Dino Di Carlo

List of Publications by Year
in descending order

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226 papers	21,743 citations	12330 69 h-index	9589 142 g-index
241 all docs	241 docs citations	241 times ranked	17549 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.	7.1	1,408
2	Inertial microfluidics. Lab on A Chip, 2009, 9, 3038.	6.0	1,349
3	Label-free cell separation and sorting in microfluidic systems. Analytical and Bioanalytical Chemistry, 2010, 397, 3249-3267.	3.7	789
4	Accelerated wound healing by injectable microporous gel scaffolds assembled fromÂannealed building blocks. Nature Materials, 2015, 14, 737-744.	27.5	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.	7.1	669
6	Dynamic single cell culture array. Lab on A Chip, 2006, 6, 1445.	6.0	651
7	Inertial microfluidic physics. Lab on A Chip, 2014, 14, 2739.	6.0	560
8	Deformability-based cell classification and enrichment using inertial microfluidics. Lab on A Chip, 2011, 11, 912.	6.0	486
9	Size-selective collection of circulating tumor cells using Vortex technology. Lab on A Chip, 2014, 14, 63-77.	6.0	457
10	Controlled encapsulation of single-cells into monodisperse picolitre drops. Lab on A Chip, 2008, 8, 1262.	6.0	444
11	Particle Segregation and Dynamics in Confined Flows. Physical Review Letters, 2009, 102, 094503.	7.8	431
12	Single-Cell Enzyme Concentrations, Kinetics, and Inhibition Analysis Using High-Density Hydrodynamic Cell Isolation Arrays. Analytical Chemistry, 2006, 78, 4925-4930.	6.5	406
13	Intelligent Image-Activated Cell Sorting. Cell, 2018, 175, 266-276.e13.	28.9	395
14	Equilibrium Separation and Filtration of Particles Using Differential Inertial Focusing. Analytical Chemistry, 2008, 80, 2204-2211.	6.5	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.	13.7	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.	7.1	333
17	Rapid prototyping polymers for microfluidic devices and high pressure injections. Lab on A Chip, 2011, 11, 3752.	6.0	332
18	Dynamic Single-Cell Analysis for Quantitative Biology. Analytical Chemistry, 2006, 78, 7918-7925.	6.5	329

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19	Sheathless inertial cell ordering for extreme throughput flow cytometry. Lab on A Chip, 2010, 10, 274-280.	6.0	324
20	Cellphone-Based Hand-Held Microplate Reader for Point-of-Care Testing of Enzyme-Linked Immunosorbent Assays. ACS Nano, 2015, 9, 7857-7866.	14.6	300
21	Continuous scalable blood filtration device using inertial microfluidics. Biotechnology and Bioengineering, 2010, 107, 302-311.	3.3	289
22	Small but Perfectly Formed? Successes, Challenges, and Opportunities for Microfluidics in the Chemical and Biological Sciences. CheM, 2017, 2, 201-223.	11.7	278
23	High-throughput size-based rare cell enrichment using microscale vortices. Biomicrofluidics, 2011, 5, 22206.	2.4	266
24	Activating an adaptive immune response from a hydrogel scaffold imparts regenerative wound healing. Nature Materials, 2021, 20, 560-569.	27.5	260
25	Automated cellular sample preparation using a Centrifuge-on-a-Chip. Lab on A Chip, 2011, 11, 2827.	6.0	247
26	Microfluidic self-assembly of tumor spheroids for anticancer drug discovery. Biomedical Microdevices, 2008, 10, 197-202.	2.8	234
27	Quantitative Diagnosis of Malignant Pleural Effusions by Single-Cell Mechanophenotyping. Science Translational Medicine, 2013, 5, 212ra163.	12.4	227
28	Reagentless mechanical cell lysis by nanoscale barbs in microchannels for sample preparation. Lab on A Chip, 2003, 3, 287.	6.0	224
29	Particle Focusing Mechanisms in Curving Confined Flows. Analytical Chemistry, 2009, 81, 8459-8465.	6.5	211
30	Particle Focusing in Staged Inertial Microfluidic Devices for Flow Cytometry. Analytical Chemistry, 2010, 82, 3862-3867.	6.5	202
31	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.	7.1	193
32	A Mechanical Biomarker of Cell State in Medicine. Journal of the Association for Laboratory Automation, 2012, 17, 32-42.	2.8	188
33	High-Throughput Assessment of Cellular Mechanical Properties. Annual Review of Biomedical Engineering, 2015, 17, 35-62.	12.3	166
34	Three Dimensional, Sheathless, and Highâ€Throughput Microparticle Inertial Focusing Through Geometryâ€Induced Secondary Flows. Small, 2013, 9, 685-690.	10.0	163
35	Differential inertial focusing of particles in curved low-aspect-ratio microchannels. New Journal of Physics, 2009, 11, 075025.	2.9	152
36	Classification of large circulating tumor cells isolated with ultra-high throughput microfluidic Vortex technology. Oncotarget, 2016, 7, 12748-12760.	1.8	151

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37	A comparison of microfluidic methods for high-throughput cell deformability measurements. Nature Methods, 2020, 17, 587-593.	19.0	148
38	Inertial Manipulation and Transfer of Microparticles Across Laminar Fluid Streams. Small, 2012, 8, 2757-2764.	10.0	144
39	Engineering fluid flow using sequenced microstructures. Nature Communications, 2013, 4, 1826.	12.8	143
40	Nonlinear Microfluidics. Analytical Chemistry, 2019, 91, 296-314.	6.5	137
41	Pinched-flow hydrodynamic stretching of single-cells. Lab on A Chip, 2013, 13, 3728.	6.0	124
42	Scalable Highâ€Throughput Production of Modular Microgels for In Situ Assembly of Microporous Tissue Scaffolds. Advanced Functional Materials, 2019, 29, 1900071.	14.9	122
43	Microfluidicâ€Based Approaches in Targeted Cell/Particle Separation Based on Physical Properties: Fundamentals and Applications. Small, 2020, 16, e2000171.	10.0	121
44	Microvortex for focusing, guiding and sorting of particles. Lab on A Chip, 2008, 8, 2128.	6.0	117
45	Microfluidic-enabled bottom-up hydrogels from annealable naturally-derived protein microbeads. Biomaterials, 2019, 192, 560-568.	11.4	116
46	Raman image-activated cell sorting. Nature Communications, 2020, 11, 3452.	12.8	116
47	Particle Hydrogels Based on Hyaluronic Acid Building Blocks. ACS Biomaterials Science and Engineering, 2016, 2, 2034-2041.	5.2	112
48	High-throughput imaging flow cytometry by optofluidic time-stretch microscopy. Nature Protocols, 2018, 13, 1603-1631.	12.0	112
49	Inertial focusing in non-rectangular cross-section microchannels and manipulation of accessible focusing positions. Lab on A Chip, 2016, 16, 992-1001.	6.0	107
50	Inertial focusing of non-spherical microparticles. Applied Physics Letters, 2011, 99, .	3.3	105
51	Functional profiling of circulating tumor cells with an integrated vortex capture and single-cell protease activity assay. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9986-9991.	7.1	105
52	Optofluidic fabrication for 3D-shaped particles. Nature Communications, 2015, 6, 6976.	12.8	101
53	Highly Stable and Sensitive Nucleic Acid Amplification and Cell-Phone-Based Readout. ACS Nano, 2017, 11, 2934-2943.	14.6	101
54	Continuous Inertial Focusing and Separation of Particles by Shape. Physical Review X, 2012, 2, .	8.9	93

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55	Rapid inertial solution exchange for enrichment and flow cytometric detection of microvesicles. Biomicrofluidics, 2015, 9, 014112.	2.4	93
56	On-chip cell lysis by local hydroxide generation. Lab on A Chip, 2005, 5, 171.	6.0	92
57	Microstructure-induced helical vortices allow single-stream and long-term inertial focusing. Lab on A Chip, 2013, 13, 2942.	6.0	90
58	Induction of Calcium Influx in Cortical Neural Networks by Nanomagnetic Forces. ACS Nano, 2016, 10, 2331-2341.	14.6	88
59	Advances in high-throughput single-cell microtechnologies. Current Opinion in Biotechnology, 2014, 25, 114-123.	6.6	86
60	Microfluidic sample preparation for diagnostic cytopathology. Lab on A Chip, 2013, 13, 1011.	6.0	84
61	Intrinsic particle-induced lateral transport in microchannels. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11593-11598.	7.1	83
62	Biophysical isolation and identification of circulating tumor cells. Lab on A Chip, 2017, 17, 1452-1461.	6.0	83
63	Evaluation of PD-L1 expression on vortex-isolated circulating tumor cells in metastatic lung cancer. Scientific Reports, 2018, 8, 2592.	3.3	81
64	A 3D Magnetic Hyaluronic Acid Hydrogel for Magnetomechanical Neuromodulation of Primary Dorsal Root Ganglion Neurons. Advanced Materials, 2018, 30, e1800927.	21.0	78
65	A review of biosensor technologies for blood biomarkers toward monitoring cardiovascular diseases at the point-of-care. Biosensors and Bioelectronics, 2021, 171, 112621.	10.1	78
66	Particle focusing by 3D inertial microfluidics. Microsystems and Nanoengineering, 2017, 3, 17027.	7.0	76
67	Size-tunable microvortex capture of rare cells. Lab on A Chip, 2017, 17, 2542-2549.	6.0	74
68	Label-free isolation of prostate circulating tumor cells using Vortex microfluidic technology. Npj Precision Oncology, 2017, 1, 15.	5.4	72
69	Enhanced In Vivo Delivery of Stem Cells using Microporous Annealed Particle Scaffolds. Small, 2019, 15, e1903147.	10.0	71
70	A practical guide to intelligent image-activated cell sorting. Nature Protocols, 2019, 14, 2370-2415.	12.0	71
71	Magnetic Nanoparticle-Based Mechanical Stimulation for Restoration of Mechano-Sensitive Ion Channel Equilibrium in Neural Networks. Nano Letters, 2017, 17, 886-892.	9.1	70
72	Shape-based separation of microalga Euglena gracilis using inertial microfluidics. Scientific Reports, 2017, 7, 10802.	3.3	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.	7.8	69
74	Pulsed Laser Activated Cell Sorting with Three Dimensional Sheathless Inertial Focusing. Small, 2014, 10, 1746-1751.	10.0	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.	14.6	66
76	Preferred interparticle spacings in trains of particles in inertial microchannel flows. Journal of Fluid Mechanics, 2016, 786, .	3.4	65
77	Deep learning-enabled point-of-care sensing using multiplexed paper-based sensors. Npj Digital Medicine, 2020, 3, 66.	10.9	65
78	Research highlights: printing the future of microfabrication. Lab on A Chip, 2014, 14, 1491.	6.0	64
79	Automated single-cell motility analysis on a chip using lensfree microscopy. Scientific Reports, 2014, 4, 4717.	3.3	63
80	Real-time control of inertial focusing in microfluidics using dielectrophoresis (DEP). RSC Advances, 2014, 4, 62076-62085.	3.6	62
81	High efficiency vortex trapping of circulating tumor cells. Biomicrofluidics, 2015, 9, 064116.	2.4	60
82	Size-based sorting of hydrogel droplets using inertial microfluidics. Lab on A Chip, 2018, 18, 2575-2582.	6.0	60
83	A ferrobotic system for automated microfluidic logistics. Science Robotics, 2020, 5, .	17.6	58
84	Fabricating Shaped Microfibers with Inertial Microfluidics. Advanced Materials, 2014, 26, 3712-3717.	21.0	57
85	High-throughput physical phenotyping of cell differentiation. Microsystems and Nanoengineering, 2017, 3, 17013.	7.0	57
86	Inertial flow of a dilute suspension over cavities in a microchannel. Journal of Fluid Mechanics, 2017, 811, 436-467.	3.4	57
87	Injectable Drugâ€Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction. Advanced Functional Materials, 2020, 30, 2004307.	14.9	57
88	Sequentially addressable dielectrophoretic array for high-throughput sorting of large-volume biological compartments. Science Advances, 2020, 6, eaba6712.	10.3	56
89	Recent Progress in Lyme Disease and Remaining Challenges. Frontiers in Medicine, 2021, 8, 666554.	2.6	55
90	Homogeneous Entropy-Driven Amplified Detection of Biomolecular Interactions. ACS Nano, 2016, 10, 7467-7475.	14.6	54

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91	Paper-based multiplexed vertical flow assay for point-of-care testing. Lab on A Chip, 2019, 19, 1027-1034.	6.0	53
92	A Gelatin Microdroplet Platform for Highâ€Throughput Sorting of Hyperproducing Singleâ€Cellâ€Derived Microalgal Clones. Small, 2018, 14, e1803315.	10.0	52
93	Rapid Softwareâ€Based Design and Optical Transient Liquid Molding of Microparticles. Advanced Materials, 2015, 27, 7970-7978.	21.0	51
94	Engineering Cortical Neuron Polarity with Nanomagnets on a Chip. ACS Nano, 2015, 9, 3664-3676.	14.6	49
95	Label-Free Enrichment of Adrenal Cortical Progenitor Cells Using Inertial Microfluidics. PLoS ONE, 2012, 7, e46550.	2.5	48
96	Drop formation using ferrofluids driven magnetically in a step emulsification device. Lab on A Chip, 2016, 16, 2474-2480.	6.0	48
97	Elastomeric sensor surfaces for high-throughput single-cell force cytometry. Nature Biomedical Engineering, 2018, 2, 124-137.	22.5	47
98	Label-free enumeration, collection and downstream cytological and cytogenetic analysis of circulating tumor cells. Scientific Reports, 2016, 6, 35474.	3.3	46
99	Obesity increases airway smooth muscle responses to contractile agonists. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 315, L673-L681.	2.9	45
100	Multiparameter mechanical and morphometric screening of cells. Scientific Reports, 2016, 6, 37863.	3.3	44
101	Inertial focusing of ellipsoidal Euglena gracilis cells in a stepped microchannel. Lab on A Chip, 2016, 16, 4458-4465.	6.0	43
102	Shaped 3D microcarriers for adherent cell culture and analysis. Microsystems and Nanoengineering, 2018, 4, 21.	7.0	43
103	Quantitative Magnetic Separation of Particles and Cells Using Gradient Magnetic Ratcheting. Small, 2016, 12, 1891-1899.	10.0	41
104	Separation of cancer cells using vortical microfluidic flows. Biomicrofluidics, 2018, 12, 014112.	2.4	41
105	Spectro-temporal encoded multiphoton microscopy and fluorescence lifetime imaging at kilohertz frame-rates. Nature Communications, 2020, 11, 2062.	12.8	41
106	Inertial microfluidic programming of microparticle-laden flows for solution transfer around cells and particles. Microfluidics and Nanofluidics, 2015, 19, 53-65.	2.2	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. SLAS Technology, 2018, 23, 16-29.	1.9	40
108	Simplified three-dimensional tissue clearing and incorporation of colorimetric phenotyping. Scientific Reports, 2016, 6, 30736.	3.3	38

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109	Electro-adaptive microfluidics for active tuning of channel geometry using polymer actuators. Microfluidics and Nanofluidics, 2013, 14, 345-358.	2.2	37
110	Micropillar sequence designs for fundamental inertial flow transformations. Lab on A Chip, 2014, 14, 4197-4204.	6.0	37
111	Microfluidic Purification and Concentration of Malignant Pleural Effusions for Improved Molecular and Cytomorphological Diagnostics. PLoS ONE, 2013, 8, e78194.	2.5	35
112	Optofluidic time-stretch quantitative phase microscopy. Methods, 2018, 136, 116-125.	3.8	35
113	Detection of EGFR Mutations in cfDNA and CTCs, and Comparison to Tumor Tissue in Non-Small-Cell-Lung-Cancer (NSCLC) Patients. Frontiers in Oncology, 2020, 10, 572895.	2.8	35
114	Suspendable Hydrogel Nanovials for Massively Parallel Single-Cell Functional Analysis and Sorting. ACS Nano, 2022, 16, 7242-7257.	14.6	35
115	Nomarski serial time-encoded amplified microscopy for high-speed contrast-enhanced imaging of transparent media. Biomedical Optics Express, 2011, 2, 3387.	2.9	34
116	Continuous-flow cytomorphological staining and analysis. Lab on A Chip, 2014, 14, 522-531.	6.0	34
117	High-throughput label-free image cytometry and image-based classification of live Euglena gracilis. Biomedical Optics Express, 2016, 7, 2703.	2.9	34
118	Inhibition of PI3K promotes dilation of human small airways in a rho kinaseâ€dependent manner. British Journal of Pharmacology, 2016, 173, 2726-2738.	5.4	34
119	Sugar Additives Improve Signal Fidelity for Implementing Two-Phase Resorufin-Based Enzyme Immunoassays. Langmuir, 2014, 30, 6637-6643.	3.5	33
120	In situ forming microporous gelatin methacryloyl hydrogel scaffolds from thermostable microgels for tissue engineering. Bioengineering and Translational Medicine, 2020, 5, e10180.	7.1	33
121	High-throughput and automated diagnosis of antimicrobial resistance using a cost-effective cellphone-based micro-plate reader. Scientific Reports, 2016, 6, 39203.	3.3	32
122	Direct measurement of particle inertial migration in rectangular microchannels. Lab on A Chip, 2016, 16, 2840-2850.	6.0	32
123	Active Control of Inertial Focusing Positions and Particle Separations Enabled by Velocity Profile Tuning with Coflow Systems. Analytical Chemistry, 2018, 90, 2902-2911.	6.5	32
124	High-throughput optofluidic particle profiling with morphological and chemical specificity. Optics Letters, 2015, 40, 4803.	3.3	28
125	GÎ±₁₂ facilitates shortening in human airway smooth muscle by modulating phosphoinositide 3â€kinaseâ€mediated activation in a RhoAâ€dependent manner. British Journal of Pharmacology, 2017, 174, 4383-4395.	5.4	28
126	Monodisperse drops templated by 3D-structured microparticles. Science Advances, 2020, 6, .	10.3	28

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127	Stimulation of the hepatoportal nerve plexus with focused ultrasound restores glucose homoeostasis in diabetic mice, rats and swine. Nature Biomedical Engineering, 2022, 6, 683-705.	22.5	28
128	Enzyme-Free Nucleic Acid Amplification Assay Using a Cellphone-Based Well Plate Fluorescence Reader. Analytical Chemistry, 2018, 90, 690-695.	6.5	27
129	Fractal LAMP: Label-Free Analysis of Fractal Precipitate for Digital Loop-Mediated Isothermal Nucleic Acid Amplification. ACS Sensors, 2020, 5, 385-394.	7.8	27
130	Fabrication of 3D concentric amphiphilic microparticles to form uniform nanoliter reaction volumes for amplified affinity assays. Lab on A Chip, 2020, 20, 3503-3514.	6.0	27
131	Scanning two-photon continuous flow lithography for synthesis of high-resolution 3D microparticles. Optics Express, 2018, 26, 13543.	3.4	26
132	Metallization and Biopatterning on Ultra-Flexible Substrates via Dextran Sacrificial Layers. PLoS ONE, 2014, 9, e106091.	2.5	25
133	Research highlights: microfluidic point-of-care diagnostics. Lab on A Chip, 2014, 14, 1962.	6.0	25
134	Mediating Millisecond Reaction Time around Particles and Cells. Analytical Chemistry, 2014, 86, 1502-1510.	6.5	24
135	A Rapid Capillary-Pressure Driven Micro-Channel to Demonstrate Newtonian Fluid Behavior of Zebrafish Blood at High Shear Rates. Scientific Reports, 2017, 7, 1980.	3.3	24
136	Nanoplasmonic swarm biosensing using single nanoparticle colorimetry. Biosensors and Bioelectronics, 2019, 132, 162-170.	10.1	24
137	Rapid Biophysical Analysis of Host Immune Cell Variations Associated with Sepsis. American Journal of Respiratory and Critical Care Medicine, 2018, 198, 280-282.	5.6	23
138	Modular microporous hydrogels formed from microgel beads with orthogonal thermo-chemical responsivity: Microfluidic fabrication and characterization. MethodsX, 2019, 6, 1747-1752.	1.6	23
139	The Mechanobiology of Endothelial-to-Mesenchymal Transition in Cardiovascular Disease. Frontiers in Physiology, 2021, 12, 734215.	2.8	23
140	The effects of shear stress on isolated receptorâ€“ligand interactions of Staphylococcus epidermidis and human plasma fibrinogen using molecularly patterned microfluidics. Lab on A Chip, 2011, 11, 883.	6.0	22
141	Effect of reservoir geometry on vortex trapping of cancer cells. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	22
142	Development and validation of a cellular host response test as an early diagnostic for sepsis. PLoS ONE, 2021, 16, e0246980.	2.5	22
143	Scalable Fabrication and Use of 3D Structured Microparticles Spatially Functionalized with Biomolecules. ACS Nano, 2022, 16, 38-49.	14.6	22
144	Introduction: Why Analyze Single Cells?. Methods in Molecular Biology, 2012, 853, 1-10.	0.9	21

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145	Computational cytometer based on magnetically modulated coherent imaging and deep learning. Light: Science and Applications, 2019, 8, 91.	16.6	21
146	Optimized design of obstacle sequences for microfluidic mixing in an inertial regime. Lab on A Chip, 2021, 21, 3910-3923.	6.0	21
147	Optimization of micropillar sequences for fluid flow sculpting. Physics of Fluids, 2016, 28, .	4.0	20
148	Micro- and nano-technologies to probe the mechano-biology of the brain. Lab on A Chip, 2016, 16, 1962-1977.	6.0	20
149	Effects of Flowâ€Induced Microfluidic Chip Wall Deformation on Imaging Flow Cytometry. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 909-920.	1.5	20
150	Singleâ€Domain Multiferroic Arrayâ€Addressable Terfenolâ€D (SMArT) Micromagnets for Programmable Singleâ€Cell Capture and Release. Advanced Materials, 2021, 33, e2006651.	21.0	20
151	Peripheral Focused Ultrasound Neuromodulation (pFUS). Journal of Neuroscience Methods, 2020, 341, 108721.	2.5	20
152	Injectable, macroporous scaffolds for delivery of therapeutic genes to the injured spinal cord. APL Bioengineering, 2021, 5, 016104.	6.2	19
153	Methylation-Sensitive Loop-Mediated Isothermal Amplification (LAMP): Nucleic Acid Methylation Detection through LAMP with Mobile Fluorescence Readout. ACS Sensors, 2021, 6, 3242-3252.	7.8	19
154	The Age of Cortical Neural Networks Affects Their Interactions with Magnetic Nanoparticles. Small, 2016, 12, 3559-3567.	10.0	18
155	Single-Cell Analysis of Morphological and Metabolic Heterogeneity in Euglena gracilis by Fluorescence-Imaging Flow Cytometry. Analytical Chemistry, 2018, 90, 11280-11289.	6.5	18
156	Engineering Design of Concentric Amphiphilic Microparticles for Spontaneous Formation of Picoliter to Nanoliter Droplet Volumes. Analytical Chemistry, 2021, 93, 2317-2326.	6.5	18
157	Sorting single-cell microcarriers using commercial flow cytometers. SLAS Technology, 2022, 27, 150-159.	1.9	18
158	A Readily Scalable, Clinically Demonstrated, Antibiofouling Zwitterionic Surface Treatment for Implantable Medical Devices. Advanced Materials, 2022, 34, e2200254.	21.0	18
159	Strategies for Implementing Hardware-Assisted High-Throughput Cellular Image Analysis. Journal of the Association for Laboratory Automation, 2011, 16, 422-430.	2.8	17
160	Remote Neural Stimulation Using Magnetic Nanoparticles. Current Medicinal Chemistry, 2017, 24, 537-548.	2.4	17
161	IL-2 secretion-based sorting of single T cells using high-throughput microfluidic on-cell cytokine capture. Lab on A Chip, 2022, 22, 1576-1583.	6.0	16
162	Modulating motility of intracellular vesicles in cortical neurons with nanomagnetic forces on-chip. Lab on A Chip, 2017, 17, 842-854.	6.0	14

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163	Hybrid Integrated Photomedical Devices for Wearable Vital Sign Tracking. ACS Sensors, 2020, 5, 1582-1588.	7.8	14
164	Counting of enzymatically amplified affinity reactions in hydrogel particle-templated drops. Lab on A Chip, 2021, 21, 3438-3448.	6.0	14
165	Selective and Improved Photoannealing of Microporous Annealed Particle (MAP) Scaffolds. ACS Biomaterials Science and Engineering, 2021, 7, 422-427.	5.2	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.	6.0	12
168	Continuous and Quantitative Purification of T-Cell Subsets for Cell Therapy Manufacturing Using Magnetic Ratcheting Cytometry. SLAS Technology, 2018, 23, 326-337.	1.9	12
169	High-Throughput Microfluidic Sorting of Live Magnetotactic Bacteria. Applied and Environmental Microbiology, 2018, 84, .	3.1	12
170	Capturing magnetic bead-based arrays using perpendicular magnetic anisotropy. Applied Physics Letters, 2019, 115, 082402.	3.3	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, .	7.1	12
172	Nano and Microtechnologies for the Study of Magnetotactic Bacteria. Advanced Functional Materials, 2019, 29, 1904178.	14.9	11
173	Rapid Detection and Inhibition of SARSâ€CoVâ€2â€Spike Mutationâ€Mediated Microthrombosis. Advanced Science, 2021, 8, e2103266.	11.2	11
174	Sequential Array Cytometry: Multi-Parameter Imaging with a Single Fluorescent Channel. Annals of Biomedical Engineering, 2011, 39, 1328-1334.	2.5	10
175	Microfluidic Cell Sorting and Separation Technology. Microsystems and Nanosystems, 2017, , 1-14.	0.1	10
176	uFlow: software for rational engineering of secondary flows in inertial microfluidic devices. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	10
177	Single Cell Mechanotype and Associated Molecular Changes in Urothelial Cell Transformation and Progression. Frontiers in Cell and Developmental Biology, 2020, 8, 601376.	3.7	10
178	Research highlights: microfluidic single-cell analysis from nucleic acids to proteins to functions. Lab on A Chip, 2014, 14, 3663.	6.0	9
179	Identification of a Human Airway Epithelial Cell Subpopulation with Altered Biophysical, Molecular, and Metastatic Properties. Cancer Prevention Research, 2017, 10, 514-524.	1.5	9
180	FlowSculpt: software for efficient design of inertial flow sculpting devices. Lab on A Chip, 2019, 19, 3277-3291.	6.0	9

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181	Best practices for reporting throughput in biomedical research. Nature Methods, 2022, 19, 633-634.	19.0	9
182	Technologies for the Directed Evolution of Cell Therapies. SLAS Technology, 2019, 24, 359-372.	1.9	8
183	Research highlights: cell separation at the bench and beyond. Lab on A Chip, 2015, 15, 605-609.	6.0	7
184	Ferrodrop Dose-Optimized Digital Quantification of Biomolecules in Low-Volume Samples. Analytical Chemistry, 2018, 90, 8881-8888.	6.5	7
185	Detection of protein conformational changes with a nanogap biosensor. , 0, , .		6
186	Cytocompatible magnetostrictive microstructures for nano- and microparticle manipulation on linear strain response piezoelectrics. Multifunctional Materials, 2018, 1, 014004.	3.7	6
187	Comment on â€œGhost cytometryâ€• Science, 2019, 364, .	12.6	6
188	On the Application of Inertial Microfluidics for the Size-Based Separation of Polydisperse Cementitious Particulates. Frontiers in Materials, 2015, 2, .	2.4	5
189	Research highlights: aptamers on a chip. Lab on A Chip, 2015, 15, 1630-1633.	6.0	5
190	Research highlights: translating chips. Lab on A Chip, 2015, 15, 1984-1988.	6.0	5
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