Zuankai Wang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| 193 | 10,725 | 51 | 100 |
|--------------------|-----------------------|---------------------|-----------------|
| papers | citations | h-index | g-index |
| 217 ext. papers | 14,277 ext. citations | 11.6 avg, IF | 6.82 L-index |

| # | Paper | IF | Citations |
|-----|--|----------------|-----------|
| 193 | Sustaining Robust Cavities with Slippery Liquid-Liquid Interfaces Advanced Science, 2022, e2103568 | 13.6 | 3 |
| 192 | Revisiting the adhesion mechanism of mussel-inspired chemistry <i>Chemical Science</i> , 2022 , 13, 1698-170 | 5 9.4 | 3 |
| 191 | Pancake Jumping of Sessile Droplets <i>Advanced Science</i> , 2022 , e2103834 | 13.6 | 8 |
| 190 | Inhibiting the Leidenfrost effect above 1,000 LC for sustained thermal cooling <i>Nature</i> , 2022 , 601, 568-5 | 5 72 .4 | 18 |
| 189 | Electrostatic tweezer for droplet manipulation <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, | 11.5 | 14 |
| 188 | Superhydrophobic and superoleophilic PH-CNT membrane for emulsified oil-water separation. <i>Desalination</i> , 2022 , 526, 115536 | 10.3 | 4 |
| 187 | Surface engineering and on-site charge neutralization for the regulation of contact electrification. <i>Nano Energy</i> , 2022 , 91, 106687 | 17.1 | 2 |
| 186 | Self-Powered Multifunction Ionic Skins Based on Gradient Polyelectrolyte Hydrogels <i>ACS Nano</i> , 2022 , | 16.7 | 7 |
| 185 | Design of micro-nano structures for counter flow diverging microchannel heat sink with extraordinarily high energy efficiency. <i>Applied Thermal Engineering</i> , 2022 , 209, 118229 | 5.8 | 1 |
| 184 | 3D Conformal Fabrication of Piezoceramic Films <i>Advanced Science</i> , 2022 , e2106030 | 13.6 | 2 |
| 183 | Skin-integrated, stretchable, transparent triboelectric nanogenerators based on ion-conducting hydrogel for energy harvesting and tactile sensing. <i>Nano Energy</i> , 2022 , 99, 107442 | 17.1 | 4 |
| 182 | Biocompatible Vibration-Actuated Omni-Droplets Rectifier with Large Volume Range Fabricated by Femtosecond Laser. <i>Advanced Materials</i> , 2021 , e2108567 | 24 | 10 |
| 181 | 3D Printed, Solid-State Conductive Ionoelastomer as a Generic Building Block for Tactile Applications. <i>Advanced Materials</i> , 2021 , e2105996 | 24 | 7 |
| 180 | Instant and Strong Underwater Adhesion by Coupling Hygroscopicity and In Situ Photocuring. <i>Chemistry of Materials</i> , 2021 , 33, 8822-8830 | 9.6 | 7 |
| 179 | Design of ultra-stretchable, highly adhesive and self-healable hydrogels tannic acid-enabled dynamic interactions. <i>Materials Horizons</i> , 2021 , 8, 3409-3416 | 14.4 | 13 |
| 178 | Multi-bioinspired self-cleaning energy-free cooling coatings. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 24276-24282 | 13 | 13 |
| 177 | Pressure-Sensitive Adhesive with Enhanced and Phototunable Underwater Adhesion. <i>ACS Applied Materials & Amp; Interfaces</i> , 2021 , 13, 50451-50460 | 9.5 | 5 |

(2021-2021)

| 176 | A new scaling number reveals droplet dynamics on vibratory surfaces. <i>Journal of Colloid and Interface Science</i> , 2021 , 608, 2414-2414 | | 1 |
|-----|---|-----|----|
| 175 | Multi-Mode Water-Tube-Based Triboelectric Nanogenerator Designed for Low-Frequency Energy Harvesting with Ultrahigh Volumetric Charge Density. <i>Advanced Energy Materials</i> , 2021 , 11, 2100038 | 3 | 34 |
| 174 | Corrosion protection of Aluminium Alloy 2024 through an epoxy coating embedded with smart microcapsules: The responses of smart microcapsules to corrosive entities. <i>Corrosion Communications</i> , 2021 , 1, 1-9 | , | 5 |
| 173 | A universal single electrode droplet-based electricity generator (SE-DEG) for water kinetic energy harvesting. <i>Nano Energy</i> , 2021 , 82, 105735 | | 32 |
| 172 | Directional Liquid Transport from the Cold Region to the Hot Region on a Topological Surface. <i>Langmuir</i> , 2021 , 37, 5059-5065 | | 4 |
| 171 | Hierarchically Hollow Microfibers as a Scalable and Effective Thermal Insulating Cooler for Buildings. <i>ACS Nano</i> , 2021 , 15, 10076-10083 | 7 | 24 |
| 170 | Explosive Pancake Bouncing on Hot Superhydrophilic Surfaces. <i>ACS Applied Materials & amp; Interfaces</i> , 2021 , 13, 24321-24328 | , | 6 |
| 169 | Recent Progress on Plant-Inspired Soft Robotics with Hydrogel Building Blocks: Fabrication, Actuation and Application. <i>Micromachines</i> , 2021 , 12, | | 3 |
| 168 | Horizontal Motion of a Superhydrophobic Substrate Affects the Drop Bouncing Dynamics. <i>Physical Review Letters</i> , 2021 , 126, 234503 | : | 12 |
| 167 | An Environmental Perception Self-Adaptive Discolorable Hydrogel Film toward Sensing and Display. <i>Advanced Optical Materials</i> , 2021 , 9, 2100116 | | 3 |
| 166 | Rapid and Persistent Suction Condensation on Hydrophilic Surfaces for High-Efficiency Water Collection. <i>Nano Letters</i> , 2021 , 21, 7411-7418 | ; | 11 |
| 165 | Harvesting energy from high-frequency impinging water droplets by a droplet-based electricity generator. <i>EcoMat</i> , 2021 , 3, e12116 | : | 16 |
| 164 | 3D architected temperature-tolerant organohydrogels with ultra-tunable energy absorption. **IScience**, 2021 , 24, 102789 | : | 1 |
| 163 | Hydrodynamic constraints on the energy efficiency of droplet electricity generators. <i>Microsystems and Nanoengineering</i> , 2021 , 7, 49 | | 3 |
| 162 | A fluorinated polymer sponge with superhydrophobicity for high-performance biomechanical energy harvesting. <i>Nano Energy</i> , 2021 , 85, 106021 | : , | 25 |
| 161 | Condensation frosting and passive anti-frosting. <i>Cell Reports Physical Science</i> , 2021 , 2, 100474 6.1 | | 5 |
| 160 | -like slippery surface with stable and mobile water/air contact line. National Science Review, 2021, 8, nward. | 33 | 17 |
| 159 | Theoretical investigation and experimental verification of the self-powered acceleration sensor based on triboelectric nanogenerators (TENGs). <i>Extreme Mechanics Letters</i> , 2021 , 42, 101021 | | 10 |

| 158 | Strengthening unidirectional liquid pumping using multi-biomimetic structures. <i>Extreme Mechanics Letters</i> , 2021 , 43, 101144 | 3.9 | 4 |
|-----|---|------|----|
| 157 | Beetle and cactus-inspired surface endows continuous and directional droplet jumping for efficient water harvesting. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1507-1516 | 13 | 22 |
| 156 | Macrotextures-enabled self-propelling of large condensate droplets. <i>Chemical Engineering Journal</i> , 2021 , 405, 126901 | 14.7 | 16 |
| 155 | Electrohydrodynamic and Hydroelectric Effects at the WaterBolid Interface: from Fundamentals to Applications. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2000670 | 4.6 | 11 |
| 154 | Modulation of solid surface with desirable under-liquid wettability based on molecular hydrophilic-lipophilic balance. <i>Chemical Science</i> , 2021 , 12, 6136-6142 | 9.4 | 4 |
| 153 | A novel, flexible dual-mode power generator adapted for wide dynamic range of the aqueous salinity. <i>Nano Energy</i> , 2021 , 85, 105970 | 17.1 | 10 |
| 152 | Direct ink writing of fluoropolymer/CNT-based superhydrophobic and corrosion-resistant electrodes for droplet energy harvesters and self-powered electronic skins. <i>Nano Energy</i> , 2021 , 86, 106 | 0551 | 9 |
| 151 | Achieving ultrahigh instantaneous power density of 10 MW/m by leveraging the opposite-charge-enhanced transistor-like triboelectric nanogenerator (OCT-TENG). <i>Nature Communications</i> , 2021 , 12, 5470 | 17.4 | 33 |
| 150 | Interfacial Laser-Induced Graphene Enabling High-Performance Liquid-Solid Triboelectric Nanogenerator. <i>Advanced Materials</i> , 2021 , 33, e2104290 | 24 | 27 |
| 149 | Robust liquid repellency by stepwise wetting resistance. <i>Applied Physics Reviews</i> , 2021 , 8, 031403 | 17.3 | 12 |
| 148 | A leaf-mimic rain energy harvester by liquid-solid contact electrification and piezoelectricity. <i>Nano Energy</i> , 2021 , 90, 106573 | 17.1 | 7 |
| 147 | Three-dimensional capillary ratchet-induced liquid directional steering. <i>Science</i> , 2021 , 373, 1344-1348 | 33.3 | 49 |
| 146 | Hydrophilic Slippery Surface Promotes Efficient Defrosting. <i>Langmuir</i> , 2021 , 37, 11931-11938 | 4 | |
| 145 | A bulk effect liquid-solid generator with 3D electrodes for wave energy harvesting. <i>Nano Energy</i> , 2021 , 87, 106218 | 17.1 | 13 |
| 144 | An experimental study of condensation on an aluminum radiant ceiling panel surface with superhydrophobic treatment. <i>Energy and Buildings</i> , 2021 , 252, 111393 | 7 | 1 |
| 143 | A flexible and lead-free BCZT thin film nanogenerator for biocompatible energy harvesting. <i>Materials Chemistry Frontiers</i> , 2021 , 5, 4682-4689 | 7.8 | 8 |
| 142 | Complete Prevention of Contact Electrification by Molecular Engineering. <i>Matter</i> , 2021 , 4, 290-301 | 12.7 | 7 |
| 141 | In situ Reduction of Silver Nanoparticles on Chitosan Hybrid Copper Phosphate Nanoflowers for Highly Efficient Plasmonic Solar-driven Interfacial Water Evaporation. <i>Journal of Bionic Engineering</i> , 2021 , 18, 30-39 | 2.7 | 4 |

(2020-2021)

| 140 | Dopamine-Triggered Hydrogels with High Transparency, Self-Adhesion, and Thermoresponse as Skinlike Sensors. <i>ACS Nano</i> , 2021 , 15, 1785-1794 | 16.7 | 63 |
|-----|---|---------|-----|
| 139 | Fully Biodegradable Water Droplet Energy Harvester Based on Leaves of Living Plants. <i>ACS Applied Materials & Amp; Interfaces</i> , 2020 , 12, 56060-56067 | 9.5 | 23 |
| 138 | Bismuth-Based Perovskite Heterostructures: In Situ Formation of Bismuth-Based Perovskite Heterostructures for High-Performance Cocatalyst-Free Photocatalytic Hydrogen Evolution (Adv. Funct. Mater. 52/2020). <i>Advanced Functional Materials</i> , 2020 , 30, 2070343 | 15.6 | 1 |
| 137 | Highly Solar-Reflective Structures for Daytime Radiative Cooling under High Humidity. <i>ACS Applied Materials & Amp; Interfaces</i> , 2020 , 12, 51409-51417 | 9.5 | 32 |
| 136 | A water droplet motion energy harvester with wafer-level fabrication method. <i>Journal of Micromechanics and Microengineering</i> , 2020 , 30, 065006 | 2 | 1 |
| 135 | Topography-Regulated Disorder-to-Order Transition of Condensation Droplets. <i>Langmuir</i> , 2020 , 36, 61 | 884-619 | 23 |
| 134 | Mussel-inspired hydrogels: from design principles to promising applications. <i>Chemical Society Reviews</i> , 2020 , 49, 3605-3637 | 58.5 | 153 |
| 133 | Design of robust superhydrophobic surfaces. <i>Nature</i> , 2020 , 582, 55-59 | 50.4 | 444 |
| 132 | How Universal Is the Wetting Aging in 2D Materials. <i>Nano Letters</i> , 2020 , 20, 5670-5677 | 11.5 | 14 |
| 131 | Tip-induced flipping of droplets on Janus pillars: From local reconfiguration to global transport. <i>Science Advances</i> , 2020 , 6, eabb4540 | 14.3 | 69 |
| 130 | Preparation of shape-controlling VO2(M/R) nanoparticles via one-step hydrothermal synthesis. <i>Frontiers of Optoelectronics</i> , 2020 , 14, 311 | 2.8 | O |
| 129 | Inhibiting Random Droplet Motion on Hot Surfaces by Engineering Symmetry-Breaking Janus-Mushroom Structure. <i>Advanced Materials</i> , 2020 , 32, e1907999 | 24 | 23 |
| 128 | One-step process for dual-scale ratchets with enhanced mobility of Leidenfrost droplets. <i>Journal of Colloid and Interface Science</i> , 2020 , 569, 229-234 | 9.3 | 2 |
| 127 | Nanogenerators with Superwetting Surfaces for Harvesting Water/Liquid Energy. <i>Advanced Functional Materials</i> , 2020 , 30, 1908252 | 15.6 | 50 |
| 126 | Phase-Change Heat Transfer: Supercapillary Architecture-Activated Two-Phase Boundary Layer Structures for Highly Stable and Efficient Flow Boiling Heat Transfer (Adv. Mater. 2/2020). <i>Advanced Materials</i> , 2020 , 32, 2070013 | 24 | 1 |
| 125 | Bioinspired footed soft robot with unidirectional all-terrain mobility. <i>Materials Today</i> , 2020 , 35, 42-49 | 21.8 | 29 |
| 124 | Preparation of nanoscale liquid metal droplet wrapped with chitosan and its tribological properties as water-based lubricant additive. <i>Tribology International</i> , 2020 , 148, 106349 | 4.9 | 9 |
| 123 | Boosting the output performance of volume effect electricity generator (VEEG) with water column. <i>Nano Energy</i> , 2020 , 73, 104748 | 17.1 | 28 |

| 122 | Electronic Skin from High-Throughput Fabrication of Intrinsically Stretchable Lead Zirconate Titanate Elastomer. <i>Research</i> , 2020 , 2020, 1085417 | 7.8 | 21 |
|-----|--|----------------|-----|
| 121 | Counterintuitive Ballistic and Directional Liquid Transport on a Flexible Droplet Rectifier. <i>Research</i> , 2020 , 2020, 6472313 | 7.8 | 5 |
| 120 | Control and Patterning of Various Hydrophobic Surfaces: In-situ Modification Realized by Flexible Atmospheric Plasma Stamp Technique. <i>Journal of Bionic Engineering</i> , 2020 , 17, 436-447 | 2.7 | 1 |
| 119 | A droplet-based electricity generator with high instantaneous power density. <i>Nature</i> , 2020 , 578, 392-39 | 9 6 0.4 | 391 |
| 118 | Supercapillary Architecture-Activated Two-Phase Boundary Layer Structures for Highly Stable and Efficient Flow Boiling Heat Transfer. <i>Advanced Materials</i> , 2020 , 32, e1905117 | 24 | 20 |
| 117 | A self-powered and high sensitivity acceleration sensor with V-Q-a model based on triboelectric nanogenerators (TENGs). <i>Nano Energy</i> , 2020 , 67, 104228 | 17.1 | 45 |
| 116 | A high-efficiency solar desalination evaporator composite of corn stalk, Mcnts and TiO2: ultra-fast capillary water moisture transportation and porous bio-tissue multi-layer filtration. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 349-357 | 13 | 76 |
| 115 | Digital microfluidic meter-on-chip. <i>Lab on A Chip</i> , 2020 , 20, 722-733 | 7.2 | 9 |
| 114 | Flexible topological liquid diode catheter. <i>Materials Today Physics</i> , 2020 , 12, 100170 | 8 | 4 |
| 113 | Desuccinylation-Triggered Peptide Self-Assembly: Live Cell Imaging of SIRT5 Activity and Mitochondrial Activity Modulation. <i>Journal of the American Chemical Society</i> , 2020 , 142, 18150-18159 | 16.4 | 34 |
| 112 | Fusion of Slippery Interfaces and Transistor-Inspired Architecture for Water Kinetic Energy Harvesting. <i>Joule</i> , 2020 , 4, 2527-2531 | 27.8 | 28 |
| 111 | Toward Self-Powered Inertial Sensors Enabled by Triboelectric Effect. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 3072-3087 | 4 | 8 |
| 110 | Transfer-Free PZT Thin Films for Flexible Nanogenerators Derived from a Single-Step Modified Sol-Gel Process on 2D Mica. <i>ACS Applied Materials & Derived Frances</i> , 2020 , 12, 54991-54999 | 9.5 | 12 |
| 109 | Skin-Like Strain Sensors Enabled by Elastomer Composites for HumanMachine Interfaces. <i>Coatings</i> , 2020 , 10, 711 | 2.9 | 10 |
| 108 | In Situ Formation of Bismuth-Based Perovskite Heterostructures for High-Performance Cocatalyst-Free Photocatalytic Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2020 , 30, 2006919 | 15.6 | 29 |
| 107 | Rectification of Mobile Leidenfrost Droplets by Planar Ratchets. <i>Small</i> , 2020 , 16, e1901751 | 11 | 15 |
| 106 | Nature-inspired surface topography: design and function. <i>Science China: Physics, Mechanics and Astronomy</i> , 2020 , 63, 1 | 3.6 | 11 |
| 105 | Improved dynamic stability of superomniphobic surfaces and droplet transport on slippery surfaces by dual-scale re-entrant structures. <i>Chemical Engineering Journal</i> , 2020 , 394, 124871 | 14.7 | 18 |

| 104 | Surface charges as a versatile platform for emerging applications. <i>Science Bulletin</i> , 2020 , 65, 1052-1054 | 10.6 | 9 |
|-----|---|------------------|-----|
| 103 | Patterned Amyloid Materials Integrating Robustness and Genetically Programmable Functionality. <i>Nano Letters</i> , 2019 , 19, 8399-8408 | 11.5 | 13 |
| 102 | Harvesting ultralow frequency (Nano Energy, 2019 , 65, 104011 | 17.1 | 26 |
| 101 | Biological and Engineered Topological Droplet Rectifiers. Advanced Materials, 2019, 31, e1806501 | 24 | 71 |
| 100 | Designing biomimetic liquid diodes. <i>Soft Matter</i> , 2019 , 15, 1902-1915 | 3.6 | 38 |
| 99 | Ultrathin metal/covalent-organic framework membranes towards ultimate separation. <i>Chemical Society Reviews</i> , 2019 , 48, 3811-3841 | 58.5 | 182 |
| 98 | SLIPS-TENG: robust triboelectric nanogenerator with optical and charge transparency using a slippery interface. <i>National Science Review</i> , 2019 , 6, 540-550 | 10.8 | 54 |
| 97 | Macrotextures-induced jumping relay of condensate droplets. <i>Applied Physics Letters</i> , 2019 , 114, 093704 | 1 3.4 | 25 |
| 96 | Microfluidics Assisted Fabrication of Three-Tier Hierarchical Microparticles for Constructing Bioinspired Surfaces. <i>ACS Nano</i> , 2019 , 13, 3638-3648 | 16.7 | 27 |
| 95 | Nature-Inspired Strategy for Anticorrosion. <i>Advanced Engineering Materials</i> , 2019 , 21, 1801379 | 3.5 | 30 |
| 94 | Harnessing Solar-Driven Photothermal Effect toward the Water-Energy Nexus. <i>Advanced Science</i> , 2019 , 6, 1900883 | 13.6 | 104 |
| 93 | Multistimuli-Responsive Microstructured Superamphiphobic Surfaces with Large-Range, Reversible Switchable Wettability for Oil. <i>ACS Applied Materials & Discrete Superamore</i> , 11, 28478-28486 | 9.5 | 46 |
| 92 | Surface charge printing for programmed droplet transport. <i>Nature Materials</i> , 2019 , 18, 936-941 | 27 | 208 |
| 91 | Droplet dynamics on slippery surfaces: small droplet, big impact. <i>Biosurface and Biotribology</i> , 2019 , 5, 35-45 | 1 | 13 |
| 90 | Skin-Integrated Graphene-Embedded Lead Zirconate Titanate Rubber for Energy Harvesting and Mechanical Sensing. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900744 | 6.8 | 34 |
| 89 | Water Purification/Harvesting: Harnessing Solar-Driven Photothermal Effect toward the WaterEnergy Nexus (Adv. Sci. 18/2019). <i>Advanced Science</i> , 2019 , 6, 1970111 | 13.6 | 4 |
| 88 | Supramolecular silicone coating capable of strong substrate bonding, readily damage healing, and easy oil sliding. <i>Science Advances</i> , 2019 , 5, eaaw5643 | 14.3 | 71 |
| 87 | Crack engineering for the construction of arbitrary hierarchical architectures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 23909-23914 | 11.5 | 18 |

| 86 | Microflower-Decorated Superhydrophobic Copper Surface for Dry Condensation. <i>Langmuir</i> , 2019 , 35, 16275-16280 | 4 | 11 |
|----|---|--------|-----|
| 85 | Mangrove Inspired Anti-Corrosion Coatings. <i>Coatings</i> , 2019 , 9, 725 | 2.9 | 7 |
| 84 | Robust Icephobic Performance of Flexible Needles. <i>ChemNanoMat</i> , 2019 , 5, 175-180 | 3.5 | 7 |
| 83 | New approach for efficient condensation heat transfer. <i>National Science Review</i> , 2019 , 6, 185-186 | 10.8 | 4 |
| 82 | Hierarchical hollow MoS2 microspheres as materials for conductometric NO2 gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2019 , 282, 259-267 | 8.5 | 71 |
| 81 | Suppressing Ice Nucleation of Supercooled Condensate with Biphilic Topography. <i>Physical Review Letters</i> , 2018 , 120, 075902 | 7.4 | 59 |
| 80 | Electrocatalytic performance of cubic NiS2 and hexagonal NiS for oxygen reduction reaction. Journal of Catalysis, 2018 , 359, 223-232 | 7.3 | 30 |
| 79 | Protein-Substrate Adhesion in Microcontact Printing Regulates Cell Behavior. <i>Langmuir</i> , 2018 , 34, 1750- | -14759 | 16 |
| 78 | Adhesives: Remote Control over Underwater Dynamic Attachment/Detachment and Locomotion (Adv. Mater. 30/2018). <i>Advanced Materials</i> , 2018 , 30, 1870222 | 24 | 1 |
| 77 | Breakdown in the directional transport of droplets on the peristome of pitcher plants. <i>Communications Physics</i> , 2018 , 1, | 5.4 | 25 |
| 76 | Toward advanced sodium-ion batteries: a wheel-inspired yolk@hell design for large-volume-change anode materials. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 13153-13163 | 13 | 24 |
| 75 | Remote Control over Underwater Dynamic Attachment/Detachment and Locomotion. <i>Advanced Materials</i> , 2018 , 30, e1801595 | 24 | 87 |
| 74 | Self-propelled droplet-based electricity generation. <i>Nanoscale</i> , 2018 , 10, 23164-23169 | 7.7 | 33 |
| 73 | Genotyping of Multiple Clinical Samples with a Combined Direct PCR and Magnetic Lateral Flow Assay. <i>IScience</i> , 2018 , 7, 170-179 | 6.1 | 5 |
| 72 | A bioinspired multilegged soft millirobot that functions in both dry and wet conditions. <i>Nature Communications</i> , 2018 , 9, 3944 | 17.4 | 233 |
| 71 | Single-Crystalline UiO-67-Type Porous Network Stable to Boiling Water, Solvent Loss, and Oxidation. <i>Inorganic Chemistry</i> , 2018 , 57, 6198-6201 | 5.1 | 13 |
| 70 | Adhesion of Microdroplets on Water-Repellent Surfaces toward the Prevention of Surface Fouling and Pathogen Spreading by Respiratory Droplets. <i>ACS Applied Materials & District Action Series</i> , 2017, 9, 6599-6599-6599-6599-6599-6599-6599-6599 | -8608 | 30 |
| 69 | Highly efficient thermogenesis from Fe3O4 nanoparticles for thermoplastic material repair both in air and underwater. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1221-1232 | 13 | 22 |

(2016-2017)

| 68 | In situ reduction of silver nanoparticles on hybrid polydopamine-copper phosphate nanoflowers with enhanced antimicrobial activity. <i>Journal of Materials Chemistry B</i> , 2017 , 5, 5311-5317 | 7.3 | 22 |
|----|--|-----------------------------|-----|
| 67 | A self-powered acceleration sensor with flexible materials based on triboelectric effect. <i>Nano Energy</i> , 2017 , 31, 469-477 | 17.1 | 45 |
| 66 | Omnidirectional Self-Assembly of Transparent Superoleophobic Nanotextures. ACS Nano, 2017, 11, 58 | 7- 5 0. 6 | 84 |
| 65 | Topological liquid diode. <i>Science Advances</i> , 2017 , 3, eaao3530 | 14.3 | 177 |
| 64 | Toward large-scale fabrication of triboelectric nanogenerator (TENG) with silk-fibroin patches film via spray-coating process. <i>Nano Energy</i> , 2017 , 41, 359-366 | 17.1 | 65 |
| 63 | Achievement of safer palladium nanocrystals by enlargement of {100} crystallographic facets. <i>Nanotoxicology</i> , 2017 , 11, 907-922 | 5.3 | 9 |
| 62 | High dislocation density-induced large ductility in deformed and partitioned steels. <i>Science</i> , 2017 , 357, 1029-1032 | 33.3 | 454 |
| 61 | Long-range spontaneous droplet self-propulsion on wettability gradient surfaces. <i>Scientific Reports</i> , 2017 , 7, 7552 | 4.9 | 80 |
| 60 | Controlled cell patterning on bioactive surfaces with special wettability. <i>Journal of Bionic Engineering</i> , 2017 , 14, 440-447 | 2.7 | 9 |
| 59 | PDMS/PVDF hybrid electrospun membrane with superhydrophobic property and drop impact dynamics for dyeing wastewater treatment using membrane distillation. <i>Journal of Membrane Science</i> , 2017 , 525, 57-67 | 9.6 | 243 |
| 58 | Bio-inspired reversible underwater adhesive. <i>Nature Communications</i> , 2017 , 8, 2218 | 17.4 | 243 |
| 57 | Superhydrophobic porous networks for enhanced droplet shedding. <i>Scientific Reports</i> , 2016 , 6, 33817 | 4.9 | 20 |
| 56 | Mimosa Origami: A nanostructure-enabled directional self-organization regime of materials. <i>Science Advances</i> , 2016 , 2, e1600417 | 14.3 | 86 |
| 55 | Underwater Superoleophobic Membrane with Enhanced OilWater Separation, Antimicrobial, and Antifouling Activities. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500664 | 4.6 | 53 |
| 54 | Force analysis and bubble dynamics during flow boiling in silicon nanowire microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 101, 915-926 | 4.9 | 33 |
| 53 | Droplets Can Rebound toward Both Directions on Textured Surfaces with a Wettability Gradient. <i>Langmuir</i> , 2016 , 32, 346-51 | 4 | 35 |
| 52 | Interfacial Engineering of Bimetallic Ag/Pt Nanoparticles on Reduced Graphene Oxide Matrix for Enhanced Antimicrobial Activity. <i>ACS Applied Materials & District Research</i> , 8, 8834-40 | 9.5 | 71 |
| 51 | Directional transport of high-temperature Janus droplets mediated by structural topography. <i>Nature Physics</i> , 2016 , 12, 606-612 | 16.2 | 190 |

| 50 | Spontaneous Wenzel to Cassie dewetting transition on structured surfaces. <i>Physical Review Fluids</i> , 2016 , 1, | 2.8 | 29 |
|----|--|------|-----|
| 49 | Bioinspired Interfacial Materials with Enhanced Drop Mobility: From Fundamentals to Multifunctional Applications. <i>Small</i> , 2016 , 12, 1825-39 | 11 | 159 |
| 48 | Bioinspired Materials: Bioinspired Interfacial Materials with Enhanced Drop Mobility: From Fundamentals to Multifunctional Applications (Small 14/2016). <i>Small</i> , 2016 , 12, 1824-1824 | 11 | 4 |
| 47 | Strain Engineering of Wave-like Nanofibers for Dynamically Switchable Adhesive/Repulsive Surfaces. <i>Advanced Functional Materials</i> , 2016 , 26, 399-407 | 15.6 | 39 |
| 46 | Dynamic control of droplet jumping by tailoring nanoparticle concentrations. <i>Applied Physics Letters</i> , 2016 , 109, 021601 | 3.4 | 12 |
| 45 | Monitoring the intracellular calcium response to a dynamic hypertonic environment. <i>Scientific Reports</i> , 2016 , 6, 23591 | 4.9 | 10 |
| 44 | Biomimetic Surfaces for Enhanced Dropwise Condensation Heat Transfer: Mimic Nature and Transcend Nature 2016 , 185-228 | | 1 |
| 43 | Wetting of mono and few-layered WS2 and MoS2 films supported on Si/SiO2 substrates. <i>ACS Nano</i> , 2015 , 9, 3023-31 | 16.7 | 156 |
| 42 | From industrially weavable and knittable highly conductive yarns to large wearable energy storage textiles. <i>ACS Nano</i> , 2015 , 9, 4766-75 | 16.7 | 359 |
| 41 | The rational design of a peptide-based hydrogel responsive to H2S. <i>Chemical Communications</i> , 2015 , 51, 17273-6 | 5.8 | 35 |
| 40 | Controlling drop bouncing using surfaces with gradient features. <i>Applied Physics Letters</i> , 2015 , 107, 051 | 6904 | 71 |
| 39 | Superhydrophobic-like tunable droplet bouncing on slippery liquid interfaces. <i>Nature Communications</i> , 2015 , 6, 7986 | 17.4 | 164 |
| 38 | Recurrent filmwise and dropwise condensation on a beetle mimetic surface. ACS Nano, 2015, 9, 71-81 | 16.7 | 326 |
| 37 | Evaporation of Condensate Droplets on Structured Surfaces with Gradient Roughness. <i>Journal of Heat Transfer</i> , 2015 , 137, | 1.8 | 4 |
| 36 | Symmetry breaking in drop bouncing on curved surfaces. <i>Nature Communications</i> , 2015 , 6, 10034 | 17.4 | 234 |
| 35 | Filmwise-to-Dropwise Condensation Transition Enabled by Patterned High Wetting Contrast. <i>Journal of Heat Transfer</i> , 2015 , 137, | 1.8 | 6 |
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