Xu Zheng

List of Publications by Year
in descending order

34 papers	817 citations	567281 15 h-index	501196 28 g-index
41 all docs	41 docs citations	41 times ranked	1152 citing authors

#	Article	IF	Citations
1	Non-Gaussian statistics for the motion of self-propelled Janus particles: Experiment versus theory. Physical Review E, 2013, 88, 032304.	2.1	118
2	Probing Non-Gaussianity in Confined Diffusion of Nanoparticles. Journal of Physical Chemistry Letters, 2016, 7, 514-519.	4.6	84
3	Cross-Interface Emulsification for Generating Size-Tunable Droplets. Analytical Chemistry, 2016, 88, 3171-3177.	6.5	69
4	The influence of Saffman lift force on nanoparticle concentration distribution near a wall. Applied Physics Letters, 2009, 95, .	3.3	56
5	Deformable Metalâ€“Organic Framework Nanosheets for Heterogeneous Catalytic Reactions. Journal of the American Chemical Society, 2020, 142, 9408-9414.	13.7	50
6	The Self-Propulsion of the Spherical Ptâ€“SiO2 Janus Micro-Motor. Micromachines, 2017, 8, 123.	2.9	49
7	Comparative study of mucoadhesive and mucus-penetrative nanoparticles based on phospholipid complex to overcome the mucus barrier for inhaled delivery of baicalein. Acta Pharmaceutica Sinica B, 2020, 10, 1576-1585.	12.0	42
8	Three-dimensional virtual surgery models for percutaneous coronary intervention (PCI) optimization strategies. Scientific Reports, 2015, 5, 10945.	3.3	40
9	Measurement of velocity profiles in a rectangular microchannel with aspect ratio Î±Â=Â0.35. Experiments in Fluids, 2008, 44, 951-959.	2.4	38
10	Programmed Coassembly of One-Dimensional Binary Superstructures by Liquid Soft Confinement. Journal of the American Chemical Society, 2018, 140, 18-21.	13.7	34
11	Diffusion of Nanoparticles with Activated Hopping in Crowded Polymer Solutions. Nano Letters, 2020, 20, 3895-3904.	9.1	34
12	Formation of Multicomponent Sizeâ€Sorted Assembly Patterns by Tunable Templated Dewetting. Angewandte Chemie - International Edition, 2018, 57, 16126-16130.	13.8	21
13	Janus particle microshuttle: 1D directional self-propulsion modulated by AC electrical field. AIP Advances, 2014, 4, 031325.	1.3	20
14	Compression Generated by a 3D Supracellular Actomyosin Cortex Promotes Embryonic Stem Cell Colony Growth and Expression of Nanog and Oct4. Cell Systems, 2019, 9, 214-220.e5.	6.2	20
15	Quasi-static motion of microparticles at the depinning contact line of an evaporating droplet on PDMS surface. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	5.1	18
16	Efficient Propulsion and Hovering of Bubble-Driven Hollow Micromotors underneath an Airâ€“Liquid Interface. Langmuir, 2018, 34, 10426-10433.	3.5	16
17	Effects of the shape distribution of aerosol particles on their volumetric scattering properties and the radiative transfer through the atmosphere that includes polarization. Applied Optics, 2019, 58, 1475.	1.8	10
18	A micro-needle induced strategy for preparation of monodisperse liquid metal droplets in glass capillary microfluidics. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	9

#	Article	IF	Citations
19	Interfacial Nanoinjectionâ€Based Nanoliter Singleâ€Cell Analysis. Small, 2020, 16, e1903739.	10.0	9
20	The influence of nano-particle tracers on the slip length measurements by microPTV. Acta Mechanica Sinica/Lixue Xuebao, 2013, 29, 411-419.	3.4	8
21	Simulation of diffusiophoresis force and the confinement effect of Janus particles with the continuum method. AIP Advances, 2014, 4, 031326.	1.3	8
22	OsciDrop: A Versatile Deterministic Droplet Generator. Analytical Chemistry, 2022, 94, 2918-2925.	6.5	8
23	Visualization and measurement of the self-propelled and rotational motion of the Janus microparticles. Journal of Visualization, 2015, 18, 425-435.	1.8	7
24	Study on the statistical intensity distribution (SID) of fluorescent nanoparticles in TIRFM measurement. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	7
25	Tunable and Contamination-Free Injection with Microfluidics by Stepinjection. Analytical Chemistry, 2021, 93, 13112-13117.	6.5	7
26	Studying aerosol light scattering based on aspect ratio distribution observed by fluorescence microscope. Optics Express, 2017, 25, A813.	3.4	6
27	Formation of Multicomponent Sizeâ€Sorted Assembly Patterns by Tunable Templated Dewetting. Angewandte Chemie, 2018, 130, 16358-16362.	2.0	6
28	Distinct dynamics of self-propelled bowl-shaped micromotors caused by shape effect: Concave vs convex. Physics of Fluids, 2021, 33, .	4.0	6
29	Effect of drag-reducing polymer on blood flow in microchannels. Colloids and Surfaces B: Biointerfaces, 2022, 209, 112212.	5.0	5
30	Flow-pattern-altered syntheses of coreâ€“shell and holeâ€“shell microparticles in an axisymmetric microfluidic device. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1378-1386.	3.4	4
31	Observation of the induced pressure in a hybrid micro/nano-channel. Journal of Hydrodynamics, 2013, 25, 274-279.	3.2	3
32	The hydrophobicity of surfaces with micro-structures. , 2006, , .		2
33	Synchronization and control of capillary flows in rectangular microchannel with spacers. Biomicrofluidics, 2020, 14, 044105.	2.4	2
34	Numerical simulation about trapping two particles in microfluidic dielectrophoretic chip. , 2012, , .		1