

# Jun Zhang

## List of Publications by Year in descending order

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77  
papers

3,570  
citations

159573

30  
h-index

138468

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. <i>Lab on A Chip</i> , 2016, 16, 10-34.	6.0	737
2	Recent progress of particle migration in viscoelastic fluids. <i>Lab on A Chip</i> , 2018, 18, 551-567.	6.0	186
3	A review of microfabrication techniques and dielectrophoretic microdevices for particle manipulation and separation. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 063001.	2.8	174
4	Inertial particle separation by differential equilibrium positions in a symmetrical serpentine micro-channel. <i>Scientific Reports</i> , 2014, 4, 4527.	3.3	152
5	Hybrid microfluidics combined with active and passive approaches for continuous cell separation. <i>Electrophoresis</i> , 2017, 38, 238-249.	2.4	138
6	Multiplexing slanted spiral microchannels for ultra-fast blood plasma separation. <i>Lab on A Chip</i> , 2016, 16, 2791-2802.	6.0	135
7	Flexible Microfluidics: Fundamentals, Recent Developments, and Applications. <i>Micromachines</i> , 2019, 10, 830.	2.9	130
8	Particle inertial focusing and its mechanism in a serpentine microchannel. <i>Microfluidics and Nanofluidics</i> , 2014, 17, 305-316.	2.2	114
9	Tunable particle separation in a hybrid dielectrophoresis (DEP)- inertial microfluidic device. <i>Sensors and Actuators B: Chemical</i> , 2018, 267, 14-25.	7.8	99
10	High throughput extraction of plasma using a secondary flow-aided inertial microfluidic device. <i>RSC Advances</i> , 2014, 4, 33149.	3.6	88
11	A Review of Secondary Flow in Inertial Microfluidics. <i>Micromachines</i> , 2020, 11, 461.	2.9	75
12	Isolating plasma from blood using a dielectrophoresis-active hydrophoretic device. <i>Lab on A Chip</i> , 2014, 14, 2993.	6.0	73
13	A novel viscoelastic-based ferrofluid for continuous sheathless microfluidic separation of nonmagnetic microparticles. <i>Lab on A Chip</i> , 2016, 16, 3947-3956.	6.0	73
14	Versatile Microfluidic Platforms Enabled by Novel Magnetorheological Elastomer Microactuators. <i>Advanced Functional Materials</i> , 2018, 28, 1705484.	14.9	71
15	MiR-130a exerts neuroprotective effects against ischemic stroke through PTEN/PI3K/AKT pathway. <i>Biomedicine and Pharmacotherapy</i> , 2019, 117, 109117.	5.6	71
16	Real-time control of inertial focusing in microfluidics using dielectrophoresis (DEP). <i>RSC Advances</i> , 2014, 4, 62076-62085.	3.6	62
17	Inertial focusing in a straight channel with asymmetrical expansion-contraction cavity arrays using two secondary flows. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 085023.	2.6	57
18	Fundamentals of Differential Particle Inertial Focusing in Symmetric Sinusoidal Microchannels. <i>Analytical Chemistry</i> , 2019, 91, 4077-4084.	6.5	51

#	ARTICLE	IF	CITATIONS
19	Continuous plasma extraction under viscoelastic fluid in a straight channel with asymmetrical expansion–contraction cavity arrays. <i>Lab on A Chip</i> , 2016, 16, 3919-3928.	6.0	50
20	Dean-flow-coupled elasto-inertial three-dimensional particle focusing under viscoelastic flow in a straight channel with asymmetrical expansion–contraction cavity arrays. <i>Biomicrofluidics</i> , 2015, 9, 044108.	2.4	49
21	High-Throughput Separation of White Blood Cells From Whole Blood Using Inertial Microfluidics. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2017, 11, 1422-1430.	4.0	47
22	Multiphysics microfluidics for cell manipulation and separation: a review. <i>Lab on A Chip</i> , 2022, 22, 423-444.	6.0	47
23	On-chip high-throughput manipulation of particles in a dielectrophoresis-active hydrophoretic focuser. <i>Scientific Reports</i> , 2014, 4, 5060.	3.3	46
24	Sheathless separation of microalgae from bacteria using a simple straight channel based on viscoelastic microfluidics. <i>Lab on A Chip</i> , 2019, 19, 2811-2821.	6.0	42
25	On-Chip Microparticle and Cell Washing Using Coflow of Viscoelastic Fluid and Newtonian Fluid. <i>Analytical Chemistry</i> , 2017, 89, 9574-9582.	6.5	37
26	Investigation of particle lateral migration in sample–sheath flow of viscoelastic fluid and Newtonian fluid. <i>Electrophoresis</i> , 2016, 37, 2147-2155.	2.4	36
27	Sheathless Dean-flow-coupled elasto-inertial particle focusing and separation in viscoelastic fluid. <i>RSC Advances</i> , 2017, 7, 3461-3469.	3.6	35
28	A hybrid dielectrophoretic and hydrophoretic microchip for particle sorting using integrated prefocusing and sorting steps. <i>Electrophoresis</i> , 2015, 36, 284-291.	2.4	34
29	Multiplexed serpentine microchannels for high-throughput sorting of disseminated tumor cells from malignant pleural effusion. <i>Sensors and Actuators B: Chemical</i> , 2021, 337, 129758.	7.8	34
30	Dean-flow-coupled elasto-inertial particle and cell focusing in symmetric serpentine microchannels. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	33
31	Nonlinear microfluidics: device physics, functions, and applications. <i>Lab on A Chip</i> , 2021, 21, 1241-1268.	6.0	32
32	Liquid metal-based amalgamation-assisted lithography for fabrication of complex channels with diverse structures and configurations. <i>Lab on A Chip</i> , 2018, 18, 785-792.	6.0	28
33	A portable, hand-powered microfluidic device for sorting of biological particles. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	2.2	28
34	High-throughput sheathless and three-dimensional microparticle focusing using a microchannel with arc-shaped groove arrays. <i>Scientific Reports</i> , 2017, 7, 41153.	3.3	27
35	Design of a Single-Layer Microchannel for Continuous Sheathless Single-Stream Particle Inertial Focusing. <i>Analytical Chemistry</i> , 2018, 90, 1786-1794.	6.5	27
36	An integrated dielectrophoresis-active hydrophoretic microchip for continuous particle filtration and separation. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 084010.	2.6	26

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37	Stretchable Inertial Microfluidic Device for Tunable Particle Separation. <i>Analytical Chemistry</i> , 2020, 92, 12473-12480.	6.5	25
38	Sheathless Separation of Cyanobacterial <i>Anabaena</i> by Shape Using Viscoelastic Microfluidics. <i>Analytical Chemistry</i> , 2021, 93, 12648-12654.	6.5	24
39	Tuning particle inertial separation in sinusoidal channels by embedding periodic obstacle microstructures. <i>Lab on A Chip</i> , 2022, 22, 2789-2800.	6.0	24
40	Flow rate-insensitive microparticle separation and filtration using a microchannel with arc-shaped groove arrays. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	2.2	21
41	Size-tuneable isolation of cancer cells using stretchable inertial microfluidics. <i>Lab on A Chip</i> , 2021, 21, 2008-2018.	6.0	21
42	Inertial Microfluidic Purification of Floating Cancer Cells for Drug Screening and Three-Dimensional Tumor Models. <i>Analytical Chemistry</i> , 2020, 92, 11558-11564.	6.5	20
43	Tunable Particle Focusing in a Straight Channel with Symmetric Semicircle Obstacle Arrays Using Electrophoresis-Modified Inertial Effects. <i>Micromachines</i> , 2016, 7, 195.	2.9	19
44	Accurate dielectrophoretic positioning of a floating liquid marble with a two-electrode configuration. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	17
45	High-throughput, sheathless, magnetophoretic separation of magnetic and non-magnetic particles with a groove-based channel. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	16
46	An inverted micro-mixer based on a magnetically-actuated cilium made of Fe doped PDMS. <i>Smart Materials and Structures</i> , 2016, 25, 095049.	3.5	16
47	Development of a novel magnetophoresis-assisted hydrophoresis microdevice for rapid particle ordering. <i>Biomedical Microdevices</i> , 2016, 18, 54.	2.8	16
48	Direct Measurement of the Contents, Thickness, and Internal Pressure of Molybdenum Disulfide Nanoblisters. <i>Nano Letters</i> , 2020, 20, 3478-3484.	9.1	14
49	Microfluidic Array Chip for Parallel Detection of Waterborne Bacteria. <i>Micromachines</i> , 2019, 10, 883.	2.9	13
50	Digital Imaging-based Colourimetry for Enzymatic Processes in Transparent Liquid Marbles. <i>ChemPhysChem</i> , 2021, 22, 99-105.	2.1	12
51	Signal-Based Methods in Dielectrophoresis for Cell and Particle Separation. <i>Biosensors</i> , 2022, 12, 510.	4.7	12
52	A label-free and high-throughput separation of neuron and glial cells using an inertial microfluidic platform. <i>Biomicrofluidics</i> , 2016, 10, 034104.	2.4	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. <i>Micromachines</i> , 2020, 11, 352.	2.9	10

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55	Investigation of viscoelastic focusing of particles and cells in a zigzag microchannel. <i>Electrophoresis</i> , 2021, 42, 2230-2237.	2.4	10
56	Oscillating sessile liquid marble - A tool to assess effective surface tension. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 627, 127176.	4.7	10
57	Making a hydrophoretic focuser tunable using a diaphragm. <i>Biomicrofluidics</i> , 2014, 8, 064115.	2.4	9
58	Synchronized generation and coalescence of largely dissimilar microdroplets governed by pulsating continuous-phase flow. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	9
59	Influence of void space on microscopic behavior of fluid flow in rock joints. <i>International Journal of Mining Science and Technology</i> , 2014, 24, 335-340.	10.3	8
60	Double-Mode Microparticle Manipulation by Tunable Secondary Flow in Microchannel With Arc-Shaped Groove Arrays. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2017, 11, 1406-1412.	4.0	8
61	Atherothrombosisâ€œonâ€œChip: A Siteâ€œSpecific Microfluidic Model for Thrombus Formation and Drug Discovery. <i>Advanced Biology</i> , 2022, 6, .	2.5	8
62	A low cost, membranes based serum separator modular. <i>Biomicrofluidics</i> , 2018, 12, 024108.	2.4	7
63	Knockdown of TXNDC9 induces apoptosis and autophagy in glioma and mediates cell differentiation by p53 activation. <i>Aging</i> , 2020, 12, 18649-18659.	3.1	7
64	Inertial Microfluidics: Mechanisms and Applications. <i>Microsystems and Nanosystems</i> , 2017, , 563-593.	0.1	6
65	A rapid, maskless 3D prototyping for fabrication of capillary circuits: Toward urinary protein detection. <i>Electrophoresis</i> , 2018, 39, 957-964.	2.4	6
66	Top sheath flow-assisted secondary flow particle manipulation in microchannels with the slanted groove structure. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	6
67	On-demand deterministic release of particles and cells using stretchable microfluidics. <i>Nanoscale Horizons</i> , 2022, 7, 414-424.	8.0	6
68	The Continuous Concentration of Particles and Cancer Cell Line Using Cell Margination in a Groove-Based Channel. <i>Micromachines</i> , 2017, 8, 315.	2.9	5
69	Integrated aeroelastic vibrator for fluid mixing in open microwells. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 017001.	2.6	4
70	Enhanced Blood Plasma Extraction Utilising Viscoelastic Effects in a Serpentine Microchannel. <i>Biosensors</i> , 2022, 12, 120.	4.7	4
71	High Throughput Cell-Free Extraction of Plasma by an Integrated Microfluidic Device Combining Inertial Focusing and Membrane. <i>Journal of Heat Transfer</i> , 2017, 139, .	2.1	3
72	Magnetofluidic spreading in circular chambers under a uniform magnetic field. <i>Microfluidics and Nanofluidics</i> , 2020, 24, 1.	2.2	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 "Centrifuge-on-a-chip", 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