

# Xiaojing Mu

## List of Publications by Year in descending order

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54  
papers

1,816  
citations

257450

24  
h-index

265206

42  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1889  
citing authors

#	ARTICLE	IF	CITATIONS
1	Boosting Output Performance of Triboelectric Nanogenerator via Mutual Coupling Effects Enabled Photon-Carriers and Plasmon. <i>Advanced Science</i> , 2022, 9, e2103957.	11.2	16
2	Resonant Magnetometer for Ultralow Magnetic Field Detection by Integrating Magnetoelastic Membrane on Film Bulk Acoustic Resonator. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2022, 69, 1452-1460.	3.0	5
3	Directional etching for high aspect ratio nano-trenches on hexagonal boron nitride by catalytic metal particles. <i>2D Materials</i> , 2022, 9, 025015.	4.4	8
4	A high performance triboelectric nanogenerator based on ordered doping technique for human-machine interaction sensing. <i>Nano Energy</i> , 2022, 95, 107025.	16.0	15
5	An Energy Harvester Coupled with a Triboelectric Mechanism and Electrostatic Mechanism for Biomechanical Energy Harvesting. <i>Nanomaterials</i> , 2022, 12, 933.	4.1	13
6	Loss-Induced phase transition in mid-infrared plasmonic metamaterials for ultrasensitive vibrational spectroscopy. <i>Information Materials</i> , 2022, 4, .	17.3	18
7	Infrared metamaterial for surface-enhanced infrared absorption spectroscopy: pushing the frontier of ultrasensitive on-chip sensing. <i>International Journal of Optomechatronics</i> , 2021, 15, 97-119.	6.6	46
8	Enhancing the Output Charge Density of Triboelectric Nanogenerator via Building Charge Blocking Layer. , 2021, , .		0
9	An Enhanced-Differential PMUT for Ultra-Long Distance Measurement in Air. , 2021, , .		5
10	A Nonresonant Hybridized Electromagnetic-Triboelectric Nanogenerator for Irregular and Ultralow Frequency Blue Energy Harvesting. <i>Research</i> , 2021, 2021, 5963293.	5.7	24
11	Mid-IR Metamaterial Absorber with Polyvinylamine as a Sensitive Layer for On-Chip Sensing of Carbon Dioxide. , 2021, , .		1
12	Infrared Plasmonic Biosensor with Tetrahedral DNA Nanostructure as Carriers for Label-Free and Ultrasensitive Detection of <i>miR-155</i> . <i>Advanced Science</i> , 2021, 8, e2100583.	11.2	43
13	Bionic Ultra-Sensitive Self-Powered Electromechanical Sensor for Muscle-Triggered Communication Application. <i>Advanced Science</i> , 2021, 8, e2101020.	11.2	41
14	Theoretical and Experimental Studies on MEMS Variable Cross-Section Cantilever Beam Based Piezoelectric Vibration Energy Harvester. <i>Micromachines</i> , 2021, 12, 772.	2.9	8
15	Plasmonic Biosensor Augmented by a Genetic Algorithm for Ultra-Rapid, Label-Free, and Multi-Functional Detection of COVID-19. <i>Analytical Chemistry</i> , 2021, 93, 9437-9444.	6.5	34
16	A piezoelectric micromachined ultrasonic transducer with mechanical grooves. <i>Journal of Micromechanics and Microengineering</i> , 2021, 31, 085009.	2.6	4
17	Multifunctional Chemical Sensing Platform Based on Dual-Resonant Infrared Plasmonic Perfect Absorber for On-Chip Detection of Poly(ethyl cyanoacrylate). <i>Advanced Science</i> , 2021, 8, e2101879.	11.2	29
18	Temperature Monitorable Kinetics Study of Human Blood Coagulation by Utilizing a Dual-Mode AlN-Based Acoustic Wave Resonator. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2020, 67, 131-135.	3.0	7

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19	A chaotic pendulum triboelectric-electromagnetic hybridized nanogenerator for wave energy scavenging and self-powered wireless sensing system. <i>Nano Energy</i> , 2020, 69, 104440.	16.0	152
20	Tannic acid-modified silver nanoparticles for enhancing anti-biofilm activities and modulating biofilm formation. <i>Biomaterials Science</i> , 2020, 8, 4852-4860.	5.4	56
21	A Triboelectric Nanogenerator Exploiting the Bernoulli Effect for Scavenging Wind Energy. <i>Cell Reports Physical Science</i> , 2020, 1, 100207.	5.6	26
22	Metal-Organic Framework Surface-Enhanced Infrared Absorption Platform Enables Simultaneous On-Chip Sensing of Greenhouse Gases. <i>Advanced Science</i> , 2020, 7, 2001173.	11.2	71
23	A self-powered and self-functional tracking system based on triboelectric-electromagnetic hybridized blue energy harvesting module. <i>Nano Energy</i> , 2020, 72, 104684.	16.0	58
24	An aptamer-based shear horizontal surface acoustic wave biosensor with a CVD-grown single-layered graphene film for high-sensitivity detection of a label-free endotoxin. <i>Microsystems and Nanoengineering</i> , 2020, 6, 4.	7.0	37
25	Single-Layered Graphene/Au-Nanoparticles-Based Love Wave Biosensor for Highly Sensitive and Specific Detection of <i>Staphylococcus aureus</i> Gene Sequences. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 12417-12425.	8.0	21
26	Surface-Enhanced Infrared Absorption-Based Biosensor and its Application to DNA Identification. , 2020, , .		4
27	Piezoelectric PVDF Films Enhanced by Ag@SiO <sub>2</sub> Nanoparticles for MEMS Transducer. , 2020, , .		1
28	Metamaterial Gas Sensing Platform Based on Surface-Enhanced Infrared Absorption. , 2020, , .		5
29	Simultaneous Quantification and Identification of Protein by Metamaterial Perfect Absorber. , 2020, , .		1
30	Enhancing the Output Performance of Triboelectric Nanogenerator via Grating-Electrode-Enabled Surface Plasmon Excitation. <i>Advanced Energy Materials</i> , 2019, 9, 1902725.	19.5	45
31	Study on the Influence of Ferroelectric Materials on the Output Performance of Triboelectric Nanogenerators. , 2019, , .		0
32	Terahertz biosensing based on bi-layer metamaterial absorbers toward ultra-high sensitivity and simple fabrication. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	59
33	Integrating a Microwave Resonator and a Microchannel with an Immunochromatographic Strip for Stable and Quantitative Biodetection. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 14630-14639.	8.0	25
34	Triboelectric Nanogenerators: Enhancing the Output Performance of Triboelectric Nanogenerator via Grating-Electrode-Enabled Surface Plasmon Excitation (Adv. Energy Mater. 44/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970177.	19.5	4
35	A high sensitive SH-SAW biosensor based 36Å° Y-X black LiTaO <sub>3</sub> for label-free detection of <i>Pseudomonas Aeruginosa</i> . <i>Sensors and Actuators B: Chemical</i> , 2019, 281, 757-764.	7.8	29
36	Electric Field Stiffening Effect in <i>c</i> -Oriented Aluminum Nitride Piezoelectric Thin Films. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 1819-1827.	8.0	18

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37	A double-helix-structured triboelectric nanogenerator enhanced with positive charge traps for self-powered temperature sensing and smart-home control systems. <i>Nanoscale</i> , 2018, 10, 19781-19790.	5.6	46
38	Temperature decoupled viscosity-density product measurement in liquid by utilizing a dual-mode AlN-based acoustic wave resonator. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	6
39	Multi-Band Sensing for Dielectric Property of Chemicals Using Metamaterial Integrated Microfluidic Sensor. <i>Scientific Reports</i> , 2018, 8, 14801.	3.3	60
40	Dual-resonator Lamb wave strain sensor with temperature compensation and enhanced sensitivity. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	11
41	Dual-mode resonant infrared detector based on film bulk acoustic resonator toward ultra-high sensitivity and anti-interference capability. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	16
42	High-temperature high-sensitivity AlN-on-SOI Lamb wave resonant strain sensor. <i>AIP Advances</i> , 2018, 8, .	1.3	10
43	Note: Modified $\pi$ -type Butterworth-Van Dyke model for dual-mode Lamb-wave resonator with precise two-port Y-parameter characterizations. <i>Review of Scientific Instruments</i> , 2016, 87, 106101.	1.3	6
44	A modified PiBVD model for Lamb wave resonator. , 2016, , .		0
45	Modelling of high frequency Lamb wave resonator for monolithic CMOS radar transceiver. , 2016, , .		0
46	Triboelectric liquid volume sensor for self-powered lab-on-chip applications. <i>Nano Energy</i> , 2016, 23, 80-88.	16.0	101
47	Flexible and transparent triboelectric nanogenerator based on high performance well-ordered porous PDMS dielectric film. <i>Nano Research</i> , 2016, 9, 3714-3724.	10.4	120
48	Flutter Phenomenon in Flow Driven Energy Harvesterâ€”A Unified Theoretical Model for â€œStiffâ€•and â€œFlexibleâ€•Materials. <i>Scientific Reports</i> , 2016, 6, 35180.	3.3	15
49	Diaphragm shape effect on the sensitivity of surface acoustic wave based pressure sensor for harsh environment. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	44
50	Flowâ€•Driven Triboelectric Generator for Directly Powering a Wireless Sensor Node. <i>Advanced Materials</i> , 2015, 27, 240-248.	21.0	167
51	Methods for improving electromechanical coupling coefficient in two dimensional electric field excited AlN Lamb wave resonators. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	47
52	Elasto-Aerodynamics-Driven Triboelectric Nanogenerator for Scavenging Air-Flow Energy. <i>ACS Nano</i> , 2015, 9, 9554-9563.	14.6	165
53	Viscosity and density decoupling method using a higher order Lamb wave sensor. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 075002.	2.6	30
54	Dual mode acoustic wave sensor for precise pressure reading. <i>Applied Physics Letters</i> , 2014, 105, 113507.	3.3	43