Cheng Wang

List of Publications by Year
in descending order

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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	Numerical investigation of falling ferrofluid droplets under magnetic fields. Colloids and Interface Science Communications, 2021, 40, 100333.	4.1	8
2	MXeneâ€“Graphene Field-Effect Transistor Sensing of Influenza Virus and SARS-CoV-2. ACS Omega, 2021, 6, 6643-6653.	3.5	101
3	Dynamics of a pair of paramagnetic particles in shear flows under a uniform magnetic field. Physics of Fluids, 2021, 33, .	4.0	8
4	Digital Microfluidics: Magnetic Transportation and Coalescence of Sessile Droplets on Hydrophobic Surfaces. Langmuir, 2021, 37, 5823-5837.	3.5	14
5	Dynamics of a Pair of Paramagnetic Janus Particles under a Uniform Magnetic Field and Simple Shear Flow. Magnetochemistry, 2021, 7, 16.	2.4	4
6	Spreading Dynamics of an Impinging Ferrofluid Droplet on Hydrophilic Surfaces under Uniform Magnetic Fields. Langmuir, 2021, 37, 13331-13345.	3.5	8
7	Lateral migration of a ferrofluid droplet in a plane Poiseuille flow under uniform magnetic fields. Physical Review E, 2020, 102, 022611.	2.1	4
8	Numerical Study of Paramagnetic Elliptical Microparticles in Curved Channels and Uniform Magnetic Fields. Micromachines, 2020, 11, 37.	2.9	6
9	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
10	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
11	Dynamics of a pair of ellipsoidal microparticles under a uniform magnetic field. Journal of Micromechanics and Microengineering, 2019, 29, 104002.	2.6	5
12	Interactions of Bacteria With Monolithic Lateral Silicon Nanospikes Inside a Microfluidic Channel. Frontiers in Chemistry, 2019, 7, 483.	3.6	17
13	Three-dimensional rotation of paramagnetic and ferromagnetic prolate spheroids in simple shear and uniform magnetic field. Physics of Fluids, 2019, 31, .	4.0	2
14	Migration of ferrofluid droplets in shear flow under a uniform magnetic field. Soft Matter, 2019, 15, 2439-2446.	2.7	19
15	Magnetic field induced ferrofluid droplet breakup in a simple shear flow at a low Reynolds number. Physics of Fluids, 2019, 31, .	4.0	23
16	Shape-based separation of micro-/nanoparticles in liquid phases. Biomicrofluidics, 2018, 12, 051503.	2.4	20
17	Deformation of a ferrofluid droplet in simple shear flows under uniform magnetic fields. Physics of Fluids, 2018, 30, .	4.0	45
18	Numerical investigation of dynamics of elliptical magnetic microparticles in shear flows. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	10

#	Article	IF	Citations
19	Numerical Study of Lateral Migration of Elliptical Magnetic Microparticles in Microchannels in Uniform Magnetic Fields. Magnetochemistry, 2018, 4, 16.	2.4	16
20	Dynamics of paramagnetic and ferromagnetic ellipsoidal particles in shear flow under a uniform magnetic field. Physical Review Fluids, 2018, 3, .	2.5	8
21	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
22	Magnetic separation of microparticles by shape. Lab on A Chip, 2017, 17, 401-406.	6.0	49
23	Magnetic Control of Lateral Migration of Ellipsoidal Microparticles in Microscale Flows. Physical Review Applied, 2017, 8, .	3.8	21
24	Analysis of optimal mixing in open-flow mixers with time-modulated vortex arrays. Physical Review Fluids, 2017, 2, .	2.5	11
25	Fabrication and integration of microscale permanent magnets for particle separation in microfluidics. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	19
26	Multiphase ferrofluid flows for micro-particle focusing and separation. Biomicrofluidics, 2016, 10, 034101.	2.4	34
27	Microfluidic separation of magnetic particles with soft magnetic microstructures. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	29
28	A Low-Cost Fabrication System for Manufacturing Soft-Lithography Microfluidic Master Molds. Micro and Nanosystems, 2015, 7, 4-12.	0.6	12
29	Three-Dimensional Phenomena in Microbubble Acoustic Streaming. Physical Review Applied, 2015, 3, .	3.8	48
30	Acoustic bubble enhanced pinched flow fractionation for microparticle separation. Journal of Micromechanics and Microengineering, 2015, 25, 084005.	2.6	23
31	Two-dimensional streaming flows driven by sessile semicylindrical microbubbles. Journal of Fluid Mechanics, 2014, 739, 57-71.	3.4	32
32	Frequency dependence and frequency control of microbubble streaming flows. Physics of Fluids, 2013, 25, .	4.0	79
33	Efficient manipulation of microparticles in bubble streaming flows. Biomicrofluidics, 2012, 6, 12801-1280111.	2.4	85
34	Size-sensitive sorting of microparticles through control of flow geometry. Applied Physics Letters, 2011, 99, .	3.3	69
35	10.1063/1.3610940.1. , 2011, , .		1
36	Liquidâ€“Liquid Stratified Flow in Microchannels. , 2008, , 1022-1031.		0

#	Article	IF	Citations
37	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
38	Characterization of electroosmotic flow in rectangular microchannels. International Journal of Heat and Mass Transfer, 2007, 50, 3115-3121.	4.8	41
39	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
40	Interface control of pressure-driven two-fluid flow in microchannels using electroosmosis. Journal of Micromechanics and Microengineering, 2005, 15, 2289-2297.	2.6	39