Xuefeng Gao

List of Publications by Year in descending order

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44 papers	8,217 citations	218381 26 h-index	276539 41 g-index
46 all docs	46 docs citations	46 times ranked	7296 citing authors

#	Article	IF	Citations
1	Water-repellent legs of water striders. Nature, 2004, 432, 36-36.	13.7	2,286
2	Bioinspired Surfaces with Special Wettability. Accounts of Chemical Research, 2005, 38, 644-652.	7.6	1,921
3	Directional adhesion of superhydrophobic butterfly wings. Soft Matter, 2007, 3, 178-182.	1.2	1,020
4	Designing Superhydrophobic Porous Nanostructures with Tunable Water Adhesion. Advanced Materials, 2009, 21, 3799-3803.	11.1	439
5	Application of Superhydrophobic Surface with High Adhesive Force in No Lost Transport of Superparamagnetic Microdroplet. Journal of the American Chemical Society, 2007, 129, 1478-1479.	6.6	426
6	Superior Water Repellency of Water Strider Legs with Hierarchical Structures:Â Experiments and Analysis. Langmuir, 2007, 23, 4892-4896.	1.6	334
7	Bioinspired Ribbed Nanoneedles with Robust Superhydrophobicity. Advanced Functional Materials, 2010, 20, 656-662.	7.8	182
8	Efficient Self-Propelling of Small-Scale Condensed Microdrops by Closely Packed ZnO Nanoneedles. Journal of Physical Chemistry Letters, 2014, 5, 2084-2088.	2.1	139
9	Clustered Ribbed-Nanoneedle Structured Copper Surfaces with High-Efficiency Dropwise Condensation Heat Transfer Performance. ACS Applied Materials & Interfaces, 2015, 7, 10660-10665.	4.0	139
10	Energy-Effective Frost-Free Coatings Based on Superhydrophobic Aligned Nanocones. ACS Applied Materials & Interfaces, 2014, 6, 8976-8980.	4.0	124
11	Effects of Rugged Nanoprotrusions on the Surface Hydrophobicity and Water Adhesion of Anisotropic Micropatterns. Langmuir, 2007, 23, 4886-4891.	1.6	113
12	Fabrication of Condensate Microdrop Selfâ€Propelling Porous Films of Cerium Oxide Nanoparticles on Copper Surfaces. Angewandte Chemie - International Edition, 2015, 54, 4876-4879.	7.2	106
13	Recent Progress in Bionic Condensate Microdrop Selfâ€Propelling Surfaces. Advanced Materials, 2017, 29, 1703002.	11.1	98
14	How does the leaf margin make the lotus surface dry as the lotus leaf floats on water?. Soft Matter, 2008, 4, 2232.	1.2	80
15	Copper-Based Ultrathin Nickel Nanocone Films with High-Efficiency Dropwise Condensation Heat Transfer Performance. ACS Applied Materials & Interfaces, 2015, 7, 11719-11723.	4.0	74
16	Bioâ€Inspired Highâ€Performance Antireflection and Antifogging Polymer Films. Small, 2014, 10, 2578-2582.	5.2	72
17	Bioâ€Inspired Superhydrophobic Closely Packed Aligned Nanoneedle Architectures for Enhancing Condensation Heat Transfer. Advanced Functional Materials, 2018, 28, 1800634.	7.8	68
18	Condensate Microdrop Self-Propelling Aluminum Surfaces Based on Controllable Fabrication of Alumina Rod-Capped Nanopores. ACS Applied Materials & Interfaces, 2015, 7, 11079-11082.	4.0	55

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19	Facile Method for Modulating the Profiles and Periods of Self-Ordered Three-Dimensional Alumina Taper-Nanopores. ACS Applied Materials & Interfaces, 2012, 4, 5678-5683.	4.0	47
20	Water-Assisted Fabrication of Polyaniline Honeycomb Structure Film. Journal of Physical Chemistry B, 2004, 108, 4586-4589.	1.2	46
21	Subcooled-Water Nonstickiness of Condensate Microdrop Self-Propelling Nanosurfaces. ACS Applied Materials & Interfaces, 2015, 7, 26391-26395.	4.0	42
22	Facile Fabrication of Anodic Alumina Rod-Capped Nanopore Films with Condensate Microdrop Self-Propelling Function. ACS Applied Materials & Interfaces, 2015, 7, 18206-18210.	4.0	39
23	A Bioinspired, Highly Transparent Surface with Dryâ€Style Antifogging, Antifrosting, Antifouling, and Moisture Selfâ€Cleaning Properties. Macromolecular Rapid Communications, 2019, 40, e1800708.	2.0	38
24	Density Maximization of One-Step Electrodeposited Copper Nanocones and Dropwise Condensation Heat-Transfer Performance Evaluation. ACS Applied Materials & Interfaces, 2020, 12, 24512-24520.	4.0	35
25	Fabrication of Biomimetic Polymer Nanocone Films with Condensate Microdrop Selfâ€Removal Function. Advanced Materials Interfaces, 2015, 2, 1500238.	1.9	33
26	In Situ Growth of Densely Packed Singleâ€Crystal Copper Nanocone Structure Films with Condensate Microdrop Selfâ€Removal Function on Copper Surfaces. Advanced Materials Interfaces, 2016, 3, 1600362.	1.9	29
27	Microdrop-Assisted Microdomain Hydrophilicization of Superhydrophobic Surfaces for High-Efficiency Nucleation and Self-Removal of Condensate Microdrops. ACS Applied Materials & Interfaces, 2019, 11, 7553-7558.	4.0	25
28	Self-ordered hard anodization in malonic acid and its application in tailoring alumina taper-nanopores with continuously tunable periods in the range of 290â€“490nm. Electrochimica Acta, 2013, 112, 327-332.	2.6	23
29	Anti-vapor-penetration and condensate microdrop self-transport of superhydrophobic oblique nanowire surface under high subcooling. Nano Research, 2021, 14, 1429-1434.	5.8	22
30	High-Efficiency Boiling Heat Transfer Interfaces Composed of Electroplated Copper Nanocone Cores and Low-Thermal-Conductivity Nickel Nanocone Coverings. ACS Applied Materials & Interfaces, 2020, 12, 39902-39909.	4.0	21
31	Copper-based high-efficiency condensation heat transfer interface consisting of superhydrophobic hierarchical microgroove and nanocone structure. Materials Today Physics, 2021, 19, 100407.	2.9	20
32	Tailoring Hexagonally Packed Metal Hollow-Nanocones and Taper-Nanotubes by Template-Induced Preferential Electrodeposition. ACS Applied Materials & Interfaces, 2013, 5, 10376-10380.	4.0	19
33	Superhydrophilic Composite Structure of Copper Microcavities and Nanocones for Enhancing Boiling Heat Transfer. Advanced Materials Interfaces, 2020, 7, 2000482.	1.9	19
34	Design and Fabrication of a Tipâ€Like ZnO Nanotube Array Structure with Condensate Microdrop Selfâ€Propelling Function. ChemNanoMat, 2016, 2, 1018-1022.	1.5	15
35	Robust Nonsticky Superhydrophobicity by the Tapering of Aligned ZnO Nanorods. ChemPhysChem, 2014, 15, 858-861.	1.0	13
36	Confined Growth and Controlled Coalescence/Self-Removal of Condensate Microdrops on a Spatially Heterogeneously Patterned Superhydrophilicâ€“Superhydrophobic Surface. ACS Applied Materials & Interfaces, 2020, 12, 29946-29952.	4.0	12

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37	Controlled nanoscale diffusion-limited chemical etching for releasing polystyrene nanocones from recyclable alumina templates. Chemical Communications, 2012, 48, 11322.	2.2	11
38	Facile fabrication of biomimetic films with the microdome and tapered nanonipple hierarchical structure possessing high haze, high transmittance, anti-fouling and moisture self-cleaning functions. Chemical Engineering Journal, 2021, 404, 127101.	6.6	8
39	Bio-inspired inclined nanohair arrays with tunable mechanical properties for effective directional condensed microdroplets self-jumping. Chemical Engineering Journal, 2022, 427, 130887.	6.6	8
40	A numerical study on subcooled flow boiling heat transfer in tubes with various helical angles at underwater vehicles conditions. Journal of Thermal Analysis and Calorimetry, 2020, 141, 145-161.	2.0	4
41	Ab Initio DFT Simulations of Nanostructures. , 2012, , 11-17.		3
42	AFM, Tapping Mode. , 2012, , 99-99.		2
43	AC Electroosmosis: Basics and Lab-on-a-Chip Applications. , 2012, , 25-30.		1
44	AFM. , 2012, , 83-83.		0