Jianxiong Zhu

List of Publications by Year
in descending order

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54 papers	2,103 citations	394421 19 h-index	233421 45 g-index
55 all docs	55 docs citations	55 times ranked	2022 citing authors

#	Article	IF	Citations
1	Bilateral multi-impact oscillators for cantilever energy harvesting enhancement. International Journal of Green Energy, 2022, 19, 521-528.	3.8	4
2	Spectrum Analysis Enabled Periodic Feature Reconstruction Based Automatic Defect Detection System for Electroluminescence Images of Photovoltaic Modules. Micromachines, 2022, 13, 332.	2.9	7
3	Artificial Intelligence of Manufacturing Robotics Health Monitoring System by Semantic Modeling. Micromachines, 2022, 13, 300.	2.9	5
4	Advances in Electrochemical Detection Electrodes for As(III). Nanomaterials, 2022, 12, 781.	4.1	17
5	A bottomâ€up optimization method for inverse design of twoâ€dimensional clampedâ€free elastic rods. International Journal for Numerical Methods in Engineering, 2022, 123, 2556-2572.	2.8	2
6	Miniature and tunable high voltage-driven soft electroactive biconvex lenses for optical visual identification. Journal of Micromechanics and Microengineering, 2022, 32, 064004.	2.6	4
7	Toward Healthcare Diagnoses by Machine-Learning-Enabled Volatile Organic Compound Identification. ACS Nano, 2021, 15, 894-903.	14.6	81
8	A High-Response Electrochemical As(III) Sensor Using Fe3O4â€“rGO Nanocomposite Materials. Chemosensors, 2021, 9, 150.	3.6	22
9	Volatile organic compounds sensing based on Bennet doubler-inspired triboelectric nanogenerator and machine learning-assisted ion mobility analysis. Science Bulletin, 2021, 66, 1176-1185.	9.0	50
10	Machine learning-enabled textile-based graphene gas sensing with energy harvesting-assisted IoT application. Nano Energy, 2021, 86, 106035.	16.0	70
11	Symmetry and asymmetry from MEMS variable capacitor by nonlinear micro stoppers. Mechanics and Industry, 2021, 22, 41.	1.3	2
12	Carbon black-reinforced 3D and 4D printable conductive polymer composites. , 2020, , 367-385.		5
13	Development Trends and Perspectives of Future Sensors and MEMS/NEMS. Micromachines, 2020, 11, 7.	2.9	216
14	Progress in<scp>TENG</scp>technologyâ€”A journey from energy harvesting to nanoenergy and nanosystem. EcoMat, 2020, 2, e12058.	11.9	194
15	Programmed-triboelectric nanogeneratorsâ€”A multi-switch regulation methodology for energy manipulation. Nano Energy, 2020, 78, 105241.	16.0	42
16	Progress in wearable electronics/photonicsâ€”Moving toward the era of artificial intelligence and internet of things. InformaÄ¤Ã-MateriÃ¡ly, 2020, 2, 1131-1162.	17.3	343
17	Deep learning-enabled triboelectric smart socks for IoT-based gait analysis and VR applications. Npj Flexible Electronics, 2020, 4, .	10.7	213
18	Continuous direct current by charge transportation for next-generation IoT and real-time virtual reality applications. Nano Energy, 2020, 73, 104760.	16.0	61

#	Article	IF	Citations
19	Numerical modeling of dynamic response of miniature multi-impact electromagnetic device for low and wide range frequencies energy harvesting. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 2400-2409.	2.1	5
20	Biomimetic Turbinate-like Artificial Nose for Hydrogen Detection Based on 3D Porous Laser-Induced Graphene. ACS Applied Materials & Interfaces, 2019, 11, 24386-24394.	8.0	64
21	Half-Pipe Palladium Nanotube-Based Hydrogen Sensor Using a Suspended Nanofiber Scaffold. ACS Applied Materials & Interfaces, 2019, 11, 13343-13349.	8.0	38
22	Feasibility Study of High-Voltage Ion Mobility for Gas Identification Based on Triboelectric Power Source. , 2019, , .		1
23	Half-Pipe Palladium Nanotube Network Hydrogen Sensor Based on Electrospun Nanofiber Scaffolds. , 2019, , .		1
24	Enhanced in-vitro osteoblastic functions on Î²-type titanium alloy using surface mechanical attrition treatment. Materials Science and Engineering C, 2019, 97, 688-697.	7.3	27
25	A flexible multi-layer electret nanogenerator for bending deformation energy harvesting and strain sensing. Materials Research Bulletin, 2018, 102, 130-136.	5.2	20
26	Suspended polytetrafluoroethylene nanostructure electret film in dual variable cavities for self-powered micro-shock sensing. Materials Research Express, 2018, 5, 046305.	1.6	4
27	A flexible piezoresistive carbon black network in silicone rubber for wide range deformation and strain sensing. Journal of Applied Physics, 2018, 123, 034505.	2.5	11
28	Singleâ€Electrode, Nylonâ€Fiberâ€Enhanced Polytetrafluoroethylene Electret Film with Hollow Cylinder Structure for Mechanical Energy Harvesting. Energy Technology, 2018, 6, 1112-1118.	3.8	12
29	Silicone-Based Triboelectric Nanogenerator for Water Wave Energy Harvesting. ACS Applied Materials & Interfaces, 2018, 10, 3616-3623.	8.0	98
30	Bulk silicon micromachined suspended fixed-end SiO2 film capacitor for passive high-pass RC filter. Microsystem Technologies, 2018, 24, 929-934.	2.0	1
31	MEMS fabrication and frequency sweep for suspending beam and plate electrode in electrostatic capacitor. Solid-State Electronics, 2018, 139, 94-100.	1.4	3
32	Flexible, Stretchable, and Transparent Planar Microsupercapacitors Based on 3D Porous Laserâ€Induced Graphene. Small, 2018, 14, 1702249.	10.0	179
33	Power generation from microfluidic drops using inorganic silicon dioxide electret film. Micro and Nano Letters, 2018, 13, 1421-1424.	1.3	5
34	Design and fabrication of 3D flexible thermoelectric energy generator using chemical vapor deposition method based on paper substrate. , 2018, , .		3
35	Asymmetric disappearance and periodic asymmetric phenomena of rocking dynamics in micro dual-capacitive energy harvester. AIP Conference Proceedings, 2018, , .	0.4	2
36	Zinc Oxide-Enhanced Piezoelectret Polypropylene Microfiber for Mechanical Energy Harvesting. ACS Applied Materials & Interfaces, 2018, 10, 19940-19947.	8.0	34

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37	A flexible comb electrode triboelectricâ€“electret nanogenerator with separated microfibers for a self-powered position, motion direction and acceleration tracking sensor. Journal of Materials Chemistry A, 2018, 6, 16548-16555.	10.3	39
38	Different Microtubule Structures Assembled by Kinesin Motors. Langmuir, 2018, 34, 9768-9773.	3.5	4
39	Modulated Pencil-Drawn U-Shaped Piezoresistive Graphite on Compound Fibers for Wind Sensing. Journal of Electronic Materials, 2018, 47, 6518-6524.	2.2	9
40	Cost-effective fabrication and high-frequency response of non-ideal RC application based on 3D porous laser-induced graphene. Journal of Materials Science, 2018, 53, 12413-12420.	3.7	13
41	A Hybrid Piezoelectric and Triboelectric Nanogenerator with PVDF Nanoparticles and Leafâ€Shaped Microstructure PTFE Film for Scavenging Mechanical Energy. Advanced Materials Interfaces, 2018, 5, 1700750.	3.7	52
42	A Study on the Strategy of Developing New Agricultural Management Business Entity in North-west Poverty-stricken Area. , 2018, , .		0
43	High performance lithium-sulfur batteries for storing pulsed energy generated by triboelectric nanogenerators. Scientific Reports, 2017, 7, 425.	3.3	11
44	Proximity sensing of electrostatic induction electret nanoparticles device using separation electrode. AIP Advances, 2017, 7, .	1.3	6
45	Electrospinning poly(l-lactic acid) piezoelectric ordered porous nanofibers for strain sensing and energy harvesting. Journal of Materials Science: Materials in Electronics, 2017, 28, 12080-12085.	2.2	48
46	A hybrid electromagnetic and leaf-shaped polytetrafluoroethylene triboelectric with an arc-shaped brace structure for energy harvesting. RSC Advances, 2017, 7, 49562-49567.	3.6	12
47	Hybrid Electromagnetic and Triboelectric Nanogenerators with Multi-Impact for Wideband Frequency Energy Harvesting. Energies, 2017, 10, 2024.	3.1	31
48	Numerical Modeling of Electromagnetic and Multi-point Impacts Stoppers Coupling for Low Frequency Energy Harvesting. DEStech Transactions on Computer Science and Engineering, 2017, , .	0.1	0
49	Dynamic phenomena and analysis of MEMS capacitive power harvester subjected to low-frequency excitations. Nonlinear Dynamics, 2015, 79, 673-688.	5.2	14
50	Surface Micromachined MEMS Capacitors With Dual Cavity for Energy Harvesting. Journal of Microelectromechanical Systems, 2013, 22, 1458-1469.	2.5	7
51	MEMS capacitors with dual cavity for power harvesting. Proceedings of SPIE, 2012, , .	0.8	1
52	Dynamic Study of MEMS Variable Capacitive Device for Power Harvesting. , 2012, , .		2
53	Two-cavity MEMS capacitive power scavenger. Proceedings of SPIE, 2012, , .	0.8	1
54	Two-cavity MEMS variable capacitor for power harvesting. Journal of Micromechanics and Microengineering, 2012, 22, 065003.	2.6	7