Patrick S Doyle

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Micelle-Laden Hydrogel Microparticles for the Removal of Hydrophobic Micropollutants from Water. ACS Applied Polymer Materials, 2022, 4, 746-754.	4.4	12
2	Quantitative and Multiplex Detection of Extracellular Vesicleâ€Derived MicroRNA via Rolling Circle Amplification within Encoded Hydrogel Microparticles. Advanced Healthcare Materials, 2022, 11, e2102332.	7.6	20
3	Hydrogel Microparticleâ€Templated Antiâ€Solvent Crystallization of Smallâ€Molecule Drugs. Advanced Healthcare Materials, 2022, 11, e2102252.	7.6	5
4	Control of Drug-Excipient Particle Attributes with Droplet Microfluidic-based Extractive Solidification Enables Improved Powder Rheology. Pharmaceutical Research, 2022, 39, 411.	3.5	7
5	Thermogelling Hydroxypropyl Methylcellulose Nanoemulsions as Templates to Formulate Poorly Water-Soluble Drugs into Oral Thin Films Containing Drug Nanoparticles. Chemistry of Materials, 2022, 34, 5194-5205.	6.7	6
6	Coarse-grained molecular dynamics simulations of immobilized micelle systems and their interactions with hydrophobic molecules. Soft Matter, 2022, 18, 4625-4637.	2.7	5
7	High-Resolution Patterning of Hydrogel Sensing Motifs within Fibrous Substrates for Sensitive and Multiplexed Detection of Biomarkers. ACS Sensors, 2021, 6, 203-211.	7.8	8
8	Hydrogel Microsphere Encapsulation Enhances the Flow Properties of Monoclonal Antibody Crystal Formulations. Advanced Therapeutics, 2021, 4, 2000216.	3.2	5
9	DNA Knot Malleability in Single-Digit Nanopores. Nano Letters, 2021, 21, 3772-3779.	9.1	14
10	Evaluation of 3D-printed molds for fabrication of non-planar microchannels. Biomicrofluidics, 2021, 15, 024111.	2.4	6
11	Continuous Embedded Droplet Printing in Yield‣tress Fluids for Pharmaceutical Drug Particle Synthesis. Advanced Materials Technologies, 2021, 6, 2001245.	5.8	7
12	Particle Synthesis: Continuous Embedded Droplet Printing in Yield‧tress Fluids for Pharmaceutical Drug Particle Synthesis (Adv. Mater. Technol. 4/2021). Advanced Materials Technologies, 2021, 6, 2170020.	5.8	0
13	Design and Use of a Thermogelling Methylcellulose Nanoemulsion to Formulate Nanocrystalline Oral Dosage Forms. Advanced Materials, 2021, 33, e2008618.	21.0	11
14	Equilibrium Conformation of Catenated DNA Networks in Slitlike Confinement. ACS Macro Letters, 2021, 10, 880-885.	4.8	13
15	Patterning of interconnected human brain spheroids. Lab on A Chip, 2021, 21, 3532-3540.	6.0	7
16	Phase Transition of Catenated DNA Networks in Poly(ethylene glycol) Solutions. ACS Macro Letters, 2021, 10, 1429-1435.	4.8	8
17	Thermally and pH-responsive gelation of nanoemulsions stabilized by weak acid surfactants. Journal of Colloid and Interface Science, 2020, 563, 229-240.	9.4	16
18	High Loading Capacity Nanoencapsulation and Release of Hydrophobic Drug Nanocrystals from Microgel Particles. Chemistry of Materials, 2020, 32, 498-509.	6.7	18

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19	Equilibrium structure and deformation response of 2D kinetoplast sheets. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 121-127.	7.1	46
20	Topological Simplification of Complex Knots Untied in Elongational Flows. Macromolecules, 2020, 53, 7389-7398.	4.8	2
21	Nanoemulsion‣oaded Capsules for Controlled Delivery of Lipophilic Active Ingredients. Advanced Science, 2020, 7, 2001677.	11.2	21
22	Spatially resolved and multiplexed MicroRNA quantification from tissue using nanoliter well arrays. Microsystems and Nanoengineering, 2020, 6, 51.	7.0	21
23	Design of a Multiplexed Analyte Biosensor using Digital Barcoded Particles and Impedance Spectroscopy. Scientific Reports, 2020, 10, 6109.	3.3	12
24	Deformation Response of Catenated DNA Networks in a Planar Elongational Field. ACS Macro Letters, 2020, 9, 944-949.	4.8	19
25	A platform for multiplexed colorimetric microRNA detection using shape-encoded hydrogel particles. Analyst, The, 2020, 145, 5134-5140.	3.5	23
26	Hydrogel-Based Colorimetric Assay for Multiplexed MicroRNA Detection in a Microfluidic Device. Analytical Chemistry, 2020, 92, 5750-5755.	6.5	54
27	Tuning Material Properties of Nanoemulsion Gels by Sequentially Screening Electrostatic Repulsions and Then Thermally Inducing Droplet Bridging. Langmuir, 2020, 36, 3346-3355.	3.5	13
28	Weak acids as an alternative anti-microbial therapy. Biofilm, 2020, 2, 100019.	3.8	34
29	Embedded droplet printing in yield-stress fluids. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5671-5679.	7.1	52
30	An experimental investigation of attraction between knots in a stretched DNA molecule. Europhysics Letters, 2020, 129, 68001.	2.0	5
31	Ionic Effects on the Equilibrium Conformation of Catenated DNA Networks. Macromolecules, 2020, 53, 8502-8508.	4.8	10
32	Colloidal Gelation through Thermally Triggered Surfactant Displacement. Langmuir, 2019, 35, 9464-9473.	3.5	16
33	Conformational State Hopping of Knots in Tensioned Polymer Chains. ACS Macro Letters, 2019, 8, 905-911.	4.8	6
34	Long-Lived Self-Entanglements in Ring Polymers. Physical Review Letters, 2019, 123, 048002.	7.8	28
35	Effects of Side Chains on Polymer Knots. Macromolecules, 2019, 52, 6792-6800.	4.8	6
36	Complex DNA knots detected with a nanopore sensor. Nature Communications, 2019, 10, 4473.	12.8	85

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37	Thermoresponsive nanoemulsion-based gel synthesized through a low-energy process. Nature Communications, 2019, 10, 2749.	12.8	78
38	Nanopore Detection of Surprising Molarity Dependence of DNA Knot Complexity. Biophysical Journal, 2019, 116, 33a.	0.5	0
39	Self-assembly of droplets in three-dimensional microchannels. Soft Matter, 2019, 15, 4244-4254.	2.7	14
40	Noninvasive monitoring of single-cell mechanics by acoustic scattering. Nature Methods, 2019, 16, 263-269.	19.0	70
41	Calcium-mediated Protein Folding and Stabilization of Salmonella Biofilm-associated Protein A. Journal of Molecular Biology, 2019, 431, 433-443.	4.2	17
42	Photopolymerized Micelle‣aden Hydrogels Can Simultaneously Form and Encapsulate Nanocrystals to Improve Drug Substance Solubility and Expedite Drug Product Design. Small, 2019, 15, e1803372.	10.0	20
43	Self-entanglement of a tumbled circular chain. Physical Review Research, 2019, 1, .	3.6	7
44	Knots modify the coil–stretch transition in linear DNA polymers. Soft Matter, 2018, 14, 1689-1698.	2.7	25
45	Low Energy Nanoemulsions as Templates for the Formulation of Hydrophobic Drugs. Advanced Therapeutics, 2018, 1, 1700020.	3.2	22
46	Motion of Knots in DNA Stretched by Elongational Fields. Physical Review Letters, 2018, 120, 188003.	7.8	57
47	Microfluidic platform for selective microparticle parking and paired particle isolation in droplet arrays. Biomicrofluidics, 2018, 12, 024102.	2.4	9
48	Multifunctional Hierarchically-Assembled Hydrogel Particles with Pollen Grains via Pickering Suspension Polymerization. Langmuir, 2018, 34, 14643-14651.	3.5	12
49	Untying of Complex Knots on Stretched Polymers in Elongational Fields. Macromolecules, 2018, 51, 9562-9571.	4.8	16
50	Rapid prototyping of fluoropolymer microchannels by xurography for improved solvent resistance. Biomicrofluidics, 2018, 12, 064105.	2.4	13
51	Designable 3D Microshapes Fabricated at the Intersection of Structured Flow and Optical Fields. Small, 2018, 14, e1803585.	10.0	20
52	Design of Hydrogel Particle Morphology for Rapid Bioassays. Analytical Chemistry, 2018, 90, 13572-13579.	6.5	15
53	Large-scale patterning of living colloids for dynamic studies of neutrophil–microbe interactions. Lab on A Chip, 2018, 18, 1514-1520.	6.0	6
54	Theoretical Insight into the Biodegradation of Solitary Oil Microdroplets Moving through a Water Column. Bioengineering, 2018, 5, 15.	3.5	5

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55	Quantitative and multiplex microRNA assays from unprocessed cells in isolated nanoliter well arrays. Lab on A Chip, 2018, 18, 2410-2424.	6.0	11
56	Design of Mucoadhesive PLGA Microparticles for Ocular Drug Delivery. ACS Applied Bio Materials, 2018, 1, 561-571.	4.6	38
57	Universal Knot Spectra for Confined Polymers. Macromolecules, 2018, 51, 6327-6333.	4.8	28
58	Oil Recovery from Micropatterned Triangular Troughs during a Surfactant Flood. Langmuir, 2018, 34, 10644-10649.	3.5	10
59	Nonfouling, Encoded Hydrogel Microparticles for Multiplex MicroRNA Profiling Directly from Formalin-Fixed, Paraffin-Embedded Tissue. Analytical Chemistry, 2018, 90, 10279-10285.	6.5	19
60	Thermal processing of thermogelling nanoemulsions as a route to tune material properties. Soft Matter, 2018, 14, 5604-5614.	2.7	8
61	3D printing of self-assembling thermoresponsive nanoemulsions into hierarchical mesostructured hydrogels. Soft Matter, 2017, 13, 921-929.	2.7	40
62	Small but Perfectly Formed? Successes, Challenges, and Opportunities for Microfluidics in the Chemical and Biological Sciences. CheM, 2017, 2, 201-223.	11.7	278
63	Effect of internal architecture on microgel deformation in microfluidic constrictions. Soft Matter, 2017, 13, 1920-1928.	2.7	22
64	Swimming bacteria promote dispersal of non-motile staphylococcal species. ISME Journal, 2017, 11, 1933-1937.	9.8	52
65	Dynamics of DNA Knots during Chain Relaxation. Macromolecules, 2017, 50, 4074-4082.	4.8	39
66	Steady-State and Transient Behavior of Knotted Chains in Extensional Fields. ACS Macro Letters, 2017, 6, 1285-1289.	4.8	19
67	Creating Isolated Liquid Compartments Using Photopatterned Obstacles in Microfluidics. Physical Review Applied, 2017, 7, .	3.8	10
68	Nanoconfinement greatly speeds up the nucleation and the annealing in single-DNA collapse. Soft Matter, 2017, 13, 6363-6371.	2.7	4
69	Multiple particle tracking study of thermally-gelling nanoemulsions. Soft Matter, 2017, 13, 6606-6619.	2.7	15
70	CO ₂ -Reactive Ionic Liquid Surfactants for the Control of Colloidal Morphology. Langmuir, 2017, 33, 7633-7641.	3.5	4
71	Microparticle parking and isolation for highly sensitive microRNA detection. Lab on A Chip, 2017, 17, 3120-3128.	6.0	16
72	Mechanistic action of weak acid drugs on biofilms. Scientific Reports, 2017, 7, 4783.	3.3	40

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73	A General Route for Nanoemulsion Synthesis Using Low-Energy Methods at Constant Temperature. Langmuir, 2017, 33, 7118-7123.	3.5	59
74	Porous microwells for geometry-selective, large-scale microparticle arrays. Nature Materials, 2017, 16, 139-146.	27.5	56
75	Trapping a Knot into Tight Conformations by Intra-Chain Repulsions. Polymers, 2017, 9, 57.	4.5	13
76	Controlled liquid entrapment over patterned sidewalls in confined geometries. Physical Review Fluids, 2017, 2, .	2.5	10
77	Core–Shell Composite Hydrogels for Controlled Nanocrystal Formation and Release of Hydrophobic Active Pharmaceutical Ingredients. Advanced Healthcare Materials, 2016, 5, 1960-1968.	7.6	45
78	Site‣elective In Situ Grown Calcium Carbonate Micromodels with Tunable Geometry, Porosity, and Wettability. Advanced Functional Materials, 2016, 26, 4896-4905.	14.9	40
79	Coil-globule transition of a single semiflexible chain in slitlike confinement. Scientific Reports, 2016, 5, 18438.	3.3	15
80	Translocation dynamics of knotted polymers under a constant or periodic external field. Soft Matter, 2016, 12, 5041-5049.	2.7	25
81	Effects of Intrachain Interactions on the Knot Size of a Polymer. Macromolecules, 2016, 49, 7581-7587.	4.8	17
82	Kinetics of the Change in Droplet Size during Nanoemulsion Formation. Langmuir, 2016, 32, 11551-11559.	3.5	25
83	Flexible Octopusâ€Shaped Hydrogel Particles for Specific Cell Capture. Small, 2016, 12, 2001-2008.	10.0	32
84	Mechanical properties of the superficial biofilm layer determine the architecture of biofilms. Soft Matter, 2016, 12, 5718-5726.	2.7	57
85	Jamming of Knots along a Tensioned Chain. ACS Macro Letters, 2016, 5, 123-127.	4.8	23
86	Encoded Hydrogel Microparticles for Sensitive and Multiplex microRNA Detection Directly from Raw Cell Lysates. Analytical Chemistry, 2016, 88, 3075-3081.	6.5	56
87	Nanoemulsions: formation, properties and applications. Soft Matter, 2016, 12, 2826-2841.	2.7	963
88	The polymer physics of single DNA confined in nanochannels. Advances in Colloid and Interface Science, 2016, 232, 80-100.	14.7	91
89	Controlling and predicting droplet size of nanoemulsions: scaling relations with experimental validation. Soft Matter, 2016, 12, 1452-1458.	2.7	94
90	Highâ€Throughput Contact Flow Lithography. Advanced Science, 2015, 2, 1500149.	11.2	50

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91	Revisiting the Anomalous Bending Elasticity of Sharply Bent DNA. Biophysical Journal, 2015, 109, 2338-2351.	0.5	27
92	Sensitive and Multiplexed Onâ€chip microRNA Profiling in Oilâ€Isolated Hydrogel Chambers. Angewandte Chemie - International Edition, 2015, 54, 2477-2481.	13.8	36
93	Origin of Metastable Knots in Single Flexible Chains. Physical Review Letters, 2015, 114, 037801.	7.8	43
94	Material properties of biofilms—a review of methods for understanding permeability and mechanics. Reports on Progress in Physics, 2015, 78, 036601.	20.1	153
95	Sensitive and Multiplexed Onâ€chip microRNA Profiling in Oilâ€Isolated Hydrogel Chambers. Angewandte Chemie, 2015, 127, 2507-2511.	2.0	6
96	Hydrogel microparticles for biosensing. European Polymer Journal, 2015, 72, 386-412.	5.4	162
97	Photopatterned oil-reservoir micromodels with tailored wetting properties. Lab on A Chip, 2015, 15, 3047-3055.	6.0	49
98	Metastable Knots in Confined Semiflexible Chains. Macromolecules, 2015, 48, 2812-2818.	4.8	35
99	Synthesis of Nonspherical Microcapsules through Controlled Polyelectrolyte Coating of Hydrogel Templates. Langmuir, 2015, 31, 9228-9235.	3.5	16
100	Stretching self-entangled DNA molecules in elongational fields. Soft Matter, 2015, 11, 3105-3114.	2.7	52
101	Synthesis of Cell-Adhesive Anisotropic Multifunctional Particles by Stop Flow Lithography and Streptavidin–Biotin Interactions. Langmuir, 2015, 31, 13165-13171.	3.5	29
102	Celebrating Soft Matter's 10th Anniversary: Sequential phase transitions in thermoresponsive nanoemulsions. Soft Matter, 2015, 11, 8426-8431.	2.7	18
103	Effect of YOYO-1 on the mechanical properties of DNA. Soft Matter, 2014, 10, 9721-9728.	2.7	88
104	Single particle tracking reveals spatial and dynamic organization of the <i>Escherichiacoli</i> biofilm matrix. New Journal of Physics, 2014, 16, 085014.	2.9	48
105	Dynamic Remodeling of Microbial Biofilms by Functionally Distinct Exopolysaccharides. MBio, 2014, 5, e01536-14.	4.1	142
106	Untying Knotted DNA with Elongational Flows. ACS Macro Letters, 2014, 3, 963-967.	4.8	34
107	Universal process-inert encoding architecture for polymer microparticles. Nature Materials, 2014, 13, 524-529.	27.5	347
108	Stop flow lithography in perfluoropolyether (PFPE) microfluidic channels. Lab on A Chip, 2014, 14, 4680-4687.	6.0	26

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109	Enhanced electrohydrodynamic collapse of DNA due to dilute polymers. Biomicrofluidics, 2014, 8, 034103.	2.4	5
110	Interconversion between Three Overstretched DNA Structures. Journal of the American Chemical Society, 2014, 136, 16073-16080.	13.7	35
111	Composite Hydrogels Laden with Crystalline Active Pharmaceutical Ingredients of Controlled Size and Loading. Chemistry of Materials, 2014, 26, 6213-6220.	6.7	41
112	Synthesis of colloidal microgels using oxygen-controlled flow lithography. Soft Matter, 2014, 10, 7595-7605.	2.7	19
113	Inertio-elastic focusing of bioparticles in microchannels at high throughput. Nature Communications, 2014, 5, 4120.	12.8	173
114	Homogeneous percolation versus arrested phase separation in attractively-driven nanoemulsion colloidal gels. Soft Matter, 2014, 10, 3122.	2.7	70
115	Metastable Tight Knots in Semiflexible Chains. Macromolecules, 2014, 47, 6135-6140.	4.8	51
116	Biocompatible Alginate Microgel Particles as Heteronucleants and Encapsulating Vehicles for Hydrophilic and Hydrophobic Drugs. Crystal Growth and Design, 2014, 14, 2073-2082.	3.0	67
117	Extended de Gennes Regime of DNA Confined in a Nanochannel. Macromolecules, 2014, 47, 2445-2450.	4.8	108
118	Self-organizing microfluidic crystals. Soft Matter, 2014, 10, 5177-5191.	2.7	25
119	Monodisperse Polymeric Ionic Liquid Microgel Beads with Multiple Chemically Switchable Functionalities. Langmuir, 2013, 29, 9535-9543.	3.5	68
120	Comparisons of a Polymer in Confinement versus Applied Force. Macromolecules, 2013, 46, 6336-6344.	4.8	48
121	Engineering particle trajectories in microfluidic flows using particle shape. Nature Communications, 2013, 4, 2666.	12.8	73
122	Oil-Isolated Hydrogel Microstructures for Sensitive Bioassays On-Chip. Analytical Chemistry, 2013, 85, 12099-12107.	6.5	53
123	Is DNA a Good Model Polymer?. Macromolecules, 2013, 46, 8369-8382.	4.8	105
124	Synthesis of biomimetic oxygen-carrying compartmentalized microparticles using flow lithography. Lab on A Chip, 2013, 13, 4765.	6.0	28
125	Gelation of the genome by topoisomerase II targeting anticancer agents. Soft Matter, 2013, 9, 1656-1663.	2.7	19
126	Effect of H-NS on the elongation and compaction of single DNA molecules in a nanospace. Soft Matter, 2013, 9, 9593.	2.7	33

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127	A nanofluidic device for single molecule studies with in situ control of environmental solution conditions. Lab on A Chip, 2013, 13, 2821.	6.0	31
128	Revisiting Blob Theory for DNA Diffusivity in Slitlike Confinement. Physical Review Letters, 2013, 110, 168105.	7.8	44
129	Time-dependent bending rigidity and helical twist of DNA by rearrangement of bound HU protein. Nucleic Acids Research, 2013, 41, 8280-8288.	14.5	21
130	Amplified stretch of bottlebrush-coated DNA in nanofluidic channels. Nucleic Acids Research, 2013, 41, e189-e189.	14.5	25
131	Intrachain Dynamics of Large dsDNA Confined to Slitlike Channels. Physical Review Letters, 2013, 110, 068101.	7.8	19
132	Revealing the competition between peeled ssDNA, melting bubbles, and S-DNA during DNA overstretching by single-molecule calorimetry. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3865-3870.	7.1	124
133	Using Magnetically Responsive Tea Waste to Remove Lead in Waters under Environmentally Relevant Conditions. PLoS ONE, 2013, 8, e66648.	2.5	19
134	Cervical Mucus Properties Stratify Risk for Preterm Birth. PLoS ONE, 2013, 8, e69528.	2.5	63
135	Scattering and nonlinear bound states of hydrodynamically coupled particles in a narrow channel. Physical Review E, 2012, 85, 016325.	2.1	13
136	Two distinct overstretched DNA structures revealed by single-molecule thermodynamics measurements. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8103-8108.	7.1	117
137	Multiplexed Detection of mRNA Using Porosity-Tuned Hydrogel Microparticles. Analytical Chemistry, 2012, 84, 9370-9378.	6.5	113
138	Synthesis of Nonspherical Superparamagnetic Particles: <i>In Situ</i> Coprecipitation of Magnetic Nanoparticles in Microgels Prepared by Stop-Flow Lithography. Journal of the American Chemical Society, 2012, 134, 7337-7343.	13.7	115
139	Arrested Chain Growth During Magnetic Directed Particle Assembly in Yield Stress Matrix Fluids. Langmuir, 2012, 28, 3683-3689.	3.5	15
140	Synthesis of magnetic hydrogel microparticles for bioassays and tweezer manipulation in microwells. Microfluidics and Nanofluidics, 2012, 13, 665-674.	2.2	24
141	A systematic study of DNA conformation in slitlike confinement. Soft Matter, 2012, 8, 2972.	2.7	82
142	Collective dynamics of small clusters of particles flowing in a quasi-two-dimensional microchannel. Soft Matter, 2012, 8, 10676.	2.7	14
143	Nucleation under Soft Confinement: Role of Polymer–Solute Interactions. Crystal Growth and Design, 2012, 12, 508-517.	3.0	51
144	Conformation Model of Back-Folding and Looping of a Single DNA Molecule Confined Inside a Nanochannel. ACS Macro Letters, 2012, 1, 1046-1050.	4.8	48

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145	Effect of Nanoslit Confinement on the Knotting Probability of Circular DNA. ACS Macro Letters, 2012, 1, 732-736.	4.8	57
146	Gel-Induced Selective Crystallization of Polymorphs. Journal of the American Chemical Society, 2012, 134, 673-684.	13.7	129
147	Nanouidic Compaction of DNA by Like-Charged Protein. Journal of Physical Chemistry B, 2012, 116, 3031-3036.	2.6	25
148	Sequence-dependent sliding kinetics of p53. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16552-16557.	7.1	87
149	Non-polydimethylsiloxane devices for oxygen-free flow lithography. Nature Communications, 2012, 3, 805.	12.8	49
150	Mesoporous organohydrogels from thermogelling photocrosslinkable nanoemulsions. Nature Materials, 2012, 11, 344-352.	27.5	138
151	Nanoemulsion Composite Microgels for Orthogonal Encapsulation and Release. Advanced Materials, 2012, 24, 3838-3844.	21.0	50
152	Microgels: Nanoemulsion Composite Microgels for Orthogonal Encapsulation and Release (Adv.) Tj ETQq0 0 0 rg	gBT /Overlo 21.0	ck ₀ 10 Tf 50 ،
153	Magnetorheology in an aging, yield stress matrix fluid. Rheologica Acta, 2012, 51, 579-593.	2.4	38
154	Compressed-air flow control system. Lab on A Chip, 2011, 11, 743-747.	6.0	70
155	Multiplexed Protein Quantification with Barcoded Hydrogel Microparticles. Analytical Chemistry, 2011, 83, 193-199.	6.5	133
156	Nonlinear microrheology of an aging, yield stress fluid using magnetic tweezers. Soft Matter, 2011, 7, 9933.	2.7	55
157	Branched Networks by Directed Assembly of Shape Anisotropic Magnetic Particles. Langmuir, 2011, 27, 13428-13435.	3.5	8
158	Using Stop-Flow Lithography To Produce Opaque Microparticles: Synthesis and Modeling. Langmuir, 2011, 27, 13813-13819.	3.5	23
159	Simulating the Relaxation of Stretched DNA in Slitlike Confinement. Macromolecules, 2011, 44, 383-392.	4.8	12
160	Aptamer-Functionalized Microgel Particles for Protein Detection. Analytical Chemistry, 2011, 83, 9138-9145.	6.5	77
161	Size dependence of microprobe dynamics during gelation of a discotic colloidal clay. Journal of Rheology, 2011, 55, 273-299.	2.6	69
162	Controlled Nucleation from Solution Using Polymer Microgels. Journal of the American Chemical Society, 2011, 133, 3756-3759.	13.7	87

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163	Bar-coded hydrogel microparticles for protein detection: synthesis, assay and scanning. Nature Protocols, 2011, 6, 1761-1774.	12.0	135
164	Effect of Nanochannel Geometry on DNA Structure in the Presence of Macromolecular Crowding Agent. Nano Letters, 2011, 11, 5047-5053.	9.1	61
165	Ultrasensitive Multiplexed MicroRNA Quantification on Encoded Gel Microparticles Using Rolling Circle Amplification. Analytical Chemistry, 2011, 83, 7179-7185.	6.5	112
166	Rapid microRNA Profiling on Encoded Gel Microparticles. Angewandte Chemie - International Edition, 2011, 50, 2289-2293.	13.8	139
167	Genotyping by Alkaline Dehybridization Using Graphically Encoded Particles. Chemistry - A European Journal, 2011, 17, 2867-2873.	3.3	6
168	Hydrogel microparticles from lithographic processes: Novel materials for fundamental and applied colloid science. Current Opinion in Colloid and Interface Science, 2011, 16, 106-117.	7.4	134
169	Compression and self-entanglement of single DNA molecules under uniform electric field. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16153-16158.	7.1	125
170	Squishy Non‣pherical Hydrogel Microparticles. Macromolecular Rapid Communications, 2010, 31, 128-134.	3.9	90
171	A review of fatty acid profiles and antioxidant content in grass-fed and grain-fed beef. Nutrition Journal, 2010, 9, 10.	3.4	556
172	Hydrodynamic Focusing Lithography. Angewandte Chemie - International Edition, 2010, 49, 87-90.	13.8	73
173	DNA Collisions with a Large, Conducting Post. Macromolecules, 2010, 43, 5424-5432.	4.8	3
174	Microfluidic Fabrication of Hydrogel Microparticles Containing Functionalized Viral Nanotemplates. Langmuir, 2010, 26, 13436-13441.	3.5	62
175	Revisiting the Conformation and Dynamics of DNA in Slitlike Confinement. Macromolecules, 2010, 43, 7368-7377.	4.8	111
176	Coilâ^'Stretch Transition of DNA Molecules in Slitlike Confinement. Macromolecules, 2010, 43, 3081-3089.	4.8	38
177	Magnetic Barcoded Hydrogel Microparticles for Multiplexed Detection. Langmuir, 2010, 26, 8008-8014.	3.5	80
178	Multifunctional Superparamagnetic Janus Particles. Langmuir, 2010, 26, 4281-4287.	3.5	237
179	Preface to Special Topic: Papers from the 82nd American Chemical Society Colloid and Surface Science Symposium, Raleigh, North Carolina, 2008. Biomicrofluidics, 2009, 3, 012701.	2.4	1
180	Temporal response of an initially deflected PDMS channel. New Journal of Physics, 2009, 11, 115001.	2.9	12

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181	The Synthesis and Assembly of Polymeric Microparticles Using Microfluidics. Advanced Materials, 2009, 21, 4071-4086.	21.0	582
182	Tuning Curvature in Flow Lithography: A New Class of Concave/Convex Particles. Langmuir, 2009, 25, 5986-5992.	3.5	21
183	Optimization of Encoded Hydrogel Particles for Nucleic Acid Quantification. Analytical Chemistry, 2009, 81, 4873-4881.	6.5	103
184	Stop-Flow Lithography for the Production of Shape-Evolving Degradable Microgel Particles. Journal of the American Chemical Society, 2009, 131, 4499-4504.	13.7	128
185	Simulation of electrophoretic stretching of DNA in a microcontraction using an obstacle array for conformational preconditioning. Biomicrofluidics, 2009, 3, 12803.	2.4	19
186	A conformal nano-adhesive via initiated chemical vapor deposition for microfluidic devices. Lab on A Chip, 2009, 9, 411-416.	6.0	88
187	Soft microflow sensors. Lab on A Chip, 2009, 9, 1213.	6.0	43
188	Lock release lithography for 3D and composite microparticles. Lab on A Chip, 2009, 9, 863.	6.0	77
189	Directed self-assembly of field-responsive fluids in confined geometries. Soft Matter, 2009, 5, 1192-1197.	2.7	3
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