Xiaolin Chen

List of Publications by Year
in descending order

29	542	933447 10	794594 19
papers	citations	h-index	g-index

29	29	29	461
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Automated Procedure for Constructing ASME External Pressure Charts. Journal of Pressure Vessel Technology, Transactions of the ASME, 2022, 144, .	0.6	0
2	Numerical study of dielectrophoresisâ€modified inertial migration for overlapping sized cell separation. Electrophoresis, 2022, 43, 879-891.	2.4	12
3	Deterministic Lateral Displacement (DLD) Analysis Tool Utilizing Machine Learning towards High-Throughput Separation. Micromachines, 2022, 13, 661.	2.9	6
4	Separation of circulating tumor cells from blood using dielectrophoretic DLD manipulation. Biomedical Microdevices, 2021, 23, 49.	2.8	11
5	Effect of angle-of-attacks on deterministic lateral displacement (DLD) with symmetric airfoil pillars. Biomedical Microdevices, 2020, 22, 42.	2.8	11
6	Compound droplet dynamics of a tumor cell squeezing through conical microfilters. Theoretical and Computational Fluid Dynamics, 2020, 34, 287-300.	2.2	2
7	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
8	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
9	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
10	Enhancing the Cell Viability in High Throughput Deterministic Lateral Displacement Separation of Circulating Tumor Cells. , 2019, , .		1
11	An adaptive mesh refinement based simulation for pressure-deformability analysis of a circulating tumor cell. , 2019, , .		1
12	Effects of electrothermal vortices on insulatorâ€based dielectrophoresis for circulating tumor cell separation. Electrophoresis, 2018, 39, 869-877.	2.4	46
13	Vortex-free high-Reynolds deterministic lateral displacement (DLD) via airfoil pillars. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	27
14	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
15	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
16	Numerical study of insulator-based dielectrophoresis method for circulating tumor cell separation. Proceedings of SPIE, 2017, , .	0.8	10
17	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
18	Characterization and optimization of an electro-thermal microactuator for precise track positioning. Computer-Aided Design and Applications, 2017, 14, 815-822.	0.6	0

#	Article	IF	Citations
19	Droplet squeezing through a narrow constriction: Minimum impulse and critical velocity. Physics of Fluids, 2017, 29, 072102.	4.0	32
20	Numerical Study of Joule Heating Effect on Dielectrophoresis-Based Circulating Tumor Cell Separation. , 2017, , .		2
21	Characterizing the High Reynolds Number Regime for Deterministic Lateral Displacement (DLD) Devices. , 2017, , .		5
22	Compound Droplet Modelling of Circulating Tumor Cell Microfiltration. , 2015, , .		6
23	A Computational Study on Non-Uniform Cross-Sectional Deformability-Based CTC Separation Devices. , 2015, , .		1
24	Fast multipole accelerated dual reciprocity boundary element method for diffusion problems. Annals of Solid and Structural Mechanics, 2015, 7, 45-58.	0.5	1
25	Entry effects of droplet in a micro confinement: Implications for deformation-based circulating tumor cell microfiltration. Biomicrofluidics, 2015, 9, 024108.	2.4	46
26	Deformability-based circulating tumor cell separation with conical-shaped microfilters: Concept, optimization, and design criteria. Biomicrofluidics, 2015, 9, 034106.	2.4	42
27	Modeling Cell Deformation in CTC Microfluidic Filters. , 2014, , .		3
28	The effects of 3D channel geometry on CTC passing pressure â€“ towards deformability-based cancer cell separation. Lab on A Chip, 2014, 14, 2576-2584.	6.0	94
29	Predictive Model for the Cell Passing Pressure in Deformation-Based CTC Chips. , 2014, , .		5