Jun Zhang

List of Publications by Year
in descending order

77 papers	3,570 citations	159358 30 h-index	138251 58 g-index
80 all docs	80 docs citations	80 times ranked	2816 citing authors

#	Article	IF	Citations
1	Fundamentals and applications of inertial microfluidics: a review. Lab on A Chip, 2016, 16, 10-34.	3.1	737
2	Recent progress of particle migration in viscoelastic fluids. Lab on A Chip, 2018, 18, 551-567.	3.1	186
3	A review of microfabrication techniques and dielectrophoretic microdevices for particle manipulation and separation. Journal Physics D: Applied Physics, 2014, 47, 063001.	1.3	174
4	Inertial particle separation by differential equilibrium positions in a symmetrical serpentine micro-channel. Scientific Reports, 2014, 4, 4527.	1.6	152
5	Hybrid microfluidics combined with active and passive approaches for continuous cell separation. Electrophoresis, 2017, 38, 238-249.	1.3	138
6	Multiplexing slanted spiral microchannels for ultra-fast blood plasma separation. Lab on A Chip, 2016, 16, 2791-2802.	3.1	135
7	Flexible Microfluidics: Fundamentals, Recent Developments, and Applications. Micromachines, 2019, 10, 830.	1.4	130
8	Particle inertial focusing and its mechanism in a serpentine microchannel. Microfluidics and Nanofluidics, 2014, 17, 305-316.	1.0	114
9	Tunable particle separation in a hybrid dielectrophoresis (DEP)- inertial microfluidic device. Sensors and Actuators B: Chemical, 2018, 267, 14-25.	4.0	99
10	High throughput extraction of plasma using a secondary flow-aided inertial microfluidic device. RSC Advances, 2014, 4, 33149.	1.7	88
11	A Review of Secondary Flow in Inertial Microfluidics. Micromachines, 2020, 11, 461.	1.4	75
12	Isolating plasma from blood using a dielectrophoresis-active hydrophoretic device. Lab on A Chip, 2014, 14, 2993.	3.1	73
13	A novel viscoelastic-based ferrofluid for continuous sheathless microfluidic separation of nonmagnetic microparticles. Lab on A Chip, 2016, 16, 3947-3956.	3.1	73
14	Versatile Microfluidic Platforms Enabled by Novel Magnetorheological Elastomer Microactuators. Advanced Functional Materials, 2018, 28, 1705484.	7.8	71
15	MiR-130a exerts neuroprotective effects against ischemic stroke through PTEN/PI3K/AKT pathway. Biomedicine and Pharmacotherapy, 2019, 117, 109117.	2.5	71
16	Real-time control of inertial focusing in microfluidics using dielectrophoresis (DEP). RSC Advances, 2014, 4, 62076-62085.	1.7	62
17	Inertial focusing in a straight channel with asymmetrical expansionâ€"contraction cavity arrays using two secondary flows. Journal of Micromechanics and Microengineering, 2013, 23, 085023.	1.5	57
18	Fundamentals of Differential Particle Inertial Focusing in Symmetric Sinusoidal Microchannels. Analytical Chemistry, 2019, 91, 4077-4084.	3.2	51

#	Article	IF	Citations
19	Continuous plasma extraction under viscoelastic fluid in a straight channel with asymmetrical expansionâ€“contraction cavity arrays. Lab on A Chip, 2016, 16, 3919-3928.	3.1	50
20	Dean-flow-coupled elasto-inertial three-dimensional particle focusing under viscoelastic flow in a straight channel with asymmetrical expansionâ€“contraction cavity arrays. Biomicrofluidics, 2015, 9, 044108.	1.2	49
21	High-Throughput Separation of White Blood Cells From Whole Blood Using Inertial Microfluidics. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1422-1430.	2.7	47
22	Multiphysics microfluidics for cell manipulation and separation: a review. Lab on A Chip, 2022, 22, 423-444.	3.1	47
23	On-chip high-throughput manipulation of particles in a dielectrophoresis-active hydrophoretic focuser. Scientific Reports, 2014, 4, 5060.	1.6	46
24	Sheathless separation of microalgae from bacteria using a simple straight channel based on viscoelastic microfluidics. Lab on A Chip, 2019, 19, 2811-2821.	3.1	42
25	On-Chip Microparticle and Cell Washing Using Coflow of Viscoelastic Fluid and Newtonian Fluid. Analytical Chemistry, 2017, 89, 9574-9582.	3.2	37
26	Investigation of particle lateral migration in sampleâ€sheath flow of viscoelastic fluid and Newtonian fluid. Electrophoresis, 2016, 37, 2147-2155.	1.3	36
27	Sheathless Dean-flow-coupled elasto-inertial particle focusing and separation in viscoelastic fluid. RSC Advances, 2017, 7, 3461-3469.	1.7	35
28	A hybrid dielectrophoretic and hydrophoretic microchip for particle sorting using integrated prefocusing and sorting steps. Electrophoresis, 2015, 36, 284-291.	1.3	34
29	Multiplexed serpentine microchannels for high-throughput sorting of disseminated tumor cells from malignant pleural effusion. Sensors and Actuators B: Chemical, 2021, 337, 129758.	4.0	34
30	Dean-flow-coupled elasto-inertial particle and cell focusing in symmetric serpentine microchannels. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	33
31	Nonlinear microfluidics: device physics, functions, and applications. Lab on A Chip, 2021, 21, 1241-1268.	3.1	32
32	Liquid metal-based amalgamation-assisted lithography for fabrication of complex channels with diverse structures and configurations. Lab on A Chip, 2018, 18, 785-792.	3.1	28
33	A portable, hand-powered microfluidic device for sorting of biological particles. Microfluidics and Nanofluidics, 2018, 22, 1.	1.0	28
34	High-throughput sheathless and three-dimensional microparticle focusing using a microchannel with arc-shaped groove arrays. Scientific Reports, 2017, 7, 41153.	1.6	27
35	Design of a Single-Layer Microchannel for Continuous Sheathless Single-Stream Particle Inertial Focusing. Analytical Chemistry, 2018, 90, 1786-1794.	3.2	27
36	An integrated dielectrophoresis-active hydrophoretic microchip for continuous particle filtration and separation. Journal of Micromechanics and Microengineering, 2015, 25, 084010.	1.5	26

#	Article	IF	Citations
37	Stretchable Inertial Microfluidic Device for Tunable Particle Separation. Analytical Chemistry, 2020, 92, 12473-12480.	3.2	25
38	Sheathless Separation of Cyanobacterial <i>Anabaena</i> by Shape Using Viscoelastic Microfluidics. Analytical Chemistry, 2021, 93, 12648-12654.	3.2	24
39	Tuning particle inertial separation in sinusoidal channels by embedding periodic obstacle microstructures. Lab on A Chip, 2022, 22, 2789-2800.	3.1	24
40	Flow rate-insensitive microparticle separation and filtration using a microchannel with arc-shaped groove arrays. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	21
41	Size-tuneable isolation of cancer cells using stretchable inertial microfluidics. Lab on A Chip, 2021, 21, 2008-2018.	3.1	21
42	Inertial Microfluidic Purification of Floating Cancer Cells for Drug Screening and Three-Dimensional Tumor Models. Analytical Chemistry, 2020, 92, 11558-11564.	3.2	20
43	Tunable Particle Focusing in a Straight Channel with Symmetric Semicircle Obstacle Arrays Using Electrophoresis-Modified Inertial Effects. Micromachines, 2016, 7, 195.	1.4	19
44	Accurate dielectrophoretic positioning of a floating liquid marble with a two-electrode configuration. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	17
45	High-throughput, sheathless, magnetophoretic separation of magnetic and non-magnetic particles with a groove-based channel. Applied Physics Letters, 2016, 109, .	1.5	16
46	An inverted micro-mixer based on a magnetically-actuated cilium made of Fe doped PDMS. Smart Materials and Structures, 2016, 25, 095049.	1.8	16
47	Development of a novel magnetophoresis-assisted hydrophoresis microdevice for rapid particle ordering. Biomedical Microdevices, 2016, 18, 54.	1.4	16
48	Direct Measurement of the Contents, Thickness, and Internal Pressure of Molybdenum Disulfide Nanoblisters. Nano Letters, 2020, 20, 3478-3484.	4.5	14
49	Microfluidic Array Chip for Parallel Detection of Waterborne Bacteria. Micromachines, 2019, 10, 883.	1.4	13
50	Digital Imagingâ€based Colourimetry for Enzymatic Processes in Transparent Liquid Marbles. ChemPhysChem, 2021, 22, 99-105.	1.0	12
51	Signal-Based Methods in Dielectrophoresis for Cell and Particle Separation. Biosensors, 2022, 12, 510.	2.3	12
52	A label-free and high-throughput separation of neuron and glial cells using an inertial microfluidic platform. Biomicrofluidics, 2016, 10, 034104.	1.2	11
53	Demonstration of Electron/Hole Injections in the Gate of p-GaN/AlGaN/GaN Power Transistors and Their Effect on Device Dynamic Performance. , 2019, , .		10
54	High-Efficiency Plasma Separator Based on Immunocapture and Filtration. Micromachines, 2020, 11, 352.	1.4	10

#	Article	IF	Citations
55	Investigation of viscoelastic focusing of particles and cells in a zigzag microchannel. Electrophoresis, 2021, 42, 2230-2237.	1.3	10
56	Oscillating sessile liquid marble - A tool to assess effective surface tension. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 627, 127176.	2.3	10
57	Making a hydrophoretic focuser tunable using a diaphragm. Biomicrofluidics, 2014, 8, 064115.	1.2	9
58	Synchronized generation and coalescence of largely dissimilar microdroplets governed by pulsating continuous-phase flow. Applied Physics Letters, 2019, 114, .	1.5	9
59	Influence of void space on microscopic behavior of fluid flow in rock joints. International Journal of Mining Science and Technology, 2014, 24, 335-340.	4.6	8
60	Double-Mode Microparticle Manipulation by Tunable Secondary Flow in Microchannel With Arc-Shaped Groove Arrays. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1406-1412.	2.7	8
61	Atherothrombosisâ€onâ€Chip: A Siteâ€Specific Microfluidic Model for Thrombus Formation and Drug Discovery. Advanced Biology, 2022, 6, .	1.4	8
62	A low cost, membranes based serum separator modular. Biomicrofluidics, 2018, 12, 024108.	1.2	7
63	Knockdown of TXNDC9 induces apoptosis and autophagy in glioma and mediates cell differentiation by p53 activation. Aging, 2020, 12, 18649-18659.	1.4	7
64	Inertial Microfluidics: Mechanisms and Applications. Microsystems and Nanosystems, 2017, , 563-593.	0.1	6
65	A rapid, maskless 3D prototyping for fabrication of capillary circuits: Toward urinary protein detection. Electrophoresis, 2018, 39, 957-964.	1.3	6
66	Top sheath flow-assisted secondary flow particle manipulation in microchannels with the slanted groove structure. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	6
67	On-demand deterministic release of particles and cells using stretchable microfluidics. Nanoscale Horizons, 2022, 7, 414-424.	4.1	6
68	The Continuous Concentration of Particles and Cancer Cell Line Using Cell Margination in a Groove-Based Channel. Micromachines, 2017, 8, 315.	1.4	5
69	Integrated aeroelastic vibrator for fluid mixing in open microwells. Journal of Micromechanics and Microengineering, 2018, 28, 017001.	1.5	4
70	Enhanced Blood Plasma Extraction Utilising Viscoelastic Effects in a Serpentine Microchannel. Biosensors, 2022, 12, 120.	2.3	4
71	High Throughput Cell-Free Extraction of Plasma by an Integrated Microfluidic Device Combining Inertial Focusing and Membrane. Journal of Heat Transfer, 2017, 139, .	1.2	3
72	Magnetofluidic spreading in circular chambers under a uniform magnetic field. Microfluidics and Nanofluidics, 2020, 24, 1.	1.0	3

#	Article	IF	Citations
73	Lab-on-a-chip (lab-on-a-phone) for analysis of blood and diagnosis of blood diseases. , 2022, , 237-264.		2
74	Magnetic cell separation. , 2022, , 193-225.		2
75	Investigation of trapping process in â€œCentrifuge-on-a-chipâ€, 2013, , .		1
76	High Throughput Cell-Free Extraction of Plasma by an Integrated Microfluidic Device Combining Inertial Microfluidics and Membrane. , 2016, , .		0
77	Three-dimensional particle focusing under viscoelastic flow based on dean-flow-coupled elasto-inertial effects. , 2016, , .		0