

Dino Di Carlo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9068531/publications.pdf>

Version: 2024-02-01

226
papers

21,743
citations

14124

69
h-index

10955

142
g-index

241
all docs

241
docs citations

241
times ranked

19998
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Scalable Fabrication and Use of 3D Structured Microparticles Spatially Functionalized with Biomolecules. <i>ACS Nano</i> , 2022, 16, 38-49. | 7.3 | 22 |
| 2 | Sorting single-cell microcarriers using commercial flow cytometers. <i>SLAS Technology</i> , 2022, 27, 150-159. | 1.0 | 18 |
| 3 | High-throughput selection of cells based on accumulated growth and division using PicoShell particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, . | 3.3 | 12 |
| 4 | IL-2 secretion-based sorting of single T cells using high-throughput microfluidic on-cell cytokine capture. <i>Lab on A Chip</i> , 2022, 22, 1576-1583. | 3.1 | 16 |
| 5 | A Readily Scalable, Clinically Demonstrated, Antibiofouling Zwitterionic Surface Treatment for Implantable Medical Devices. <i>Advanced Materials</i> , 2022, 34, e2200254. | 11.1 | 18 |
| 6 | Stimulation of the hepatoportal nerve plexus with focused ultrasound restores glucose homeostasis in diabetic mice, rats and swine. <i>Nature Biomedical Engineering</i> , 2022, 6, 683-705. | 11.6 | 28 |
| 7 | Suspendable Hydrogel Nanovials for Massively Parallel Single-Cell Functional Analysis and Sorting. <i>ACS Nano</i> , 2022, 16, 7242-7257. | 7.3 | 35 |
| 8 | Best practices for reporting throughput in biomedical research. <i>Nature Methods</i> , 2022, 19, 633-634. | 9.0 | 9 |
| 9 | Interdisciplinarity and mechanobiology. <i>IScience</i> , 2022, 25, 104187. | 1.9 | 3 |
| 10 | Surface energy minimizing configurations for axisymmetric microparticles. <i>Journal of Engineering Mathematics</i> , 2022, 134, 1. | 0.6 | 2 |
| 11 | Activating an adaptive immune response from a hydrogel scaffold imparts regenerative wound healing. <i>Nature Materials</i> , 2021, 20, 560-569. | 13.3 | 260 |
| 12 | A review of biosensor technologies for blood biomarkers toward monitoring cardiovascular diseases at the point-of-care. <i>Biosensors and Bioelectronics</i> , 2021, 171, 112621. | 5.3 | 78 |
| 13 | Engineering Design of Concentric Amphiphilic Microparticles for Spontaneous Formation of Picoliter to Nanoliter Droplet Volumes. <i>Analytical Chemistry</i> , 2021, 93, 2317-2326. | 3.2 | 18 |
| 14 | Counting of enzymatically amplified affinity reactions in hydrogel particle-templated drops. <i>Lab on A Chip</i> , 2021, 21, 3438-3448. | 3.1 | 14 |
| 15 | Injectable, macroporous scaffolds for delivery of therapeutic genes to the injured spinal cord. <i>APL Bioengineering</i> , 2021, 5, 016104. | 3.3 | 19 |
| 16 | Singleâ€Domain Multiferroic Arrayâ€Addressable Terfenolâ€D (SMARt) Micromagnets for Programmable Singleâ€Cell Capture and Release. <i>Advanced Materials</i> , 2021, 33, e2006651. | 11.1 | 20 |
| 17 | Development and validation of a cellular host response test as an early diagnostic for sepsis. <i>PLoS ONE</i> , 2021, 16, e0246980. | 1.1 | 22 |
| 18 | Singleâ€Cell Manipulation: Singleâ€Domain Multiferroic Arrayâ€Addressable Terfenolâ€D (SMARt) Micromagnets for Programmable Singleâ€Cell Capture and Release (Adv. Mater. 20/2021). <i>Advanced Materials</i> , 2021, 33, 2170159. | 11.1 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Statistical energy minimization theory for systems of drop-carrier particles. <i>Physical Review E</i> , 2021, 104, 015109. | 0.8 | 3 |
| 20 | Recent Progress in Lyme Disease and Remaining Challenges. <i>Frontiers in Medicine</i> , 2021, 8, 666554. | 1.2 | 55 |
| 21 | The Mechanobiology of Endothelial-to-Mesenchymal Transition in Cardiovascular Disease. <i>Frontiers in Physiology</i> , 2021, 12, 734215. | 1.3 | 23 |
| 22 | Methylation-Sensitive Loop-Mediated Isothermal Amplification (LAMP): Nucleic Acid Methylation Detection through LAMP with Mobile Fluorescence Readout. <i>ACS Sensors</i> , 2021, 6, 3242-3252. | 4.0 | 19 |
| 23 | Optimized design of obstacle sequences for microfluidic mixing in an inertial regime. <i>Lab on A Chip</i> , 2021, 21, 3910-3923. | 3.1 | 21 |
| 24 | Selective and Improved Photoannealing of Microporous Annealed Particle (MAP) Scaffolds. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 422-427. | 2.6 | 14 |
| 25 | Rapid Detection and Inhibition of SARS-CoV-2 Spike Mutation-Mediated Microthrombosis. <i>Advanced Science</i> , 2021, 8, e2103266. | 5.6 | 11 |
| 26 | Fractal LAMP: Label-Free Analysis of Fractal Precipitate for Digital Loop-Mediated Isothermal Nucleic Acid Amplification. <i>ACS Sensors</i> , 2020, 5, 385-394. | 4.0 | 27 |
| 27 | Effects of Flow-Induced Microfluidic Chip Wall Deformation on Imaging Flow Cytometry. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2020, 97, 909-920. | 1.1 | 20 |
| 28 | Point-of-Care Serodiagnostic Test for Early-Stage Lyme Disease Using a Multiplexed Paper-Based Immunoassay and Machine Learning. <i>ACS Nano</i> , 2020, 14, 229-240. | 7.3 | 66 |
| 29 | Natural Perspiration Sampling and in Situ Electrochemical Analysis with Hydrogel Micropatches for User-Identifiable and Wireless Chemo/Biosensing. <i>ACS Sensors</i> , 2020, 5, 93-102. | 4.0 | 69 |
| 30 | Detection of EGFR Mutations in cfDNA and CTCs, and Comparison to Tumor Tissue in Non-Small-Cell-Lung-Cancer (NSCLC) Patients. <i>Frontiers in Oncology</i> , 2020, 10, 572895. | 1.3 | 35 |
| 31 | Raman image-activated cell sorting. <i>Nature Communications</i> , 2020, 11, 3452. | 5.8 | 116 |
| 32 | Single Cell Mechanotype and Associated Molecular Changes in Urothelial Cell Transformation and Progression. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 601376. | 1.8 | 10 |
| 33 | In situ forming microporous gelatin methacryloyl hydrogel scaffolds from thermostable microgels for tissue engineering. <i>Bioengineering and Translational Medicine</i> , 2020, 5, e10180. | 3.9 | 33 |
| 34 | Drug Delivery: Injectable Drug-Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction (<i>Adv. Funct. Mater.</i> 43/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070289. | 7.8 | 2 |
| 35 | Injectable Drug-Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction. <i>Advanced Functional Materials</i> , 2020, 30, 2004307. | 7.8 | 57 |
| 36 | Fabrication of 3D concentric amphiphilic microparticles to form uniform nanoliter reaction volumes for amplified affinity assays. <i>Lab on A Chip</i> , 2020, 20, 3503-3514. | 3.1 | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Monodisperse drops templated by 3D-structured microparticles. <i>Science Advances</i> , 2020, 6, . | 4.7 | 28 |
| 38 | Deep learning-enabled point-of-care sensing using multiplexed paper-based sensors. <i>Npj Digital Medicine</i> , 2020, 3, 66. | 5.7 | 65 |
| 39 | Sequentially addressable dielectrophoretic array for high-throughput sorting of large-volume biological compartments. <i>Science Advances</i> , 2020, 6, eaba6712. | 4.7 | 56 |
| 40 | Microfluidic-Based Approaches in Targeted Cell/Particle Separation Based on Physical Properties: Fundamentals and Applications. <i>Small</i> , 2020, 16, e2000171. | 5.2 | 121 |
| 41 | Hybrid Integrated Photomedical Devices for Wearable Vital Sign Tracking. <i>ACS Sensors</i> , 2020, 5, 1582-1588. | 4.0 | 14 |
| 42 | A ferrobatic system for automated microfluidic logistics. <i>Science Robotics</i> , 2020, 5, . | 9.9 | 58 |
| 43 | Shape design for stabilizing microparticles in inertial microfluidic flows. <i>Journal of Fluid Mechanics</i> , 2020, 886, . | 1.4 | 4 |
| 44 | Spectro-temporal encoded multiphoton microscopy and fluorescence lifetime imaging at kilohertz frame-rates. <i>Nature Communications</i> , 2020, 11, 2062. | 5.8 | 41 |
| 45 | A comparison of microfluidic methods for high-throughput cell deformability measurements. <i>Nature Methods</i> , 2020, 17, 587-593. | 9.0 | 148 |
| 46 | Peripheral Focused Ultrasound Neuromodulation (pFUS). <i>Journal of Neuroscience Methods</i> , 2020, 341, 108721. | 1.3 | 20 |
| 47 | Enhanced In Vivo Delivery of Stem Cells using Microporous Annealed Particle Scaffolds. <i>Small</i> , 2019, 15, e1903147. | 5.2 | 71 |
| 48 | Microengineered Emulsion-to-Powder Technology for the High-Fidelity Preservation of Molecular, Colloidal, and Bulk Properties of Hydrogel Suspensions. <i>ACS Applied Polymer Materials</i> , 2019, 1, 1935-1941. | 2.0 | 5 |
| 49 | Nano and Microtechnologies for the Study of Magnetotactic Bacteria. <i>Advanced Functional Materials</i> , 2019, 29, 1904178. | 7.8 | 11 |
| 50 | Modular microporous hydrogels formed from microgel beads with orthogonal thermo-chemical responsivity: Microfluidic fabrication and characterization. <i>MethodsX</i> , 2019, 6, 1747-1752. | 0.7 | 23 |
| 51 | A practical guide to intelligent image-activated cell sorting. <i>Nature Protocols</i> , 2019, 14, 2370-2415. | 5.5 | 71 |
| 52 | Capturing magnetic bead-based arrays using perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2019, 115, 082402. | 1.5 | 12 |
| 53 | FlowSculpt: software for efficient design of inertial flow sculpting devices. <i>Lab on A Chip</i> , 2019, 19, 3277-3291. | 3.1 | 9 |
| 54 | Computational cytometer based on magnetically modulated coherent imaging and deep learning. <i>Light: Science and Applications</i> , 2019, 8, 91. | 7.7 | 21 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Paper-based multiplexed vertical flow assay for point-of-care testing. <i>Lab on A Chip</i> , 2019, 19, 1027-1034. | 3.1 | 53 |
| 56 | Hydrogels: Scalable High-Throughput Production of Modular Microgels for In Situ Assembly of Microporous Tissue Scaffolds (<i>Adv. Funct. Mater.</i> 25/2019). <i>Advanced Functional Materials</i> , 2019, 29, 1970174. | 7.8 | 4 |
| 57 | Nanoplasmonic swarm biosensing using single nanoparticle colorimetry. <i>Biosensors and Bioelectronics</i> , 2019, 132, 162-170. | 5.3 | 24 |
| 58 | Technologies for the Directed Evolution of Cell Therapies. <i>SLAS Technology</i> , 2019, 24, 359-372. | 1.0 | 8 |
| 59 | Scalable High-Throughput Production of Modular Microgels for In Situ Assembly of Microporous Tissue Scaffolds. <i>Advanced Functional Materials</i> , 2019, 29, 1900071. | 7.8 | 122 |
| 60 | Microfluidic-enabled bottom-up hydrogels from annealable naturally-derived protein microbeads. <i>Biomaterials</i> , 2019, 192, 560-568. | 5.7 | 116 |
| 61 | Nonlinear Microfluidics. <i>Analytical Chemistry</i> , 2019, 91, 296-314. | 3.2 | 137 |
| 62 | Abstract 409: Regulation of Cardiomyocyte Maturation by an RNA Splicing Regulator Rbfox1. <i>Circulation Research</i> , 2019, 125, . | 2.0 | 1 |
| 63 | Comment on "Ghost cytometry". <i>Science</i> , 2019, 364, . | 6.0 | 6 |
| 64 | Capturing magnetic bead-based arrays using perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2019, 115, . | 1.5 | 1 |
| 65 | Rapid Biophysical Analysis of Host Immune Cell Variations Associated with Sepsis. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2018, 198, 280-282. | 2.5 | 23 |
| 66 | Elastomeric sensor surfaces for high-throughput single-cell force cytometry. <i>Nature Biomedical Engineering</i> , 2018, 2, 124-137. | 11.6 | 47 |
| 67 | Separation of cancer cells using vortical microfluidic flows. <i>Biomicrofluidics</i> , 2018, 12, 014112. | 1.2 | 41 |
| 68 | Active Control of Inertial Focusing Positions and Particle Separations Enabled by Velocity Profile Tuning with Coflow Systems. <i>Analytical Chemistry</i> , 2018, 90, 2902-2911. | 3.2 | 32 |
| 69 | Fast and Label-Free Isolation of Circulating Tumor Cells from Blood: From a Research Microfluidic Platform to an Automated Fluidic Instrument, VTX-1 Liquid Biopsy System. <i>SLAS Technology</i> , 2018, 23, 16-29. | 1.0 | 40 |
| 70 | Evaluation of PD-L1 expression on vortex-isolated circulating tumor cells in metastatic lung cancer. <i>Scientific Reports</i> , 2018, 8, 2592. | 1.6 | 81 |
| 71 | Continuous and Quantitative Purification of T-Cell Subsets for Cell Therapy Manufacturing Using Magnetic Ratcheting Cytometry. <i>SLAS Technology</i> , 2018, 23, 326-337. | 1.0 | 12 |
| 72 | Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. <i>Journal of the American Chemical Society</i> , 2018, 140, 6317-6324. | 6.6 | 338 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Optofluidic time-stretch quantitative phase microscopy. <i>Methods</i> , 2018, 136, 116-125. | 1.9 | 35 |
| 74 | Enzyme-Free Nucleic Acid Amplification Assay Using a Cellphone-Based Well Plate Fluorescence Reader. <i>Analytical Chemistry</i> , 2018, 90, 690-695. | 3.2 | 27 |
| 75 | A Gelatin Microdroplet Platform for High-Throughput Sorting of Hyperproducing Single-Cell-Derived Microalgal Clones. <i>Small</i> , 2018, 14, e1803315. | 5.2 | 52 |
| 76 | Cytocompatible magnetostrictive microstructures for nano- and microparticle manipulation on linear strain response piezoelectrics. <i>Multifunctional Materials</i> , 2018, 1, 014004. | 2.4 | 6 |
| 77 | Functional profiling of circulating tumor cells with an integrated vortex capture and single-cell protease activity assay. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9986-9991. | 3.3 | 105 |
| 78 | Obesity increases airway smooth muscle responses to contractile agonists. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2018, 315, L673-L681. | 1.3 | 45 |
| 79 | High-throughput imaging flow cytometry by optofluidic time-stretch microscopy. <i>Nature Protocols</i> , 2018, 13, 1603-1631. | 5.5 | 112 |
| 80 | High-Throughput Microfluidic Sorting of Live Magnetotactic Bacteria. <i>Applied and Environmental Microbiology</i> , 2018, 84, . | 1.4 | 12 |
| 81 | uFlow: software for rational engineering of secondary flows in inertial microfluidic devices. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1. | 1.0 | 10 |
| 82 | Scanning two-photon continuous flow lithography for synthesis of high-resolution 3D microparticles. <i>Optics Express</i> , 2018, 26, 13543. | 1.7 | 26 |
| 83 | Size-based sorting of hydrogel droplets using inertial microfluidics. <i>Lab on A Chip</i> , 2018, 18, 2575-2582. | 3.1 | 60 |
| 84 | Ferrodrop Dose-Optimized Digital Quantification of Biomolecules in Low-Volume Samples. <i>Analytical Chemistry</i> , 2018, 90, 8881-8888. | 3.2 | 7 |
| 85 | Shaped 3D microcarriers for adherent cell culture and analysis. <i>Microsystems and Nanoengineering</i> , 2018, 4, 21. | 3.4 | 43 |
| 86 | Single-Cell Analysis of Morphological and Metabolic Heterogeneity in <i>Euglena gracilis</i> by Fluorescence-Imaging Flow Cytometry. <i>Analytical Chemistry</i> , 2018, 90, 11280-11289. | 3.2 | 18 |
| 87 | Intelligent Image-Activated Cell Sorting. <i>Cell</i> , 2018, 175, 266-276.e13. | 13.5 | 395 |
| 88 | A 3D Magnetic Hyaluronic Acid Hydrogel for Magnetomechanical Neuromodulation of Primary Dorsal Root Ganglion Neurons. <i>Advanced Materials</i> , 2018, 30, e1800927. | 11.1 | 78 |
| 89 | Highly Stable and Sensitive Nucleic Acid Amplification and Cell-Phone-Based Readout. <i>ACS Nano</i> , 2017, 11, 2934-2943. | 7.3 | 101 |
| 90 | Modulating motility of intracellular vesicles in cortical neurons with nanomagnetic forces on-chip. <i>Lab on A Chip</i> , 2017, 17, 842-854. | 3.1 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Small but Perfectly Formed? Successes, Challenges, and Opportunities for Microfluidics in the Chemical and Biological Sciences. <i>CheM</i> , 2017, 2, 201-223. | 5.8 | 278 |
| 92 | Magnetic Nanoparticle-Based Mechanical Stimulation for Restoration of Mechano-Sensitive Ion Channel Equilibrium in Neural Networks. <i>Nano Letters</i> , 2017, 17, 886-892. | 4.5 | 70 |
| 93 | Label-free isolation of prostate circulating tumor cells using Vortex microfluidic technology. <i>Npj Precision Oncology</i> , 2017, 1, 15. | 2.3 | 72 |
| 94 | A Rapid Capillary-Pressure Driven Micro-Channel to Demonstrate Newtonian Fluid Behavior of Zebrafish Blood at High Shear Rates. <i>Scientific Reports</i> , 2017, 7, 1980. | 1.6 | 24 |
| 95 | Effect of reservoir geometry on vortex trapping of cancer cells. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1. | 1.0 | 22 |
| 96 | High-throughput physical phenotyping of cell differentiation. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17013. | 3.4 | 57 |
| 97 | Biophysical isolation and identification of circulating tumor cells. <i>Lab on A Chip</i> , 2017, 17, 1452-1461. | 3.1 | 83 |
| 98 | Inertial flow of a dilute suspension over cavities in a microchannel. <i>Journal of Fluid Mechanics</i> , 2017, 811, 436-467. | 1.4 | 57 |
| 99 | Probing Cell Adhesion Profiles with a Microscale Adhesive Choice Assay. <i>Biophysical Journal</i> , 2017, 113, 1858-1867. | 0.2 | 5 |
| 100 | Microscale Laminar Vortices for High-Purity Extraction and Release of Circulating Tumor Cells. <i>Methods in Molecular Biology</i> , 2017, 1634, 65-79. | 0.4 | 1 |
| 101 | Shape-based separation of microalga <i>Euglena gracilis</i> using inertial microfluidics. <i>Scientific Reports</i> , 2017, 7, 10802. | 1.6 | 70 |
| 102 | Ca^{2+} facilitates shortening in human airway smooth muscle by modulating phosphoinositide 3-kinase-mediated activation in a RhoA-dependent manner. <i>British Journal of Pharmacology</i> , 2017, 174, 4383-4395. | 2.7 | 28 |
| 103 | Identification of a Human Airway Epithelial Cell Subpopulation with Altered Biophysical, Molecular, and Metastatic Properties. <i>Cancer Prevention Research</i> , 2017, 10, 514-524. | 0.7 | 9 |
| 104 | Particle focusing by 3D inertial microfluidics. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17027. | 3.4 | 76 |
| 105 | Microfluidic Cell Sorting and Separation Technology. <i>Microsystems and Nanosystems</i> , 2017, , 1-14. | 0.1 | 10 |
| 106 | Size-tunable microvortex capture of rare cells. <i>Lab on A Chip</i> , 2017, 17, 2542-2549. | 3.1 | 74 |
| 107 | Remote Neural Stimulation Using Magnetic Nanoparticles. <i>Current Medicinal Chemistry</i> , 2017, 24, 537-548. | 1.2 | 17 |
| 108 | Classification of large circulating tumor cells isolated with ultra-high throughput microfluidic Vortex technology. <i>Oncotarget</i> , 2016, 7, 12748-12760. | 0.8 | 151 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | The Age of Cortical Neural Networks Affects Their Interactions with Magnetic Nanoparticles. <i>Small</i> , 2016, 12, 3559-3567. | 5.2 | 18 |
| 110 | Quantitative Magnetic Separation of Particles and Cells Using Gradient Magnetic Ratcheting. <i>Small</i> , 2016, 12, 1891-1899. | 5.2 | 41 |
| 111 | Optimization of micropillar sequences for fluid flow sculpting. <i>Physics of Fluids</i> , 2016, 28, . | 1.6 | 20 |
| 112 | High-throughput and automated diagnosis of antimicrobial resistance using a cost-effective cellphone-based micro-plate reader. <i>Scientific Reports</i> , 2016, 6, 39203. | 1.6 | 32 |
| 113 | Multiparameter mechanical and morphometric screening of cells. <i>Scientific Reports</i> , 2016, 6, 37863. | 1.6 | 44 |
| 114 | Preferred interparticle spacings in trains of particles in inertial microchannel flows. <i>Journal of Fluid Mechanics</i> , 2016, 786, . | 1.4 | 65 |
| 115 | Micro- and nano-technologies to probe the mechano-biology of the brain. <i>Lab on A Chip</i> , 2016, 16, 1962-1977. | 3.1 | 20 |
| 116 | Inertial focusing of ellipsoidal <i>Euglena gracilis</i> cells in a stepped microchannel. <i>Lab on A Chip</i> , 2016, 16, 4458-4465. | 3.1 | 43 |
| 117 | Homogeneous Entropy-Driven Amplified Detection of Biomolecular Interactions. <i>ACS Nano</i> , 2016, 10, 7467-7475. | 7.3 | 54 |
| 118 | High-throughput label-free image cytometry and image-based classification of live <i>Euglena gracilis</i> . <i>Biomedical Optics Express</i> , 2016, 7, 2703. | 1.5 | 34 |
| 119 | Current Status of Microfluidics-Assisted Cytology: The Application in Molecular Cytology. <i>Essentials in Cytopathology Series</i> , 2016, , 261-283. | 0.1 | 0 |
| 120 | Particle Hydrogels Based on Hyaluronic Acid Building Blocks. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 2034-2041. | 2.6 | 112 |
| 121 | Inhibition of PI3K promotes dilation of human small airways in a rho kinase-dependent manner. <i>British Journal of Pharmacology</i> , 2016, 173, 2726-2738. | 2.7 | 34 |
| 122 | Label-free enumeration, collection and downstream cytological and cytogenetic analysis of circulating tumor cells. <i>Scientific Reports</i> , 2016, 6, 35474. | 1.6 | 46 |
| 123 | Simplified three-dimensional tissue clearing and incorporation of colorimetric phenotyping. <i>Scientific Reports</i> , 2016, 6, 30736. | 1.6 | 38 |
| 124 | Drop formation using ferrofluids driven magnetically in a step emulsification device. <i>Lab on A Chip</i> , 2016, 16, 2474-2480. | 3.1 | 48 |
| 125 | Direct measurement of particle inertial migration in rectangular microchannels. <i>Lab on A Chip</i> , 2016, 16, 2840-2850. | 3.1 | 32 |
| 126 | Inertial focusing in non-rectangular cross-section microchannels and manipulation of accessible focusing positions. <i>Lab on A Chip</i> , 2016, 16, 992-1001. | 3.1 | 107 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | Induction of Calcium Influx in Cortical Neural Networks by Nanomagnetic Forces. ACS Nano, 2016, 10, 2331-2341. | 7.3 | 88 |
| 128 | High-throughput time-stretch microscopy with morphological and chemical specificity. Proceedings of SPIE, 2016, , . | 0.8 | 1 |
| 129 | High efficiency vortex trapping of circulating tumor cells. Biomicrofluidics, 2015, 9, 064116. | 1.2 | 60 |
| 130 | Rapid Software-Based Design and Optical Transient Liquid Molding of Microparticles. Advanced Materials, 2015, 27, 7970-7978. | 11.1 | 51 |
| 131 | On the Application of Inertial Microfluidics for the Size-Based Separation of Polydisperse Cementitious Particulates. Frontiers in Materials, 2015, 2, . | 1.2 | 5 |
| 132 | Research highlights: aptamers on a chip. Lab on A Chip, 2015, 15, 1630-1633. | 3.1 | 5 |
| 133 | Accelerated wound healing by injectable microporous gel scaffolds assembled from Annealed building blocks. Nature Materials, 2015, 14, 737-744. | 13.3 | 698 |
| 134 | High-throughput optofluidic particle profiling with morphological and chemical specificity. Optics Letters, 2015, 40, 4803. | 1.7 | 28 |
| 135 | Inertial microfluidic programming of microparticle-laden flows for solution transfer around cells and particles. Microfluidics and Nanofluidics, 2015, 19, 53-65. | 1.0 | 40 |
| 136 | Cellphone-Based Hand-Held Microplate Reader for Point-of-Care Testing of Enzyme-Linked Immunosorbent Assays. ACS Nano, 2015, 9, 7857-7866. | 7.3 | 300 |
| 137 | High-Throughput Assessment of Cellular Mechanical Properties. Annual Review of Biomedical Engineering, 2015, 17, 35-62. | 5.7 | 166 |
| 138 | Optofluidic fabrication for 3D-shaped particles. Nature Communications, 2015, 6, 6976. | 5.8 | 101 |
| 139 | Research highlights: surface-based microfluidic control. Lab on A Chip, 2015, 15, 3107-3110. | 3.1 | 1 |
| 140 | Research highlights: translating chips. Lab on A Chip, 2015, 15, 1984-1988. | 3.1 | 5 |
| 141 | Rapid inertial solution exchange for enrichment and flow cytometric detection of microvesicles. Biomicrofluidics, 2015, 9, 014112. | 1.2 | 93 |
| 142 | Engineering Cortical Neuron Polarity with Nanomagnets on a Chip. ACS Nano, 2015, 9, 3664-3676. | 7.3 | 49 |
| 143 | Research highlights: microfluidic-enabled single-cell epigenetics. Lab on A Chip, 2015, 15, 4109-4113. | 3.1 | 5 |
| 144 | Research highlights: enhancing whole genome amplification using compartmentalization. Lab on A Chip, 2015, 15, 4379-4382. | 3.1 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Research highlights: microfluidically-fabricated materials. Lab on A Chip, 2015, 15, 3818-3821. | 3.1 | 4 |
| 146 | Research highlights: cell separation at the bench and beyond. Lab on A Chip, 2015, 15, 605-609. | 3.1 | 7 |
| 147 | Metallization and Biopatterning on Ultra-Flexible Substrates via Dextran Sacrificial Layers. PLoS ONE, 2014, 9, e106091. | 1.1 | 25 |
| 148 | Pulsed laser activated cell sorter (PLACS) for high-throughput fluorescent mammalian cell sorting. Proceedings of SPIE, 2014, , . | 0.8 | 2 |
| 149 | Advances in high-throughput single-cell microtechnologies. Current Opinion in Biotechnology, 2014, 25, 114-123. | 3.3 | 86 |
| 150 | Continuous-flow cytomorphological staining and analysis. Lab on A Chip, 2014, 14, 522-531. | 3.1 | 34 |
| 151 | Pulsed Laser Activated Cell Sorting with Three Dimensional Sheathless Inertial Focusing. Small, 2014, 10, 1746-1751. | 5.2 | 66 |
| 152 | Preparing Substrates Encoding Cell Patterning and Localized Intracellular Magnetic Particle Stimulus for High-Throughput Experimentation. Methods in Cell Biology, 2014, 120, 201-214. | 0.5 | 2 |
| 153 | Pulsed laser activated cell sorting with three dimensional sheathless inertial focusing, , 2014, , . | | 1 |
| 154 | Research highlights: micro-engineered therapies. Lab on A Chip, 2014, 14, 4585-4589. | 3.1 | 2 |
| 155 | Real-time control of inertial focusing in microfluidics using dielectrophoresis (DEP). RSC Advances, 2014, 4, 62076-62085. | 1.7 | 62 |
| 156 | Research highlights: microfluidic point-of-care diagnostics. Lab on A Chip, 2014, 14, 1962. | 3.1 | 25 |
| 157 | Research highlights: printing the future of microfabrication. Lab on A Chip, 2014, 14, 1491. | 3.1 | 64 |
| 158 | Emerging investigators: new challenges spawn new innovations. Lab on A Chip, 2014, 14, 2599. | 3.1 | 1 |
| 159 | Research highlights: microfluidic single-cell analysis from nucleic acids to proteins to functions. Lab on A Chip, 2014, 14, 3663. | 3.1 | 9 |
| 160 | Mediating Millisecond Reaction Time around Particles and Cells. Analytical Chemistry, 2014, 86, 1502-1510. | 3.2 | 24 |
| 161 | Research highlights: microfluidics and magnets. Lab on A Chip, 2014, 14, 2882-2886. | 3.1 | 12 |
| 162 | Size-selective collection of circulating tumor cells using Vortex technology. Lab on A Chip, 2014, 14, 63-77. | 3.1 | 457 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 163 | Research highlights: measuring and manipulating cell migration. Lab on A Chip, 2014, 14, 4117-4121. | 3.1 | 3 |
| 164 | Micropillar sequence designs for fundamental inertial flow transformations. Lab on A Chip, 2014, 14, 4197-4204. | 3.1 | 37 |
| 165 | Inertial microfluidic physics. Lab on A Chip, 2014, 14, 2739. | 3.1 | 560 |
| 166 | Sugar Additives Improve Signal Fidelity for Implementing Two-Phase Resorufin-Based Enzyme Immunoassays. Langmuir, 2014, 30, 6637-6643. | 1.6 | 33 |
| 167 | Automated single-cell motility analysis on a chip using lensfree microscopy. Scientific Reports, 2014, 4, 4717. | 1.6 | 63 |
| 168 | Fabricating Shaped Microfibers with Inertial Microfluidics. Advanced Materials, 2014, 26, 3712-3717. | 11.1 | 57 |
| 169 | Pinched-flow hydrodynamic stretching of single-cells. Lab on A Chip, 2013, 13, 3728. | 3.1 | 124 |
| 170 | Three Dimensional, Sheathless, and High-Throughput Microparticle Inertial Focusing Through Geometry-Induced Secondary Flows. Small, 2013, 9, 685-690. | 5.2 | 163 |
| 171 | Ultrafast automated image cytometry for cancer detection. , 2013, 2013, 129-32. | | 1 |
| 172 | A hardware accelerated approach for imaging flow cytometry. , 2013, , . | | 3 |
| 173 | Electro-adaptive microfluidics for active tuning of channel geometry using polymer actuators. Microfluidics and Nanofluidics, 2013, 14, 345-358. | 1.0 | 37 |
| 174 | Microstructure-induced helical vortices allow single-stream and long-term inertial focusing. Lab on A Chip, 2013, 13, 2942. | 3.1 | 90 |
| 175 | Microfluidic sample preparation for diagnostic cytopathology. Lab on A Chip, 2013, 13, 1011. | 3.1 | 84 |
| 176 | Engineering fluid flow using sequenced microstructures. Nature Communications, 2013, 4, 1826. | 5.8 | 143 |
| 177 | Dielectric elastomer actuators for active microfluidic control. Proceedings of SPIE, 2013, , . | 0.8 | 12 |
| 178 | Quantitative Diagnosis of Malignant Pleural Effusions by Single-Cell Mechanophenotyping. Science Translational Medicine, 2013, 5, 212ra163. | 5.8 | 227 |
| 179 | Microfluidic Purification and Concentration of Malignant Pleural Effusions for Improved Molecular and Cytomorphological Diagnostics. PLoS ONE, 2013, 8, e78194. | 1.1 | 35 |
| 180 | Microfluidics: Three Dimensional, Sheathless, and High-Throughput Microparticle Inertial Focusing Through Geometry-Induced Secondary Flows (Small 5/2013). Small, 2013, 9, 804-804. | 5.2 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Microfluidics as a Promising Tool Toward Distributed Viral Detection. , 2013, , 311-340. | | 0 |
| 182 | Label-Free Enrichment of Adrenal Cortical Progenitor Cells Using Inertial Microfluidics. PLoS ONE, 2012, 7, e46550. | 1.1 | 48 |
| 183 | Introduction: Why Analyze Single Cells?. Methods in Molecular Biology, 2012, 853, 1-10. | 0.4 | 21 |
| 184 | Hydrodynamic stretching of single cells for large population mechanical phenotyping. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7630-7635. | 3.3 | 669 |
| 185 | A Mechanical Biomarker of Cell State in Medicine. Journal of the Association for Laboratory Automation, 2012, 17, 32-42. | 2.8 | 188 |
| 186 | Intrinsic particle-induced lateral transport in microchannels. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11593-11598. | 3.3 | 83 |
| 187 | High-throughput single-microparticle imaging flow analyzer. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11630-11635. | 3.3 | 333 |
| 188 | Inertial Microfluidics: Inertial Manipulation and Transfer of Microparticles Across Laminar Fluid Streams (Small 17/2012). Small, 2012, 8, 2765-2765. | 5.2 | 1 |
| 189 | Continuous Inertial Focusing and Separation of Particles by Shape. Physical Review X, 2012, 2, . | 2.8 | 93 |
| 190 | Inertial Manipulation and Transfer of Microparticles Across Laminar Fluid Streams. Small, 2012, 8, 2757-2764. | 5.2 | 144 |
| 191 | The effects of shear stress on isolated receptor–ligand interactions of Staphylococcus epidermidis and human plasma fibrinogen using molecularly patterned microfluidics. Lab on A Chip, 2011, 11, 883. | 3.1 | 22 |
| 192 | Deformability-based cell classification and enrichment using inertial microfluidics. Lab on A Chip, 2011, 11, 912. | 3.1 | 486 |
| 193 | Automated cellular sample preparation using a Centrifuge-on-a-Chip. Lab on A Chip, 2011, 11, 2827. | 3.1 | 247 |
| 194 | Rapid prototyping polymers for microfluidic devices and high pressure injections. Lab on A Chip, 2011, 11, 3752. | 3.1 | 332 |
| 195 | Nomarski serial time-encoded amplified microscopy for high-speed contrast-enhanced imaging of transparent media. Biomedical Optics Express, 2011, 2, 3387. | 1.5 | 34 |
| 196 | Sequential Array Cytometry: Multi-Parameter Imaging with a Single Fluorescent Channel. Annals of Biomedical Engineering, 2011, 39, 1328-1334. | 1.3 | 10 |
| 197 | Inertial focusing of non-spherical microparticles. Applied Physics Letters, 2011, 99, . | 1.5 | 105 |
| 198 | High-throughput size-based rare cell enrichment using microscale vortices. Biomicrofluidics, 2011, 5, 22206. | 1.2 | 266 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Strategies for Implementing Hardware-Assisted High-Throughput Cellular Image Analysis. Journal of the Association for Laboratory Automation, 2011, 16, 422-430. | 2.8 | 17 |
| 200 | Label-free cell separation and sorting in microfluidic systems. Analytical and Bioanalytical Chemistry, 2010, 397, 3249-3267. | 1.9 | 789 |
| 201 | Continuous scalable blood filtration device using inertial microfluidics. Biotechnology and Bioengineering, 2010, 107, 302-311. | 1.7 | 289 |
| 202 | Dynamic self-assembly and control of microfluidic particle crystals. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22413-22418. | 3.3 | 193 |
| 203 | Pulsed laser triggered high speed fluorescence activated microfluidic switch. , 2010, , . | | 2 |
| 204 | Particle Focusing in Staged Inertial Microfluidic Devices for Flow Cytometry. Analytical Chemistry, 2010, 82, 3862-3867. | 3.2 | 202 |
| 205 | Sheathless inertial cell ordering for extreme throughput flow cytometry. Lab on A Chip, 2010, 10, 274-280. | 3.1 | 324 |
| 206 | Inertial microfluidics for flow cytometry. , 2010, , . | | 0 |
| 207 | Particle Segregation and Dynamics in Confined Flows. Physical Review Letters, 2009, 102, 094503. | 2.9 | 431 |
| 208 | Differential inertial focusing of particles in curved low-aspect-ratio microchannels. New Journal of Physics, 2009, 11, 075025. | 1.2 | 152 |
| 209 | Particle Focusing Mechanisms in Curving Confined Flows. Analytical Chemistry, 2009, 81, 8459-8465. | 3.2 | 211 |
| 210 | Inertial microfluidics. Lab on A Chip, 2009, 9, 3038. | 3.1 | 1,349 |
| 211 | Microfluidic self-assembly of tumor spheroids for anticancer drug discovery. Biomedical Microdevices, 2008, 10, 197-202. | 1.4 | 234 |
| 212 | Equilibrium Separation and Filtration of Particles Using Differential Inertial Focusing. Analytical Chemistry, 2008, 80, 2204-2211. | 3.2 | 354 |
| 213 | Microvortex for focusing, guiding and sorting of particles. Lab on A Chip, 2008, 8, 2128. | 3.1 | 117 |
| 214 | Controlled encapsulation of single-cells into monodisperse picolitre drops. Lab on A Chip, 2008, 8, 1262. | 3.1 | 444 |
| 215 | Continuous inertial focusing, ordering, and separation of particles in microchannels. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18892-18897. | 3.3 | 1,408 |
| 216 | Single-Cell Enzyme Concentrations, Kinetics, and Inhibition Analysis Using High-Density Hydrodynamic Cell Isolation Arrays. Analytical Chemistry, 2006, 78, 4925-4930. | 3.2 | 406 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | Dynamic Single-Cell Analysis for Quantitative Biology. Analytical Chemistry, 2006, 78, 7918-7925. | 3.2 | 329 |
| 218 | Dynamic single cell culture array. Lab on A Chip, 2006, 6, 1445. | 3.1 | 651 |
| 219 | On-chip cell lysis by local hydroxide generation. Lab on A Chip, 2005, 5, 171. | 3.1 | 92 |
| 220 | Reagentless mechanical cell lysis by nanoscale barbs in microchannels for sample preparation. Lab on A Chip, 2003, 3, 287. | 3.1 | 224 |
| 221 | Enhanced Velocity Gradients within Microfluidics for Cellular Manipulation. , 2002, , 799-801. | | 0 |
| 222 | Simulations of near-field excitation and trapping for integrated near-field optical microfluidic devices. , 0, , . | | 2 |
| 223 | Mechanical cell lysis results of a sample preparation module for functional genomics. , 0, , . | | 1 |
| 224 | Detection of protein conformational changes with a nanogap biosensor. , 0, , . | | 6 |
| 225 | Single Cell Analysis for Quantitative Systems Biology. , 0, , 135-160. | | 0 |
| 226 | Blood screening using a time-stretch camera identifies cancer cells with record sensitivity. SPIE Newsroom, 0, , . | 0.1 | 0 |