Chuan-Hua Chen

List of Publications by Year
in descending order

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36 papers	4,682 citations	257450 24 h-index	434195 31 g-index

41 all docs	41 docs citations	41 times ranked	3406 citing authors

#	Article	IF	Citations
1	Self-Propelled Dropwise Condensate on Superhydrophobic Surfaces. Physical Review Letters, 2009, 103, 184501.	7.8	993
2	Self-cleaning of superhydrophobic surfaces by self-propelled jumping condensate. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7992-7997.	7.1	494
3	Fabrication and characterization of electroosmotic micropumps. Sensors and Actuators B: Chemical, 2001, 79, 107-114.	7.8	369
4	Dropwise condensation on superhydrophobic surfaces with two-tier roughness. Applied Physics Letters, 2007, 90, 173108.	3.3	302
5	A planar electroosmotic micropump. Journal of Microelectromechanical Systems, 2002, 11, 672-683.	2.5	245
6	Instability of electrokinetic microchannel flows with conductivity gradients. Physics of Fluids, 2004, 16, 1922-1935.	4.0	215
7	Restoring Superhydrophobicity of Lotus Leaves with Vibration-Induced Dewetting. Physical Review Letters, 2009, 103, 174502.	7.8	213
8	Numerical simulations of self-propelled jumping upon drop coalescence on non-wetting surfaces. Journal of Fluid Mechanics, 2014, 752, 39-65.	3.4	209
9	Planar jumping-drop thermal diodes. Applied Physics Letters, 2011, 99, .	3.3	195
10	Convective and absolute electrokinetic instability with conductivity gradients. Journal of Fluid Mechanics, 2005, 524, 263-303.	3.4	181
11	Wetting and Dewetting Transitions on Hierarchical Superhydrophobic Surfaces. Langmuir, 2011, 27, 7502-7509.	3.5	154
12	Vapor chambers with jumping-drop liquid return from superhydrophobic condensers. International Journal of Heat and Mass Transfer, 2013, 61, 409-418.	4.8	149
13	Scaling laws for pulsed electrohydrodynamic drop formation. Applied Physics Letters, 2006, 89, 124103.	3.3	122
14	Hotspot cooling with jumping-drop vapor chambers. Applied Physics Letters, 2017, 110, .	3.3	114
15	Electroosmotic flow pumps with polymer frits. Sensors and Actuators B: Chemical, 2002, 82, 209-212.	7.8	100
16	Self-propelled sweeping removal of dropwise condensate. Applied Physics Letters, 2015, 106, .	3.3	95
17	Self-propelled jumping upon drop coalescence on Leidenfrost surfaces. Journal of Fluid Mechanics, 2014, 752, 22-38.	3.4	80
18	Self-Propelled Droplet Removal from Hydrophobic Fiber-Based Coalescers. Physical Review Letters, 2015, 115, 074502.	7.8	73

#	Article	IF	Citations
19	Pulsating electrohydrodynamic cone-jets: from choked jet to oscillating cone. Journal of Fluid Mechanics, 2011, 689, 552-563.	3.4	56
20	Electrohydrodynamic â€œdrop-and-placeâ€•particle deployment. Applied Physics Letters, 2006, 88, 154104.	3.3	49
21	The minimum flow rate scaling of Taylor cone-jets issued from a nozzle. Applied Physics Letters, 2014, 104, 024103.	3.3	45
22	Asymmetric drop coalescence launches fungal ballistospores with directionality. Journal of the Royal Society Interface, 2017, 14, 20170083.	3.4	34
23	Thermocapillary actuation of binary drops on solid surfaces. Applied Physics Letters, 2011, 99, .	3.3	30
24	Electrohydrodynamic Stability. , 2011, , 177-220.		28
25	Capillary-inertial colloidal catapults upon drop coalescence. Applied Physics Letters, 2016, 109, 011601.	3.3	18
26	Droplet actuation on superhydrophobic substrates via electric field gradients. Applied Physics Letters, 2019, 114, .	3.3	13
27	Electrohydrodynamic cone-jet bridges: Stability diagram and operating modes. Journal of Electrostatics, 2014, 72, 330-335.	1.9	11
28	Fabrication and characterization of electrokinetic micro pumps. , 0, , .		9
29	Computational Study of Band-Crossing Reactions. Journal of Microelectromechanical Systems, 2004, 13, 310-322.	2.5	5
30	A Micromachined Silicon Low-Voltage Parallel-Plate Electrokinetic Pump. , 2001, , 892-895.		4
31	Special issue on fundamental principles and techniques in microfluidics. Lab on A Chip, 2009, 9, 2423.	6.0	3
32	Beetle Inspired Electrospray Vapor Chamber. , 2009, , .		3
33	Development of an Adaptive Vapor Chamber With Thermoresponsive Polymer Coating. , 2009, , .		1
34	Nonclogging Resistive Pulse Sensing with Electrohydrodynamic Cone-Jet Bridges. Physical Review X, 2011, 1, .	8.9	1
35	Hotspot Size Effect on Conductive Heat Spreading. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1459-1464.	2.5	1
36	Evaporation and Condensation on Two-Tier Superhydrophobic Surfaces. , 2008, , .		0