

Zhaomiao Liu

List of Publications by Year in descending order

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66
papers

842
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567281

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78
all docs

78
docs citations

78
times ranked

726
citing authors

#	ARTICLE	IF	CITATIONS
1	Concentration gradient generation methods based on microfluidic systems. RSC Advances, 2017, 7, 29966-29984.	3.6	150
2	Global Dynamics of a Parametrically and Externally Excited Thin Plate. Nonlinear Dynamics, 2001, 24, 245-268.	5.2	60
3	Droplet breakup in an asymmetric bifurcation with two angled branches. Chemical Engineering Science, 2018, 188, 11-17.	3.8	42
4	A soft microchannel decreases polydispersity of droplet generation. Lab on A Chip, 2014, 14, 4029-4034.	6.0	41
5	Micro-PIV investigation of the internal flow transitions inside droplets traveling in a rectangular microchannel. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	36
6	Study of flow behaviors of droplet merging and splitting in microchannels using Micro-PIV measurement. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	33
7	Microparticle image velocimetry ($\hat{1}/4$ PIV) study of microcavity flow at low Reynolds number. Microfluidics and Nanofluidics, 2015, 19, 403-417.	2.2	30
8	Breakup dynamics of droplets in an asymmetric bifurcation by $\hat{1}/4$ PIV and theoretical investigations. Chemical Engineering Science, 2019, 197, 258-268.	3.8	28
9	Droplet coalescence at microchannel intersection chambers with different shapes. Soft Matter, 2016, 12, 5797-5807.	2.7	26
10	Generation of single/double Janus emulsion droplets in co-flowing microtube. International Journal of Multiphase Flow, 2019, 113, 199-207.	3.4	25
11	Experimental study of single-particle trapping mechanisms into microcavities using microfluidics. Physics of Fluids, 2019, 31, .	4.0	22
12	Flow characteristics inside droplets moving in a curved microchannel with rectangular section. Physics of Fluids, 2019, 31, .	4.0	21
13	Droplets generation under different flow rates in T-junction microchannel with a neck. AIChE Journal, 2020, 66, e16290.	3.6	21
14	Single-particle trapping, orbiting, and rotating in a microcavity using microfluidics. Applied Physics Express, 2017, 10, 097301.	2.4	17
15	Breakup regimes of double emulsion droplets in a microfluidic Y-junction. Physics of Fluids, 2021, 33, .	4.0	17
16	Generation of droplets in the T-junction with a constriction microchannel. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	16
17	Flow topology and its transformation inside droplets traveling in rectangular microchannels. Physics of Fluids, 2020, 32, .	4.0	16
18	The influence of channel intersection angle on droplets coalescence process. Experiments in Fluids, 2015, 56, 1.	2.4	14

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19	Effects of geometry factors on microvortices evolution in confined square microcavities. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	2.2	14
20	Breakup of compound jets with inner droplets in a capillary flow-focusing device. <i>Physics of Fluids</i> , 2021, 33, 013304.	4.0	13
21	Acoustic particle migration and focusing in a tilted acoustic field. <i>Physics of Fluids</i> , 2021, 33, 122006.	4.0	13
22	Recirculation Flow and Pressure Distributions in a Rayleigh Step Bearing. <i>Advances in Tribology</i> , 2018, 2018, 1-8.	2.1	12
23	Droplet behavior and its effects on flow characteristics in T-junction microchannels. <i>Physics of Fluids</i> , 2021, 33, .	4.0	11
24	Impact of flow feedback on bubble generation in T-junction microchannels under pressure-driven condition. <i>Chemical Engineering Science</i> , 2021, 246, 117010.	3.8	11
25	Dynamics of droplet breakup in unilateral Y-junctions with different angles. <i>Journal of Industrial and Engineering Chemistry</i> , 2022, 112, 46-57.	5.8	10
26	Experimental and theoretical studies on neck thinning dynamics of droplets in cross junction microchannels. <i>Experimental Thermal and Fluid Science</i> , 2022, 139, 110739.	2.7	10
27	Evolution of single-particle recirculating orbits within a hydrodynamic microvortex. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 085018.	2.6	9
28	Particle recirculating orbits within microvortices using microfluidics. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 025401.	2.8	9
29	Efficiency optimization of induction motors using genetic algorithm and Hybrid Genetic Algorithm. , 2011, , .		8
30	Influence of coronary bifurcation angle on atherosclerosis. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2019, 35, 1269-1278.	3.4	7
31	Round cavity-based vortex sorting of particles with enhanced holding capacity. <i>Physics of Fluids</i> , 2021, 33, 082002.	4.0	7
32	Study of droplet flow in a T-shape microchannel with bottom wall fluctuation. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2018, 34, 632-643.	3.4	6
33	Role of periodic inner dripping on compound jets in a capillary device. <i>International Journal of Multiphase Flow</i> , 2020, 123, 103180.	3.4	6
34	Pressure measurement methods in microchannels: advances and applications. <i>Microfluidics and Nanofluidics</i> , 2021, 25, 1.	2.2	6
35	Flow regimes of the immiscible liquids within a rectangular microchannel. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021, 37, 1544-1556.	3.4	6
36	Micro-Particle Image Velocimetry Investigation of Flow Fields of SonoVue Microbubbles Mediated by Ultrasound and Their Relationship With Delivery. <i>Frontiers in Pharmacology</i> , 2019, 10, 1651.	3.5	5

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37	Thinning dynamics of the liquid thread at different stages in a rectangular cross junction. AICHE Journal, 0, , .	3.6	5
38	Breakup dynamics of emulsion droplet and effects of inner interface. Journal of Food Engineering, 2022, 330, 111088.	5.2	5
39	Influence of boundary conditions and turntable speeds on the stability of hydrostatic oil cavity. Frontiers of Mechanical Engineering, 2011, 6, 359.	4.3	4
40	Downstream pressure and elastic wall reflection of droplet flow in a T-junction microchannel. Acta Mechanica Sinica/Lixue Xuebao, 2016, 32, 579-587.	3.4	4
41	Mechanisms of rectangular groove-induced multiple-microdroplet coalescences. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 585-594.	3.4	4
42	Trapping a moving droplet train by bubble guidance in microfluidic networks. RSC Advances, 2018, 8, 8787-8794.	3.6	4
43	Numerical Analysis of Oil Film Flow in Micro Gap with Navier Slip Boundary Conditions. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2011, 47, 104.	0.5	4
44	Enhanced droplet formation in a T-junction microchannel using electric field: A lattice Boltzmann study. Physics of Fluids, 2022, 34, .	4.0	4
45	Influence of orifice geometry on atomization characteristics of pressure swirl atomizer. Science Progress, 2020, 103, 36850420950182.	1.9	3
46	Experimental study of transient behaviors of start-up flow in long microcavities. Chemical Engineering Science, 2020, 219, 115591.	3.8	3
47	Study on Performance and Wall Slip Behavior of Visco-plastic Hydrodynamic Lubrication in Convergent Wedge. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2014, 50, 91.	0.5	3
48	Particle orbiting motion and deviations from streamlines in a microvortex. Applied Physics Letters, 2022, 120, .	3.3	3
49	Dynamic analysis of free-surface thin film flows driven by gravity over undulated substrate. Frontiers of Mechanical Engineering in China, 2010, 5, 219-225.	0.4	2
50	Dynamical analysis of droplet impact spreading on solid substrate. Frontiers of Mechanical Engineering in China, 2010, 5, 308-315.	0.4	2
51	Numerical and Experimental Study of the Flow Field Structure Evolution in the Circular Recess of Oil Cavity. Mathematical Problems in Engineering, 2014, 2014, 1-11.	1.1	2
52	Collision characteristics of droplet pairs with the presence of arriving distance differences. Journal of Industrial and Engineering Chemistry, 2019, 69, 225-232.	5.8	2
53	The effect of anastomotic angle and diameter ratio on flow field in the distal end-to-side anastomosis. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 377-386.	1.8	2
54	Influence of the Navier boundary wall slip on flow patterns in micro-scale cavity. , 2011, , .		1

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55	Effects of Geometry on the Liquid Flow in Microchannel. , 2011, , .		1
56	Flow characteristics inside shear thinning xanthan gum non-Newtonian droplets moving in rectangular microchannels. Experiments in Fluids, 2021, 62, 1.	2.4	1
57	Effects of Geometry on Liquid Flow and Heat Transfer in Microchannels. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2012, 48, 139.	0.5	1
58	Numerical Analysis on Two-phase Flow Characteristics at Convection Microfluidic Y-junctions. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2014, 50, 189.	0.5	1
59	An investigation of droplet mobility and the ultra-mild internal mechanical microenvironment in cylindrical microchannels. Physics of Fluids, 2021, 33, 102005.	4.0	1
60	Perturbations of liquid jets with an entering sphere in flow focusing. International Journal of Multiphase Flow, 2022, 147, 103914.	3.4	1
61	Transient flow patterns of start-up flow in round microcavities. Microfluidics and Nanofluidics, 2022, 26, .	2.2	1
62	Efficiency improvement measures analysis of induction motors. , 2011, , .		0
63	Rheological behavior's effect on the work performance of oil film. Frontiers of Mechanical Engineering, 2011, 6, 254.	4.3	0
64	Influence of Slip Boundary Condition on Oil Film Flow Between Piston and Cylinder. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2018, 54, 152.	0.5	0
65	10.1063/5.0074939.1. , 2022, , .		0
66	Study on the dynamic characteristics of stable formation of single droplet in gas-liquid co-flow device. Journal of Physics: Conference Series, 2022, 2230, 012005.	0.4	0