

# Xiao-Sheng Zhang

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2259773/xiao-sheng-zhang-publications-by-citations.pdf>  
**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

42 papers	2,270 citations	16 h-index	47 g-index
51 ext. papers	2,759 ext. citations	8.8 avg, IF	5.22 L-index

#	Paper	IF	Citations
42	Frequency-multiplication high-output triboelectric nanogenerator for sustainably powering biomedical microsystems. <i>Nano Letters</i> , <b>2013</b> , 13, 1168-72	11.5	499
41	All-fiber hybrid piezoelectric-enhanced triboelectric nanogenerator for wearable gesture monitoring. <i>Nano Energy</i> , <b>2018</b> , 48, 152-160	17.1	231
40	High-performance triboelectric nanogenerator with enhanced energy density based on single-step fluorocarbon plasma treatment. <i>Nano Energy</i> , <b>2014</b> , 4, 123-131	17.1	229
39	r-Shaped hybrid nanogenerator with enhanced piezoelectricity. <i>ACS Nano</i> , <b>2013</b> , 7, 8554-60	16.7	188
38	All-in-one self-powered flexible microsystems based on triboelectric nanogenerators. <i>Nano Energy</i> , <b>2018</b> , 47, 410-426	17.1	185
37	High performance triboelectric nanogenerators based on large-scale mass-fabrication technologies. <i>Nano Energy</i> , <b>2015</b> , 11, 304-322	17.1	149
36	A flexible and implantable piezoelectric generator harvesting energy from the pulsation of ascending aorta: in vitro and in vivo studies. <i>Nano Energy</i> , <b>2015</b> , 12, 296-304	17.1	111
35	A silk-fibroin-based transparent triboelectric generator suitable for autonomous sensor network. <i>Nano Energy</i> , <b>2016</b> , 20, 37-47	17.1	96
34	Penciling a triboelectric nanogenerator on paper for autonomous power MEMS applications. <i>Nano Energy</i> , <b>2017</b> , 33, 393-401	17.1	95
33	Magnetic-assisted triboelectric nanogenerators as self-powered visualized omnidirectional tilt sensing system. <i>Scientific Reports</i> , <b>2014</b> , 4, 4811	4.9	82
32	Printed silk-fibroin-based triboelectric nanogenerators for multi-functional wearable sensing. <i>Nano Energy</i> , <b>2019</b> , 66, 104123	17.1	65
31	Self-powered smart active RFID tag integrated with wearable hybrid nanogenerator. <i>Nano Energy</i> , <b>2019</b> , 64, 103911	17.1	43
30	Self-cleaning poly(dimethylsiloxane) film with functional micro/nano hierarchical structures. <i>Langmuir</i> , <b>2013</b> , 29, 10769-75	4	40
29	Wearable multi-sensing double-chain thermoelectric generator. <i>Microsystems and Nanoengineering</i> , <b>2020</b> , 6, 68	7.7	29
28	Recent progress in silk fibroin-based flexible electronics. <i>Microsystems and Nanoengineering</i> , <b>2021</b> , 7, 35	7.7	25
27	An unmovable single-layer triboelectric generator driven by sliding friction. <i>Nano Energy</i> , <b>2014</b> , 9, 401-407	17.1	16
26	Tunable wetting behavior of nanostructured poly(dimethylsiloxane) by plasma combination treatments. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 221601	3.4	16

25	Unidirectional-current triboelectric nanogenerator based on periodical lateral-cantilevers. <i>Nano Energy</i> , <b>2020</b> , 74, 104770	17.1	16
24	Single-Layer Triboelectric Nanogenerators Based on Ion-Doped Natural Nanofibrils. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 42859-42867	9.5	16
23	Super-stretchable multi-sensing triboelectric nanogenerator based on liquid conductive composite. <i>Nano Energy</i> , <b>2021</b> , 83, 105823	17.1	16
22	Switchable wetting and flexible SiC thin film with nanostructures for microfluidic surface-enhanced Raman scattering sensors. <i>Sensors and Actuators A: Physical</i> , <b>2014</b> , 208, 166-173	3.9	15
21	3D nanostructure reconstruction based on the SEM imaging principle, and applications. <i>Nanotechnology</i> , <b>2014</b> , 25, 185705	3.4	12
20	Dissipation Analysis Methods and Q-Enhancement Strategies in Piezoelectric MEMS Laterally Vibrating Resonators: A Review. <i>Sensors</i> , <b>2020</b> , 20,	3.8	12
19	Self-powered trajectory-tracking microsystem based on electrode-miniaturized triboelectric nanogenerator. <i>Nano Energy</i> , <b>2021</b> , 82, 105730	17.1	12
18	Note: A cubic electromagnetic harvester that convert vibration energy from all directions. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 076109	1.7	9
17	Textile-Based Triboelectric Nanogenerators for Wearable Self-Powered Microsystems. <i>Micromachines</i> , <b>2021</b> , 12,	3.3	9
16	Spider Web-Like Phononic Crystals for Piezoelectric MEMS Resonators to Reduce Acoustic Energy Dissipation. <i>Micromachines</i> , <b>2019</b> , 10,	3.3	7
15	Quality factor improvement of piezoelectric MEMS resonator by the conjunction of frame structure and phononic crystals. <i>Sensors and Actuators A: Physical</i> , <b>2019</b> , 297, 111541	3.9	6
14	Fabrication and characterization of the functional parylene-C film with micro/nano hierarchical structures. <i>Microelectronic Engineering</i> , <b>2015</b> , 141, 72-80	2.5	5
13	Flexible Hybrid Photo-Thermoelectric Generator Based on Single Thermoelectric Effect for Simultaneously Harvesting Thermal and Radiation Energies. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 21401-21410	9.5	5
12	Hybrid nanogenerator-based self-powered double-authentication microsystem for smart identification. <i>Nano Energy</i> , <b>2021</b> , 86, 106100	17.1	5
11	Flexible fabric-based wearable solid-state supercapacitor <b>2017</b> ,		4
10	Micro/Nano Integrated Fabrication Technology and Its Applications in Microenergy Harvesting. <i>Springer Theses</i> , <b>2016</b> ,	0.1	4
9	Silk Fibroin-Based Wearable All-Fiber Multifunctional Sensor for Smart Clothing. <i>Advanced Fiber Materials</i> , <sup>1</sup>	10.9	3
8	Fully-Differential TPoS Resonators Based on Dual Interdigital Electrodes for Feedthrough Suppression. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	2

7	Flexible Triboelectric Nanogenerators: Enhancement and Applications. <i>Springer Theses</i> , <b>2016</b> , 93-117	0.1	2
6	Electron-Ion Coupling Mechanism to Construct Stable Output Performance Nanogenerator. <i>Research</i> , <b>2021</b> , 2021, 9817062	7.8	2
5	Suspended Frame Structure with Phononic Crystals for Anchor Loss Reduction of MEMS Resonator <b>2018</b> ,		2
4	An Artificial Electrical-Chemical Mixed Synapse Based on Ion-Gated MoS Nanosheets for Real-Time Facilitation Index Tuning. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 15755-15760	9.5	1
3	High-Q Multiple-Frequency Ring-Shaped Thin-Film Piezoelectric-on-Silicon Resonators <b>2018</b> ,		1
2	Flexible Triboelectric Nanogenerators: Principle and Fabrication. <i>Springer Theses</i> , <b>2016</b> , 75-91	0.1	
1	Flexible nanogenerator based on sponge-shaped piezoelectric composite. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 434002	3	