David A Weitz

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

426 papers

52,451 citations

112 h-index 223 g-index

461 ext. papers

60,539 ext. citations

10.6 avg, IF

7.81 L-index

| # | Paper | IF | Citations |
|-----|---|---------------------|-----------|
| 426 | Highly Parallel Genome-wide Expression Profiling of Individual Cells Using Nanoliter Droplets. <i>Cell</i> , 2015 , 161, 1202-1214 | 56.2 | 3873 |
| 425 | Droplet barcoding for single-cell transcriptomics applied to embryonic stem cells. <i>Cell</i> , 2015 , 161, 1187 | -152021 | 1983 |
| 424 | Colloidosomes: selectively permeable capsules composed of colloidal particles. <i>Science</i> , 2002 , 298, 100 | 6 39 3.3 | 1769 |
| 423 | Monodisperse double emulsions generated from a microcapillary device. <i>Science</i> , 2005 , 308, 537-41 | 33.3 | 1687 |
| 422 | Three-dimensional direct imaging of structural relaxation near the colloidal glass transition. <i>Science</i> , 2000 , 287, 627-31 | 33.3 | 1470 |
| 421 | Elastic behavior of cross-linked and bundled actin networks. <i>Science</i> , 2004 , 304, 1301-5 | 33.3 | 933 |
| 420 | 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 | 15.6 | 927 |
| 419 | Geometrically mediated breakup of drops in microfluidic devices. <i>Physical Review Letters</i> , 2004 , 92, 054 | 5 1 9.34 | 859 |
| 418 | Single-cell analysis and sorting using droplet-based microfluidics. <i>Nature Protocols</i> , 2013 , 8, 870-91 | 18.8 | 834 |
| 417 | Real-space imaging of nucleation and growth in colloidal crystallization. <i>Science</i> , 2001 , 292, 258-62 | 33.3 | 831 |
| 416 | 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, 4004-9 | 11.5 | 817 |
| 415 | Physical forces during collective cell migration. <i>Nature Physics</i> , 2009 , 5, 426-430 | 16.2 | 760 |
| 414 | Droplet microfluidics for high-throughput biological assays. <i>Lab on A Chip</i> , 2012 , 12, 2146-55 | 7.2 | 705 |
| 413 | Gelation of particles with short-range attraction. <i>Nature</i> , 2008 , 453, 499-503 | 50.4 | 700 |
| 412 | Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. <i>Lab on A Chip</i> , 2009 , 9, 1850-8 | 7.2 | 648 |
| 411 | Dripping to jetting transitions in coflowing liquid streams. <i>Physical Review Letters</i> , 2007 , 99, 094502 | 7.4 | 621 |
| 410 | Droplet-based microfluidic platforms for the encapsulation and screening of Mammalian cells and multicellular organisms. <i>Chemistry and Biology</i> , 2008 , 15, 427-37 | | 555 |

(2010-2007)

| 409 | Controllable monodisperse multiple emulsions. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 8970-4 | 16.4 | 552 |
|-----|---|--------------------|-----|
| 408 | Single-cell ChIP-seq reveals cell subpopulations defined by chromatin state. <i>Nature Biotechnology</i> , 2015 , 33, 1165-72 | 44.5 | 551 |
| 407 | Designer emulsions using microfluidics. <i>Materials Today</i> , 2008 , 11, 18-27 | 21.8 | 544 |
| 406 | Electric control of droplets in microfluidic devices. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 2556-60 | 16.4 | 540 |
| 405 | Massively parallel single-nucleus RNA-seq with DroNc-seq. <i>Nature Methods</i> , 2017 , 14, 955-958 | 21.6 | 525 |
| 404 | Biocompatible surfactants for water-in-fluorocarbon emulsions. <i>Lab on A Chip</i> , 2008 , 8, 1632-9 | 7.2 | 508 |
| 403 | Monodisperse Emulsion Generation via Drop Break Off in a Coflowing Stream. <i>Langmuir</i> , 2000 , 16, 347- | -3.≨1 | 508 |
| 402 | Two-point microrheology of inhomogeneous soft materials. <i>Physical Review Letters</i> , 2000 , 85, 888-91 | 7.4 | 507 |
| 401 | Structural rearrangements that govern flow in colloidal glasses. <i>Science</i> , 2007 , 318, 1895-9 | 33.3 | 437 |
| 400 | Drop-based microfluidic devices for encapsulation of single cells. <i>Lab on A Chip</i> , 2008 , 8, 1110-5 | 7.2 | 409 |
| 399 | Production of Unilamellar Vesicles Using an Inverted Emulsion. <i>Langmuir</i> , 2003 , 19, 2870-2879 | 4 | 402 |
| 398 | Controlled encapsulation of single-cells into monodisperse picolitre drops. <i>Lab on A Chip</i> , 2008 , 8, 1262 | - 4 y.2 | 386 |
| 397 | Synthesis of nonspherical colloidal particles with anisotropic properties. <i>Journal of the American Chemical Society</i> , 2006 , 128, 14374-7 | 16.4 | 374 |
| 396 | Engineering asymmetric vesicles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 10718-21 | 11.5 | 358 |
| 395 | The cell as a material. Current Opinion in Cell Biology, 2007, 19, 101-7 | 9 | 353 |
| 394 | Microfluidic fabrication of monodisperse biocompatible and biodegradable polymersomes with controlled permeability. <i>Journal of the American Chemical Society</i> , 2008 , 130, 9543-9 | 16.4 | 352 |
| 393 | Dielectrophoretic manipulation of drops for high-speed microfluidic sorting devices. <i>Applied Physics Letters</i> , 2006 , 88, 024104 | 3.4 | 346 |
| 392 | High-throughput injection with microfluidics using picoinjectors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 19163-6 | 11.5 | 344 |

| 391 | Probing the stochastic, motor-driven properties of the cytoplasm using force spectrum microscopy. <i>Cell</i> , 2014 , 158, 822-832 | 56.2 | 339 |
|-------------------|---|----------------------|-------------------|
| 390 | Microfluidic synthesis of advanced microparticles for encapsulation and controlled release. <i>Lab on A Chip</i> , 2012 , 12, 2135-45 | 7.2 | 292 |
| 389 | Scaling of the viscoelasticity of weakly attractive particles. <i>Physical Review Letters</i> , 2000 , 85, 449-52 | 7.4 | 292 |
| 388 | Double Emulsion-Templated Nanoparticle Colloidosomes with Selective Permeability. <i>Advanced Materials</i> , 2008 , 20, 3498-3503 | 24 | 280 |
| 387 | Surface acoustic wave actuated cell sorting (SAWACS). Lab on A Chip, 2010, 10, 789-94 | 7.2 | 269 |
| 386 | Dripping, Jetting, Drops, and Wetting: The Magic of Microfluidics. MRS Bulletin, 2007, 32, 702-708 | 3.2 | 265 |
| 385 | Surface acoustic wave (SAW) directed droplet flow in microfluidics for PDMS devices. <i>Lab on A Chip</i> , 2009 , 9, 2625-7 | 7.2 | 258 |
| 384 | Quantifying cell-generated mechanical forces within living embryonic tissues. <i>Nature Methods</i> , 2014 , 11, 183-9 | 21.6 | 257 |
| 383 | Fabrication of monodisperse gel shells and functional microgels in microfluidic devices. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 1819-22 | 16.4 | 257 |
| 382 | Charge stabilization in nonpolar solvents. <i>Langmuir</i> , 2005 , 21, 4881-7 | 4 | 252 |
| 381 | Microfluidic fabrication of microparticles for biomedical applications. <i>Chemical Society Reviews</i> , 2018 , 47, 5646-5683 | 58.5 | 251 |
| | | <i>J</i> e. <i>J</i> | |
| 380 | Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , 2014 , 32, 473-8 | 44.5 | 247 |
| 380 379 | Microfluidic high-throughput culturing of single cells for selection based on extracellular | | 247 |
| | Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , 2014 , 32, 473-8 | 44.5 | · |
| 379 | Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , 2014 , 32, 473-8 Colloid Surfactants for Emulsion Stabilization. <i>Advanced Materials</i> , 2008 , 20, 3239-3243 Electrocoalescence of drops synchronized by size-dependent flow in microfluidic channels. <i>Applied</i> | 44.5 | 246 |
| 379 378 | Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , 2014 , 32, 473-8 Colloid Surfactants for Emulsion Stabilization. <i>Advanced Materials</i> , 2008 , 20, 3239-3243 Electrocoalescence of drops synchronized by size-dependent flow in microfluidic channels. <i>Applied Physics Letters</i> , 2006 , 88, 264105 | 44·5 24 3·4 | 246 241 |
| 379 378 377 | Microfluidic high-throughput culturing of single cells for selection based on extracellular metabolite production or consumption. <i>Nature Biotechnology</i> , 2014 , 32, 473-8 Colloid Surfactants for Emulsion Stabilization. <i>Advanced Materials</i> , 2008 , 20, 3239-3243 Electrocoalescence of drops synchronized by size-dependent flow in microfluidic channels. <i>Applied Physics Letters</i> , 2006 , 88, 264105 High-order multiple emulsions formed in poly(dimethylsiloxane) microfluidics. <i>Small</i> , 2009 , 5, 2030-2 Microfluidic assembly of homogeneous and Janus colloid-filled hydrogel granules. <i>Langmuir</i> , 2006 , | 44·5 24 3·4 | 246 241 240 |

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| 373 | Injectable Stem Cell-Laden Photocrosslinkable Microspheres Fabricated Using Microfluidics for Rapid Generation of Osteogenic Tissue Constructs. <i>Advanced Functional Materials</i> , 2016 , 26, 2809-2819 | 15.6 | 222 |
|-----|--|------|-----|
| 372 | Clonal evolution in patients with chronic lymphocytic leukaemia developing resistance to BTK inhibition. <i>Nature Communications</i> , 2016 , 7, 11589 | 17.4 | 220 |
| 371 | Multicompartment polymersomes from double emulsions. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 1648-51 | 16.4 | 218 |
| 370 | Stress controls the mechanics of collagen networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 9573-8 | 11.5 | 216 |
| 369 | 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 | 5.4 | 216 |
| 368 | Cell volume change through water efflux impacts cell stiffness and stem cell fate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E8618-E8627 | 11.5 | 215 |
| 367 | Microfluidic generation of multifunctional quantum dot barcode particles. <i>Journal of the American Chemical Society</i> , 2011 , 133, 8790-3 | 16.4 | 214 |
| 366 | Microfluidic Generation of Monodisperse, Structurally Homogeneous Alginate Microgels for Cell Encapsulation and 3D Cell Culture. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1628-33 | 10.1 | 208 |
| 365 | Three-dimensional confocal microscopy of colloids. <i>Applied Optics</i> , 2001 , 40, 4152-9 | 1.7 | 206 |
| 364 | Droplet microfluidics: A tool for biology, chemistry and nanotechnology. <i>TrAC - Trends in Analytical Chemistry</i> , 2016 , 82, 118-125 | 14.6 | 206 |
| 363 | High throughput production of single core double emulsions in a parallelized microfluidic device. <i>Lab on A Chip</i> , 2012 , 12, 802-7 | 7.2 | 205 |
| 362 | Tough Self-Healing Elastomers by Molecular Enforced Integration of Covalent and Reversible Networks. <i>Advanced Materials</i> , 2017 , 29, 1702616 | 24 | 204 |
| 361 | Uniform Nonspherical Colloidal Particles with Tunable Shapes. Advanced Materials, 2007, 19, 2005-2009 | 24 | 203 |
| 360 | Sorting drops and cells with acoustics: acoustic microfluidic fluorescence-activated cell sorter. <i>Lab on A Chip</i> , 2014 , 14, 3710-8 | 7.2 | 201 |
| 359 | Deterministic encapsulation of single cells in thin tunable microgels for niche modelling and therapeutic delivery. <i>Nature Materials</i> , 2017 , 16, 236-243 | 27 | 199 |
| 358 | Multiple polymersomes for programmed release of multiple components. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15165-71 | 16.4 | 199 |
| 357 | Scaling by shrinking: empowering single-cell @micsQwith microfluidic devices. <i>Nature Reviews Genetics</i> , 2017 , 18, 345-361 | 30.1 | 198 |
| 356 | 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, 2881-7 | 7.2 | 193 |

| 355 | Double-emulsion drops with ultra-thin shells for capsule templates. Lab on A Chip, 2011, 11, 3162-6 | 7.2 | 193 |
|-----|--|--------------|-----|
| 354 | Janus particles templated from double emulsion droplets generated using microfluidics. <i>Langmuir</i> , 2009 , 25, 4320-3 | 4 | 192 |
| 353 | Droplet microfluidics for fabrication of non-spherical particles. <i>Macromolecular Rapid Communications</i> , 2010 , 31, 108-18 | 4.8 | 192 |
| 352 | Color from hierarchy: Diverse optical properties of micron-sized spherical colloidal assemblies. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10845-50 | 11.5 | 191 |
| 351 | Controlled synthesis of cell-laden microgels by radical-free gelation in droplet microfluidics. <i>Journal of the American Chemical Society</i> , 2012 , 134, 4983-9 | 16.4 | 186 |
| 350 | Novel defect structures in nematic liquid crystal shells. <i>Physical Review Letters</i> , 2007 , 99, 157801 | 7.4 | 185 |
| 349 | Nanoparticle imaging. 3D structure of individual nanocrystals in solution by electron microscopy. <i>Science</i> , 2015 , 349, 290-5 | 33.3 | 183 |
| 348 | Fluids of clusters in attractive colloids. <i>Physical Review Letters</i> , 2006 , 96, 028306 | 7.4 | 183 |
| 347 | The role of vimentin intermediate filaments in cortical and cytoplasmic mechanics. <i>Biophysical Journal</i> , 2013 , 105, 1562-8 | 2.9 | 182 |
| 346 | 25th anniversary article: double emulsion templated solid microcapsules: mechanics and controlled release. <i>Advanced Materials</i> , 2014 , 26, 2205-18 | 24 | 180 |
| 345 | Colloidal Particles: Crystals, Glasses, and Gels. Annual Review of Condensed Matter Physics, 2013, 4, 217- | 283 7 | 179 |
| 344 | Controllable microfluidic production of multicomponent multiple emulsions. <i>Lab on A Chip</i> , 2011 , 11, 1587-92 | 7.2 | 171 |
| 343 | Relating microstructure to rheology of a bundled and cross-linked F-actin network in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9636-41 | 11.5 | 169 |
| 342 | Smart microgel capsules from macromolecular precursors. <i>Journal of the American Chemical Society</i> , 2010 , 132, 6606-9 | 16.4 | 160 |
| 341 | Fabrication of monodisperse thermosensitive microgels and gel capsules in microfluidic devices. <i>Soft Matter</i> , 2008 , 4, 2303 | 3.6 | 159 |
| 340 | Protein expression, aggregation, and triggered release from polymersomes as artificial cell-like structures. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6416-20 | 16.4 | 145 |
| 339 | Janus Supraparticles by Induced Phase Separation of Nanoparticles in Droplets. <i>Advanced Materials</i> , 2009 , 21, 1949-1953 | 24 | 143 |
| 338 | Biodegradable core-shell carriers for simultaneous encapsulation of synergistic actives. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7933-7 | 16.4 | 142 |

(2014-2006)

| 337 | Dewetting instability during the formation of polymersomes from block-copolymer-stabilized double emulsions. <i>Langmuir</i> , 2006 , 22, 4457-61 | 4 | 140 | |
|-----|--|------|-----|--|
| 336 | Scaling of F-actin network rheology to probe single filament elasticity and dynamics. <i>Physical Review Letters</i> , 2004 , 93, 188102 | 7.4 | 140 | |
| 335 | One step formation of controllable complex emulsions: from functional particles to simultaneous encapsulation of hydrophilic and hydrophobic agents into desired position. <i>Advanced Materials</i> , 2013 , 25, 2536-41 | 24 | 137 | |
| 334 | Amphiphilic crescent-moon-shaped microparticles formed by selective adsorption of colloids. Journal of the American Chemical Society, 2011 , 133, 5516-24 | 16.4 | 135 | |
| 333 | Beating Poisson encapsulation statistics using close-packed ordering. <i>Lab on A Chip</i> , 2009 , 9, 2628-31 | 7.2 | 134 | |
| 332 | Nonequilibrium microtubule fluctuations in a model cytoskeleton. <i>Physical Review Letters</i> , 2008 , 100, 118104 | 7.4 | 134 | |
| 331 | Controlled assembly of heterotypic cells in a core-shell scaffold: organ in a droplet. <i>Lab on A Chip</i> , 2016 , 16, 1346-9 | 7.2 | 132 | |
| 330 | Polymer microcapsules with programmable active release. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7744-50 | 16.4 | 132 | |
| 329 | Bioinspired graphene membrane with temperature tunable channels for water gating and molecular separation. <i>Nature Communications</i> , 2017 , 8, 2011 | 17.4 | 130 | |
| 328 | Ultrathin shell double emulsion templated giant unilamellar lipid vesicles with controlled microdomain formation. <i>Small</i> , 2014 , 10, 950-6 | 11 | 130 | |
| 327 | An Intestinal Organ Culture System Uncovers a Role for the Nervous System in Microbe-Immune Crosstalk. <i>Cell</i> , 2017 , 168, 1135-1148.e12 | 56.2 | 127 | |
| 326 | Osmotic-pressure-controlled concentration of colloidal particles in thin-shelled capsules. <i>Nature Communications</i> , 2014 , 5, 3068 | 17.4 | 126 | |
| 325 | Massively parallel sequencing of single cells by epicPCR links functional genes with phylogenetic markers. <i>ISME Journal</i> , 2016 , 10, 427-36 | 11.9 | 125 | |
| 324 | MAFG-driven astrocytes promote CNS inflammation. <i>Nature</i> , 2020 , 578, 593-599 | 50.4 | 125 | |
| 323 | Robust scalable high throughput production of monodisperse drops. <i>Lab on A Chip</i> , 2016 , 16, 4163-4177 | 27.2 | 125 | |
| 322 | Photo- and thermoresponsive polymersomes for triggered release. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 12499-503 | 16.4 | 124 | |
| 321 | Monodisperse Thermoresponsive Microgels with Tunable Volume-Phase Transition Kinetics. <i>Advanced Functional Materials</i> , 2007 , 17, 3499-3504 | 15.6 | 124 | |
| 320 | 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 | 8.1 | 116 | |

| 319 | Microfluidic melt emulsification for encapsulation and release of actives. <i>ACS Applied Materials & Materials amp; Interfaces</i> , 2010 , 2, 3411-6 | 9.5 | 116 |
|-----|---|------|-----|
| 318 | Cross-kingdom chemical communication drives a heritable, mutually beneficial prion-based transformation of metabolism. <i>Cell</i> , 2014 , 158, 1083-1093 | 56.2 | 115 |
| 317 | 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 | 9 | 114 |
| 316 | PHYSICS. Packing in the spheres. <i>Science</i> , 2004 , 303, 968-9 | 33.3 | 114 |
| 315 | Delayed buckling and guided folding of inhomogeneous capsules. <i>Physical Review Letters</i> , 2012 , 109, 134302 | 7.4 | 112 |
| 314 | Spatial fluctuations of fluid velocities in flow through a three-dimensional porous medium. <i>Physical Review Letters</i> , 2013 , 111, 064501 | 7.4 | 110 |
| 313 | Single step emulsification for the generation of multi-component double emulsions. <i>Soft Matter</i> , 2012 , 8, 10719 | 3.6 | 110 |
| 312 | The micromechanics of three-dimensional collagen-I gels. <i>Complexity</i> , 2011 , 16, 22-28 | 1.6 | 110 |
| 311 | Soft Poly(dimethylsiloxane) Elastomers from Architecture-Driven Entanglement Free Design. <i>Advanced Materials</i> , 2015 , 27, 5132-40 | 24 | 107 |
| 310 | Core/Shell Nanocomposites Produced by Superfast Sequential Microfluidic Nanoprecipitation. <i>Nano Letters</i> , 2017 , 17, 606-614 | 11.5 | 106 |
| 309 | Geometric constraints during epithelial jamming. <i>Nature Physics</i> , 2018 , 14, 613-620 | 16.2 | 106 |
| 308 | One-step emulsification of multiple concentric shells with capillary microfluidic devices. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 8731-4 | 16.4 | 105 |
| 307 | Gel-immobilized colloidal crystal shell with enhanced thermal sensitivity at photonic wavelengths. <i>Advanced Materials</i> , 2010 , 22, 4998-5002 | 24 | 105 |
| 306 | 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 | 11.5 | 104 |
| 305 | Mechanical Properties of the Cytoskeleton and Cells. <i>Cold Spring Harbor Perspectives in Biology</i> , 2017 , 9, | 10.2 | 103 |
| 304 | Visualizing multiphase flow and trapped fluid configurations in a model three-dimensional porous medium. <i>AICHE Journal</i> , 2013 , 59, 1022-1029 | 3.6 | 103 |
| 303 | Fabrication of tunable spherical colloidal crystals immobilized in soft hydrogels. <i>Small</i> , 2010 , 6, 807-10 | 11 | 103 |
| 302 | A model for velocity fluctuations in sedimentation. <i>Journal of Fluid Mechanics</i> , 2004 , 501, 71-104 | 3.7 | 103 |

(2010-2016)

| 301 | Encapsulation and Enhanced Retention of Fragrance in Polymer Microcapsules. <i>ACS Applied Materials & ACS Applied Materials & ACS Applied</i> | 9.5 | 101 |
|-----|--|--------------------|-----|
| 300 | Axial and lateral particle ordering in finite Reynolds number channel flows. <i>Physics of Fluids</i> , 2010 , 22, 081703 | 4.4 | 99 |
| 299 | Photoreactive coating for high-contrast spatial patterning of microfluidic device wettability. <i>Lab on A Chip</i> , 2008 , 8, 2157-60 | 7.2 | 99 |
| 298 | NANOPARTICLES. Production of amorphous nanoparticles by supersonic spray-drying with a microfluidic nebulator. <i>Science</i> , 2015 , 349, 956-60 | 33.3 | 98 |
| 297 | Does size matter? Elasticity of compressed suspensions of colloidal- and granular-scale microgels. <i>Soft Matter</i> , 2012 , 8, 156-164 | 3.6 | 98 |
| 296 | Microfluidic sorting with high-speed single-layer membrane valves. <i>Applied Physics Letters</i> , 2010 , 96, 203509 | 3.4 | 98 |
| 295 | Patterning microfluidic device wettability using flow confinement. <i>Lab on A Chip</i> , 2010 , 10, 1774-6 | 7.2 | 98 |
| 294 | 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, 3330-33 | 340 ^{5.6} | 97 |
| 293 | Protein microgels from amyloid fibril networks. ACS Nano, 2015 , 9, 43-51 | 16.7 | 94 |
| 292 | Impact of inlet channel geometry on microfluidic drop formation. <i>Physical Review E</i> , 2009 , 80, 026310 | 2.4 | 93 |
| 291 | 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, 1549-55 | 7.2 | 91 |
| 290 | Mobilization of a trapped non-wetting fluid from a three-dimensional porous medium. <i>Physics of Fluids</i> , 2014 , 26, 022002 | 4.4 | 89 |
| 289 | Viscoelastic Properties of Microtubule Networks. <i>Macromolecules</i> , 2007 , 40, 7714-7720 | 5.5 | 89 |
| 288 | A new device for the generation of microbubbles. <i>Physics of Fluids</i> , 2004 , 16, 2828-2834 | 4.4 | 89 |
| 287 | Microfluidic Model Porous Media: Fabrication and Applications. <i>Small</i> , 2018 , 14, e1703575 | 11 | 88 |
| 286 | Novel surface acoustic wave (SAW)-driven closed PDMS flow chamber. <i>Microfluidics and Nanofluidics</i> , 2012 , 12, 229-235 | 2.8 | 88 |
| 285 | A microfluidic approach to encapsulate living cells in uniform alginate hydrogel microparticles. <i>Macromolecular Bioscience</i> , 2012 , 12, 946-51 | 5.5 | 86 |
| 284 | Capillary micromechanics: Measuring the elasticity of microscopic soft objects. <i>Soft Matter</i> , 2010 , 6, 45 | 50 .6 | 84 |

| 283 | Janus microgels produced from functional precursor polymers. <i>Langmuir</i> , 2010 , 26, 14842-7 | 4 | 83 |
|-----|--|-------|----|
| 282 | High-Throughput Step Emulsification for the Production of Functional Materials Using a Glass Microfluidic Device. <i>Macromolecular Chemistry and Physics</i> , 2017 , 218, 1600472 | 2.6 | 77 |
| 281 | Drop formation in non-planar microfluidic devices. <i>Lab on A Chip</i> , 2012 , 12, 4263-8 | 7.2 | 77 |
| 280 | Multicompartment Polymersomes from Double Emulsions. <i>Angewandte Chemie</i> , 2011 , 123, 1686-1689 | 3.6 | 77 |
| 279 | Measurement of nonlinear rheology of cross-linked biopolymer gels. Soft Matter, 2010, 6, 4120 | 3.6 | 76 |
| 278 | 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, 6619-24 | 11.5 | 73 |
| 277 | 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 | 11.5 | 73 |
| 276 | Stimuli-Responsive CoreBhell Microcapsules with Tunable Rates of Release by Using a Depolymerizable Poly(phthalaldehyde) Membrane. <i>Macromolecules</i> , 2013 , 46, 3309-3313 | 5.5 | 72 |
| 275 | Optically Anisotropic Colloids of Controllable Shape. <i>Advanced Materials</i> , 2005 , 17, 680-684 | 24 | 72 |
| 274 | Structures, stresses, and fluctuations in the delayed failure of colloidal gels. <i>Soft Matter</i> , 2012 , 8, 3657 | 3.6 | 71 |
| 273 | Dewetting-induced membrane formation by adhesion of amphiphile-laden interfaces. <i>Journal of the American Chemical Society</i> , 2011 , 133, 4420-6 | 16.4 | 71 |
| 272 | Characterizing concentrated, multiply scattering, and actively driven fluorescent systems with confocal differential dynamic microscopy. <i>Physical Review Letters</i> , 2012 , 108, 218103 | 7.4 | 71 |
| 271 | Nonuniversal velocity fluctuations of sedimenting particles. <i>Physical Review Letters</i> , 2002 , 89, 054501 | 7.4 | 71 |
| 270 | One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 13470-13474 | 16.4 | 71 |
| 269 | Experimental validation of plugging during drop formation in a T-junction. Lab on A Chip, 2012, 12, 1516 | 5-721 | 69 |
| 268 | Controlled fabrication of polymer microgels by polymer-analogous gelation in droplet microfluidics. <i>Soft Matter</i> , 2010 , 6, 3184 | 3.6 | 69 |
| 267 | Rheology of F-actin solutions determined from thermally driven tracer motion. <i>Journal of Rheology</i> , 2000 , 44, 917-928 | 4.1 | 69 |
| 266 | Optically Reconfigurable Chiral Microspheres of Self-Organized Helical Superstructures with Handedness Inversion. <i>Materials Horizons</i> , 2017 , 4, 1190-1195 | 14.4 | 68 |

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