Choongyeop Lee

List of Publications by Year
in descending order

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44 papers	2,670 citations	236912 25 h-index	289230 40 g-index
44 all docs	44 docs citations	44 times ranked	2683 citing authors

#	Article	IF	Citations
1	Structured Surfaces for a Giant Liquid Slip. Physical Review Letters, 2008, 101, 064501.	7.8	366
2	Underwater Restoration and Retention of Gases on Superhydrophobic Surfaces for Drag Reduction. Physical Review Letters, 2011, 106, 014502.	7.8	349
3	Maximizing the Giant Liquid Slip on Superhydrophobic Microstructures by Nanostructuring Their Sidewalls. Langmuir, 2009, 25, 12812-12818.	3.5	251
4	Superhydrophobic drag reduction in laminar flows: a critical review. Experiments in Fluids, 2016, 57, 1.	2.4	229
5	The effects of surface wettability on the fog and dew moisture harvesting performance on tubular surfaces. Scientific Reports, 2016, 6, 24276.	3.3	155
6	Large Apparent Electric Size of Solid-State Nanopores Due to Spatially Extended Surface Conduction. Nano Letters, 2012, 12, 4037-4044.	9.1	143
7	Electron blocking layer-based interfacial design for highly-enhanced triboelectric nanogenerators. Nano Energy, 2018, 50, 9-15.	16.0	105
8	Two types of Cassie-to-Wenzel wetting transitions on superhydrophobic surfaces during drop impact. Soft Matter, 2015, 11, 4592-4599.	2.7	88
9	Osmotic Flow through Fully Permeable Nanochannels. Physical Review Letters, 2014, 112, 244501.	7.8	85
10	Drop Impact Dynamics on Oil-Infused Nanostructured Surfaces. Langmuir, 2014, 30, 8400-8407.	3.5	81
11	Water Penetration through a Superhydrophobic Mesh During a Drop Impact. Physical Review Letters, 2017, 118, 014501.	7.8	79
12	Influence of Geometric Patterns of Microstructured Superhydrophobic Surfaces on Water-Harvesting Performance via Dewing. Langmuir, 2014, 30, 15468-15476.	3.5	72
13	Droplet coalescence on water repellant surfaces. Soft Matter, 2015, 11, 154-160.	2.7	57
14	Influence of Surface Hierarchy of Superhydrophobic Surfaces on Liquid Slip. Langmuir, 2011, 27, 4243-4248.	3.5	51
15	Influence of geometric patterns of microstructured superhydrophobic surfaces on water harvesting performance via dewing. Journal of Physics: Conference Series, 2014, 557, 012068.	0.4	49
16	Continuous scavenging of broadband vibrations via omnipotent tandem triboelectric nanogenerators with cascade impact structure. Scientific Reports, 2019, 9, 8223.	3.3	47
17	Effect of geometrical parameters on rebound of impacting droplets on leaky superhydrophobic meshes. Soft Matter, 2018, 14, 1571-1580.	2.7	40
18	Enhanced heat transfer using metal foam liquid supply layers for micro heat spreaders. International Journal of Heat and Mass Transfer, 2017, 108, 2338-2345.	4.8	37

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19	Passive Anti-Flooding Superhydrophobic Surfaces. ACS Applied Materials & Interfaces, 2020, 12, 4068-4080.	8.0	37
20	Performance Analysis of Gravity-Driven Oilâ€“Water Separation Using Membranes with Special Wettability. Langmuir, 2019, 35, 7769-7782.	3.5	33
21	Contact time on curved superhydrophobic surfaces. Physical Review E, 2020, 101, 043108.	2.1	32
22	Nanoscale Dynamics versus Surface Interactions: What Dictates Osmotic Transport?. Journal of Physical Chemistry Letters, 2017, 8, 478-483.	4.6	30
23	Dynamical role of slip heterogeneities in confined flows. Physical Review E, 2014, 89, 052309.	2.1	29
24	Viscoelastic properties of bovine orbital connective tissue and fat: constitutive models. Biomechanics and Modeling in Mechanobiology, 2011, 10, 901-914.	2.8	28
25	Brushed lubricant-impregnated surfaces (BLIS) for long-lasting high condensation heat transfer. Scientific Reports, 2020, 10, 2959.	3.3	27
26	Mesoporous Highly-Deformable Composite Polymer for a Gapless Triboelectric Nanogenerator via a One-Step Metal Oxidation Process. Micromachines, 2018, 9, 656.	2.9	25
27	Wetting and Active Dewetting Processes of Hierarchically Constructed Superhydrophobic Surfaces Fully Immersed in Water. Journal of Microelectromechanical Systems, 2012, 21, 712-720.	2.5	24
28	Near-wall nanovelocimetry based on total internal reflection fluorescence with continuousÂtracking. Journal of Fluid Mechanics, 2015, 766, 147-171.	3.4	20
29	Influence of lubricant-mediated droplet coalescence on frosting delay on lubricant impregnated surfaces. International Journal of Heat and Mass Transfer, 2019, 128, 217-228.	4.8	19
30	Quantifying Frictional Drag Reduction Properties of Superhydrophobic Metal Oxide Nanostructures. Langmuir, 2020, 36, 11809-11816.	3.5	13
31	Plasmonicâ€“Photonic Interference Coupling in Submicrometer Amorphous TiO₂â€“Ag Nanoarchitectures. Langmuir, 2017, 33, 12398-12403.	3.5	12
32	Anisotropic drop spreading on superhydrophobic grates during drop impact. Soft Matter, 2018, 14, 3760-3767.	2.7	12
33	Water penetration dynamics through a Janus mesh during drop impact. Soft Matter, 2020, 16, 6072-6081.	2.7	11
34	High-efficiency power generation in hyper-saline environment using conventional nanoporous membrane. Electrochimica Acta, 2019, 319, 366-374.	5.2	10
35	Drag reduction on drop during impact on multiscale superhydrophobic surfaces. Journal of Fluid Mechanics, 2020, 892, .	3.4	9
36	Endowing antifouling properties on metal substrata by creating an artificial barrier layer based on scalable metal oxide nanostructures. Biofouling, 2020, 36, 766-782.	2.2	4

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37	Organic/inorganic hybrid cerium oxide-based superhydrophobic surface with enhanced weather resistance and self-recovery. Progress in Organic Coatings, 2022, 170, 106998.	3.9	4
38	Influence of early drop bouncing on heat transfer during drop impact. International Communications in Heat and Mass Transfer, 2022, 137, 106235.	5.6	3
39	Reducing surface fouling against emulsified oils using CuO nanostructured surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 612, 125991.	4.7	2
40	Effect of Geometric Parameters of Superhydrophobic Surface on Liquid Slip. , 2008, , .		1
41	Scalable superhydrophobic flexible plasmonic poly(tetrafluoroethylene-co-perfluorovinyl ether) films via ion-beam irradiation and metal deposition. Materials Express, 2017, 7, 319-323.	0.5	1
42	Fabrication of Superhydrophobic Microstructures With Nanostructured Sidewalls Designed to Maximize Giant Liquid Slip. , 2009, , .		0
43	Restoring underwater superhydrophobicity with self-regulated gas generation. , 2011, , .		0
44	Influence of molecular-surface interactions on osmotic flow in nanochannels. , 2017, , .		0