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	Droplet actuation on superhydrophobic substrates via electric field gradients. Applied Physics Letters, 2019, 114, .	3.3	13
2	Hotspot cooling with jumping-drop vapor chambers. Applied Physics Letters, 2017, 110, .	3.3	114
3	Hotspot Size Effect on Conductive Heat Spreading. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1459-1464.	2.5	1
4	Asymmetric drop coalescence launches fungal ballistospores with directionality. Journal of the Royal Society Interface, 2017, 14, 20170083.	3.4	34
5	Capillary-inertial colloidal catapults upon drop coalescence. Applied Physics Letters, 2016, 109, 011601.	3.3	18
6	Self-Propelled Droplet Removal from Hydrophobic Fiber-Based Coalescers. Physical Review Letters, 2015, 115, 074502.	7.8	73
7	Self-propelled sweeping removal of dropwise condensate. Applied Physics Letters, 2015, 106, .	3.3	95
8	The minimum flow rate scaling of Taylor cone-jets issued from a nozzle. Applied Physics Letters, 2014, 104, 024103.	3.3	45
9	Self-propelled jumping upon drop coalescence on Leidenfrost surfaces. Journal of Fluid Mechanics, 2014, 752, 22-38.	3.4	80
10	Numerical simulations of self-propelled jumping upon drop coalescence on non-wetting surfaces. Journal of Fluid Mechanics, 2014, 752, 39-65.	3.4	209
11	Electrohydrodynamic cone-jet bridges: Stability diagram and operating modes. Journal of Electrostatics, 2014, 72, 330-335.	1.9	11
12	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
13	Vapor chambers with jumping-drop liquid return from superhydrophobic condensers. International Journal of Heat and Mass Transfer, 2013, 61, 409-418.	4.8	149
14	Wetting and Dewetting Transitions on Hierarchical Superhydrophobic Surfaces. Langmuir, 2011, 27, 7502-7509.	3.5	154
15	Pulsating electrohydrodynamic cone-jets: from choked jet to oscillating cone. Journal of Fluid Mechanics, 2011, 689, 552-563.	3.4	56
16	Nonclogging Resistive Pulse Sensing with Electrohydrodynamic Cone-Jet Bridges. Physical Review X, 2011, 1, .	8.9	1
17	Planar jumping-drop thermal diodes. Applied Physics Letters, 2011, 99, .	3.3	195
18	Thermocapillary actuation of binary drops on solid surfaces. Applied Physics Letters, 2011, 99, .	3.3	30

#	Article	IF	Citations
19	Electrohydrodynamic Stability. , 2011, , 177-220.		28
20	Self-Propelled Dropwise Condensate on Superhydrophobic Surfaces. Physical Review Letters, 2009, 103, 184501.	7.8	993
21	Restoring Superhydrophobicity of Lotus Leaves with Vibration-Induced Dewetting. Physical Review Letters, 2009, 103, 174502.	7.8	213
22	Special issue on fundamental principles and techniques in microfluidics. Lab on A Chip, 2009, 9, 2423.	6.0	3
23	Beetle Inspired Electrospray Vapor Chamber. , 2009, , .		3
24	Development of an Adaptive Vapor Chamber With Thermoresponsive Polymer Coating. , 2009, , .		1
25	Evaporation and Condensation on Two-Tier Superhydrophobic Surfaces. , 2008, , .		0
26	Dropwise condensation on superhydrophobic surfaces with two-tier roughness. Applied Physics Letters, 2007, 90, 173108.	3.3	302
27	Scaling laws for pulsed electrohydrodynamic drop formation. Applied Physics Letters, 2006, 89, 124103.	3.3	122
28	Electrohydrodynamic â€œdrop-and-placeâ€•particle deployment. Applied Physics Letters, 2006, 88, 154104.	3.3	49
29	Convective and absolute electrokinetic instability with conductivity gradients. Journal of Fluid Mechanics, 2005, 524, 263-303.	3.4	181
30	Computational Study of Band-Crossing Reactions. Journal of Microelectromechanical Systems, 2004, 13, 310-322.	2.5	5
31	Instability of electrokinetic microchannel flows with conductivity gradients. Physics of Fluids, 2004, 16, 1922-1935.	4.0	215
32	A planar electroosmotic micropump. Journal of Microelectromechanical Systems, 2002, 11, 672-683.	2.5	245
33	Electroosmotic flow pumps with polymer frits. Sensors and Actuators B: Chemical, 2002, 82, 209-212.	7.8	100
34	A Micromachined Silicon Low-Voltage Parallel-Plate Electrokinetic Pump. , 2001, , 892-895.		4
35	Fabrication and characterization of electroosmotic micropumps. Sensors and Actuators B: Chemical, 2001, 79, 107-114.	7.8	369
36	Fabrication and characterization of electrokinetic micro pumps. , 0, , .		9