

# Xiaofeng Zhou

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6476355/publications.pdf>

Version: 2024-02-01

46  
papers

3,247  
citations

218677

26  
h-index

265206

42  
g-index

46  
all docs

46  
docs citations

46  
times ranked

3303  
citing authors

#	ARTICLE	IF	CITATIONS
1	A droplet-based electricity generator with high instantaneous power density. <i>Nature</i> , 2020, 578, 392-396.	27.8	871
2	Topological liquid diode. <i>Science Advances</i> , 2017, 3, eaao3530.	10.3	249
3	Superhydrophobic-like tunable droplet bouncing on slippery liquid interfaces. <i>Nature Communications</i> , 2015, 6, 7986.	12.8	229
4	Activating the Microscale Edge Effect in a Hierarchical Surface for Frosting Suppression and Defrosting Promotion. <i>Scientific Reports</i> , 2013, 3, 2515.	3.3	166
5	Dual-defect surface engineering of bimetallic sulfide nanotubes towards flexible asymmetric solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24053-24064.	10.3	133
6	Effect of fluorine doping and sulfur vacancies of CuCo <sub>2</sub> S <sub>4</sub> on its electrochemical performance in supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 390, 124643.	12.7	132
7	Long-range spontaneous droplet self-propulsion on wettability gradient surfaces. <i>Scientific Reports</i> , 2017, 7, 7552.	3.3	113
8	SLIPS-TENG: robust triboelectric nanogenerator with optical and charge transparency using a slippery interface. <i>National Science Review</i> , 2019, 6, 540-550.	9.5	110
9	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.	16.0	105
10	Ultrafast Dynamic Pressure Sensors Based on Graphene Hybrid Structure. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 24148-24154.	8.0	103
11	A universal single electrode droplet-based electricity generator (SE-DEC) for water kinetic energy harvesting. <i>Nano Energy</i> , 2021, 82, 105735.	16.0	89
12	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.	16.0	83
13	Humidity detection by nanostructured ZnO: A wireless quartz crystal microbalance investigation. <i>Sensors and Actuators A: Physical</i> , 2007, 135, 209-214.	4.1	68
14	A self-powered acceleration sensor with flexible materials based on triboelectric effect. <i>Nano Energy</i> , 2017, 31, 469-477.	16.0	64
15	Humidity sensor based on quartz tuning fork coated with sol-gel-derived nanocrystalline zinc oxide thin film. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 299-305.	7.8	62
16	Boosting the output performance of volume effect electricity generator (VEEG) with water column. <i>Nano Energy</i> , 2020, 73, 104748.	16.0	62
17	Self-propelled droplet-based electricity generation. <i>Nanoscale</i> , 2018, 10, 23164-23169.	5.6	49
18	Design and fabrication of a MEMS capacitive accelerometer with fully symmetrical double-sided H-shaped beam structure. <i>Microelectronic Engineering</i> , 2015, 131, 51-57.	2.4	46

#	ARTICLE	IF	CITATIONS
19	Rapid and Persistent Suction Condensation on Hydrophilic Surfaces for High-Efficiency Water Collection. <i>Nano Letters</i> , 2021, 21, 7411-7418.	9.1	45
20	A new strategy for synthesis of hierarchical MnO <sub>2</sub> @Mn <sub>3</sub> O <sub>4</sub> nanocomposite via reduction-induced exfoliation of MnO <sub>2</sub> nanowires and its application in high-performance asymmetric supercapacitor. <i>Composites Part B: Engineering</i> , 2019, 178, 107501.	12.0	43
21	A bulk effect liquid-solid generator with 3D electrodes for wave energy harvesting. <i>Nano Energy</i> , 2021, 87, 106218.	16.0	41
22	Inhibiting Random Droplet Motion on Hot Surfaces by Engineering Symmetry-Breaking Janus-Mushroom Structure. <i>Advanced Materials</i> , 2020, 32, e1907999.	21.0	38
23	Rectification of Mobile Leidenfrost Droplets by Planar Ratchets. <i>Small</i> , 2020, 16, e1901751.	10.0	32
24	Harvesting ultralow frequency (<math>1\ \mu\text{Hz}</math>) mechanical energy using triboelectric nanogenerator. <i>Nano Energy</i> , 2019, 65, 104011.	16.0	31
25	Theoretical investigation and experimental verification of the self-powered acceleration sensor based on triboelectric nanogenerators (TENGs). <i>Extreme Mechanics Letters</i> , 2021, 42, 101021.	4.1	28
26	A novel sandwich capacitive accelerometer with a symmetrical structure fabricated from a D-SOI wafer. <i>Journal of Micromechanics and Microengineering</i> , 2012, 22, 085031.	2.6	27
27	A flexible resistive temperature detector (RTD) based on in-situ growth of patterned Ag film on polyimide without lithography. <i>Microelectronic Engineering</i> , 2019, 216, 111052.	2.4	25
28	Dynamic control of droplet jumping by tailoring nanoparticle concentrations. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	23
29	Toward Self-Powered Inertial Sensors Enabled by Triboelectric Effect. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3072-3087.	4.3	23
30	Paper-Based ZnS:Cu Alternating Current Electroluminescent Devices for Current Humidity Sensors with High-Linearity and Flexibility. <i>Sensors</i> , 2019, 19, 4607.	3.8	22
31	A novel capacitive accelerometer with an eight-beam-mass structure by self-stop anisotropic etching of (100) silicon. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 075005.	2.6	20
32	Bioinspired Interfacial Strengthening Flexible Supercapacitors via Hierarchically Topological Interlocking Strategy. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 38303-38312.	8.0	14
33	Machine learning-guided design and development of multifunctional flexible Ag/poly (amic acid) composites using the differential evolution algorithm. <i>Nanoscale</i> , 2020, 12, 3988-3996.	5.6	14
34	Controlled cell patterning on bioactive surfaces with special wettability. <i>Journal of Bionic Engineering</i> , 2017, 14, 440-447.	5.0	13
35	Directional Liquid Transport from the Cold Region to the Hot Region on a Topological Surface. <i>Langmuir</i> , 2021, 37, 5059-5065.	3.5	13
36	Single wafer fabrication of a symmetric double-sided beam-mass structure using DRIE and wet etching by a novel vertical sidewall protection technique. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 115009.	2.6	11

#	ARTICLE	IF	CITATIONS
37	One-step synthesis of oxygen-deficient manganese dioxides sponge-like 3D architecture for high-performance supercapacitors. <i>Journal of Alloys and Compounds</i> , 2019, 809, 151790.	5.5	11
38	Strengthening unidirectional liquid pumping using multi-biomimetic structures. <i>Extreme Mechanics Letters</i> , 2021, 43, 101144.	4.1	11
39	Fabrication of a MEMS capacitive accelerometer with symmetrical double-sided serpentine beam-mass structure. <i>Microsystem Technologies</i> , 2014, 20, 1365-1372.	2.0	10
40	Flexible topological liquid diode catheter. <i>Materials Today Physics</i> , 2020, 12, 100170.	6.0	8
41	A MEMS accelerometer with double-sided symmetrical folded-beams on single wafer. , 2017, , .		4
42	A water droplet motion energy harvester with wafer-level fabrication method. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 065006.	2.6	3
43	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.	5.0	2
44	Capture of circulating tumor cells with superhydrophilic silicon dioxide nano pillar structure without capture antibodies. , 2015, , .		1
45	Design and fabrication of a micro-electromechanical system sandwich capacitive accelerometer. , 2014, , .		0
46	Development of cell microarray by using superhydrophilic silicon dioxide nano structure. , 2016, , .		0