

# Dino Di Carlo

## List of Publications by Year in descending order

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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	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
2	Inertial microfluidics. Lab on A Chip, 2009, 9, 3038.	3.1	1,349
3	Label-free cell separation and sorting in microfluidic systems. Analytical and Bioanalytical Chemistry, 2010, 397, 3249-3267.	1.9	789
4	Accelerated wound healing by injectable microporous gel scaffolds assembled from Annealed building blocks. Nature Materials, 2015, 14, 737-744.	13.3	698
5	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
6	Dynamic single cell culture array. Lab on A Chip, 2006, 6, 1445.	3.1	651
7	Inertial microfluidic physics. Lab on A Chip, 2014, 14, 2739.	3.1	560
8	Deformability-based cell classification and enrichment using inertial microfluidics. Lab on A Chip, 2011, 11, 912.	3.1	486
9	Size-selective collection of circulating tumor cells using Vortex technology. Lab on A Chip, 2014, 14, 63-77.	3.1	457
10	Controlled encapsulation of single-cells into monodisperse picolitre drops. Lab on A Chip, 2008, 8, 1262.	3.1	444
11	Particle Segregation and Dynamics in Confined Flows. Physical Review Letters, 2009, 102, 094503.	2.9	431
12	Single-Cell Enzyme Concentrations, Kinetics, and Inhibition Analysis Using High-Density Hydrodynamic Cell Isolation Arrays. Analytical Chemistry, 2006, 78, 4925-4930.	3.2	406
13	Intelligent Image-Activated Cell Sorting. Cell, 2018, 175, 266-276.e13.	13.5	395
14	Equilibrium Separation and Filtration of Particles Using Differential Inertial Focusing. Analytical Chemistry, 2008, 80, 2204-2211.	3.2	354
15	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. Journal of the American Chemical Society, 2018, 140, 6317-6324.	6.6	338
16	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
17	Rapid prototyping polymers for microfluidic devices and high pressure injections. Lab on A Chip, 2011, 11, 3752.	3.1	332
18	Dynamic Single-Cell Analysis for Quantitative Biology. Analytical Chemistry, 2006, 78, 7918-7925.	3.2	329

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19	Sheathless inertial cell ordering for extreme throughput flow cytometry. <i>Lab on A Chip</i> , 2010, 10, 274-280.	3.1	324
20	Cellphone-Based Hand-Held Microplate Reader for Point-of-Care Testing of Enzyme-Linked Immunosorbent Assays. <i>ACS Nano</i> , 2015, 9, 7857-7866.	7.3	300
21	Continuous scalable blood filtration device using inertial microfluidics. <i>Biotechnology and Bioengineering</i> , 2010, 107, 302-311.	1.7	289
22	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
23	High-throughput size-based rare cell enrichment using microscale vortices. <i>Biomicrofluidics</i> , 2011, 5, 22206.	1.2	266
24	Activating an adaptive immune response from a hydrogel scaffold imparts regenerative wound healing. <i>Nature Materials</i> , 2021, 20, 560-569.	13.3	260
25	Automated cellular sample preparation using a Centrifuge-on-a-Chip. <i>Lab on A Chip</i> , 2011, 11, 2827.	3.1	247
26	Microfluidic self-assembly of tumor spheroids for anticancer drug discovery. <i>Biomedical Microdevices</i> , 2008, 10, 197-202.	1.4	234
27	Quantitative Diagnosis of Malignant Pleural Effusions by Single-Cell Mechanophenotyping. <i>Science Translational Medicine</i> , 2013, 5, 212ra163.	5.8	227
28	Reagentless mechanical cell lysis by nanoscale barbs in microchannels for sample preparation. <i>Lab on A Chip</i> , 2003, 3, 287.	3.1	224
29	Particle Focusing Mechanisms in Curving Confined Flows. <i>Analytical Chemistry</i> , 2009, 81, 8459-8465.	3.2	211
30	Particle Focusing in Staged Inertial Microfluidic Devices for Flow Cytometry. <i>Analytical Chemistry</i> , 2010, 82, 3862-3867.	3.2	202
31	Dynamic self-assembly and control of microfluidic particle crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 22413-22418.	3.3	193
32	A Mechanical Biomarker of Cell State in Medicine. <i>Journal of the Association for Laboratory Automation</i> , 2012, 17, 32-42.	2.8	188
33	High-Throughput Assessment of Cellular Mechanical Properties. <i>Annual Review of Biomedical Engineering</i> , 2015, 17, 35-62.	5.7	166
34	Three Dimensional, Sheathless, and High-Throughput Microparticle Inertial Focusing Through Geometry-Induced Secondary Flows. <i>Small</i> , 2013, 9, 685-690.	5.2	163
35	Differential inertial focusing of particles in curved low-aspect-ratio microchannels. <i>New Journal of Physics</i> , 2009, 11, 075025.	1.2	152
36	Classification of large circulating tumor cells isolated with ultra-high throughput microfluidic Vortex technology. <i>Oncotarget</i> , 2016, 7, 12748-12760.	0.8	151

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37	A comparison of microfluidic methods for high-throughput cell deformability measurements. <i>Nature Methods</i> , 2020, 17, 587-593.	9.0	148
38	Inertial Manipulation and Transfer of Microparticles Across Laminar Fluid Streams. <i>Small</i> , 2012, 8, 2757-2764.	5.2	144
39	Engineering fluid flow using sequenced microstructures. <i>Nature Communications</i> , 2013, 4, 1826.	5.8	143
40	Nonlinear Microfluidics. <i>Analytical Chemistry</i> , 2019, 91, 296-314.	3.2	137
41	Pinched-flow hydrodynamic stretching of single-cells. <i>Lab on A Chip</i> , 2013, 13, 3728.	3.1	124
42	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
43	Microfluidic-Based Approaches in Targeted Cell/Particle Separation Based on Physical Properties: Fundamentals and Applications. <i>Small</i> , 2020, 16, e2000171.	5.2	121
44	Microvortex for focusing, guiding and sorting of particles. <i>Lab on A Chip</i> , 2008, 8, 2128.	3.1	117
45	Microfluidic-enabled bottom-up hydrogels from annealable naturally-derived protein microbeads. <i>Biomaterials</i> , 2019, 192, 560-568.	5.7	116
46	Raman image-activated cell sorting. <i>Nature Communications</i> , 2020, 11, 3452.	5.8	116
47	Particle Hydrogels Based on Hyaluronic Acid Building Blocks. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 2034-2041.	2.6	112
48	High-throughput imaging flow cytometry by optofluidic time-stretch microscopy. <i>Nature Protocols</i> , 2018, 13, 1603-1631.	5.5	112
49	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
50	Inertial focusing of non-spherical microparticles. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	105
51	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
52	Optofluidic fabrication for 3D-shaped particles. <i>Nature Communications</i> , 2015, 6, 6976.	5.8	101
53	Highly Stable and Sensitive Nucleic Acid Amplification and Cell-Phone-Based Readout. <i>ACS Nano</i> , 2017, 11, 2934-2943.	7.3	101
54	Continuous Inertial Focusing and Separation of Particles by Shape. <i>Physical Review X</i> , 2012, 2, .	2.8	93

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55	Rapid inertial solution exchange for enrichment and flow cytometric detection of microvesicles. <i>Biomicrofluidics</i> , 2015, 9, 014112.	1.2	93
56	On-chip cell lysis by local hydroxide generation. <i>Lab on A Chip</i> , 2005, 5, 171.	3.1	92
57	Microstructure-induced helical vortices allow single-stream and long-term inertial focusing. <i>Lab on A Chip</i> , 2013, 13, 2942.	3.1	90
58	Induction of Calcium Influx in Cortical Neural Networks by Nanomagnetic Forces. <i>ACS Nano</i> , 2016, 10, 2331-2341.	7.3	88
59	Advances in high-throughput single-cell microtechnologies. <i>Current Opinion in Biotechnology</i> , 2014, 25, 114-123.	3.3	86
60	Microfluidic sample preparation for diagnostic cytopathology. <i>Lab on A Chip</i> , 2013, 13, 1011.	3.1	84
61	Intrinsic particle-induced lateral transport in microchannels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 11593-11598.	3.3	83
62	Biophysical isolation and identification of circulating tumor cells. <i>Lab on A Chip</i> , 2017, 17, 1452-1461.	3.1	83
63	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
64	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
65	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
66	Particle focusing by 3D inertial microfluidics. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17027.	3.4	76
67	Size-tunable microvortex capture of rare cells. <i>Lab on A Chip</i> , 2017, 17, 2542-2549.	3.1	74
68	Label-free isolation of prostate circulating tumor cells using Vortex microfluidic technology. <i>Npj Precision Oncology</i> , 2017, 1, 15.	2.3	72
69	Enhanced In Vivo Delivery of Stem Cells using Microporous Annealed Particle Scaffolds. <i>Small</i> , 2019, 15, e1903147.	5.2	71
70	A practical guide to intelligent image-activated cell sorting. <i>Nature Protocols</i> , 2019, 14, 2370-2415.	5.5	71
71	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
72	Shape-based separation of microalga <i>Euglena gracilis</i> using inertial microfluidics. <i>Scientific Reports</i> , 2017, 7, 10802.	1.6	70

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73	Natural Perspiration Sampling and in Situ Electrochemical Analysis with Hydrogel Micropatches for User-Identifiable and Wireless Chemo/Biosensing. ACS Sensors, 2020, 5, 93-102.	4.0	69
74	Pulsed Laser Activated Cell Sorting with Three Dimensional Sheathless Inertial Focusing. Small, 2014, 10, 1746-1751.	5.2	66
75	Point-of-Care Serodiagnostic Test for Early-Stage Lyme Disease Using a Multiplexed Paper-Based Immunoassay and Machine Learning. ACS Nano, 2020, 14, 229-240.	7.3	66
76	Preferred interparticle spacings in trains of particles in inertial microchannel flows. Journal of Fluid Mechanics, 2016, 786, .	1.4	65
77	Deep learning-enabled point-of-care sensing using multiplexed paper-based sensors. Npj Digital Medicine, 2020, 3, 66.	5.7	65
78	Research highlights: printing the future of microfabrication. Lab on A Chip, 2014, 14, 1491.	3.1	64
79	Automated single-cell motility analysis on a chip using lensfree microscopy. Scientific Reports, 2014, 4, 4717.	1.6	63
80	Real-time control of inertial focusing in microfluidics using dielectrophoresis (DEP). RSC Advances, 2014, 4, 62076-62085.	1.7	62
81	High efficiency vortex trapping of circulating tumor cells. Biomicrofluidics, 2015, 9, 064116.	1.2	60
82	Size-based sorting of hydrogel droplets using inertial microfluidics. Lab on A Chip, 2018, 18, 2575-2582.	3.1	60
83	A ferrobotic system for automated microfluidic logistics. Science Robotics, 2020, 5, .	9.9	58
84	Fabricating Shaped Microfibers with Inertial Microfluidics. Advanced Materials, 2014, 26, 3712-3717.	11.1	57
85	High-throughput physical phenotyping of cell differentiation. Microsystems and Nanoengineering, 2017, 3, 17013.	3.4	57
86	Inertial flow of a dilute suspension over cavities in a microchannel. Journal of Fluid Mechanics, 2017, 811, 436-467.	1.4	57
87	Injectable Drug-Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction. Advanced Functional Materials, 2020, 30, 2004307.	7.8	57
88	Sequentially addressable dielectrophoretic array for high-throughput sorting of large-volume biological compartments. Science Advances, 2020, 6, eaba6712.	4.7	56
89	Recent Progress in Lyme Disease and Remaining Challenges. Frontiers in Medicine, 2021, 8, 666554.	1.2	55
90	Homogeneous Entropy-Driven Amplified Detection of Biomolecular Interactions. ACS Nano, 2016, 10, 7467-7475.	7.3	54

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91	Paper-based multiplexed vertical flow assay for point-of-care testing. <i>Lab on A Chip</i> , 2019, 19, 1027-1034.	3.1	53
92	A Gelatin Microdroplet Platform for High-Throughput Sorting of Hyperproducing Single-Cell-Derived Microalgal Clones. <i>Small</i> , 2018, 14, e1803315.	5.2	52
93	Rapid Software-Based Design and Optical Transient Liquid Molding of Microparticles. <i>Advanced Materials</i> , 2015, 27, 7970-7978.	11.1	51
94	Engineering Cortical Neuron Polarity with Nanomagnets on a Chip. <i>ACS Nano</i> , 2015, 9, 3664-3676.	7.3	49
95	Label-Free Enrichment of Adrenal Cortical Progenitor Cells Using Inertial Microfluidics. <i>PLoS ONE</i> , 2012, 7, e46550.	1.1	48
96	Drop formation using ferrofluids driven magnetically in a step emulsification device. <i>Lab on A Chip</i> , 2016, 16, 2474-2480.	3.1	48
97	Elastomeric sensor surfaces for high-throughput single-cell force cytometry. <i>Nature Biomedical Engineering</i> , 2018, 2, 124-137.	11.6	47
98	Label-free enumeration, collection and downstream cytological and cytogenetic analysis of circulating tumor cells. <i>Scientific Reports</i> , 2016, 6, 35474.	1.6	46
99	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
100	Multiparameter mechanical and morphometric screening of cells. <i>Scientific Reports</i> , 2016, 6, 37863.	1.6	44
101	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
102	Shaped 3D microcarriers for adherent cell culture and analysis. <i>Microsystems and Nanoengineering</i> , 2018, 4, 21.	3.4	43
103	Quantitative Magnetic Separation of Particles and Cells Using Gradient Magnetic Ratcheting. <i>Small</i> , 2016, 12, 1891-1899.	5.2	41
104	Separation of cancer cells using vortical microfluidic flows. <i>Biomicrofluidics</i> , 2018, 12, 014112.	1.2	41
105	Spectro-temporal encoded multiphoton microscopy and fluorescence lifetime imaging at kilohertz frame-rates. <i>Nature Communications</i> , 2020, 11, 2062.	5.8	41
106	Inertial microfluidic programming of microparticle-laden flows for solution transfer around cells and particles. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 53-65.	1.0	40
107	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
108	Simplified three-dimensional tissue clearing and incorporation of colorimetric phenotyping. <i>Scientific Reports</i> , 2016, 6, 30736.	1.6	38

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109	Electro-adaptive microfluidics for active tuning of channel geometry using polymer actuators. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 345-358.	1.0	37
110	Micropillar sequence designs for fundamental inertial flow transformations. <i>Lab on A Chip</i> , 2014, 14, 4197-4204.	3.1	37
111	Microfluidic Purification and Concentration of Malignant Pleural Effusions for Improved Molecular and Cytomorphological Diagnostics. <i>PLoS ONE</i> , 2013, 8, e78194.	1.1	35
112	Optofluidic time-stretch quantitative phase microscopy. <i>Methods</i> , 2018, 136, 116-125.	1.9	35
113	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
114	Suspendable Hydrogel Nanovials for Massively Parallel Single-Cell Functional Analysis and Sorting. <i>ACS Nano</i> , 2022, 16, 7242-7257.	7.3	35
115	Nomarski serial time-encoded amplified microscopy for high-speed contrast-enhanced imaging of transparent media. <i>Biomedical Optics Express</i> , 2011, 2, 3387.	1.5	34
116	Continuous-flow cytomorphological staining and analysis. <i>Lab on A Chip</i> , 2014, 14, 522-531.	3.1	34
117	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
118	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
119	Sugar Additives Improve Signal Fidelity for Implementing Two-Phase Resorufin-Based Enzyme Immunoassays. <i>Langmuir</i> , 2014, 30, 6637-6643.	1.6	33
120	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
121	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
122	Direct measurement of particle inertial migration in rectangular microchannels. <i>Lab on A Chip</i> , 2016, 16, 2840-2850.	3.1	32
123	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
124	High-throughput optofluidic particle profiling with morphological and chemical specificity. <i>Optics Letters</i> , 2015, 40, 4803.	1.7	28
125	facilitates shortening in human airway smooth muscle by modulating phosphoinositide 3-kinase-mediated activation in a Rho-dependent manner. <i>British Journal of Pharmacology</i> , 2017, 174, 4383-4395.	2.7	28
126	Monodisperse drops templated by 3D-structured microparticles. <i>Science Advances</i> , 2020, 6, .	4.7	28



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127	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
128	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
129	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
130	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
131	Scanning two-photon continuous flow lithography for synthesis of high-resolution 3D microparticles. <i>Optics Express</i> , 2018, 26, 13543.	1.7	26
132	Metallization and Biopatterning on Ultra-Flexible Substrates via Dextran Sacrificial Layers. <i>PLoS ONE</i> , 2014, 9, e106091.	1.1	25
133	Research highlights: microfluidic point-of-care diagnostics. <i>Lab on A Chip</i> , 2014, 14, 1962.	3.1	25
134	Mediating Millisecond Reaction Time around Particles and Cells. <i>Analytical Chemistry</i> , 2014, 86, 1502-1510.	3.2	24
135	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
136	Nanoplasmonic swarm biosensing using single nanoparticle colorimetry. <i>Biosensors and Bioelectronics</i> , 2019, 132, 162-170.	5.3	24
137	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
138	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
139	The Mechanobiology of Endothelial-to-Mesenchymal Transition in Cardiovascular Disease. <i>Frontiers in Physiology</i> , 2021, 12, 734215.	1.3	23
140	The effects of shear stress on isolated receptor-ligand interactions of <i>Staphylococcus epidermidis</i> and human plasma fibrinogen using molecularly patterned microfluidics. <i>Lab on A Chip</i> , 2011, 11, 883.	3.1	22
141	Effect of reservoir geometry on vortex trapping of cancer cells. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	1.0	22
142	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
143	Scalable Fabrication and Use of 3D Structured Microparticles Spatially Functionalized with Biomolecules. <i>ACS Nano</i> , 2022, 16, 38-49.	7.3	22
144	Introduction: Why Analyze Single Cells?. <i>Methods in Molecular Biology</i> , 2012, 853, 1-10.	0.4	21

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145	Computational cytometer based on magnetically modulated coherent imaging and deep learning. <i>Light: Science and Applications</i> , 2019, 8, 91.	7.7	21
146	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
147	Optimization of micropillar sequences for fluid flow sculpting. <i>Physics of Fluids</i> , 2016, 28, .	1.6	20
148	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
149	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
150	Single-Domain Multiferroic Array-Addressable Terfenol (SMArT) Micromagnets for Programmable Single-Cell Capture and Release. <i>Advanced Materials</i> , 2021, 33, e2006651.	11.1	20
151	Peripheral Focused Ultrasound Neuromodulation (pFUS). <i>Journal of Neuroscience Methods</i> , 2020, 341, 108721.	1.3	20
152	Injectable, macroporous scaffolds for delivery of therapeutic genes to the injured spinal cord. <i>APL Bioengineering</i> , 2021, 5, 016104.	3.3	19
153	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
154	The Age of Cortical Neural Networks Affects Their Interactions with Magnetic Nanoparticles. <i>Small</i> , 2016, 12, 3559-3567.	5.2	18
155	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
156	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
157	Sorting single-cell microcarriers using commercial flow cytometers. <i>SLAS Technology</i> , 2022, 27, 150-159.	1.0	18
158	A Readily Scalable, Clinically Demonstrated, Antibiofouling Zwitterionic Surface Treatment for Implantable Medical Devices. <i>Advanced Materials</i> , 2022, 34, e2200254.	11.1	18
159	Strategies for Implementing Hardware-Assisted High-Throughput Cellular Image Analysis. <i>Journal of the Association for Laboratory Automation</i> , 2011, 16, 422-430.	2.8	17
160	Remote Neural Stimulation Using Magnetic Nanoparticles. <i>Current Medicinal Chemistry</i> , 2017, 24, 537-548.	1.2	17
161	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
162	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

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163	Hybrid Integrated Photomedical Devices for Wearable Vital Sign Tracking. ACS Sensors, 2020, 5, 1582-1588.	4.0	14
164	Counting of enzymatically amplified affinity reactions in hydrogel particle-templated drops. Lab on A Chip, 2021, 21, 3438-3448.	3.1	14
165	Selective and Improved Photoannealing of Microporous Annealed Particle (MAP) Scaffolds. ACS Biomaterials Science and Engineering, 2021, 7, 422-427.	2.6	14
166	Dielectric elastomer actuators for active microfluidic control. Proceedings of SPIE, 2013, , .	0.8	12
167	Research highlights: microfluidics and magnets. Lab on A Chip, 2014, 14, 2882-2886.	3.1	12
168	Continuous and Quantitative Purification of T-Cell Subsets for Cell Therapy Manufacturing Using Magnetic Ratcheting Cytometry. SLAS Technology, 2018, 23, 326-337.	1.0	12
169	High-Throughput Microfluidic Sorting of Live Magnetotactic Bacteria. Applied and Environmental Microbiology, 2018, 84, .	1.4	12
170	Capturing magnetic bead-based arrays using perpendicular magnetic anisotropy. Applied Physics Letters, 2019, 115, 082402.	1.5	12
171	High-throughput selection of cells based on accumulated growth and division using PicoShell particles. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	12
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