

Xiaolin Chen

List of Publications by Year in descending order

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Version: 2024-02-01

29
papers

542
citations

933447

10
h-index

794594

19
g-index

29
all docs

29
docs citations

29
times ranked

461
citing authors

#	ARTICLE	IF	CITATIONS
1	The effects of 3D channel geometry on CTC passing pressure “ towards deformability-based cancer cell separation. Lab on A Chip, 2014, 14, 2576-2584.	6.0	94
2	On the design of deterministic dielectrophoresis for continuous separation of circulating tumor cells from peripheral blood cells. Electrophoresis, 2019, 40, 1486-1493.	2.4	67
3	Entry effects of droplet in a micro confinement: Implications for deformation-based circulating tumor cell microfiltration. Biomicrofluidics, 2015, 9, 024108.	2.4	46
4	Effects of electrothermal vortices on insulator-based dielectrophoresis for circulating tumor cell separation. Electrophoresis, 2018, 39, 869-877.	2.4	46
5	Deformability-based circulating tumor cell separation with conical-shaped microfilters: Concept, optimization, and design criteria. Biomicrofluidics, 2015, 9, 034106.	2.4	42
6	Deterministic lateral displacement (DLD) in the high Reynolds number regime: high-throughput and dynamic separation characteristics. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	42
7	On the transport of particles/cells in high-throughput deterministic lateral displacement devices: Implications for circulating tumor cell separation. Biomicrofluidics, 2019, 13, 034112.	2.4	33
8	Droplet squeezing through a narrow constriction: Minimum impulse and critical velocity. Physics of Fluids, 2017, 29, 072102.	4.0	32
9	Vortex-free high-Reynolds deterministic lateral displacement (DLD) via airfoil pillars. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	27
10	On passing a non-Newtonian circulating tumor cell (CTC) through a deformation-based microfluidic chip. Theoretical and Computational Fluid Dynamics, 2018, 32, 753-764.	2.2	17
11	On the thin-film-dominated passing pressure of cancer cell squeezing through a microfluidic CTC chip. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	13
12	Numerical study of dielectrophoresis-modified inertial migration for overlapping sized cell separation. Electrophoresis, 2022, 43, 879-891.	2.4	12
13	Effect of angle-of-attacks on deterministic lateral displacement (DLD) with symmetric airfoil pillars. Biomedical Microdevices, 2020, 22, 42.	2.8	11
14	Separation of circulating tumor cells from blood using dielectrophoretic DLD manipulation. Biomedical Microdevices, 2021, 23, 49.	2.8	11
15	Numerical study of insulator-based dielectrophoresis method for circulating tumor cell separation. Proceedings of SPIE, 2017, , .	0.8	10
16	Compound Droplet Modelling of Circulating Tumor Cell Microfiltration. , 2015, , .		6
17	Compound Droplet Modeling for Circulating Tumor Cell Microfiltration With Adaptive Meshing Refinement. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, .	1.5	6
18	Deterministic Lateral Displacement (DLD) Analysis Tool Utilizing Machine Learning towards High-Throughput Separation. Micromachines, 2022, 13, 661.	2.9	6

#	ARTICLE	IF	CITATIONS
19	Predictive Model for the Cell Passing Pressure in Deformation-Based CTC Chips. , 2014, , .		5
20	Characterizing the High Reynolds Number Regime for Deterministic Lateral Displacement (DLD) Devices. , 2017, , .		5
21	Modeling Cell Deformation in CTC Microfluidic Filters. , 2014, , .		3
22	Numerical Study of Joule Heating Effect on Dielectrophoresis-Based Circulating Tumor Cell Separation. , 2017, , .		2
23	Compound droplet dynamics of a tumor cell squeezing through conical microfilters. Theoretical and Computational Fluid Dynamics, 2020, 34, 287-300.	2.2	2
24	A Computational Study on Non-Uniform Cross-Sectional Deformability-Based CTC Separation Devices. , 2015, , .		1
25	Fast multipole accelerated dual reciprocity boundary element method for diffusion problems. Annals of Solid and Structural Mechanics, 2015, 7, 45-58.	0.5	1
26	Enhancing the Cell Viability in High Throughput Deterministic Lateral Displacement Separation of Circulating Tumor Cells. , 2019, , .		1
27	An adaptive mesh refinement based simulation for pressure-deformability analysis of a circulating tumor cell. , 2019, , .		1
28	Characterization and optimization of an electro-thermal microactuator for precise track positioning. Computer-Aided Design and Applications, 2017, 14, 815-822.	0.6	0
29	Automated Procedure for Constructing ASME External Pressure Charts. Journal of Pressure Vessel Technology, Transactions of the ASME, 2022, 144, .	0.6	0