Yunlu Pan

List of Publications by Year in descending order

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#	Article	IF	Citations
1	Flexible, Durable, and Unconditioned Superoleophobic/Superhydrophilic Surfaces for Controllable Transport and Oil–Water Separation. Advanced Functional Materials, 2018, 28, 1706867.	14.9	203
2	Graphene-based fully integrated portable nanosensing system for on-line detection of cytokine biomarkers in saliva. Biosensors and Bioelectronics, 2019, 134, 16-23.	10.1	115
3	Bioinspired superoleophobic/superhydrophilic functionalized cotton for efficient separation of immiscible oil-water mixtures and oil-water emulsions. Journal of Colloid and Interface Science, 2019, 548, 123-130.	9.4	109
4	Coexistence of superhydrophilicity and superoleophobicity: theory, experiments and applications in oil/water separation. Journal of Materials Chemistry A, 2018, 6, 15057-15063.	10.3	102
5	Multifunctional TiO ₂ -Based Superoleophobic/Superhydrophilic Coating for Oil–Water Separation and Oil Purification. ACS Applied Materials & Interfaces, 2020, 12, 18074-18083.	8.0	87
6	A Flexible and Regenerative Aptameric Graphene–Nafion Biosensor for Cytokine Storm Biomarker Monitoring in Undiluted Biofluids toward Wearable Applications. Advanced Functional Materials, 2021, 31, 2005958.	14.9	86
7	Ultra-robust superwetting hierarchical membranes constructed by coordination complex networks for oily water treatment. Journal of Membrane Science, 2021, 627, 119234.	8.2	79
8	Measurement of cytokine biomarkers using an aptamer-based affinity graphene nanosensor on a flexible substrate toward wearable applications. Nanoscale, 2018, 10, 21681-21688.	5.6	69
9	Surfaces with controllable super-wettability and applications for smart oil-water separation. Chemical Engineering Journal, 2019, 378, 122178.	12.7	52
10	The study of surface wetting, nanobubbles and boundary slip with an applied voltage: A review. Beilstein Journal of Nanotechnology, 2014, 5, 1042-1065.	2.8	48
11	Ultraviolet-driven switchable superliquiphobic/superliquiphilic coating for separation of oil-water mixtures and emulsions and water purification. Journal of Colloid and Interface Science, 2019, 557, 395-407.	9.4	48
12	Coalescence and Stability Analysis of Surface Nanobubbles on the Polystyrene/Water Interface. Langmuir, 2014, 30, 6079-6088.	3.5	47
13	Hygro-responsive, Photo-decomposed Superoleophobic/Superhydrophilic Coating for On-Demand Oil–Water Separation. ACS Applied Materials & Interfaces, 2021, 13, 35142-35152.	8.0	46
14	Electroviscous effect and convective heat transfer of pressure-driven flow through microtubes with surface charge-dependent slip. International Journal of Heat and Mass Transfer, 2016, 101, 648-655.	4.8	45
15	An Intelligent Grapheneâ€Based Biosensing Device for Cytokine Storm Syndrome Biomarkers Detection in Human Biofluids. Small, 2021, 17, e2101508.	10.0	44
16	Size dependences of hydraulic resistance and heat transfer of fluid flow in elliptical microchannel heat sinks with boundary slip. International Journal of Heat and Mass Transfer, 2018, 119, 647-653.	4.8	43
17	A Wearable and Deformable Graphene-Based Affinity Nanosensor for Monitoring of Cytokines in Biofluids. Nanomaterials, 2020, 10, 1503.	4.1	43
18	Joule heating, viscous dissipation and convective heat transfer of pressure-driven flow in a microchannel with surface charge-dependent slip. International Journal of Heat and Mass Transfer, 2017, 108, 1305-1313.	4.8	42

#	Article	IF	CITATIONS
19	Modulating the Linker Immobilization Density on Aptameric Graphene Field Effect Transistors Using an Electric Field. ACS Sensors, 2020, 5, 2503-2513.	7.8	40
20	AFM characterization of nanobubble formation and slip condition in oxygenated and electrokinetically altered fluids. Journal of Colloid and Interface Science, 2013, 392, 105-116.	9.4	39
21	Role of surface charge on boundary slip in fluid flow. Journal of Colloid and Interface Science, 2013, 392, 117-121.	9.4	37
22	Valid data based normalized cross-correlation (VDNCC) for topography identification. Neurocomputing, 2018, 308, 184-193.	5.9	37
23	Mechanochemical robust, magnetic-driven, superhydrophobic 3D porous materials for contaminated oil recovery. Journal of Colloid and Interface Science, 2019, 538, 25-33.	9.4	37
24	Study of the Relationship between Boundary Slip and Nanobubbles on a Smooth Hydrophobic Surface. Langmuir, 2016, 32, 11287-11294.	3.5	35
25	Hydrodynamic drag-force measurement and slip length on microstructured surfaces. Physical Review E, 2012, 85, 066310.	2.1	33
26	Tactile Perception of Roughness and Hardness to Discriminate Materials by Friction-Induced Vibration. Sensors, 2017, 17, 2748.	3.8	32
27	Sensitive detection of lung cancer biomarkers using an aptameric graphene-based nanosensor with enhanced stability. Biomedical Microdevices, 2019, 21, 65.	2.8	29
28	The non-monotonic overlapping EDL-induced electroviscous effect with surface charge-dependent slip and its size dependence. International Journal of Heat and Mass Transfer, 2017, 113, 32-39.	4.8	28
29	Role of Electric Field on Surface Wetting of Polystyrene Surface. Langmuir, 2011, 27, 9425-9429.	3.5	27
30	On-demand oil/water separation enabled by magnetic super-oleophobic/super-hydrophilic surfaces with solvent-responsive wettability transition. Applied Surface Science, 2020, 533, 147092.	6.1	27
31	An integrated flexible and reusable graphene field effect transistor nanosensor for monitoring glucose. Journal of Materiomics, 2020, 6, 308-314.	5.7	26
32	Rapid, ultraviolet-induced, reversibly switchable wettability of superhydrophobic/superhydrophilic surfaces. Beilstein Journal of Nanotechnology, 2019, 10, 866-873.	2.8	23
33	Core-shell magnetic nanoparticles for substrate-Independent super-amphiphobic surfaces and mechanochemically robust liquid marbles. Chemical Engineering Journal, 2020, 391, 123523.	12.7	20
34	Study on Nanobubble-on-Pancake Objects Forming at Polystyrene/Water Interface. Langmuir, 2016, 32, 11256-11264.	3.5	19
35	Optimal fractal tree-like microchannel networks with slip for laminar-flow-modified Murray's law. Beilstein Journal of Nanotechnology, 2018, 9, 482-489.	2.8	17
36	Ultra-sensitive and rapid screening of acute myocardial infarction using 3D-affinity graphene biosensor. Cell Reports Physical Science, 2022, 3, 100855.	5.6	17

#	Article	IF	CITATIONS
37	A Facile and Effective Method to Fabricate Superhydrophobic/Superoeophilic Surface for the Separation of Both Water/Oil Mixtures and Water-in-Oil Emulsions. Polymers, 2017, 9, 563.	4.5	14
38	Characterization and Bioreplication of <i>Tradescantia pallida</i> Inspired Biomimetic Superwettability for Dual Way Patterned Water Harvesting. Advanced Materials Interfaces, 2018, 5, 1800723.	3.7	14
39	Superhydrophilic Al ₂ O ₃ Particle Layer for Efficient Separation of Oil-in-Water (O/W) and Water-in-Oil (W/O) Emulsions. Langmuir, 2020, 36, 13285-13291.	3.5	14
40	Atomic Force Microscopy Measurement of Slip on Smooth Hydrophobic Surfaces and Possible Artifacts. Journal of Physical Chemistry C, 2015, 119, 12531-12537.	3.1	13
41	Measurements of slip length for flows over graphite surface with gas domains. Applied Physics Letters, 2016, 109, .	3.3	12
42	Eco-friendly Dopamine-Modified Silica Nanoparticles for Oil-Repellent Coatings: Implications for Underwater Self-Cleaning and Antifogging Applications. ACS Applied Nano Materials, 2022, 5, 8038-8047.	5.0	11
43	Surface charge-induced EDL interaction on the contact angle of surface nanobubbles. Langmuir, 2016, 32, 11123-11132.	3. 5	10
44	Effect of surface morphology on measurement and interpretation of boundary slip on superhydrophobic surfaces. Surface and Interface Analysis, 2017, 49, 594-598.	1.8	10
45	Measurement and Quantification of Effective Slip Length at Solid–Liquid Interface of Roughness-Induced Surfaces with Oleophobicity. Applied Sciences (Switzerland), 2018, 8, 931.	2.5	9
46	An Ultraflexible and Transparent Grapheneâ€Based Wearable Sensor for Biofluid Biomarkers Detection. Advanced Materials Technologies, 2022, 7, .	5.8	9
47	The effect of the electrical double layer on hydrodynamic lubrication: a non-monotonic trend with increasing zeta potential. Beilstein Journal of Nanotechnology, 2017, 8, 1515-1522.	2.8	8
48	Effective Boundary Slip Induced by Surface Roughness and Their Coupled Effect on Convective Heat Transfer of Liquid Flow. Entropy, 2018, 20, 334.	2.2	8
49	A fully integrated graphene-polymer field-effect transistor biosensing device for on-site detection of glucose in human urine. Materials Today Chemistry, 2022, 23, 100635.	3. 5	8
50	Effect of Surface Charge on the Nanofriction and Its Velocity Dependence in an Electrolyte Based on Lateral Force Microscopy. Langmuir, 2017, 33, 1792-1798.	3.5	7
51	Establishment of a Standard Method for Boundary Slip Measurement on Smooth Surfaces Based on AFM. Applied Sciences (Switzerland), 2019, 9, 1453.	2.5	7
52	Effect of Surface Roughness on the Measurement of Boundary Slip Based on Atomic Force Microscope. Science of Advanced Materials, 2017, 9, 122-127.	0.7	6
53	Slip Length Measurement of Confined Air Flow on Three Smooth Surfaces. Langmuir, 2013, 29, 4298-4302.	3.5	5
54	Characterization of spherical domains at the polystyrene thin film–water interface. Beilstein Journal of Nanotechnology, 2016, 7, 581-590.	2.8	5

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55	Simulation of Effective Slip and Drag in Pressure-Driven Flow on Superhydrophobic Surfaces. Journal of Nanomaterials, 2016, 2016, 1-9.	2.7	5
56	Humanoid Identification of Fabric Material Properties by Vibration Spectrum Analysis. Sensors, 2018, 18, 1820.	3.8	4
57	Selective Superwettability: Flexible, Durable, and Unconditioned Superoleophobic/Superhydrophilic Surfaces for Controllable Transport and Oil–Water Separation (Adv. Funct. Mater. 20/2018). Advanced Functional Materials, 2018, 28, 1870136.	14.9	3
58	Interface conditions of roughness-induced superoleophilic and superoleophobic surfaces immersed in hexadecane and ethylene glycol. Beilstein Journal of Nanotechnology, 2017, 8, 2504-2514.	2.8	2
59	AFM Study on the Boundary Condition, Surface Potential and the Viscosity of the Magnetic Treated Liquids. Science of Advanced Materials, 2017, 9, 144-150.	0.7	2
60	Ultrasensitive Graphene-Based Nanobiosensor for Rapid Detection of Hemoglobin in Undiluted Biofluids. ACS Applied Bio Materials, 2022, 5, 1624-1632.	4.6	2
61	Influence of Polystyrene (PS) solution concentration on the formation of nanobubbles. , 2013, , .		1
62	Preparation of colloidal crystal template for inverse opal hydrogels. Composite Interfaces, 2018, 25, 251-258.	2.3	1
63	Slip-shear and inertial migration of finite-size spheres in plane Poiseuille flow. Computational Materials Science, 2020, 176, 109542.	3.0	1
64	Cytokine Storm Biomarkers: A Flexible and Regenerative Aptameric Graphene–Nafion Biosensor for Cytokine Storm Biomarker Monitoring in Undiluted Biofluids toward Wearable Applications (Adv.) Tj ETQq0 0 0	rgBII4/ 9 ve	rloak 10 Tf 50
65	Role of Electric Field on Electroviscosity. Advanced Materials Research, 0, 803, 438-441.	0.3	0
66	An improved method for measuring boundary slip on hydrophobic surface with atomic force microscope. , 2013 , , .		0
67	Analysis of Slip Induced One Dimensional MHD Flow between Parallel Plates. Applied Mechanics and Materials, 2014, 618, 159-163.	0.2	0
68	Design and analysis of a GMM actuator for active vibration isolation. , 2015, , .		0
69	Extraction of individual characteristics of breech face impressions in ballistic identification using optimal Gaussian filter parameters. , 2016, , .		0
70	ANALYSIS OF LIQUID MEDIATED CONTACT OF GLASS COLLOIDAL PARTICLE WITH POLYSTYRENE COATED SURFACE. Surface Review and Letters, 2020, 27, 1950101.	1.1	0