Xiao Peng

List of Publications by Year
in descending order

59 papers	5,819 citations	76326 40 h-index	144013 57 g-index
59 all docs	59 docs citations	59 times ranked	3664 citing authors

#	Article	IF	Citations
1	Triboelectric Nanogenerator Based on a Rotational Magnetic Ball for Harvesting Transmission Line Magnetic Energy. Advanced Functional Materials, 2022, 32, 2108827.	14.9	33
2	Ultrathin Stretchable All-Fiber Electronic Skin for Highly Sensitive Self-Powered Human Motion Monitoring. Nanoenergy Advances, 2022, 2, 52-63.	7.7	9
3	Helical Fiber Strain Sensors Based on Triboelectric Nanogenerators for Self-Powered Human Respiratory Monitoring. ACS Nano, 2022, 16, 2811-2821.	14.6	102
4	Advances in Highâ€Performance Autonomous Energy and Selfâ€Powered Sensing Textiles with Novel 3D Fabric Structures. Advanced Materials, 2022, 34, e2109355.	21.0	118
5	Sweatâ€Permeable, Biodegradable, Transparent and Selfâ€powered Chitosanâ€Based Electronic Skin with Ultrathin Elastic Gold Nanofibers. Advanced Functional Materials, 2022, 32, .	14.9	80
6	Underwater Monitoring Networks Based on Cable-Structured Triboelectric Nanogenerators. Research, 2022, 2022, 9809406.	5.7	4
7	Ultrathin Eardrumâ€Inspired Selfâ€Powered Acoustic Sensor for Vocal Synchronization Recognition with the Assistance of Machine Learning. Small, 2022, 18, e2106960.	10.0	43
8	<scp>Largeâ€scale</scp> fabrication of <scp>coreâ€shell</scp> triboelectric braided fibers and power textiles for energy harvesting and plantar pressure monitoring. EcoMat, 2022, 4, .	11.9	44
9	A Dual-Mode Triboelectric Nanogenerator for Wind Energy Harvesting and Self-Powered Wind Speed Monitoring. ACS Nano, 2022, 16, 6244-6254.	14.6	111
10	Smart Textile Triboelectric Nanogenerators: Prospective Strategies for Improving Electricity Output Performance. Nanoenergy Advances, 2022, 2, 133-164.	7.7	59
11	Industrial production of bionic scales knitting fabric-based triboelectric nanogenerator for outdoor rescue and human protection. Nano Energy, 2022, 97, 107168.	16.0	28
12	A self-powered and concealed sensor based on triboelectric nanogenerators for cultural-relic anti-theft systems. Nano Research, 2022, 15, 8435-8441.	10.4	9
13	An Openâ€Environment Tactile Sensing System: Toward Simple and Efficient Material Identification. Advanced Materials, 2022, 34, e2203073.	21.0	72
14	Vibration-Driven Triboelectric Nanogenerator for Vibration Attenuation and Condition Monitoring for Transmission Lines. Nano Letters, 2022, 22, 5584-5591.	9.1	36
15	Enhanced Output of Onâ€Body Directâ€Current Power Textiles by Efficient Energy Management for Sustainable Working of Mobile Electronics. Advanced Energy Materials, 2022, 12, .	19.5	23
16	Hybrid Triboelectricâ€Electromagnetic Magnetic Energy Harvesterâ€Based Sensing for Wireless Monitoring of Transmission Lines. Small, 2022, 18, .	10.0	14
17	Stretchable, Washable, and Ultrathin Triboelectric Nanogenerators as Skinâ€Like Highly Sensitive Selfâ€Powered Haptic Sensors. Advanced Functional Materials, 2021, 31, .	14.9	155
18	Multi-Layer Extreme Learning Machine-Based Keystroke Dynamics Identification for Intelligent Keyboard. IEEE Sensors Journal, 2021, 21, 2324-2333.	4.7	10

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19	Flexible and Stretchable Fiberâ€Shaped Triboelectric Nanogenerators for Biomechanical Monitoring and Humanâ€Interactive Sensing. Advanced Functional Materials, 2021, 31, 2006679.	14.9	145
20	All-in-one 3D acceleration sensor based on coded liquidâ€“metal triboelectric nanogenerator for vehicle restraint system. Materials Today, 2021, 43, 37-44.	14.2	113
21	UV-Protective, Self-Cleaning, and Antibacterial Nanofiber-Based Triboelectric Nanogenerators for Self-Powered Human Motion Monitoring. ACS Applied Materials & Interfaces, 2021, 13, 11205-11214.	8.0	111
22	Smart Wearable Sensors Based on Triboelectric Nanogenerator for Personal Healthcare Monitoring. Micromachines, 2021, 12, 352.	2.9	62
23	Fully Fabric-Based Triboelectric Nanogenerators as Self-Powered Humanâ€“Machine Interactive Keyboards. Nano-Micro Letters, 2021, 13, 103.	27.0	96
24	A Skinâ€Inspired Triboelectric Nanogenerator with an Interpenetrating Structure for Motion Sensing and Energy Harvesting. Macromolecular Materials and Engineering, 2021, 306, 2100147.	3.6	13
25	Allâ€Nanofiber Selfâ€Powered Skinâ€Interfaced Realâ€Time Respiratory Monitoring System for Obstructive Sleep Apneaâ€Hypopnea Syndrome Diagnosing. Advanced Functional Materials, 2021, 31, 2103559.	14.9	115
26	A review on emerging biodegradable polymers for environmentally benign transient electronic skins. Journal of Materials Science, 2021, 56, 16765-16789.	3.7	49
27	Scalable and washable 3D warp-knitted spacer power fabrics for energy harvesting and pressure sensing. Journal Physics D: Applied Physics, 2021, 54, 424006.	2.8	23
28	Dual-mode thermal-regulating and self-powered pressure sensing hybrid smart fibers. Chemical Engineering Journal, 2021, 420, 129650.	12.7	34
29	Self-Powered Smart Arm Training Band Sensor Based on Extremely Stretchable Hydrogel Conductors. ACS Applied Materials & Interfaces, 2021, 13, 44868-44877.	8.0	49
30	Design Optimization of Softâ€Contact Freestanding Rotary Triboelectric Nanogenerator for Highâ€Output Performance. Advanced Energy Materials, 2021, 11, 2102106.	19.5	45
31	High output direct-current power fabrics based on the air breakdown effect. Energy and Environmental Science, 2021, 14, 2460-2471.	30.8	58
32	Integrated All-Fiber Electronic Skin toward Self-Powered Sensing Sports Systems. ACS Applied Materials & Interfaces, 2021, 13, 50329-50337.	8.0	60
33	A Hydrophobic Self-Repairing Power Textile for Effective Water Droplet Energy Harvesting. ACS Nano, 2021, 15, 18172-18181.	14.6	83
34	Fiber/Fabricâ€Based Piezoelectric and Triboelectric Nanogenerators for Flexible/Stretchable and Wearable Electronics and Artificial Intelligence. Advanced Materials, 2020, 32, e1902549.	21.0	826
35	Rationally designed rotation triboelectric nanogenerators with much extended lifetime and durability. Nano Energy, 2020, 68, 104378.	16.0	111
36	Flame-Retardant Textile-Based Triboelectric Nanogenerators for Fire Protection Applications. ACS Nano, 2020, 14, 15853-15863.	14.6	133

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37	Self-Powered Sensors and Systems Based on Nanogenerators. Sensors, 2020, 20, 2925.	3.8	195
38	Shape adaptable and highly resilient 3D braided triboelectric nanogenerators as e-textiles for power and sensing. Nature Communications, 2020, 11, 2868.	12.8	285
39	A breathable, biodegradable, antibacterial, and self-powered electronic skin based on all-nanofiber triboelectric nanogenerators. Science Advances, 2020, 6, eaba9624.	10.3	589
40	Actuation and sensor integrated self-powered cantilever system based on TENG technology. Nano Energy, 2019, 64, 103920.	16.0	60
41	Multifunctional Sensor Based on Translationalâ€Rotary Triboelectric Nanogenerator. Advanced Energy Materials, 2019, 9, 1901124.	19.5	101
42	A Hybridized Triboelectricâ€“Electromagnetic Water Wave Energy Harvester Based on a Magnetic Sphere. ACS Nano, 2019, 13, 2349-2356.	14.6	92
43	TriboPump: A Lowâ€Cost, Handâ€Powered Water Disinfection System. Advanced Energy Materials, 2019, 9, 1901320.	19.5	74
44	Energy Harvestingâ€Storage Bracelet Incorporating Electrochemical Microsupercapacitors Selfâ€Charged from a Single Hand Gesture. Advanced Energy Materials, 2019, 9, 1900152.	19.5	47
45	Electrohydrodynamic Jet Printing Driven by a Triboelectric Nanogenerator. Advanced Functional Materials, 2019, 29, 1901102.	14.9	59
46	Rational Structure Optimized Hybrid Nanogenerator for Highly Efficient Water Wave Energy Harvesting. Advanced Energy Materials, 2019, 9, 1802892.	19.5	92
47	Direct-Current Rotary-Tubular Triboelectric Nanogenerators Based on Liquid-Dielectrics Contact for Sustainable Energy Harvesting and Chemical Composition Analysis. ACS Nano, 2019, 13, 2587-2598.	14.6	66
48	Boosting the Solar Cell Efficiency by Flexo-photovoltaic Effect?. ACS Nano, 2019, 13, 12259-12267.	14.6	111
49	A Triboelectric Nanogeneratorâ€Based Smart Insole for Multifunctional Gait Monitoring. Advanced Materials Technologies, 2019, 4, 1800360.	5.8	181
50	A Stretchable Yarn Embedded Triboelectric Nanogenerator as Electronic Skin for Biomechanical Energy Harvesting and Multifunctional Pressure Sensing. Advanced Materials, 2018, 30, e1804944.	21.0	396
51	Self-Powered Multifunctional Motion Sensor Enabled by Magnetic-Regulated Triboelectric Nanogenerator. ACS Nano, 2018, 12, 5726-5733.	14.6	109
52	Note: High-efficiency broadband acoustic energy harvesting using Helmholtz resonator and dual piezoelectric cantilever beams. Review of Scientific Instruments, 2014, 85, 066103.	1.3	44
53	Significant tuning of band structures of magneto-mechanical phononic crystals using extraordinarily small magnetic fields. Applied Physics Letters, 2014, 105, 011904.	3.3	14
54	Enhanced acoustic wave localization effect using coupled sonic crystal resonators. Applied Physics Letters, 2014, 104, .	3.3	26

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55	A Power Supply of Self-Powered Online Monitoring Systems for Power Cords. IEEE Transactions on Energy Conversion, 2013, 28, 921-928.	5.2	54
56	Enhanced acoustoelectric coupling in acoustic energy harvester using dual helmholtz resonators. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, .	3.0	1
57	A wideband acoustic energy harvester using a three degree-of-freedom architecture. Applied Physics Letters, 2013, 103, .	3.3	36
58	Influence of shape demagnetizing effect on piezomagnetic coefficient in magnetostrictive/piezoelectric laminate composite. , 2012, , .		1
59	A Triboelectricâ€“Electromagnetic Hybrid Nanogenerator with Broadband Working Range for Wind Energy Harvesting and a Self-Powered Wind Speed Sensor. ACS Energy Letters, 0, , 1443-1452.	17.4	110