Philseok Kim

List of Publications by Year
in descending order

33	7,259	218381	329751
papers	citations	26 h-index	37 g-index

37	37	37	8246
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Liquid-Infused Nanostructured Surfaces with Extreme Anti-Ice and Anti-Frost Performance. ACS Nano, 2012, 6, 6569-6577.	7.3	1,118
2	Design of anti-icing surfaces: smooth, textured or slippery?. Nature Reviews Materials, 2016, 1, .	23.3	1,048
3	High Energy Density Nanocomposites Based on Surface-Modified BaTiO₃ and a Ferroelectric Polymer. ACS Nano, 2009, 3, 2581-2592.	7.3	758
4	Condensation on slippery asymmetric bumps. Nature, 2016, 531, 78-82.	13.7	656
5	A bioinspired omniphobic surface coating on medical devices prevents thrombosis and biofouling. Nature Biotechnology, 2014, 32, 1134-1140.	9.4	575
6	Hierarchical or Not? Effect of the Length Scale and Hierarchy of the Surface Roughness on Omniphobicity of Lubricant-Infused Substrates. Nano Letters, 2013, 13, 1793-1799.	4.5	426
7	Extremely durable biofouling-resistant metallic surfaces based on electrodeposited nanoporous tungstite films on steel. Nature Communications, 2015, 6, 8649.	5.8	326
8	Inhibition of ice nucleation by slippery liquid-infused porous surfaces (SLIPS). Physical Chemistry Chemical Physics, 2013, 15, 581-585.	1.3	284
9	Bacterial flagella explore microscale hummocks and hollows to increase adhesion. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5624-5629.	3.3	262
10	Liquid-Infused Silicone As a Biofouling-Free Medical Material. ACS Biomaterials Science and Engineering, 2015, 1, 43-51.	2.6	235
11	Stability of Surface-Immobilized Lubricant Interfaces under Flow. Chemistry of Materials, 2015, 27, 1792-1800.	3.2	181
12	Fluorogel Elastomers with Tunable Transparency, Elasticity, Shapeâ€Memory, and Antifouling Properties. Angewandte Chemie - International Edition, 2014, 53, 4418-4422.	7.2	161
13	Bioâ€inspired Design of Submerged Hydrogelâ€Actuated Polymer Microstructures Operating in Response to pH. Advanced Materials, 2011, 23, 1442-1446.	11.1	149
14	Control of bacterial biofilm growth on surfaces by nanostructural mechanics and geometry. Nanotechnology, 2011, 22, 494007.	1.3	133
15	Patterning the Tips of Optical Fibers with Metallic Nanostructures Using Nanoskiving. Nano Letters, 2011, 11, 632-636.	4.5	121
16	Rational Design of Mechanoâ€Responsive Optical Materials by Fine Tuning the Evolution of Strainâ€Dependent Wrinkling Patterns. Advanced Optical Materials, 2013, 1, 381-388.	3.6	115
17	Bioinspired micrograting arrays mimicking the reverse color diffraction elements evolved by the butterfly Pierella luna. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15630-15634.	3.3	89
18	Photothermally triggered actuation of hybrid materials as a new platform for in vitro cell manipulation. Nature Communications, 2017, 8, 14700.	5.8	88

#	Article	IF	Citations
19	Fabrics coated with lubricated nanostructures display robust omniphobicity. Nanotechnology, 2014, 25, 014019.	1.3	86
20	Hydrogel-actuated integrated responsive systems (HAIRS): Moving towards adaptive materials. Current Opinion in Solid State and Materials Science, 2011, 15, 236-245.	5.6	66
21	Layerâ€Byâ€Layer Dendritic Growth of Hyperbranched Thin Films for Surface Solâ€“Gel Syntheses of Conformal, Functional, Nanocrystalline Oxide Coatings on Complex 3D (Bio)silica Templates. Advanced Functional Materials, 2009, 19, 2768-2776.	7.8	55
22	Fabrication and Replication of Arrays of Single- or Multicomponent Nanostructures by Replica Molding and Mechanical Sectioning. ACS Nano, 2010, 4, 4017-4026.	7.3	55
23	Structural Transformation by Electrodeposition on Patterned Substrates (STEPS): A New Versatile Nanofabrication Method. Nano Letters, 2012, 12, 527-533.	4.5	55
24	Improved Sensitivity and Physical Properties of Solâ^'Gel Protein Chips Using Large-Scale Material Screening and Selection. Analytical Chemistry, 2006, 78, 7392-7396.	3.2	40
25	Enriching libraries of high-aspect-ratio micro- or nanostructures by rapid, low-cost, benchtop nanofabrication. Nature Protocols, 2012, 7, 311-327.	5.5	39
26	Microbristle in gels: Toward all-polymer reconfigurable hybrid surfaces. Soft Matter, 2010, 6, 750.	1.2	32
27	Surface Oxidation under Ambient Airâ€”Not Only a Fast and Economical Method to Identify Double Bond Positions in Unsaturated Lipids But Also a Reminder of Proper Lipid Processing. Analytical Chemistry, 2014, 86, 5697-5705.	3.2	20
28	Laboratory and Field Testing Assessment of Next Generation Biocide-Free, Fouling-Resistant Slippery Coatings. ACS Applied Polymer Materials, 2020, 2, 5147-5162.	2.0	14
29	Selfâ€Stratifying Porous Silicones with Enhanced Liquid Infusion and Protective Skin Layer for Biofouling Prevention. Advanced Materials Interfaces, 2021, 8, 2000359.	1.9	12
30	Harnessing structural instability and material instability in the hydrogel-actuated integrated responsive structures (HAIRS). Extreme Mechanics Letters, 2017, 13, 84-90.	2.0	9
31	Screening Conditions for Rationally Engineered Electrodeposition of Nanostructures (SCREEN): Electrodeposition and Applications of Polypyrrole Nanofibers using Microfluidic Gradients. Small, 2012, 8, 3502-3509.	5.2	8
32	Hydroglyphics: Demonstration of Selective Wetting on Hydrophilic and Hydrophobic Surfaces. Journal of Chemical Education, 2013, 90, 625-628.	1.1	6
33	Dynamic Self-Repairing Hybrid Liquid-in-Solid Protective Barrier for Cementitious Materials. ACS Applied Materials & Interfaces, 2020, 12, 31922-31932.	4.0	6