Huawei Chen

List of Publications by Year
in descending order

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58	2,732	304368 22	182168 51
papers	citations	h-index	g-index

62	62	62	2582
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Continuous directional water transport on the peristome surface of Nepenthes alata. Nature, 2016, 532, 85-89.	13.7	834
2	Ultrafast water harvesting and transport in hierarchical microchannels. Nature Materials, 2018, 17, 935-942.	13.3	320
3	Uniâ€Directional Transportation on Peristomeâ€Mimetic Surfaces for Completely Wetting Liquids. Angewandte Chemie - International Edition, 2016, 55, 14988-14992.	7.2	134
4	Bioinspired Surface for Surgical Graspers Based on the Strong Wet Friction of Tree Frog Toe Pads. ACS Applied Materials & Interfaces, 2015, 7, 13987-13995.	4.0	119
5	High-Sensitivity Wearable and Flexible Humidity Sensor Based on Graphene Oxide/Non-Woven Fabric for Respiration Monitoring. Langmuir, 2020, 36, 9443-9448.	1.6	110
6	A Novel Bioinspired Continuous Unidirectional Liquid Spreading Surface Structure from the Peristome Surface of Nepenthes alata. Small, 2017, 13, 1601676.	5.2	94
7	Surfaces Inspired by the Nepenthes Peristome for Unidirectional Liquid Transport. Advanced Materials, 2017, 29, 1702995.	11.1	93
8	Biomineralization Forming Process and Bio-inspired Nanomaterials for Biomedical Application: A Review. Minerals (Basel, Switzerland), 2019, 9, 68.	0.8	70
9	Microâ€“Nano Hierarchical Structure Enhanced Strong Wet Friction Surface Inspired by Tree Frogs. Advanced Science, 2020, 7, 2001125.	5.6	69
10	Transparent self-cleaning lubricant-infused surfaces made with large-area breath figure patterns. Applied Surface Science, 2015, 355, 1083-1090.	3.1	62
11	Uni-directional liquid spreading control on a bio-inspired surface from the peristome of Nepenthes alata. Journal of Materials Chemistry A, 2017, 5, 6914-6920.	5.2	62
12	Investigation on large-area fabrication of vivid shark skin with superior surface functions. Applied Surface Science, 2014, 316, 124-131.	3.1	60
13	Stable slippery liquid-infused anti-wetting surface at high temperatures. Journal of Materials Chemistry A, 2016, 4, 12212-12220.	5.2	60
14	Bioinspired Smart Peristome Surface for Temperature-Controlled Unidirectional Water Spreading. ACS Applied Materials & Interfaces, 2017, 9, 5645-5652.	4.0	60
15	Biomimetic Drag Reduction Study on Herringbone Riblets of Bird Feather. Journal of Bionic Engineering, 2013, 10, 341-349.	2.7	57
16	Flow over bio-inspired 3D herringbone wall riblets. Experiments in Fluids, 2014, 55, 1.	1.1	50
17	Aligned P(VDF-TrFE) Nanofibers for Enhanced Piezoelectric Directional Strain Sensing. Polymers, 2018, 10, 364.	2.0	49
18	Recent Advances in Fieldâ€Controlled Microâ€“Nano Manipulations and Microâ€“Nano Robots. Advanced Intelligent Systems, 2022, 4, 2100116.	3.3	39

#	Article	IF	Citations
19	Precise Control of Customized Macrophage Cell Robot for Targeted Therapy of Solid Tumors with Minimal Invasion. Small, 2021, 17, e2103986.	5.2	38
20	Liquid-Infused Surfaces on Electrosurgical Instruments with Exceptional Antiadhesion and Low-Damage Performances. ACS Applied Materials & Interfaces, 2018, 10, 33713-33720.	4.0	30
21	Bioâ€inspired drag reduction surface from sharkskin. Biosurface and Biotribology, 2018, 4, 39-45.	0.6	29
22	Investigation of the Anisotropic Morphology-Induced Effects of the Slippery Zone in Pitchers of Nepenthes alata. Journal of Bionic Engineering, 2015, 12, 79-87.	2.7	22
23	Bioinspired Unidirectional Liquid Transport Micro-nano Structures: A Review. Journal of Bionic Engineering, 2021, 18, 1-29.	2.7	22
24	Magnetically Actuated Cellâ€Robot System: Precise Control, Manipulation, and Multimode Conversion. Small, 2022, 18, e2105414.	5.2	21
25	High-Efficient Fog Harvest from a Synergistic Effect of Coupling Hierarchical Structures. ACS Applied Materials & Interfaces, 2022, 14, 33993-34001.	4.0	19
26	Largeâ€scale equalâ€proportional amplification bioâ€replication of shark skin Based on solventâ€swelling PDMS. Journal of Applied Polymer Science, 2013, 130, 2383-2389.	1.3	18
27	Applications of bioinspired approaches and challenges in medical devices. Bio-Design and Manufacturing, 2021, 4, 146-148.	3.9	15
28	Air Bubble Bridgeâ€Based Bioinspired Underwater Adhesion. Small, 2021, 17, e2103423.	5.2	15
29	Bristled-wing design of materials, microstructures, and aerodynamics enables flapping flight in tiny wasps. IScience, 2022, 25, 103692.	1.9	15
30	Self-jumping Mechanism of Melting Frost on Superhydrophobic Surfaces. Scientific Reports, 2017, 7, 14722.	1.6	14
31	<scp>Dualâ€composite dragâ€reduction</scp> surface based on the multilayered structure and mechanical properties of tuna skin. Microscopy Research and Technique, 2021, 84, 1862-1872.	1.2	14
32	Highly Efficient Multiscale Fog Collector Inspired by Sarracenia Trichome Hierarchical Structure. Global Challenges, 2021, 5, 2100087.	1.8	14
33	Interaction between positive and negative dielectric microparticles/microorganism in optoelectronic tweezers. Lab on A Chip, 2021, 21, 4379-4389.	3.1	13
34	Self-Lubricanting Slippery Surface with Wettability Gradients for Anti-Sticking of Electrosurgical Scalpel. Micromachines, 2018, 9, 591.	1.4	11
35	Synthetic Effect of Vivid Shark Skin and Polymer Additive on Drag Reduction Reinforcement. Advances in Mechanical Engineering, 2014, 6, 425701.	0.8	9
36	Artificial Whisker Sensor with Undulated Morphology and Self-Spread Piezoresistors for Diverse Flow Analyses. Soft Robotics, 2023, 10, 97-105.	4.6	9

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37	The prey capture mechanism of micro structure on the Sarracenia Judith Hindle inner surface. Journal of Bionic Engineering, 2018, 15, 34-41.	2.7	6
38	Controllable Directional Liquid Transport in Open Channel. Advanced Materials Interfaces, 0, , 2102547.	1.9	6
39	Bioinspired Functional Surfaces for Medical Devices. Chinese Journal of Mechanical Engineering (English Edition), 2022, 35, .	1.9	6
40	Development of integrated precision vibration-assisted micro-engraving system. Transactions of Tianjin University, 2011, 17, 242-247.	3.3	5
41	UV grafting process for synthetic drag reduction of biomimetic riblet surfaces. Journal of Applied Polymer Science, 2015, 132, .	1.3	5
42	Uniâ€Directional Transportation on Peristomeâ€Mimetic Surfaces for Completely Wetting Liquids. Angewandte Chemie, 2016, 128, 15212-15216.	1.6	5
43	Preparation of multiâ€level honeycombâ€structured porous films by control of spraying atomized water droplets. Journal of Applied Polymer Science, 2014, 131, .	1.3	4
44	Parallel Manipulation and Flexible Assembly of Micro-Spiral via Optoelectronic Tweezers. Frontiers in Bioengineering and Biotechnology, 2022, 10, 868821.	2.0	3
45	Titelbild: Uni-Directional Transportation on Peristome-Mimetic Surfaces for Completely Wetting Liquids (Angew. Chem. 48/2016). Angewandte Chemie, 2016, 128, 15097-15097.	1.6	2
46	Self-Assembly of Self-Cleaning Polystyrene/Styrene-Butadiene-Styrene Films with Well-Ordered Micro-Structures. Coatings, 2020, 10, 1133.	1.2	2
47	Surface-Tension-Confined Channel with Biomimetic Microstructures for Unidirectional Liquid Spreading. Micromachines, 2020, 11, 978.	1.4	2
48	Role of glucose in the repair of cell membrane damage during squeeze distortion of erythrocytes in microfluidic capillaries. Lab on A Chip, 2021, 21, 896-903.	3.1	2
49	Air Bubble Bridgeâ€Based Bioinspired Underwater Adhesion (Small 42/2021). Small, 2021, 17, 2170221.	5.2	2
50	A seamless coupling between molecular dynamics and material point method. Japan Journal of Industrial and Applied Mathematics, 2011, 28, 55-67.	0.5	1
51	Reduction of Erythrocyte Fluid Adaptability Due to Cell Membrane Hardening Based on Single-Cell Analysis. Biochip Journal, 2021, 15, 90-99.	2.5	1
52	Liquid-Infused Porous Film Self-Assembly for Superior Light-Transmitting and Anti-Adhesion. Micromachines, 2022, 13, 540.	1.4	1
53	Magnetically Actuated Cellâ€Robot System: Precise Control, Manipulation, and Multimode Conversion (Small 15/2022). Small, 2022, 18, .	5.2	1
54	Breath figure patterns prepared by spraying ultrasonic atomized water droplets. , 2016, , .		0

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55	Large-Scale Fabrication of Biomimetic Drag-Reduction Surface via Bio-Replication of Shark Skin. , 2016, , 229-269.		0
56	An Underwater Flow Sensor Inspired by Air-Retaining Hairs of Notonecta. , 2021, , .		0
57	Characterization of biological micro/nano interfacial structures for friction reduction and friction increase. , 2022, , 55-86.		0
58	Surgical instruments with lubrication and friction enhancement through bioinspired surfaces. , 2022, , 227-264.		0