Jiwoo Hong

List of Publications by Year
in descending order

29 papers	493 citations	687363 13 h-index	677142 22 g-index
29 all docs	29 docs citations	29 times ranked	578 citing authors

#	Article	IF	Citations
1	Digital Microfluidic Mixing via Reciprocating Motions of Droplets Driven by Contact Charge Electrophoresis. Micromachines, 2022, 13, 593.	2.9	3
2	Compact Three-Dimensional Digital Microfluidic Platforms with Programmable Contact Charge Electrophoresis Actuation. Langmuir, 2022, 38, 5759-5764.	3.5	3
3	Magnetically maneuverable three-dimensional digital microfluidic manipulation of magnetic droplets for biochemical applications. Japanese Journal of Applied Physics, 2021, 60, 076504.	1.5	4
4	Direct Visualization of Microscale Dynamics of Water Droplets on under-Oil-Hydrophilic Membranes by Using Synchrotron White-Beam X-ray Microimaging Techniques. Langmuir, 2020, 36, 10548-10554.	3.5	3
5	Robust Production of Wellâ€Controlled Microdroplets in a 3Dâ€Printed Chimneyâ€Shaped Milliâ€Fluidic Device. Advanced Materials Technologies, 2019, 4, 1900457.	5.8	16
6	Optothermally pulsating microbubble-mediated micro-energy harvesting in underwater medium. Review of Scientific Instruments, 2019, 90, 095004.	1.3	2
7	Direct Visualization of the Behavior and Shapes of the Nanoscale Menisci of an Evaporating Water Droplet on a Hydrophilic Nanotextured Surface via High-Resolution Synchrotron X-ray Imaging. Langmuir, 2019, 35, 6460-6467.	3.5	5
8	Acoustically Excited Oscillating Bubble on a Flexible Structure and Its Energy-Harvesting Capability. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 531-537.	4.9	8
9	Wetting Criteria of Intrinsic Contact Angle To Distinguish between Hydrophilic and Hydrophobic Micro-/Nanotextured Surfaces: Experimental and Theoretical Analysis with Synchrotron X-ray Imaging. Langmuir, 2019, 35, 3607-3614.	3.5	13
10	Hybrid optothermal and acoustic manipulations of microbubbles for precise and on-demand handling of micro-objects. Sensors and Actuators B: Chemical, 2017, 246, 415-420.	7.8	25
11	Bio-inspired cab-roof fairing of heavy vehicles for enhancing drag reduction and driving stability. International Journal of Mechanical Sciences, 2017, 131-132, 868-879.	6.7	14
12	Smart self-cleaning lens cover for miniature cameras of automobiles. Sensors and Actuators B: Chemical, 2017, 239, 754-758.	7.8	20
13	Smart self-cleaning cover glass for automotive miniature cameras. , 2016, , .		2
14	Electrically Controllable Microparticle Synthesis and Digital Microfluidic Manipulation by Electric-Field-Induced Droplet Dispensing into Immiscible Fluids. Scientific Reports, 2016, 6, 31901.	3.3	15
15	Capillary waves in a sharp-edged slit driven by vertical vibration. Experimental Thermal and Fluid Science, 2016, 71, 52-56.	2.7	1
16	Fast Electrically Driven Capillary Rise Using Overdrive Voltage. Langmuir, 2015, 31, 13718-13724.	3.5	11
17	Three-dimensional digital microfluidic manipulation of droplets in oil medium. Scientific Reports, 2015, 5, 10685.	3.3	50
18	Detaching droplets in immiscible fluids from a solid substrate with the help of electrowetting. Lab on A Chip, 2015, 15, 900-907.	6.0	34

#	Article	IF	Citations
19	Enhancement of response speed of viscous fluids using overdrive voltage. Sensors and Actuators B: Chemical, 2015, 209, 56-60.	7.8	10
20	Nonlinear oscillations of a sessile drop on a hydrophobic surface induced by ac electrowetting. Physical Review E, 2014, 90, 033017.	2.1	6
21	Spreading dynamics and oil film entrapment of sessile drops submerged in oil driven by DC electrowetting. Sensors and Actuators B: Chemical, 2014, 196, 292-297.	7.8	21
22	Electrowetting-Induced Droplet Detachment from Hydrophobic Surfaces. Langmuir, 2014, 30, 1805-1811.	3.5	60
23	Evaporation-Induced Flows inside a Confined Droplet of Diluted Saline Solution. Langmuir, 2014, 30, 7710-7715.	3.5	26
24	Effects of drop viscosity on oscillation dynamics induced by AC electrowetting. Sensors and Actuators B: Chemical, 2014, 190, 48-54.	7.8	26
25	Drop transport between two non-parallel plates via AC electrowetting-driven oscillation. Sensors and Actuators B: Chemical, 2013, 188, 637-643.	7.8	8
26	Effects of Drop Size and Viscosity on Spreading Dynamics in DC Electrowetting. Langmuir, 2013, 29, 9118-9125.	3.5	63
27	Suppressing drop rebound by electrically driven shape distortion. Physical Review E, 2013, 87, .	2.1	23
28	Size-Selective Sliding of Sessile Drops on a Slightly Inclined Plane Using Low-Frequency AC Electrowetting. Langmuir, 2012, 28, 6307-6312.	3.5	20
29	Switching Time of Electrowetting-Based Devices. , 2009, , .		1