

# David A Weitz

## List of Publications by Year in descending order

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419  
papers

66,491  
citations

699

121  
h-index

906

241  
g-index

461  
all docs

461  
docs citations

461  
times ranked

55755  
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly Parallel Genome-wide Expression Profiling of Individual Cells Using Nanoliter Droplets. <i>Cell</i> , 2015, 161, 1202-1214.	13.5	5,908
2	Droplet Barcoding for Single-Cell Transcriptomics Applied to Embryonic Stem Cells. <i>Cell</i> , 2015, 161, 1187-1201.	13.5	2,857
3	Colloidosomes: Selectively Permeable Capsules Composed of Colloidal Particles. <i>Science</i> , 2002, 298, 1006-1009.	6.0	1,943
4	Monodisperse Double Emulsions Generated from a Microcapillary Device. <i>Science</i> , 2005, 308, 537-541.	6.0	1,923
5	Three-Dimensional Direct Imaging of Structural Relaxation Near the Colloidal Glass Transition. <i>Science</i> , 2000, 287, 627-631.	6.0	1,608
6	Eutectic Gallium-Indium (EGaIn): A Liquid Metal Alloy for the Formation of Stable Structures in Microchannels at Room Temperature. <i>Advanced Functional Materials</i> , 2008, 18, 1097-1104.	7.8	1,170
7	Single-cell analysis and sorting using droplet-based microfluidics. <i>Nature Protocols</i> , 2013, 8, 870-891.	5.5	1,146
8	Elastic Behavior of Cross-Linked and Bundled Actin Networks. <i>Science</i> , 2004, 304, 1301-1305.	6.0	1,090
9	Physical forces during collective cell migration. <i>Nature Physics</i> , 2009, 5, 426-430.	6.5	989
10	Geometrically Mediated Breakup of Drops in Microfluidic Devices. <i>Physical Review Letters</i> , 2004, 92, 054503.	2.9	969
11	Ultrahigh-throughput screening in drop-based microfluidics for directed evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 4004-4009.	3.3	959
12	Real-Space Imaging of Nucleation and Growth in Colloidal Crystallization. <i>Science</i> , 2001, 292, 258-262.	6.0	925
13	Massively parallel single-nucleus RNA-seq with DroNc-seq. <i>Nature Methods</i> , 2017, 14, 955-958.	9.0	859
14	Droplet microfluidics for high-throughput biological assays. <i>Lab on A Chip</i> , 2012, 12, 2146.	3.1	854
15	Gelation of particles with short-range attraction. <i>Nature</i> , 2008, 453, 499-503.	13.7	811
16	Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. <i>Lab on A Chip</i> , 2009, 9, 1850.	3.1	784
17	Single-cell ChIP-seq reveals cell subpopulations defined by chromatin state. <i>Nature Biotechnology</i> , 2015, 33, 1165-1172.	9.4	748
18	Dripping to Jetting Transitions in Coflowing Liquid Streams. <i>Physical Review Letters</i> , 2007, 99, 094502.	2.9	731

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19	Designer emulsions using microfluidics. <i>Materials Today</i> , 2008, 11, 18-27.	8.3	623
20	Controllable Monodisperse Multiple Emulsions. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 8970-8974.	7.2	621
21	Droplet-Based Microfluidic Platforms for the Encapsulation and Screening of Mammalian Cells and Multicellular Organisms. <i>Chemistry and Biology</i> , 2008, 15, 427-437.	6.2	620
22	Electric Control of Droplets in Microfluidic Devices. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2556-2560.	7.2	617
23	Biocompatible surfactants for water-in-fluorocarbon emulsions. <i>Lab on A Chip</i> , 2008, 8, 1632.	3.1	589
24	Two-Point Microrheology of Inhomogeneous Soft Materials. <i>Physical Review Letters</i> , 2000, 85, 888-891.	2.9	581
25	Monodisperse Emulsion Generation via Drop Break Off in a Coflowing Stream. <i>Langmuir</i> , 2000, 16, 347-351.	1.6	576
26	Structural Rearrangements That Govern Flow in Colloidal Glasses. <i>Science</i> , 2007, 318, 1895-1899.	6.0	485
27	Production of Unilamellar Vesicles Using an Inverted Emulsion. <i>Langmuir</i> , 2003, 19, 2870-2879.	1.6	483
28	Drop-based microfluidic devices for encapsulation of single cells. <i>Lab on A Chip</i> , 2008, 8, 1110.	3.1	470
29	Controlled encapsulation of single-cells into monodisperse picolitre drops. <i>Lab on A Chip</i> , 2008, 8, 1262.	3.1	444
30	Probing the Stochastic, Motor-Driven Properties of the Cytoplasm Using Force Spectrum Microscopy. <i>Cell</i> , 2014, 158, 822-832.	13.5	444
31	High-throughput injection with microfluidics using picoinjectors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 19163-19166.	3.3	429
32	Engineering asymmetric vesicles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 10718-10721.	3.3	418
33	Microfluidic fabrication of microparticles for biomedical applications. <i>Chemical Society Reviews</i> , 2018, 47, 5646-5683.	18.7	410
34	Synthesis of Nonspherical Colloidal Particles with Anisotropic Properties. <i>Journal of the American Chemical Society</i> , 2006, 128, 14374-14377.	6.6	409
35	The cell as a material. <i>Current Opinion in Cell Biology</i> , 2007, 19, 101-107.	2.6	403
36	Microfluidic Fabrication of Monodisperse Biocompatible and Biodegradable Polymersomes with Controlled Permeability. <i>Journal of the American Chemical Society</i> , 2008, 130, 9543-9549.	6.6	397

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37	Dielectrophoretic manipulation of drops for high-speed microfluidic sorting devices. Applied Physics Letters, 2006, 88, 024104.	1.5	380
38	Cell volume change through water efflux impacts cell stiffness and stem cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8618-E8627.	3.3	362
39	Microfluidic synthesis of advanced microparticles for encapsulation and controlled release. Lab on A Chip, 2012, 12, 2135.	3.1	357
40	Quantifying cell-generated mechanical forces within living embryonic tissues. Nature Methods, 2014, 11, 183-189.	9.0	336
41	Scaling of the Viscoelasticity of Weakly Attractive Particles. Physical Review Letters, 2000, 85, 449-452.	2.9	328
42	Injectable Stem Cell-Laden Photocrosslinkable Microspheres Fabricated Using Microfluidics for Rapid Generation of Osteogenic Tissue Constructs. Advanced Functional Materials, 2016, 26, 2809-2819.	7.8	309
43	Double Emulsion-templated Nanoparticle Colloidosomes with Selective Permeability. Advanced Materials, 2008, 20, 3498-3503.	11.1	307
44	Surface acoustic wave actuated cell sorting (SAWACS). Lab on A Chip, 2010, 10, 789.	3.1	306
45	Tough Self-Healing Elastomers by Molecular Enforced Integration of Covalent and Reversible Networks. Advanced Materials, 2017, 29, 1702616.	11.1	304
46	Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. Nature Biotechnology, 2014, 32, 473-478.	9.4	298
47	Dripping, Jetting, Drops, and Wetting: The Magic of Microfluidics. MRS Bulletin, 2007, 32, 702-708.	1.7	296
48	Surface acoustic wave (SAW) directed droplet flow in microfluidics for PDMS devices. Lab on A Chip, 2009, 9, 2625.	3.1	295
49	Deterministic encapsulation of single cells in thin tunable microgels for niche modelling and therapeutic delivery. Nature Materials, 2017, 16, 236-243.	13.3	286
50	Clonal evolution in patients with chronic lymphocytic leukaemia developing resistance to BTK inhibition. Nature Communications, 2016, 7, 11589.	5.8	285
51	Stress controls the mechanics of collagen networks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9573-9578.	3.3	284
52	MAFG-driven astrocytes promote CNS inflammation. Nature, 2020, 578, 593-599.	13.7	282
53	Droplet microfluidics: A tool for biology, chemistry and nanotechnology. TrAC - Trends in Analytical Chemistry, 2016, 82, 118-125.	5.8	280
54	Charge Stabilization in Nonpolar Solvents. Langmuir, 2005, 21, 4881-4887.	1.6	274

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55	Scaling by shrinking: empowering single-cell 'omics' with microfluidic devices. <i>Nature Reviews Genetics</i> , 2017, 18, 345-361.	7.7	274
56	Colloid Surfactants for Emulsion Stabilization. <i>Advanced Materials</i> , 2008, 20, 3239-3243.	11.1	273
57	Microfluidic Generation of Monodisperse, Structurally Homogeneous Alginate Microgels for Cell Encapsulation and 3D Cell Culture. <i>Advanced Healthcare Materials</i> , 2015, 4, 1628-1633.	3.9	272
58	Fabrication of Monodisperse Gel Shells and Functional Microgels in Microfluidic Devices. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1819-1822.	7.2	271
59	High-Order Multiple Emulsions Formed in Poly(dimethylsiloxane) Microfluidics. <i>Small</i> , 2009, 5, 2030-2032.	5.2	271
60	Nuclear Envelope Composition Determines the Ability of Neutrophil-type Cells to Passage through Micron-scale Constrictions. <i>Journal of Biological Chemistry</i> , 2013, 288, 8610-8618.	1.6	270
61	Glass coating for PDMS microfluidic channels by sol-gel methods. <i>Lab on A Chip</i> , 2008, 8, 516.	3.1	266
62	Investigating the microenvironments of inhomogeneous soft materials with multiple particle tracking. <i>Physical Review E</i> , 2001, 64, 061506.	0.8	264
63	Electrocoalescence of drops synchronized by size-dependent flow in microfluidic channels. <i>Applied Physics Letters</i> , 2006, 88, 264105.	1.5	261
64	Microfluidic Assembly of Homogeneous and Janus Colloid-Filled Hydrogel Granules. <i>Langmuir</i> , 2006, 22, 8618-8622.	1.6	251
65	Multicompartment Polymersomes from Double Emulsions. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1648-1651.	7.2	245
66	High-yield cell ordering and deterministic cell-in-droplet encapsulation using Dean flow in a curved microchannel. <i>Lab on A Chip</i> , 2012, 12, 2881.	3.1	243
67	Color from hierarchy: Diverse optical properties of micron-sized spherical colloidal assemblies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10845-10850.	3.3	242
68	High throughput production of single core double emulsions in a parallelized microfluidic device. <i>Lab on A Chip</i> , 2012, 12, 802.	3.1	241
69	Sorting drops and cells with acoustics: acoustic microfluidic fluorescence-activated cell sorter. <i>Lab on A Chip</i> , 2014, 14, 3710-3718.	3.1	240
70	3D structure of individual nanocrystals in solution by electron microscopy. <i>Science</i> , 2015, 349, 290-295.	6.0	238
71	Microfluidic Generation of Multifunctional Quantum Dot Barcode Particles. <i>Journal of the American Chemical Society</i> , 2011, 133, 8790-8793.	6.6	233
72	25th Anniversary Article: Double Emulsion Templated Solid Microcapsules: Mechanics And Controlled Release. <i>Advanced Materials</i> , 2014, 26, 2205-2218.	11.1	226

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73	Double-emulsion drops with ultra-thin shells for capsule templates. <i>Lab on A Chip</i> , 2011, 11, 3162-3166.	3.1	225
74	The Role of Vimentin Intermediate Filaments in Cortical and Cytoplasmic Mechanics. <i>Biophysical Journal</i> , 2013, 105, 1562-1568.	0.2	225
75	Colloidal Particles: Crystals, Glasses, and Gels. <i>Annual Review of Condensed Matter Physics</i> , 2013, 4, 217-233.	5.2	225
76	Multiple Polymersomes for Programmed Release of Multiple Components. <i>Journal of the American Chemical Society</i> , 2011, 133, 15165-15171.	6.6	219
77	Three-dimensional confocal microscopy of colloids. <i>Applied Optics</i> , 2001, 40, 4152.	2.1	218
78	Uniform Nonspherical Colloidal Particles with Tunable Shapes. <i>Advanced Materials</i> , 2007, 19, 2005-2009.	11.1	218
79	Janus Particles Templated from Double Emulsion Droplets Generated Using Microfluidics. <i>Langmuir</i> , 2009, 25, 4320-4323.	1.6	210
80	Droplet Microfluidics for Fabrication of Non-spherical Particles. <i>Macromolecular Rapid Communications</i> , 2010, 31, 108-118.	2.0	208
81	Controlled Synthesis of Cell-Laden Microgels by Radical-Free Gelation in Droplet Microfluidics. <i>Journal of the American Chemical Society</i> , 2012, 134, 4983-4989.	6.6	208
82	Novel Defect Structures in Nematic Liquid Crystal Shells. <i>Physical Review Letters</i> , 2007, 99, 157801.	2.9	207
83	Fluids of Clusters in Attractive Colloids. <i>Physical Review Letters</i> , 2006, 96, 028306.	2.9	200
84	Controllable microfluidic production of multicomponent multiple emulsions. <i>Lab on A Chip</i> , 2011, 11, 1587.	3.1	199
85	Geometric constraints during epithelial jamming. <i>Nature Physics</i> , 2018, 14, 613-620.	6.5	196
86	Mechanical Properties of the Cytoskeleton and Cells. <i>Cold Spring Harbor Perspectives in Biology</i> , 2017, 9, a022038.	2.3	194
87	Massively parallel sequencing of single cells by epicPCR links functional genes with phylogenetic markers. <i>ISME Journal</i> , 2016, 10, 427-436.	4.4	184
88	An Intestinal Organ Culture System Uncovers a Role for the Nervous System in Microbe-Immune Crosstalk. <i>Cell</i> , 2017, 168, 1135-1148.e12.	13.5	182
89	Relating microstructure to rheology of a bundled and cross-linked F-actin network in vitro. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 9636-9641.	3.3	178
90	Fabrication of monodisperse thermosensitive microgels and gel capsules in microfluidic devices. <i>Soft Matter</i> , 2008, 4, 2303.	1.2	178

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91	Robust scalable high throughput production of monodisperse drops. Lab on A Chip, 2016, 16, 4163-4172.	3.1	178
92	Smart Microgel Capsules from Macromolecular Precursors. Journal of the American Chemical Society, 2010, 132, 6606-6609.	6.6	177
93	Bioinspired graphene membrane with temperature tunable channels for water gating and molecular separation. Nature Communications, 2017, 8, 2011.	5.8	175
94	Controlled assembly of heterotypic cells in a core-shell scaffold: organ in a droplet. Lab on A Chip, 2016, 16, 1346-1349.	3.1	169
95	Biodegradable Core-Shell Carriers for Simultaneous Encapsulation of Synergistic Actives. Journal of the American Chemical Society, 2013, 135, 7933-7937.	6.6	167
96	Janus Supraparticles by Induced Phase Separation of Nanoparticles in Droplets. Advanced Materials, 2009, 21, 1949-1953.	11.1	166
97	Soft Poly(dimethylsiloxane) Elastomers from Architecture-Driven Entanglement Free Design. Advanced Materials, 2015, 27, 5132-5140.	11.1	163
98	Beating Poisson encapsulation statistics using close-packed ordering. Lab on A Chip, 2009, 9, 2628.	3.1	162
99	Protein Expression, Aggregation, and Triggered Release from Polymersomes as Artificial Cell-like Structures. Angewandte Chemie - International Edition, 2012, 51, 6416-6420.	7.2	162
100	One Step Formation of Controllable Complex Emulsions: From Functional Particles to Simultaneous Encapsulation of Hydrophilic and Hydrophobic Agents into Desired Position. Advanced Materials, 2013, 25, 2536-2541.	11.1	161
101	Microfluidic Model Porous Media: Fabrication and Applications. Small, 2018, 14, e1703575.	5.2	160
102	Amphiphilic Crescent-Moon-Shaped Microparticles Formed by Selective Adsorption of Colloids. Journal of the American Chemical Society, 2011, 133, 5516-5524.	6.6	159
103	Cross-Kingdom Chemical Communication Drives a Heritable, Mutually Beneficial Prion-Based Transformation of Metabolism. Cell, 2014, 158, 1083-1093.	13.5	158
104	Scaling of F-Actin Network Rheology to Probe Single Filament Elasticity and Dynamics. Physical Review Letters, 2004, 93, 188102.	2.9	155
105	Dewetting Instability during the Formation of Polymersomes from Block-Copolymer-Stabilized Double Emulsions. Langmuir, 2006, 22, 4457-4461.	1.6	155
106	Photo- and Thermoresponsive Polymersomes for Triggered Release. Angewandte Chemie - International Edition, 2012, 51, 12499-12503.	7.2	155
107	Nonequilibrium Microtubule Fluctuations in a Model Cytoskeleton. Physical Review Letters, 2008, 100, 118104.	2.9	152
108	Single step emulsification for the generation of multi-component double emulsions. Soft Matter, 2012, 8, 10719.	1.2	152

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109	Osmotic-pressure-controlled concentration of colloidal particles in thin-shelled capsules. <i>Nature Communications</i> , 2014, 5, 3068.	5.8	152
110	Ultrathin Shell Double Emulsion Templated Giant Unilamellar Lipid Vesicles with Controlled Microdomain Formation. <i>Small</i> , 2014, 10, 950-956.	5.2	150
111	Polymer Microcapsules with Programmable Active Release. <i>Journal of the American Chemical Society</i> , 2013, 135, 7744-7750.	6.6	149
112	Monodisperse Thermoresponsive Microgels with Tunable Volume-Phase Transition Kinetics. <i>Advanced Functional Materials</i> , 2007, 17, 3499-3504.	7.8	139
113	Single Molecule Protein Detection with Attomolar Sensitivity Using Droplet Digital Enzyme-Linked Immunosorbent Assay. <i>ACS Nano</i> , 2020, 14, 9491-9501.	7.3	138
114	Spatial Fluctuations of Fluid Velocities in Flow through a Three-Dimensional Porous Medium. <i>Physical Review Letters</i> , 2013, 111, 064501.	2.9	137
115	PHYSICS: Packing in the Spheres. <i>Science</i> , 2004, 303, 968-969.	6.0	135
116	Intermediate filament mechanics in vitro and in the cell: from coiled coils to filaments, fibers and networks. <i>Current Opinion in Cell Biology</i> , 2015, 32, 82-91.	2.6	134
117	An RNA-based signature enables high specificity detection of circulating tumor cells in hepatocellular carcinoma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1123-1128.	3.3	133
118	Delayed Buckling and Guided Folding of Inhomogeneous Capsules. <i>Physical Review Letters</i> , 2012, 109, 134302.	2.9	130
119	Photoresponsive Monodisperse Cholesteric Liquid Crystalline Microshells for Tunable Omnidirectional Lasing Enabled by a Visible Light-Driven Chiral Molecular Switch. <i>Advanced Optical Materials</i> , 2014, 2, 845-848.	3.6	128
120	Microfluidic Melt Emulsification for Encapsulation and Release of Actives. <i>ACS Applied Materials &amp; Interfaces</i> , 2010, 2, 3411-3416.	4.0	127
121	Visualizing multiphase flow and trapped fluid configurations in a model three-dimensional porous medium. <i>AIChE Journal</i> , 2013, 59, 1022-1029.	1.8	127
122	Programmable microencapsulation for enhanced mesenchymal stem cell persistence and immunomodulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15392-15397.	3.3	124
123	Core/Shell Nanocomposites Produced by Superfast Sequential Microfluidic Nanoprecipitation. <i>Nano Letters</i> , 2017, 17, 606-614.	4.5	123
124	The micromechanics of three-dimensional collagen gels. <i>Complexity</i> , 2011, 16, 22-28.	0.9	122
125	Axial and lateral particle ordering in finite Reynolds number channel flows. <i>Physics of Fluids</i> , 2010, 22, .	1.6	121
126	Protein Microgels from Amyloid Fibril Networks. <i>ACS Nano</i> , 2015, 9, 43-51.	7.3	121



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127	One-step generation of cell-laden microgels using double emulsion drops with a sacrificial ultra-thin oil shell. <i>Lab on A Chip</i> , 2016, 16, 1549-1555.	3.1	119
128	A model for velocity fluctuations in sedimentation. <i>Journal of Fluid Mechanics</i> , 2004, 501, 71-104.	1.4	118
129	Patterning microfluidic device wettability using flow confinement. <i>Lab on A Chip</i> , 2010, 10, 1774.	3.1	118
130	One-Step Emulsification of Multiple Concentric Shells with Capillary Microfluidic Devices. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 8731-8734.	7.2	118
131	Microfluidic Templated Multicompartment Microgels for 3D Encapsulation and Pairing of Single Cells. <i>Small</i> , 2018, 14, 1702955.	5.2	118
132	Gel-immobilized Colloidal Crystal Shell with Enhanced Thermal Sensitivity at Photonic Wavelengths. <i>Advanced Materials</i> , 2010, 22, 4998-5002.	11.1	117
133	Encapsulation and Enhanced Retention of Fragrance in Polymer Microcapsules. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 4007-4013.	4.0	115
134	An outlook on microfluidics: the promise and the challenge. <i>Lab on A Chip</i> , 2022, 22, 530-536.	3.1	115
135	Fabrication of Tunable Spherical Colloidal Crystals Immobilized in Soft Hydrogels. <i>Small</i> , 2010, 6, 807-810.	5.2	114
136	Mobilization of a trapped non-wetting fluid from a three-dimensional porous medium. <i>Physics of Fluids</i> , 2014, 26, .	1.6	114
137	Inhibition of Multidrug Resistance of Cancer Cells by Co-Delivery of DNA Nanostructures and Drugs Using Porous Silicon Nanoparticles@Giant Liposomes. <i>Advanced Functional Materials</i> , 2015, 25, 3330-3340.	7.8	114
138	High-Throughput Step Emulsification for the Production of Functional Materials Using a Glass Microfluidic Device. <i>Macromolecular Chemistry and Physics</i> , 2017, 218, 1600472.	1.1	113
139	Microfluidic sorting with high-speed single-layer membrane valves. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	111
140	Tumor-Vasculature-on-a-Chip for Investigating Nanoparticle Extravasation and Tumor Accumulation. <i>ACS Nano</i> , 2018, 12, 11600-11609.	7.3	111
141	Production of amorphous nanoparticles by supersonic spray-drying with a microfluidic nebulator. <i>Science</i> , 2015, 349, 956-960.	6.0	110
142	Photoreactive coating for high-contrast spatial patterning of microfluidic device wettability. <i>Lab on A Chip</i> , 2008, 8, 2157.	3.1	109
143	Impact of inlet channel geometry on microfluidic drop formation. <i>Physical Review E</i> , 2009, 80, 026310.	0.8	108
144	Does size matter? Elasticity of compressed suspensions of colloidal- and granular-scale microgels. <i>Soft Matter</i> , 2012, 8, 156-164.	1.2	108

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145	Capillary micromechanics: Measuring the elasticity of microscopic soft objects. <i>Soft Matter</i> , 2010, 6, 4550.	1.2	100
146	High-throughput, single-microbe genomics with strain resolution, applied to a human gut microbiome. <i>Science</i> , 2022, 376, .	6.0	100
147	A new device for the generation of microbubbles. <i>Physics of Fluids</i> , 2004, 16, 2828-2834.	1.6	99
148	Viscoelastic Properties of Microtubule Networks. <i>Macromolecules</i> , 2007, 40, 7714-7720.	2.2	99
149	A Microfluidic Approach to Encapsulate Living Cells in Uniform Alginate Hydrogel Microparticles. <i>Macromolecular Bioscience</i> , 2012, 12, 946-951.	2.1	98
150	Janus Microgels Produced from Functional Precursor Polymers. <i>Langmuir</i> , 2010, 26, 14842-14847.	1.6	97
151	Novel surface acoustic wave (SAW)-driven closed PDMS flow chamber. <i>Microfluidics and Nanofluidics</i> , 2012, 12, 229-235.	1.0	97
152	Dendronized fluorosurfactant for highly stable water-in-fluorinated oil emulsions with minimal inter-droplet transfer of small molecules. <i>Nature Communications</i> , 2019, 10, 4546.	5.8	95
153	Measurement of nonlinear rheology of cross-linked biopolymer gels. <i>Soft Matter</i> , 2010, 6, 4120.	1.2	91
154	Characterizing Concentrated, Multiply Scattering, and Actively Driven Fluorescent Systems with Confocal Differential Dynamic Microscopy. <i>Physical Review Letters</i> , 2012, 108, 218103.	2.9	90
155	One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13470-13474.	7.2	90
156	Structures, stresses, and fluctuations in the delayed failure of colloidal gels. <i>Soft Matter</i> , 2012, 8, 3657.	1.2	89
157	Microfluidics-assisted engineering of polymeric microcapsules with high encapsulation efficiency for protein drug delivery. <i>International Journal of Pharmaceutics</i> , 2014, 472, 82-87.	2.6	89
158	Drop formation in non-planar microfluidic devices. <i>Lab on A Chip</i> , 2012, 12, 4263.	3.1	88
159	Alpha-actinin binding kinetics modulate cellular dynamics and force generation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6619-6624.	3.3	87
160	Photothermal-responsive nanosized hybrid polymersome as versatile therapeutics codelivery nanovehicle for effective tumor suppression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 7744-7749.	3.3	85
161	Optically reconfigurable chiral microspheres of self-organized helical superstructures with handedness inversion. <i>Materials Horizons</i> , 2017, 4, 1190-1195.	6.4	83
162	Stable Polymer Nanoparticles with Exceptionally High Drug Loading by Sequential Nanoprecipitation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4720-4728.	7.2	81

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163	Nonuniversal Velocity Fluctuations of Sedimenting Particles. <i>Physical Review Letters</i> , 2002, 89, 054501.	2.9	80
164	Dewetting-Induced Membrane Formation by Adhesion of Amphiphile-Laden Interfaces. <i>Journal of the American Chemical Society</i> , 2011, 133, 4420-4426.	6.6	79
165	Fluid breakup during simultaneous two-phase flow through a three-dimensional porous medium. <i>Physics of Fluids</i> , 2014, 26, .	1.6	79
166	Throughput enhancement of parallel step emulsifier devices by shear-free and efficient nozzle clearance. <i>Lab on A Chip</i> , 2018, 18, 132-138.	3.1	79
167	Fabrication of solid lipid microcapsules containing ascorbic acid using a microfluidic technique. <i>Food Chemistry</i> , 2014, 152, 271-275.	4.2	78
168	Microfluidic Fabrication of Colloidal Nanomaterials-Encapsulated Microcapsules for Biomolecular Sensing. <i>Nano Letters</i> , 2017, 17, 2015-2020.	4.5	78
169	Attractive Pickering Emulsion Gels. <i>Advanced Materials</i> , 2021, 33, e2102362.	11.1	78
170	Stimuli-Responsive Core-Shell Microcapsules with Tunable Rates of Release by Using a Depolymerizable Poly(phthalaldehyde) Membrane. <i>Macromolecules</i> , 2013, 46, 3309-3313.	2.2	77
171	Optically Anisotropic Colloids of Controllable Shape. <i>Advanced Materials</i> , 2005, 17, 680-684.	11.1	76
172	Rheology and microrheology of a microstructured fluid: The gellan gum case. <i>Journal of Rheology</i> , 2007, 51, 851-865.	1.3	76
173	Controlled fabrication of polymer microgels by polymer-analogous gelation in droplet microfluidics. <i>Soft Matter</i> , 2010, 6, 3184.	1.2	76
174	Experimental validation of plugging during drop formation in a T-junction. <i>Lab on A Chip</i> , 2012, 12, 1516.	3.1	75
175	Graphene-templated directional growth of an inorganic nanowire. <i>Nature Nanotechnology</i> , 2015, 10, 423-428.	15.6	75
176	Biocompatible fluorinated polyglycerols for droplet microfluidics as an alternative to PEG-based copolymer surfactants. <i>Lab on A Chip</i> , 2016, 16, 65-69.	3.1	74
177	Wetting controls of droplet formation in step emulsification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9479-9484.	3.3	74
178	Rheology of F-actin solutions determined from thermally driven tracer motion. <i>Journal of Rheology</i> , 2000, 44, 917-928.	1.3	73
179	Time-Dependent Strength of Colloidal Gels. <i>Physical Review Letters</i> , 2005, 95, 048302.	2.9	73
180	Gold Nanorods Conjugated Porous Silicon Nanoparticles Encapsulated in Calcium Alginate Nano Hydrogels Using Microemulsion Templates. <i>Nano Letters</i> , 2018, 18, 1448-1453.	4.5	73

#	ARTICLE	IF	CITATIONS
181	Velocity Fluctuations in Fluidized Suspensions Probed by Ultrasonic Correlation Spectroscopy. <i>Physical Review Letters</i> , 2000, 85, 453-456.	2.9	72
182	Microfluidic Production of Alginate Hydrogel Particles for Antibody Encapsulation and Release. <i>Macromolecular Bioscience</i> , 2015, 15, 1641-1646.	2.1	72
183	Biocompatible Amphiphilic Hydrogel-Solid Dimer Particles as Colloidal Surfactants. <i>ACS Nano</i> , 2017, 11, 11978-11985.	7.3	72
184	Pickering emulsions stabilized by colloidal surfactants: Role of solid particles. <i>Particuology</i> , 2022, 64, 153-163.	2.0	72
185	Wetting-induced formation of controllable monodisperse multiple emulsions in microfluidics. <i>Lab on A Chip</i> , 2013, 13, 4047-4052.	3.1	71
186	Polymersomes Containing a Hydrogel Network for High Stability and Controlled Release. <i>Small</i> , 2013, 9, 124-131.	5.2	68
187	Local shear transformations in deformed and quiescent hard-sphere colloidal glasses. <i>Physical Review E</i> , 2014, 90, 042305.	0.8	68
188	A New Ensemble Machine-Learning Framework for Searching Sweet Spots in Shale Reservoirs. <i>SPE Journal</i> , 2021, 26, 482-497.	1.7	68
189	Enhanced-throughput production of polymersomes using a parallelized capillary microfluidic device. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 509-514.	1.0	66
190	Highly anisotropic vorticity aligned structures in a shear thickening attractive colloidal system. <i>Soft Matter</i> , 2008, 4, 1388.	1.2	65
191	Local Pore Size Correlations Determine Flow Distributions in Porous Media. <i>Physical Review Letters</i> , 2017, 119, 144501.	2.9	65
192	High-Throughput Single-Cell Labeling (Hi-SCL) for RNA-Seq Using Drop-Based Microfluidics. <i>PLoS ONE</i> , 2015, 10, e0116328.	1.1	64
193	Traveling surface acoustic wave (TSAW) microfluidic fluorescence activated cell sorter (µFACS). <i>Lab on A Chip</i> , 2019, 19, 2435-2443.	3.1	63
194	Microfluidics-Assisted Assembly of Injectable Photonic Hydrogels toward Reflective Cooling. <i>Small</i> , 2020, 16, e1903939.	5.2	63
195	Microfluidic synthesis of monodisperse porous microspheres with size-tunable pores. <i>Soft Matter</i> , 2012, 8, 10636.	1.2	62
196	Direct imaging of repulsive and attractive colloidal glasses. <i>Journal of Chemical Physics</i> , 2006, 125, 074716.	1.2	61
197	Sequencing-Based Protein Analysis of Single Extracellular Vesicles. <i>ACS Nano</i> , 2021, 15, 5631-5638.	7.3	61
198	A high-throughput cellulase screening system based on droplet microfluidics. <i>Biomicrofluidics</i> , 2014, 8, 041102.	1.2	60

#	ARTICLE	IF	CITATIONS
199	Chemically induced coalescence in droplet-based microfluidics. <i>Lab on A Chip</i> , 2015, 15, 1140-1144.	3.1	60
200	Colloidal Polymers with Controlled Sequence and Branching Constructed from Magnetic Field Assembled Nanoparticles. <i>ACS Nano</i> , 2015, 9, 2720-2728.	7.3	59
201	Scalable single-step microfluidic production of single-core double emulsions with ultra-thin shells. <i>Lab on A Chip</i> , 2015, 15, 3335-3340.	3.1	59
202	Tandem emulsification for high-throughput production of double emulsions. <i>Lab on A Chip</i> , 2017, 17, 936-942.	3.1	57
203	Decoupling the effects of nanopore size and surface roughness on the attachment, spreading and differentiation of bone marrow-derived stem cells. <i>Biomaterials</i> , 2020, 248, 120014.	5.7	57
204	Phase switching of ordered arrays of liquid crystal emulsions. <i>Applied Physics Letters</i> , 2003, 82, 2610-2612.	1.5	56
205	Control of non-linear elasticity in F-actin networks with microtubules. <i>Soft Matter</i> , 2011, 7, 902-906.	1.2	56
206	Short-time self-diffusion of nearly hard spheres at an oil-water interface. <i>Journal of Fluid Mechanics</i> , 2009, 618, 243-261.	1.4	55
207	Triple Emulsion Drops with An Ultrathin Water Layer: High Encapsulation Efficiency and Enhanced Cargo Retention in Microcapsules. <i>Advanced Materials</i> , 2016, 28, 3340-3344.	11.1	55
208	Millimeter-Size Pickering Emulsions Stabilized with Janus Microparticles. <i>Langmuir</i> , 2019, 35, 4693-4701.	1.6	55
209	Continuous microfluidic encapsulation of single mesenchymal stem cells using alginate microgels as injectable fillers for bone regeneration. <i>Acta Biomaterialia</i> , 2020, 111, 181-196.	4.1	55
210	Ultrafast Nanofiltration through Large-Area Single-Layered Graphene Membranes. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 9239-9244.	4.0	54
211	Reduced Graphene Oxide Membrane Induced Robust Structural Colors toward Personal Thermal Management. <i>ACS Photonics</i> , 2019, 6, 116-122.	3.2	54
212	Multi-functional micromotor: microfluidic fabrication and water treatment application. <i>Lab on A Chip</i> , 2017, 17, 4220-4224.	3.1	53
213	Controlled co-precipitation of biocompatible colorant-loaded nanoparticles by microfluidics for natural color drinks. <i>Lab on A Chip</i> , 2019, 19, 2089-2095.	3.1	53
214	Breakup of double emulsions in constrictions. <i>Soft Matter</i> , 2011, 7, 2345.	1.2	52
215	Thermally Switched Release from Nanoparticle Colloidosomes. <i>Advanced Functional Materials</i> , 2013, 23, 5925-5929.	7.8	52
216	Convection-Driven Pull-Down Assays in Nanoliter Droplets Using Scaffolded Aptamers. <i>Analytical Chemistry</i> , 2017, 89, 3468-3473.	3.2	52

#	ARTICLE	IF	CITATIONS
217	Single Extracellular Vesicle Protein Analysis Using Immuno-Droplet Digital Polymerase Chain Reaction Amplification. <i>Advanced Biology</i> , 2020, 4, e1900307.	3.0	52
218	Programmable microbial ink for 3D printing of living materials produced from genetically engineered protein nanofibers. <i>Nature Communications</i> , 2021, 12, 6600.	5.8	52
219	Enhanced surface acoustic wave cell sorting by 3D microfluidic-chip design. <i>Lab on A Chip</i> , 2017, 17, 4059-4069.	3.1	51
220	High-throughput double emulsion-based microfluidic production of hydrogel microspheres with tunable chemical functionalities toward biomolecular conjugation. <i>Lab on A Chip</i> , 2018, 18, 323-334.	3.1	51
221	Hydrogel microcapsules with photocatalytic nanoparticles for removal of organic pollutants. <i>Environmental Science: Nano</i> , 2020, 7, 656-664.	2.2	51
222	Millifluidics, microfluidics, and nanofluidics: manipulating fluids at varying length scales. <i>Materials Today Nano</i> , 2021, 16, 100136.	2.3	51
223	Drying regimes in homogeneous porous media from macro- to nanoscale. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	48
224	Characterization of niobium point contacts showing Josephson effects in the far infrared. <i>Journal of Applied Physics</i> , 1978, 49, 4873-4880.	1.1	47
225	Formation of polymersomes with double bilayers templated by quadruple emulsions. <i>Lab on A Chip</i> , 2013, 13, 1351.	3.1	47
226	Physical limits to biomechanical sensing in disordered fibre networks. <i>Nature Communications</i> , 2017, 8, 16096.	5.8	47
227	Target-locking acquisition with real-time confocal (TARC) microscopy. <i>Optics Express</i> , 2007, 15, 8702.	1.7	46
228	Probe Sensitivity to Cortical versus Intracellular Cytoskeletal Network Stiffness. <i>Biophysical Journal</i> , 2019, 116, 518-529.	0.2	46
229	Microfluidic Templated Mesoporous Silicon-Solid Lipid Microcomposites for Sustained Drug Delivery. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 12127-12134.	4.0	45
230	Rapid Patterning of PDMS Microfluidic Device Wettability Using Syringe-Vacuum-Induced Segmented Flow in Nonplanar Geometry. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 3170-3174.	4.0	45
231	Evolution on the Biophysical Fitness Landscape of an RNA Virus. <i>Molecular Biology and Evolution</i> , 2018, 35, 2390-2400.	3.5	45
232	Hydrogel Microcapsules with Dynamic pH-Responsive Properties from Methacrylic Anhydride. <i>Macromolecules</i> , 2018, 51, 5798-5805.	2.2	45
233	Parallelizable microfluidic dropmakers with multilayer geometry for the generation of double emulsions. <i>Lab on A Chip</i> , 2020, 20, 147-154.	3.1	45
234	Probing nonlinear rheology with inertio-elastic oscillations. <i>Journal of Rheology</i> , 2008, 52, 1013-1025.	1.3	44

#	ARTICLE	IF	CITATIONS
235	Tissue and cellular rigidity and mechanosensitive signaling activation in Alexander disease. <i>Nature Communications</i> , 2018, 9, 1899.	5.8	43
236	Early development drug formulation on a chip: Fabrication of nanoparticles using a microfluidic spray dryer. <i>Lab on A Chip</i> , 2011, 11, 2362.	3.1	42
237	Rapid growth of large, defect-free colloidal crystals. <i>Soft Matter</i> , 2013, 9, 320-328.	1.2	42
238	Aggregate-Based FRET Monitoring of Drug Release from Polymer Nanoparticles with High Drug Loading. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 20065-20074.	7.2	42
239	Active Encapsulation in Biocompatible Nanocapsules. <i>Small</i> , 2020, 16, e2002716.	5.2	42
240	Versatile Hydrogel Ensembles with Macroscopic Multidimensions. <i>Advanced Materials</i> , 2018, 30, 1803475.	11.1	41
241	Uncovering the Mechanism of Trapping and Cell Orientation during <i>Neisseria gonorrhoeae</i> Twitching Motility. <i>Biophysical Journal</i> , 2014, 107, 1523-1531.	0.2	40
242	Biodegradable Photothermal and pH Responsive Calcium Carbonate@Phospholipid@Acetalated Dextran Hybrid Platform for Advancing Biomedical Applications. <i>Advanced Functional Materials</i> , 2016, 26, 6158-6169.	7.8	40
243	Probing phenotypic growth in expanding <i>Bacillus subtilis</i> biofilms. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 4607-4615.	1.7	40
244	Drying kinetics driven by the shape of the air/water interface in a capillary channel. <i>European Physical Journal E</i> , 2016, 39, 23.	0.7	40
245	Stable Polymer Nanoparticles with Exceptionally High Drug Loading by Sequential Nanoprecipitation. <i>Angewandte Chemie</i> , 2020, 132, 4750-4758.	1.6	40
246	Ordered Mesoporous Microcapsules from Double Emulsion Confined Block Copolymer Self-Assembly. <i>ACS Nano</i> , 2021, 15, 3490-3499.	7.3	40
247	Enhanced Encapsulation of Actives in Self-Sealing Microcapsules by Precipitation in Capsule Shells. <i>Langmuir</i> , 2011, 27, 13988-13991.	1.6	39
248	Microcapsules for Enhanced Cargo Retention and Diversity. <i>Small</i> , 2015, 11, 2903-2909.	5.2	39
249	Functional Microcapsules via Thiolene Photopolymerization in Droplet-Based Microfluidics. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 3288-3293.	4.0	39
250	Transparent Impact-Resistant Composite Films with Bioinspired Hierarchical Structure. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 23616-23622.	4.0	39
251	A high-throughput multiparameter screen for accelerated development and optimization of soluble genetically encoded fluorescent biosensors. <i>Nature Communications</i> , 2022, 13, .	5.8	39
252	Block-and-break generation of microdroplets with fixed volume. <i>Biomicrofluidics</i> , 2013, 7, 024108.	1.2	38

#	ARTICLE	IF	CITATIONS
253	Gas-core triple emulsions for ultrasound triggered release. <i>Soft Matter</i> , 2013, 9, 38-42.	1.2	37
254	Fluorocarbon Oil Reinforced Triple Emulsion Drops. <i>Advanced Materials</i> , 2016, 28, 8425-8430.	11.1	37
255	Interaction of spin-labeled HPMA-based nanoparticles with human blood plasma proteins – the introduction of protein-corona-free polymer nanomedicine. <i>Nanoscale</i> , 2018, 10, 6194-6204.	2.8	37
256	Dynamic Microcapsules with Rapid and Reversible Permeability Switching. <i>Advanced Functional Materials</i> , 2018, 28, 1803385.	7.8	37
257	Observations of 3 nm Silk Nanofibrils Exfoliated from Natural Silkworm Silk Fibers. , 2020, 2, 153-160.		37
258	Electrostatics for Exploring the Nature of Water Adsorption on the Laponite Sheets' Surface. <i>Journal of Physical Chemistry B</i> , 2003, 107, 8946-8952.	1.2	36
259	Colloidal gelation of oppositely charged particles. <i>Soft Matter</i> , 2012, 8, 8697.	1.2	36
260	Stimuli-responsive dendronized polymeric hydrogels through Schiff-base chemistry showing remarkable topological effects. <i>Polymer Chemistry</i> , 2018, 9, 378-387.	1.9	36
261	Advanced microfluidic devices for fabricating multi-structural hydrogel microsphere. <i>Exploration</i> , 2021, 1, .	5.4	35
262	The microfluidic post-array device: high throughput production of single emulsion drops. <i>Lab on A Chip</i> , 2014, 14, 705-709.	3.1	34
263	Microfluidic Fabrication of Pluronic Vesicles with Controlled Permeability. <i>Langmuir</i> , 2016, 32, 5350-5355.	1.6	34
264	Osmotic Pressure Triggered Rapid Release of Encapsulated Enzymes with Enhanced Activity. <i>Advanced Functional Materials</i> , 2017, 27, 1700975.	7.8	34
265	Nonlinear Phenomena in Microfluidics. <i>Chemical Reviews</i> , 2022, 122, 6921-6937.	23.0	34
266	One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. <i>Angewandte Chemie</i> , 2016, 128, 13668-13672.	1.6	33
267	Regularized lattice Boltzmann multicomponent models for low capillary and Reynolds microfluidics flows. <i>Computers and Fluids</i> , 2018, 167, 33-39.	1.3	33
268	A general strategy for one-step fabrication of biocompatible microcapsules with controlled active release. <i>Chinese Chemical Letters</i> , 2020, 31, 249-252.	4.8	33
269	Hybrid Microgels with Thermo-Tunable Elasticity for Controllable Cell Confinement. <i>Advanced Healthcare Materials</i> , 2015, 4, 1841-1848.	3.9	32
270	Crystallization and reentrant melting of charged colloids in nonpolar solvents. <i>Physical Review E</i> , 2015, 91, 030301.	0.8	32



#	ARTICLE	IF	CITATIONS
271	Isolation and Analysis of Rare Norovirus Recombinants from Coinfected Mice Using Drop-Based Microfluidics. <i>Journal of Virology</i> , 2015, 89, 7722-7734.	1.5	32
272	Fluctuations in the Kinetics of Linear Protein Self-Assembly. <i>Physical Review Letters</i> , 2016, 116, 258103.	2.9	32
273	Emergent properties of composite semiflexible biopolymer networks. <i>Bioarchitecture</i> , 2014, 4, 138-143.	1.5	31
274	Self-Limited Accumulation of Colloids in Porous Media. <i>Physical Review Letters</i> , 2019, 123, 158005.	2.9	31
275	Hydrogel micromotors with catalyst-containing liquid core and shell. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 214004.	0.7	31
276	Methods for Determining the Cellular Functions of Vimentin Intermediate Filaments. <i>Methods in Enzymology</i> , 2016, 568, 389-426.	0.4	30
277	Surfactant Variations in Porous Media Localize Capillary Instabilities during Haines Jumps. <i>Physical Review Letters</i> , 2018, 120, 028005.	2.9	30
278	Single-step assembly of asymmetric vesicles. <i>Lab on A Chip</i> , 2019, 19, 749-756.	3.1	30
279	Rapid isolation of antigen-specific B-cells using droplet microfluidics. <i>RSC Advances</i> , 2020, 10, 27006-27013.	1.7	30
280	Droplet encapsulation improves accuracy of immune cell cytokine capture assays. <i>Lab on A Chip</i> , 2020, 20, 1513-1520.	3.1	30
281	The Fourth Decade of Microfluidics. <i>Small</i> , 2020, 16, e2000070.	5.2	30
282	Controlled Generation of Ultrathin Shell Double Emulsions and Studies on Their Stability. <i>ChemPhysChem</i> , 2017, 18, 1393-1399.	1.0	29
283	Functional patterning of PDMS microfluidic devices using integrated chemo-masks. <i>Lab on A Chip</i> , 2010, 10, 1521.	3.1	28
284	Nanomechanics of vimentin intermediate filament networks. <i>Soft Matter</i> , 2010, 6, 1910.	1.2	28
285	Artifact-Free Quantification and Sequencing of Rare Recombinant Viruses by Using Drop-Based Microfluidics. <i>ChemBioChem</i> , 2015, 16, 2167-2171.	1.3	28
286	Direct observation of crystallization and melting with colloids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1180-1184.	3.3	28
287	Nanoparticle-Shelled Catalytic Bubble Micromotor. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901583.	1.9	28
288	The correlation between cell and nucleus size is explained by an eukaryotic cell growth model. <i>PLoS Computational Biology</i> , 2022, 18, e1009400.	1.5	28

#	ARTICLE	IF	CITATIONS
289	Vimentin intermediate filaments and filamentous actin form unexpected interpenetrating networks that redefine the cell cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2115217119.	3.3	28
290	Niobium point-contact Josephson junction behavior at 604 GHz. <i>Applied Physics Letters</i> , 1977, 31, 227-229.	1.5	27
291	Orders-of-magnitude performance increases in GPU-accelerated correlation of images from the International Space Station. <i>Journal of Real-Time Image Processing</i> , 2010, 5, 179-193.	2.2	27
292	Direct Observation of Entropic Stabilization of bcc Crystals Near Melting. <i>Physical Review Letters</i> , 2017, 118, 088003.	2.9	27
293	Microfluidic Synthesis of Multimode Au@CoFeB-Rg3 Nanomedicines and Their Cytotoxicity and Anti-Tumor Effects. <i>Chemistry of Materials</i> , 2020, 32, 5044-5056.	3.2	27
294	Elucidating the mechanism of step emulsification. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	27
295	Label-free single-cell protein quantification using a drop-based mix-and-read system. <i>Scientific Reports</i> , 2015, 5, 12756.	1.6	26
296	Polymer Phase Separation in a Microcapsule Shell. <i>Macromolecules</i> , 2017, 50, 7681-7686.	2.2	26
297	Parallelization of microfluidic flow-focusing devices. <i>Physical Review E</i> , 2017, 95, 043105.	0.8	26
298	Selective cell encapsulation, lysis, pico-injection and size-controlled droplet generation using traveling surface acoustic waves in a microfluidic device. <i>Lab on A Chip</i> , 2020, 20, 3914-3921.	3.1	26
299	Diverse Particle Carriers Prepared by Co-precipitation and Phase Separation: Formation and Applications. <i>ChemPlusChem</i> , 2021, 86, 49-58.	1.3	26
300	The vortex-driven dynamics of droplets within droplets. <i>Nature Communications</i> , 2021, 12, 82.	5.8	26
301	Like-charged particles at liquid interfaces. <i>Nature</i> , 2003, 424, 1014-1014.	13.7	25
302	A Versatile Strategy to Fabricate 3D Conductive Frameworks for Lithium Metal Anodes. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800807.	1.9	25
303	Jetting to dripping transition: Critical aspect ratio in step emulsifiers. <i>Physics of Fluids</i> , 2019, 31, .	1.6	25
304	Dissolvable Polyacrylamide Beads for High-Throughput Droplet DNA Barcoding. <i>Advanced Science</i> , 2020, 7, 1903463.	5.6	25
305	Corrugated interfaces in multiphase core-annular flow. <i>Physics of Fluids</i> , 2010, 22, 082002.	1.6	24
306	Mechanics and dynamics of reconstituted cytoskeletal systems. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015, 1853, 3038-3042.	1.9	24

#	ARTICLE	IF	CITATIONS
307	Stable Ultrathin Shell Double Emulsions for Controlled Release. <i>ChemPhysChem</i> , 2016, 17, 1553-1556.	1.0	24
308	Controlled self-assembly of alginate microgels by rapidly binding molecule pairs. <i>Lab on A Chip</i> , 2017, 17, 2481-2490.	3.1	24
309	Fabrication of Calcium Phosphate-Based Nanocomposites Incorporating DNA Origami, Gold Nanorods, and Anticancer Drugs for Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700664.	3.9	24
310	Creation of Faceted Polyhedral Microgels from Compressed Emulsions. <i>Small</i> , 2017, 13, 1701256.	5.2	23
311	Controllable Fabrication of Inhomogeneous Microcapsules for Triggered Release by Osmotic Pressure. <i>Small</i> , 2019, 15, e1903087.	5.2	23
312	Hydrogel Microcapsules with a Thin Oil Layer: Smart Triggered Release via Diverse Stimuli. <i>Advanced Functional Materials</i> , 2021, 31, 2009553.	7.8	23
313	Origin of anomalous polymer-induced fluid displacement in porous media. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	23
314	Digital Microfluidic Thermal Control Chip-Based Multichannel Immunosensor for Noninvasively Detecting Acute Myocardial Infarction. <i>Analytical Chemistry</i> , 2021, 93, 15033-15041.	3.2	23
315	Absorbent Adsorbates: Large Amphiphilic Janus Microgels as Droplet Stabilizers. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 33439-33446.	4.0	22
316	Emulsion Designer Using Microfluidic Three-Dimensional Droplet Printing in Droplet. <i>Small</i> , 2021, 17, e2102579.	5.2	22
317	Biocompatible microcapsules with a water core templated from single emulsions. <i>Chinese Chemical Letters</i> , 2017, 28, 1897-1900.	4.8	21
318	Rapid additive-free bacteria lysis using traveling surface acoustic waves in microfluidic channels. <i>Lab on A Chip</i> , 2019, 19, 4064-4070.	3.1	21
319	A High-Throughput Screening System Based on Droplet Microfluidics for Glucose Oxidase Gene Libraries. <i>Molecules</i> , 2020, 25, 2418.	1.7	21
320	Memories of paste. <i>Nature</i> , 2001, 410, 32-33.	13.7	20
321	Spatial Propagation of Protein Polymerization. <i>Physical Review Letters</i> , 2014, 112, 098101.	2.9	20
322	Collective generation of milliemulsions by step-emulsification. <i>RSC Advances</i> , 2017, 7, 14932-14938.	1.7	20
323	Compression Generated by a 3D Supracellular Actomyosin Cortex Promotes Embryonic Stem Cell Colony Growth and Expression of Nanog and Oct4. <i>Cell Systems</i> , 2019, 9, 214-220.e5.	2.9	20
324	Novel nonequilibrium steady states in multiple emulsions. <i>Physics of Fluids</i> , 2020, 32, .	1.6	20

#	ARTICLE	IF	CITATIONS
325	Controlling droplet incubation using close-packed plug flow. <i>Biomicrofluidics</i> , 2011, 5, 24101.	1.2	19
326	Mechanism of Calponin Stabilization of Cross-Linked Actin Networks. <i>Biophysical Journal</i> , 2014, 106, 793-800.	0.2	19
327	A simple mix-and-read bacteria detection system based on a DNAzyme and a molecular beacon. <i>Chemical Communications</i> , 2019, 55, 7358-7361.	2.2	19
328	Effect of Divalent Cations on the Structure and Mechanics of Vimentin Intermediate Filaments. <i>Biophysical Journal</i> , 2020, 119, 55-64.	0.2	19
329	Programmable Engineering of DNA-AuNP Encoders Integrated Multimodal Coupled Analysis for Precision Discrimination of Multiple Metal Ions. <i>Nano Letters</i> , 2021, 21, 2141-2148.	4.5	19
330	Tumorigenic mesenchymal clusters are less sensitive to moderate osmotic stresses due to low amounts of junctional E-cadherin. <i>Scientific Reports</i> , 2021, 11, 16279.	1.6	19
331	Polarization dependent Bragg diffraction and electro-optic switching of three-dimensional assemblies of nematic liquid crystal droplets. <i>Applied Physics Letters</i> , 2006, 88, 121911.	1.5	18
332	Optical manipulation and rotation of liquid crystal drops using high-index fiber-optic tweezers. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	18
333	Measuring the elastic modulus of microgels using microdrops. <i>Soft Matter</i> , 2012, 8, 10032.	1.2	18
334	Fluctuations in flow produced by competition between apparent wall slip and dilatancy. <i>Rheologica Acta</i> , 2014, 53, 333-347.	1.1	18
335	Stable, Fluorescent Polymethylmethacrylate Particles for the Long-Term Observation of Slow Colloidal Dynamics. <i>Langmuir</i> , 2017, 33, 6382-6389.	1.6	18
336	Stimuli responsive Janus microgels with convertible hydrophilicity for controlled emulsion destabilization. <i>Soft Matter</i> , 2020, 16, 3613-3620.	1.2	18
337	Unjamming a Polymer Glass. <i>Science</i> , 2009, 323, 214-215.	6.0	17
338	Identifying directional persistence in intracellular particle motion using Hidden Markov Models. <i>Mathematical Biosciences</i> , 2014, 248, 140-145.	0.9	17
339	Whole-Genome Sequencing of a Single Viral Species from a Highly Heterogeneous Sample. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13985-13988.	7.2	17
340	Microfluidic Fabrication and Micromechanics of Permeable and Impermeable Elastomeric Microbubbles. <i>Langmuir</i> , 2015, 31, 3489-3493.	1.6	17
341	Microfluidics-Assisted Osteogenesis: Injectable Stem Cell-Laden Photocrosslinkable Microspheres Fabricated Using Microfluidics for Rapid Generation of Osteogenic Tissue Constructs ( <i>Adv. Funct. Mater.</i> ) Tj ETQq1 1 0.784314 rgBT1/Overlook	1.3	17
342	Initial growth dynamics of 10-nm nanobubbles in the graphene liquid cell. <i>Applied Nanoscience (Switzerland)</i> , 2021, 11, 1-7.	1.6	17

#	ARTICLE	IF	CITATIONS
343	Dispersing hydrophobic natural colourant $\beta$ -carotene in shellac particles for enhanced stability and tunable colour. <i>Royal Society Open Science</i> , 2017, 4, 170919.	1.1	16
344	Core-Shell Nanohydrogels with Programmable Swelling for Conformance Control in Porous Media. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 34217-34225.	4.0	16
345	Efficient extraction of oil from droplet microfluidic emulsions. <i>Biomicrofluidics</i> , 2017, 11, 034111.	1.2	15
346	Implications of Quenching-Dequenching Switch in Quantitative Cell Uptake and Biodistribution of Dye-Labeled Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15426-15435.	7.2	15
347	Effects of Vimentin Intermediate Filaments on the Structure and Dynamics of <i>In Vitro</i> Multicomponent Interpenetrating Cytoskeletal Networks. <i>Physical Review Letters</i> , 2021, 127, 108101.	2.9	15
348	Velocity fluctuations of initially stratified sedimenting spheres. <i>Physics of Fluids</i> , 2007, 19, 113304.	1.6	14
349	Transport of charged colloids in a nonpolar solvent. <i>Soft Matter</i> , 2013, 9, 5173.	1.2	14
350	Anisotropic elasticity of experimental colloidal Wigner crystals. <i>Physical Review E</i> , 2015, 91, 032310.	0.8	14
351	Anomalous mechanics of Zn <sup>2+</sup> -modified fibrin networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	14
352	Synthesis of nanomedicine hydrogel microcapsules by droplet microfluidic process and their pH and temperature dependent release. <i>RSC Advances</i> , 2021, 11, 37814-37823.	1.7	14
353	Regulation of cell attachment, spreading, and migration by hydrogel substrates with independently tunable mesh size. <i>Acta Biomaterialia</i> , 2022, 141, 178-189.	4.1	14
354	Sensitive and predictable separation of microfluidic droplets by size using in-line passive filter. <i>Biomicrofluidics</i> , 2017, 11, 014114.	1.2	13
355	Preparation of monodisperse hybrid gel particles with various morphologies <i>via</i> flow rate and temperature control. <i>Soft Matter</i> , 2019, 15, 6934-6937.	1.2	13
356	Rock damage evolution model of pulsating fracturing based on energy evolution theory. <i>Energy Science and Engineering</i> , 2020, 8, 1050-1067.	1.9	13
357	Universal Statistical Laws for the Velocities of Collective Migrating Cells. <i>Advanced Biology</i> , 2020, 4, e2000065.	3.0	13
358	Multicompartment polymersome gel for encapsulation. <i>Soft Matter</i> , 2011, 7, 8762.	1.2	12
359	A mix-and-read drop-based in vitro two-hybrid method for screening high-affinity peptide binders. <i>Scientific Reports</i> , 2016, 6, 22575.	1.6	12
360	The microfluidic nebulator: production of sub-micrometer sized airborne drops. <i>Lab on A Chip</i> , 2017, 17, 1475-1480.	3.1	12

#	ARTICLE	IF	CITATIONS
361	Triple Junction at the Triple Point Resolved on the Individual Particle Level. <i>Physical Review Letters</i> , 2017, 119, 128001.	2.9	12
362	Large-scale single-cell encapsulation in microgels through metastable droplet-templating combined with microfluidic-integration. <i>Biofabrication</i> , 2022, 14, 035015.	3.7	12
363	Velocity fluctuations in a low-Reynolds-number fluidized bed. <i>Journal of Fluid Mechanics</i> , 2008, 596, 467-475.	1.4	11
364	The soft framework of the cellular machine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 1105-1106.	3.3	11
365	Single-Cell Transcriptomics Reveals a Heterogeneous Cellular Response to BK Virus Infection. <i>Journal of Virology</i> , 2021, 95, .	1.5	11
366	Aggregate-Based FRET Monitoring of Drug Release from Polymer Nanoparticles with High Drug Loading. <i>Angewandte Chemie</i> , 2020, 132, 20240-20249.	1.6	10
367	Patterned Colloidal Coating Using Adhesive Emulsions. <i>Langmuir</i> , 2001, 17, 2275-2277.	1.6	9
368	Rolling particle lithography by soft polymer microparticles. <i>Soft Matter</i> , 2013, 9, 2206.	1.2	9
369	Spontaneous Creation of Anisotropic Polymer Crystals with Orientation-Sensitive Birefringence in Liquid Drops. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 3912-3918.	4.0	9
370	Tunable Nanochannels Connected in Series for Dynamic Control of Multiple Concentration-Polarization Layers and Preconcentrated Molecule Plugs. <i>Nano Letters</i> , 2020, 20, 8524-8533.	4.5	9
371	Optimization and development of a universal flow-based microfluidic gradient generator. <i>Microfluidics and Nanofluidics</i> , 2016, 20, 1.	1.0	8
372	One-pot system for synthesis, assembly, and display of functional single-span membrane proteins on oil-water interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 608-613.	3.3	8
373	Rapid Production of Submicron Drug Substance Particles by Supersonic Spray Drying. <i>Crystal Growth and Design</i> , 2017, 17, 2046-2053.	1.4	8
374	Collective Shape Actuation of Polymer Double Emulsions by Solvent Evaporation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 31865-31869.	4.0	8
375	Linear triglycerol-based fluorosurfactants show high potential for droplet-microfluidics-based biochemical assays. <i>Soft Matter</i> , 2021, 17, 7260-7267.	1.2	8
376	Microchannel measurements of viscosity for both gases and liquids. <i>Lab on A Chip</i> , 2021, 21, 2805-2811.	3.1	8
377	Micro-ecology restoration of colonic inflammation by in-Situ oral delivery of antibody-laden hydrogel microcapsules. <i>Bioactive Materials</i> , 2022, 15, 305-315.	8.6	8
378	Line optical tweezers as controllable micromachines: techniques and emerging trends. <i>Soft Matter</i> , 2022, 18, 5359-5365.	1.2	8

#	ARTICLE	IF	CITATIONS
379	Microfluidic Fabrication of Phase-Inverted Microcapsules with Asymmetric Shell Membranes with Graded Porosity. <i>ACS Macro Letters</i> , 2021, 10, 116-121.	2.3	7
380	Propagation and adsorption of nanoparticles in porous medium as traveling waves. <i>Physical Review Research</i> , 2020, 2, .	1.3	7
381	Cell-Inspired Hydrogel Microcapsules with a Thin Oil Layer for Enhanced Retention of Highly Reactive Antioxidants. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 2597-2604.	4.0	7
382	Adsorption of Polar Species at Crude Oil-Water Interfaces: the Chemoelastic Behavior. <i>Langmuir</i> , 2022, 38, 6523-6530.	1.6	7
383	Imaging grain boundary grooves in hard-sphere colloidal bicrystals. <i>Physical Review E</i> , 2016, 94, 042604.	0.8	6
384	Dynamic sound scattering: Field fluctuation spectroscopy with singly scattered ultrasound in the near and far fields. <i>Journal of the Acoustical Society of America</i> , 2016, 140, 1992-2001.	0.5	6
385	Composition and degradation of turbine oil sludge. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 125, 155-162.	2.0	6
386	A machine learning approach-based array sensor for rapidly predicting the mechanisms of action of antibacterial compounds. <i>Nanoscale</i> , 2022, 14, 3087-3096.	2.8	6
387	Robust mechanobiological behavior emerges in heterogeneous myosin systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E8147-E8154.	3.3	5
388	Dynamic Speckle Holography. <i>Physical Review Letters</i> , 2021, 127, 088003.	2.9	5
389	One Step Formation of Controllable Complex Emulsions: From Functional Particles to Simultaneous Encapsulation of Hydrophilic and Hydrophobic Agents into Desired Position ( <i>Adv. Mater.</i> 18/2013). <i>Advanced Materials</i> , 2013, 25, 2535-2535.	11.1	4
390	Expansion and rupture of charged microcapsules. <i>Materials Horizons</i> , 2014, 1, 92-95.	6.4	4
391	Perspective on droplet-based single-cell sequencing. <i>Lab on A Chip</i> , 2017, 17, 2539-2539.	3.1	4
392	Water-Triggered Rapid Release of Biocide with Enhanced Antimicrobial Activity in Biodiesel. <i>Macromolecular Materials and Engineering</i> , 2019, 304, 1900156.	1.7	4
393	Unexpected scaling of interstitial velocities with permeability due to polymer retention in porous media. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	4
394	Dielectrophoretic Characterization of Dynamic Microcapsules and Their Magnetophoretic Manipulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 15765-15773.	4.0	4
395	Multistage Transformation and Lattice Fluctuation at AgCl-Ag Interface. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5853-5860.	2.1	3
396	Macroscopic Self-Assembly: Versatile Hydrogel Ensembles with Macroscopic Multidimensions ( <i>Adv.</i> ) <i>Tj ETQq0 0 0,rgBT /Overlock 10 Tf</i>	1.1	3

#	ARTICLE	IF	CITATIONS
397	DNAzyme-powered nucleic acid release from solid supports. <i>Chemical Communications</i> , 2020, 56, 647-650.	2.2	3
398	Stiffness of the interface between a colloidal body-centered cubic crystal and its liquid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 25225-25229.	3.3	3
399	Interfacial Viscoelasticity in Crude Oil-Water Systems to Understand Incremental Oil Recovery. , 2020, , .		3
400	Microshells: Photoresponsive Monodisperse Cholesteric Liquid Crystalline Microshells for Tunable Omnidirectional Lasing Enabled by a Visible Light-Driven Chiral Molecular Switch ( <i>Advanced Optical</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5		
401	Reply to the "Comment on "Robust scalable high throughput production of monodisperse drops"™ by M. Nakajima, <i>Lab Chip</i> , 2017, <b>17</b>, DOI: 10.1039/C7LC00181A. <i>Lab on A Chip</i> , 2017, 17, 2332-2333.	3.1	2
402	Self-Healing Materials: Tough Self-Healing Elastomers by Molecular Enforced Integration of Covalent and Reversible Networks ( <i>Adv. Mater.</i> 38/2017). <i>Advanced Materials</i> , 2017, 29, .	11.1	2
403	Axial Confocal Tomography of Capillary-Contained Colloidal Structures. <i>Langmuir</i> , 2017, 33, 13343-13349.	1.6	2
404	Characterizing the Non-Linear Rheology of Biopolymer Networks Using Inertio-Elastic Oscillations. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	1
405	Droplet Based Microfluidics for Synthesis of Mesoporous Silica Microspheres. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1272, 1.	0.1	1
406	Elasticity of Soft Particles and Colloids near the Jamming Threshold. , 2011, , 195-206.		1
407	Microfabricated liquid chamber utilizing solvent-drying for in-situ TEM imaging of nanoparticle self-assembly. , 2015, , .		1
408	Determining the lipid specificity of insoluble protein transmembrane domains. <i>Lab on A Chip</i> , 2018, 18, 3561-3569.	3.1	1
409	Implications of Quenching"Dequenching Switch in Quantitative Cell Uptake and Biodistribution of Dye-Labeled Nanoparticles. <i>Angewandte Chemie</i> , 2021, 133, 15554-15563.	1.6	1
410	High-fidelity transfer of area-selective atomic layer deposition grown HfO2 through DNA origami-assisted nanolithography. <i>Nano Research</i> , 2022, 15, 5687-5694.	5.8	1
411	Optical manipulation of liquid crystal drops: Application towards all-optical tunable photonic devices. , 2006, , .		0
412	Microfluidics: Drug Dissolution Chip (DDC): A Microfluidic Approach for Drug Release ( <i>Small</i> 21/2011). <i>Small</i> , 2011, 7, 2958-2958.	5.2	0
413	Titelbild: Hole-Shell Microparticles from Controllably Evolved Double Emulsions ( <i>Angew. Chem.</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.6	0
414	Back Cover: <i>Macromol. Biosci.</i> 12/2015. <i>Macromolecular Bioscience</i> , 2015, 15, 1764-1764.	2.1	0



#	ARTICLE	IF	CITATIONS
415	Drug Co-Delivery: Biodegradable Photothermal and pH Responsive Calcium Carbonate@Phospholipid@Acetalated Dextran Hybrid Platform for Advancing Biomedical Applications (Adv. Funct. Mater. 34/2016). Advanced Functional Materials, 2016, 26, 6138-6138.	7.8	0
416	Microfluidics: Osmotic Pressure Triggered Rapid Release of Encapsulated Enzymes with Enhanced Activity (Adv. Funct. Mater. 29/2017). Advanced Functional Materials, 2017, 27, .	7.8	0
417	Hydrogel Microcapsules: Hydrogel Microcapsules with a Thin Oil Layer: Smart Triggered Release via Diverse Stimuli (Adv. Funct. Mater. 18/2021). Advanced Functional Materials, 2021, 31, 2170124.	7.8	0
418	Structural basis of filamin Aâ€filGAP interaction and its impairment in congenital anomalies associated with filamin A mutations. FASEB Journal, 2009, 23, 704.1.	0.2	0
419	Correlation Tracking: Using simulations to interpolate highly correlated particle tracks. Physical Review E, 2022, 105, 044608.	0.8	0