Cheng Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1259423/publications.pdf

Version: 2024-02-01

40	1,090	394421 19	395702 33
papers	citations	h-index	g-index

43	43	43	1126
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MXeneâ€“Graphene Field-Effect Transistor Sensing of Influenza Virus and SARS-CoV-2. ACS Omega, 2021, 6, 6643-6653.	3.5	101
2	Three dimensional phase-field investigation of droplet formation in microfluidic flow focusing devices with experimental validation. International Journal of Multiphase Flow, 2017, 93, 130-141.	3.4	88
3	Efficient manipulation of microparticles in bubble streaming flows. Biomicrofluidics, 2012, 6, 12801-1280111.	2.4	85
4	Frequency dependence and frequency control of microbubble streaming flows. Physics of Fluids, 2013, 25, .	4.0	79
5	Size-sensitive sorting of microparticles through control of flow geometry. Applied Physics Letters, 2011, 99, .	3.3	69
6	Magnetic separation of microparticles by shape. Lab on A Chip, 2017, 17, 401-406.	6.0	49
7	Three-Dimensional Phenomena in Microbubble Acoustic Streaming. Physical Review Applied, 2015, 3, .	3.8	48
8	Deformation of a ferrofluid droplet in simple shear flows under uniform magnetic fields. Physics of Fluids, 2018, 30, .	4.0	45
9	Electro-osmotic control of the interface position of two-liquid flow through a microchannel. Journal of Micromechanics and Microengineering, 2007, 17, 358-366.	2.6	42
10	Characterization of electroosmotic flow in rectangular microchannels. International Journal of Heat and Mass Transfer, 2007, 50, 3115-3121.	4.8	41
11	Interface control of pressure-driven two-fluid flow in microchannels using electroosmosis. Journal of Micromechanics and Microengineering, 2005, 15, 2289-2297.	2.6	39
12	Multiphase ferrofluid flows for micro-particle focusing and separation. Biomicrofluidics, 2016, 10, 034101.	2.4	34
13	Two-dimensional streaming flows driven by sessile semicylindrical microbubbles. Journal of Fluid Mechanics, 2014, 739, 57-71.	3.4	32
14	Optical measurement of flow field and concentration field inside a moving nanoliter droplet. Sensors and Actuators A: Physical, 2007, 133, 317-322.	4.1	31
15	Microfluidic separation of magnetic particles with soft magnetic microstructures. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	29
16	Acoustic bubble enhanced pinched flow fractionation for microparticle separation. Journal of Micromechanics and Microengineering, 2015, 25, 084005.	2.6	23
17	Magnetic field induced ferrofluid droplet breakup in a simple shear flow at a low Reynolds number. Physics of Fluids, 2019, 31, .	4.0	23
18	Magnetic Control of Lateral Migration of Ellipsoidal Microparticles in Microscale Flows. Physical Review Applied, 2017, 8, .	3.8	21

#	Article	IF	Citations
19	Shape-based separation of micro-/nanoparticles in liquid phases. Biomicrofluidics, 2018, 12, 051503.	2.4	20
20	Fabrication and integration of microscale permanent magnets for particle separation in microfluidics. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	19
21	Migration of ferrofluid droplets in shear flow under a uniform magnetic field. Soft Matter, 2019, 15, 2439-2446.	2.7	19
22	Interactions of Bacteria With Monolithic Lateral Silicon Nanospikes Inside a Microfluidic Channel. Frontiers in Chemistry, 2019, 7, 483.	3.6	17
23	Numerical Study of Lateral Migration of Elliptical Magnetic Microparticles in Microchannels in Uniform Magnetic Fields. Magnetochemistry, 2018, 4, 16.	2.4	16
24	Digital Microfluidics: Magnetic Transportation and Coalescence of Sessile Droplets on Hydrophobic Surfaces. Langmuir, 2021, 37, 5823-5837.	3.5	14
25	A Low-Cost Fabrication System for Manufacturing Soft-Lithography Microfluidic Master Molds. Micro and Nanosystems, 2015, 7, 4-12.	0.6	12
26	Ferro-hydrodynamic interactions between ferrofluid droplet pairs in simple shear flows. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 602, 124906.	4.7	12
27	Analysis of optimal mixing in open-flow mixers with time-modulated vortex arrays. Physical Review Fluids, 2017, 2, .	2.5	11
28	Numerical investigation of dynamics of elliptical magnetic microparticles in shear flows. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	10
29	Numerical investigation of falling ferrofluid droplets under magnetic fields. Colloids and Interface Science Communications, 2021, 40, 100333.	4.1	8
30	Dynamics of a pair of paramagnetic particles in shear flows under a uniform magnetic field. Physics of Fluids, 2021, 33, .	4.0	8
31	Dynamics of paramagnetic and ferromagnetic ellipsoidal particles in shear flow under a uniform magnetic field. Physical Review Fluids, 2018, 3, .	2.5	8
32	Spreading Dynamics of an Impinging Ferrofluid Droplet on Hydrophilic Surfaces under Uniform Magnetic Fields. Langmuir, 2021, 37, 13331-13345.	3.5	8
33	Direct numerical simulation of microbubble streaming in a microfluidic device: The effect of the bubble protrusion depth on the vortex pattern. Korean Journal of Chemical Engineering, 2020, 37, 2117-2123.	2.7	7
34	Numerical Study of Paramagnetic Elliptical Microparticles in Curved Channels and Uniform Magnetic Fields. Micromachines, 2020, 11, 37.	2.9	6
35	Dynamics of a pair of ellipsoidal microparticles under a uniform magnetic field. Journal of Micromechanics and Microengineering, 2019, 29, 104002.	2.6	5
36	Lateral migration of a ferrofluid droplet in a plane Poiseuille flow under uniform magnetic fields. Physical Review E, 2020, 102, 022611.	2.1	4

#	Article	IF	Citations
37	Dynamics of a Pair of Paramagnetic Janus Particles under a Uniform Magnetic Field and Simple Shear Flow. Magnetochemistry, 2021, 7, 16.	2.4	4
38	Three-dimensional rotation of paramagnetic and ferromagnetic prolate spheroids in simple shear and uniform magnetic field. Physics of Fluids, 2019, 31, .	4.0	2
39	10.1063/1.3610940.1. , 2011, , .		1
40	Liquidâ€“Liquid Stratified Flow in Microchannels. , 2008, , 1022-1031.		0