors

#	Article	IF	Citations
1	Harnessing the power of chemically active sheets in solution. Nature Reviews Physics, 2022, 4, 125-137.	11.9	13
2	Self-Generated Convective Flows Enhance the Rates of Chemical Reactions. Langmuir, 2022, 38, 1432-1439.	1.6	7
3	Self-regulated non-reciprocal motions in single-material microstructures. Nature, 2022, 605, 76-83.	13.7	63
4	Computer modeling reveals modalities to actuate mutable, active matter. Nature Communications, 2022, 13, 2689.	5.8	6
5	Solutal-buoyancy-driven intertwining and rotation of patterned elastic sheets. , 2022, 1, .		1
6	Formation of helices with controllable chirality in gel-fiber composites. Polymer, 2021, 212, 123191.	1.8	1
7	Controllable growth of interpenetrating or random copolymer networks. Soft Matter, 2021, 17, 7177-7187.	1.2	7
8	Self-Morphing, Chemically Driven Gears and Machines. Matter, 2021, 4, 600-617.	5.0	9
9	Achieving Independent Control over Surface and Bulk Fluid Flows in Microchambers. ACS Applied Materials & Interfaces, 2021, 13, 6870-6878.	4.0	9
10	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, .	3.3	41
11	Colloidal Assembly and Separation under UVâ€Induced Convective Flows and on Inclines. ChemNanoMat, 2021, 7, 805-810.	1.5	3
12	Resonant amplification of enzymatic chemical oscillations by oscillating flow. Chaos, 2021, 31, 093125.	1.0	1
13	Using Dissipative Particle Dynamics to Model Effects of Chemical Reactions Occurring within Hydrogels. Nanomaterials, 2021, 11, 2764.	1.9	3
14	Dynamic behavior of chemically tunable mechano-responsive hydrogels. Soft Matter, 2021, 17, 10664-10674.	1.2	4
15	Patterning non-equilibrium morphologies in stimuli-responsive gels through topographical confinement. Soft Matter, 2020, 16, 1463-1472.	1.2	7
16	Light-Induced Dynamic Control of Particle Motion in Fluid-Filled Microchannels. Langmuir, 2020, 36, 10022-10032.	1.6	4
17	Effects of an Imposed Flow on Chemical Oscillations Generated by Enzymatic Reactions. Frontiers in Chemistry, 2020, 8, 618.	1.8	2
18	Buckling-induced interaction between circular inclusions in an infinite thin plate. Physical Review E, 2020, 102, 033004.	0.8	5

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19	Understanding the origin of softness in structurally tailored and engineered macromolecular (STEM) gels: A DPD study. Polymer, 2020, 208, 122909.	1.8	3
20	Enhancement of chemical oscillations by self-generated convective flows. Communications Physics, 2020, 3, .	2.0	10
21	STEM Gels by Controlled Radical Polymerization. Trends in Chemistry, 2020, 2, 341-353.	4.4	35
22	Harnessing biomimetic cryptic bonds to form self-reinforcing gels. Soft Matter, 2020, 16, 5120-5131.	1.2	7
23	Chemically controlled shape-morphing of elastic sheets. Materials Horizons, 2020, 7, 2314-2327.	6.4	13
24	Opto-chemo-mechanical transduction in photoresponsive gels elicits switchable self-trapped beams with remote interactions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3953-3959.	3.3	12
25	Controlling the Spatiotemporal Transport of Particles in Fluid-Filled Microchambers. Langmuir, 2020, 36, 7124-7132.	1.6	7
26	Twist again: Dynamically and reversibly controllable chirality in liquid crystalline elastomer microposts. Science Advances, 2020, 6, eaay5349.	4.7	24
27	Organization of Particle Islands through Lightâ€Powered Fluid Pumping. Angewandte Chemie, 2019, 131, 2317-2321.	1.6	5
28	Modeling the biomimetic self-organization of active objects in fluids. Nano Today, 2019, 29, 100804.	6.2	2
29	Modeling the behavior of inclusions in circular plates undergoing shape changes from two to three dimensions. Physical Review E, 2019, 100, 043001.	0.8	7
30	RÃ¼cktitelbild: Organization of Particle Islands through Light-Powered Fluid Pumping (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.6	1
31	Fight the flow: the role of shear in artificial rheotaxis for individual and collective motion. Nanoscale, 2019, 11, 10944-10951.	2.8	32
32	Collaboration and competition between active sheets for self-propelled particles. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9257-9262.	3.3	10
33	Light-Induced Convective Segregation of Different Sized Microparticles. ACS Applied Materials & Interfaces, 2019, 11, 18004-18012.	4.0	14
34	Modeling the formation of double rolls from heterogeneously patterned gels. Physical Review E, 2019, 99, 033003.	0.8	7
35	Self-Organization of Fluids in a Multienzymatic Pump System. Langmuir, 2019, 35, 3724-3732.	1.6	30
36	Achieving self-sustained motion of particles in solution with chemical pumps. , 2019, , 223-249.		0

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37	Organization of Particle Islands through Lightâ€Powered Fluid Pumping. Angewandte Chemie - International Edition, 2019, 58, 2295-2299.	7.2	15
38	â€œPatterning with loopsâ€•to dynamically reconfigure polymer gels. Soft Matter, 2018, 14, 3361-3371.	1.2	8
39	Optimizing Micromixer Surfaces To Deter Biofouling. ACS Applied Materials & Interfaces, 2018, 10, 8374-8383.	4.0	2
40	Fibers on the surface of thermo-responsive gels induce 3D shape changes. Soft Matter, 2018, 14, 1822-1832.	1.2	8
41	Flow-Driven Assembly of Microcapsules into Three-Dimensional Towers. Langmuir, 2018, 34, 2890-2899.	1.6	4
42	Designing polymer gels and composites that undergo bio-inspired phototactic reconfiguration and motion. Bioinspiration and Biomimetics, 2018, 13, 035004.	1.5	7
43	Modeling Biofilm Formation on Dynamically Reconfigurable Composite Surfaces. Langmuir, 2018, 34, 1807-1816.	1.6	4
44	Tailoring the mechanical properties of nanoparticle networks that encompass biomimetic catch bonds. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 105-118.	2.4	12
45	Structurally Tailored and Engineered Macromolecular (STEM) Gels as Soft Elastomers and Hard/Soft Interfaces. Macromolecules, 2018, 51, 9184-9191.	2.2	31
46	Intelligent Nano/Micromotors: Using Free Energy To Fabricate Organized Systems Driven Far from Equilibrium. Accounts of Chemical Research, 2018, 51, 2979-2979.	7.6	18
47	Designing self-propelled, chemically active sheets: Wrappers, flappers, and creepers. Science Advances, 2018, 4, eaav1745.	4.7	26
48	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.	3.3	91
49	Using Chemical Pumps and Motors To Design Flows for Directed Particle Assembly. Accounts of Chemical Research, 2018, 51, 2672-2680.	7.6	13
50	Phase Transitions and Pattern Formation in Chemoâ€Responsive Gels and Composites. Israel Journal of Chemistry, 2018, 58, 693-705.	1.0	4
51	Transformable Materials: Structurally Tailored and Engineered Macromolecular (STEM) Gels by Controlled Radical Polymerization. Macromolecules, 2018, 51, 3808-3817.	2.2	56
52	Tuning the synchronization of a network of weakly coupled self-oscillating gels via capacitors. Chaos, 2018, 28, 053106.	1.0	2
53	Detecting spatial defects in colored patterns using self-oscillating gels. Journal of Applied Physics, 2018, 123, 215107.	1.1	3
54	Delamination of a thin sheet from a soft adhesive Winkler substrate. Physical Review E, 2018, 97, 062803.	0.8	15

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55	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.	5.3	146
56	Photo-regeneration of severed gel with iniferter-mediated photo-growth. Soft Matter, 2017, 13, 1978-1987.	1.2	20
57	Modeling the formation of layered, amphiphilic gels. Polymer, 2017, 111, 214-221.	1.8	15
58	Harnessing catalytic pumps for directional delivery of microparticles in microchambers. Nature Communications, 2017, 8, 14384.	5.8	58
59	Using Torsion for Controllable Reconfiguration of Binary Nanoparticle Networks. ACS Nano, 2017, 11, 3059-3066.	7.3	2
60	Designing self-powered materials systems that perform pattern recognition. Chemical Communications, 2017, 53, 7692-7706.	2.2	12
61	Solutal and thermal buoyancy effects in self-powered phosphatase micropumps. Soft Matter, 2017, 13, 2800-2807.	1.2	57
62	Photoactivated Structurally Tailored and Engineered Macromolecular (STEM) gels as precursors for materials with spatially differentiated mechanical properties. Polymer, 2017, 126, 224-230.	1.8	28
63	Synthetic quorum sensing in model microcapsule colonies. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8475-8480.	3.3	9
64	Convective Self-Sustained Motion in Mixtures of Chemically Active and Passive Particles. Langmuir, 2017, 33, 7873-7880.	1.6	23
65	Effects of morphology on the mechanical properties of heterogeneous polymer-grafted nanoparticle networks. Molecular Systems Design and Engineering, 2017, 2, 490-499.	1.7	3
66	Combining ATRP and FRP Gels: Soft Gluing of Polymeric Materials for the Fabrication of Stackable Gels. Polymers, 2017, 9, 186.	2.0	10
67	Tailoring the structure of polymer networks with iniferter-mediated photo-growth. Polymer Chemistry, 2016, 7, 2955-2964.	1.9	40
68	Miktoarm star copolymers as interfacial connectors for stackable amphiphilic gels. Polymer, 2016, 101, 406-414.	1.8	17
69	Embedding flexible fibers into responsive gels to create composites with controllable dexterity. Soft Matter, 2016, 12, 9170-9184.	1.2	6
70	Harnessing Cooperative Interactions between Thermoresponsive Aptamers and Gels To Trap and Release Nanoparticles. ACS Applied Materials & Interfaces, 2016, 8, 30475-30483.	4.0	8
71	Harnessing surface-bound enzymatic reactions to organize microcapsules in solution. Science Advances, 2016, 2, e1501835.	4.7	23
72	Pattern recognition with â€œmaterials that computeâ€• Science Advances, 2016, 2, e1601114.	4.7	42

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73	Computational modeling of oscillating fins that â€œcatch and releaseâ€•targeted nanoparticles in bilayer flows. Soft Matter, 2016, 12, 1374-1384.	1.2	11
74	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.	3.3	78
75	Tuning the Mechanical Properties of Polymer-Grafted Nanoparticle Networks through the Use of Biomimetic Catch Bonds. Macromolecules, 2016, 49, 1353-1361.	2.2	20
76	Computational design of microscopic swimmers and capsules: From directed motion to collective behavior. Current Opinion in Colloid and Interface Science, 2016, 21, 44-56.	3.4	8
77	Stimuli-responsive behavior of composites integrating thermo-responsive gels with photo-responsive fibers. Materials Horizons, 2016, 3, 53-62.	6.4	114
78	Modeling the entrainment of self-oscillating gels to periodic mechanical deformation. Chaos, 2015, 25, 064302.	1.0	10
79	Stackable, Covalently Fused Gels: Repair and Composite Formation. Macromolecules, 2015, 48, 1169-1178.	2.2	30
80	Designing Composite Coatings That Provide a Dual Defense against Fouling. Langmuir, 2015, 31, 7524-7532.	1.6	16
81	Achieving synchronization with active hybrid materials: Coupling self-oscillating gels and piezoelectric films. Scientific Reports, 2015, 5, 11577.	1.6	12
82	Harnessing biomimetic catch bonds to create mechanically robust nanoparticle networks. Polymer, 2015, 69, 310-320.	1.8	15
83	Designing Dual-functionalized Gels for Self-reconfiguration and Autonomous Motion. Scientific Reports, 2015, 5, 9569.	1.6	13
84	An aptamer-functionalized chemomechanically modulated biomolecule catch-and-release system. Nature Chemistry, 2015, 7, 447-454.	6.6	128
85	Modeling free radical polymerization using dissipative particle dynamics. Polymer, 2015, 72, 217-225.	1.8	48
86	Self-assembly of microcapsules regulated via the repressilator signaling network. Soft Matter, 2015, 11, 3542-3549.	1.2	16
87	Self-Propelled Nanomotors Autonomously Seek and Repair Cracks. Nano Letters, 2015, 15, 7077-7085.	4.5	123
88	Designing Synthetic Microcapsules That Undergo Biomimetic Communication and Autonomous Motion. Langmuir, 2015, 31, 11951-11963.	1.6	7
89	Designing a gelâ€"fiber composite to extract nanoparticles from solution. Soft Matter, 2015, 11, 8692-8700.	1.2	12
90	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.	11.8	35

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91	Designing biomimetic reactive polymer gels. Materials Today, 2014, 17, 486-493.	8.3	7
92	Dynamic behavior of dual cross-linked nanoparticle networks under oscillatory shear. New Journal of Physics, 2014, 16, 075009.	1.2	11
93	Cooperative, Reversible Selfâ€Assembly of Covalently Preâ€Linked Proteins into Giant Fibrous Structures. Angewandte Chemie - International Edition, 2014, 53, 8050-8055.	7.2	32
94	Picking up Nanoparticles with Functional Droplets. Advanced Materials Interfaces, 2014, 1, 1400121.	1.9	8
95	MODELING STIMULI-INDUCED RECONFIGURATION AND DIRECTED MOTION OF RESPONSIVE GELS. World Scientific Lecture Notes in Complex Systems, 2014, , 149-168.	0.1	0
96	Modeling polymer grafted nanoparticle networks reinforced by high-strength chains. Soft Matter, 2014, 10, 1374-1383.	1.2	28
97	Modeling Chemoresponsive Polymer Gels. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 35-54.	3.3	21
98	Forming self-rotating pinwheels from assemblies of oscillating polymer gels. Materials Horizons, 2014, 1, 125-132.	6.4	8
99	Using light to control the interactions between self-rotating assemblies of active gels. Polymer, 2014, 55, 5924-5932.	1.8	4
100	Reconfigurable soft matter. Soft Matter, 2014, 10, 1244.	1.2	9
101	Fluid-driven motion of passive cilia enables the layer to expel sticky particles. Soft Matter, 2014, 10, 1416-1427.	1.2	17
102	Designing Mechanomutable Composites: Reconfiguring the Structure of Nanoparticle Networks through Mechanical Deformation. Nano Letters, 2014, 14, 4745-4750.	4.5	11
103	Directing the Behavior of Active, Self-Oscillating Gels with Light. Macromolecules, 2014, 47, 3231-3242.	2.2	20
104	Designing Bioinspired Artificial Cilia to Regulate Particleâ€"Surface Interactions. Journal of Physical Chemistry Letters, 2014, 5, 1691-1700.	2.1	22
105	Strain recovery and self-healing in dual cross-linked nanoparticle networks. Polymer Chemistry, 2013, 4, 4927.	1.9	33
106	Modeling the Photoinduced Reconfiguration and Directed Motion of Polymer Gels. Advanced Functional Materials, 2013, 23, 4601-4610.	7.8	56
107	Chemo-responsive, self-oscillating gels that undergo biomimetic communication. Chemical Society Reviews, 2013, 42, 7257.	18.7	54
108	Using Light To Guide the Motion of Nanorods in Photoresponsive Binary Blends: Designing Hierarchically Structured Nanocomposites. Langmuir, 2013, 29, 12785-12795.	1.6	1

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109	â€œZeroâ€Dimensionalâ€•Singleâ€Walled Carbon Nanotubes. Angewandte Chemie - International Edition, 2013, 52, 11308-11312.	7.2	13
110	Active Ciliated Surfaces Expel Model Swimmers. Langmuir, 2013, 29, 12770-12776.	1.6	21
111	Harnessing Interfacially-Active Nanorods to Regenerate Severed Polymer Gels. Nano Letters, 2013, 13, 6269-6274.	4.5	75
112	Modeling the response of dual cross-linked nanoparticle networks to mechanical deformation. Soft Matter, 2013, 9, 109-121.	1.2	50
113	Nano-pipette directed transport of nanotube transmembrane channels and hybrid vesicles. Nanoscale, 2013, 5, 9773.	2.8	9
114	Reconfigurable assemblies of active, autochemotactic gels. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 431-436.	3.3	31
115	UV patternable thin film chemistry for shape and functionally versatile self-oscillating gels. Soft Matter, 2013, 9, 1231-1243.	1.2	52
116	Stiffness-modulated motion of soft microscopic particles over active adhesive cilia. Soft Matter, 2013, 9, 3945.	1.2	12
117	Polymer Gels: Modeling the Photoinduced Reconfiguration and Directed Motion of Polymer Gels (Adv.) Tj ETQq1 1 0.784314 rgBT /Over	7.8	0
118	Coassembly of Nanorods and Photosensitive Binary Blends: â€œCombingâ€•with Light To Create Periodically Ordered Nanocomposites. Langmuir, 2013, 29, 750-760.	1.6	7
119	Harnessing Fluid-Driven Vesicles To Pick Up and Drop Off Janus Particles. ACS Nano, 2013, 7, 1224-1238.	7.3	49
120	Size Selectivity in Artificial Ciliaâ€"Particle Interactions: Mimicking the Behavior of Suspension Feeders. Langmuir, 2013, 29, 4616-4621.	1.6	18
121	Self-Healing Vesicles Deposit Lipid-Coated Janus Particles into Nanoscopic Trenches. Langmuir, 2013, 29, 16066-16074.	1.6	20
122	Wasted loops quantified. Nature, 2013, 493, 172-173.	13.7	5
123	Designing Tunable Bio-nanostructured Materials via Self-Assembly of Amphiphilic Lipids and Functionalized Nanotubes. Materials Research Society Symposia Proceedings, 2012, 1464, 21.	0.1	1
124	Promoting Network Formation in Nanorod-filled Binary Blends. Materials Research Society Symposia Proceedings, 2012, 1411, 75.	0.1	0
125	Modeling the Transport of Nanoparticle-Filled Binary Fluids through Micropores. Langmuir, 2012, 28, 11410-11421.	1.6	27
126	Chemical Oscillators in Structured Media. Accounts of Chemical Research, 2012, 45, 2160-2168.	7.6	63

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127	Probing and repairing damaged surfaces with nanoparticle-containing microcapsules. Nature Nanotechnology, 2012, 7, 87-90.	15.6	56
128	Fibers with Integrated Mechanochemical Switches: Minimalistic Design Principles Derived from Fibronectin. Biophysical Journal, 2012, 103, 1909-1918.	0.2	27
129	Designing mechano-responsive microcapsules that undergo self-propelled motion. Soft Matter, 2012, 8, 180-190.	1.2	20
130	Modeling the making and breaking of bonds as an elastic microcapsule moves over a compliant substrate. Soft Matter, 2012, 8, 77-85.	1.2	10
131	Chemically-mediated communication in self-oscillating, biomimetic cilia. Journal of Materials Chemistry, 2012, 22, 241-250.	6.7	43
132	Controlling the dynamic behavior of heterogeneous self-oscillating gels. Journal of Materials Chemistry, 2012, 22, 13625.	6.7	51
133	Self-Healing Polymer Films Based on Thiolâ€"Disulfide Exchange Reactions and Self-Healing Kinetics Measured Using Atomic Force Microscopy. Macromolecules, 2012, 45, 142-149.	2.2	407
134	Propulsion and Trapping of Microparticles by Active Cilia Arrays. Langmuir, 2012, 28, 3217-3226.	1.6	35
135	Mechano-chemical oscillations and waves in reactive gels. Reports on Progress in Physics, 2012, 75, 066601.	8.1	64
136	Synthetic homeostatic materials with chemo-mechano-chemical self-regulation. Nature, 2012, 487, 214-218.	13.7	418
137	Mechanical Resuscitation of Chemical Oscillations in Belousovâ€"Zhabotinsky Gels. Advanced Functional Materials, 2012, 22, 2535-2541.	7.8	49
138	Shape- and size-dependent patterns in self-oscillating polymer gels. Soft Matter, 2011, 7, 3141.	1.2	63
139	Forming transmembrane channels using end-functionalized nanotubes. Nanoscale, 2011, 3, 240-250.	2.8	38
140	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
141	Self-assembly of nanorods in ternary mixtures: promoting the percolation of the rods and creating interfacially jammed gels. Journal of Materials Chemistry, 2011, 21, 14178.	6.7	8
142	Kinetically Trapped Co-continuous Polymer Morphologies through Intraphase Gelation of Nanoparticles. Nano Letters, 2011, 11, 1997-2003.	4.5	107
143	Using Mesoscopic Models to Design Strong and Tough Biomimetic Polymer Networks. Langmuir, 2011, 27, 13796-13805.	1.6	20
144	UV-enhanced Ordering in Azobenzene-Containing Polystyrene-<i>block</i>-Poly(<i>n</i>-Butyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	2.2	8

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145	Tailoring the Trajectory of Cell Rolling with Cytotactic Surfaces. Langmuir, 2011, 27, 15345-15351.	1.6	7
146	Phase Behavior and Photoresponse of Azobenzene-Containing Polystyrene-<i>block</i>-poly(<i>n</i>-butyl methacrylate) Block Copolymers. Macromolecules, 2011, 44, 1125-1131.	2.2	16
147	Role of Parallel Reformable Bonds in the Self-Healing of Cross-Linked Nanogel Particles. Langmuir, 2011, 27, 3991-4003.	1.6	26
148	Self-assembly of mixtures of nanorods in binary, phase-separating blends. Soft Matter, 2011, 7, 595-607.	1.2	41
149	Modeling the Self-Assembly of Lipids and Nanotubes in Solution: Forming Vesicles and Bicelles with Transmembrane Nanotube Channels. ACS Nano, 2011, 5, 4769-4782.	7.3	61
150	Designing self-propelled microcapsules for pick-up and delivery of microscopic cargo. Soft Matter, 2011, 7, 3168.	1.2	21
151	Photocontrol over the Disorder-to-Order Transition in Thin Films of Polystyrene-<i>block</i>-poly(methyl methacrylate) Block Copolymers Containing Photodimerizable Anthracene Functionality. Journal of the American Chemical Society, 2011, 133, 17217-17224.	6.6	23
152	Interactions of End-functionalized Nanotubes with Lipid Vesicles: Spontaneous Insertion and Nanotube Self-Organization. Current Nanoscience, 2011, 7, 699-715.	0.7	25
153	Modeling the nanoscratching of self-healing materials. Journal of Chemical Physics, 2011, 134, 084901.	1.2	13
154	Design rules for creating sensing and self-actuating microcapsules. Smart Structures and Systems, 2011, 7, 199-211.	1.9	3
155	Designing Oscillating Cilia That Capture or Release Microscopic Particles. Langmuir, 2010, 26, 2963-2968.	1.6	50
156	Modeling autonomously oscillating chemo-responsive gels. Progress in Polymer Science, 2010, 35, 155-173.	11.8	82
157	Copying from nature: Designing adaptive, chemoresponsive gels. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 2533-2541.	2.4	7
158	Designing communicating colonies of biomimetic microcapsules. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12417-12422.	3.3	43
159	Computational Design of Active, Self-Reinforcing Gels. Journal of Physical Chemistry B, 2010, 114, 6316-6322.	1.2	33
160	Using Nanoparticle-Filled Microcapsules for Site-Specific Healing of Damaged Substrates: Creating a â€œRepair-and-Goâ€•System. ACS Nano, 2010, 4, 1115-1123.	7.3	52
161	Designing autonomously motile gels that follow complex paths. Soft Matter, 2010, 6, 768-773.	1.2	36
162	Redox Responsive Behavior of Thiol/Disulfide-Functionalized Star Polymers Synthesized via Atom Transfer Radical Polymerization. Macromolecules, 2010, 43, 4133-4139.	2.2	159

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163	Biomimetic chemical signaling across synthetic microcapsule arrays. Journal of Materials Chemistry, 2010, 20, 10384.	6.7	13
164	Designing microcapsule arrays that propagate chemical signals. Physical Review E, 2010, 82, 021801.	0.8	6
165	Emerging themes in soft matter: responsive and active soft materials. Soft Matter, 2010, 6, 703.	1.2	7
166	Controlling chemical oscillations in heterogeneous Belousov-Zhabotinsky gels via mechanical strain. Physical Review E, 2009, 79, 046214.	0.8	25
167	Spatial confinement controls self-oscillations in polymer gels undergoing the Belousov-Zhabotinsky reaction. Physical Review E, 2009, 80, 056208.	0.8	11
168	Emergent or Just Complex?. Science, 2009, 325, 1632-1634.	6.0	33
169	Synthesis of Photoisomerizable Block Copolymers by Atom Transfer Radical Polymerization. Macromolecular Chemistry and Physics, 2009, 210, 1484-1492.	1.1	10
170	Modeling the Interactions between Membranes and Inclusions: Designing Selfâ€Cleaning Films and Resealing Pores. Macromolecular Theory and Simulations, 2009, 18, 11-24.	0.6	8
171	Self-Sustained Motion of a Train of Haptotactic Microcapsules. Langmuir, 2009, 25, 9644-9647.	1.6	10
172	Harnessing Labile Bonds between Nanogel Particles to Create Self-Healing Materials. ACS Nano, 2009, 3, 885-892.	7.3	80
173	Using Light to Guide the Self-Sustained Motion of Active Gels. Langmuir, 2009, 25, 4298-4301.	1.6	60
174	Effect of encapsulated polymers and nanoparticles on shear deformation of droplets. Soft Matter, 2009, 5, 850.	1.2	2
175	Shear and extensional deformation of droplets containing polymers and nanoparticles. Journal of Chemical Physics, 2009, 130, 234905.	1.2	14
176	Global signaling of localized impact in chemo-responsive gels. Soft Matter, 2009, 5, 1835.	1.2	23
177	Forming ordered structures in ternary, photosensitive blends through the use of masks. Soft Matter, 2009, 5, 1205-1213.	1.2	3
178	Flow injection of polymers into nanopores. Soft Matter, 2009, 5, 4575.	1.2	42
179	New approaches for designing â€˜programmableâ€™ microfluidic devices. Polymer International, 2008, 57, 669-671.	1.6	1
180	Harnessing Janus Nanoparticles to Create Controllable Pores in Membranes. ACS Nano, 2008, 2, 1117-1122.	7.3	182

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181	Using a Single Mask to Create Multiple Patterns in Three-Component, Photoreactive Blends. Langmuir, 2008, 24, 1621-1624.	1.6	11
182	Modeling Microcapsules That Communicate through Nanoparticles To Undergo Self-Propelled Motion. ACS Nano, 2008, 2, 471-476.	7.3	35
183	Designing Synthetic, Pumping Cilia That Switch the Flow Direction in Microchannels. Langmuir, 2008, 24, 12102-12106.	1.6	59
184	Gradient Sensing in Reactive, Ternary Membranes. Langmuir, 2008, 24, 1878-1883.	1.6	1
185	Designing patterned substrates to regulate the movement of capsules in microchannels. Journal of Chemical Physics, 2008, 128, 235102.	1.2	7
186	Chemomechanical synchronization in heterogeneous self-oscillating gels. Physical Review E, 2008, 77, 046210.	0.8	25
187	Three-dimensional model for chemoresponsive polymer gels undergoing the Belousov-Zhabotinsky reaction. Physical Review E, 2008, 78, 041406.	0.8	78
188	Designing synthetic vesicles that engulf nanoscopic particles. Journal of Chemical Physics, 2007, 127, 084703.	1.2	130
189	Modeling the interactions between compliant microcapsules and pillars in microchannels. Journal of Chemical Physics, 2007, 127, 034703.	1.2	11
190	Modeling multicomponent reactive membranes. Physical Review E, 2007, 75, 051906.	0.8	6
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