Jinkai Chen

List of Publications by Year
in descending order

52 papers	2,186 citations	279487 23 h-index	223531 46 g-index
52 all docs	52 docs citations	52 times ranked	2221 citing authors

#	Article	IF	Citations
1	Fully biodegradable triboelectric nanogenerators based on electrospun polylactic acid and nanostructured gelatin films. Nano Energy, 2018, 45, 193-202.	8.2	226
2	Fast Response and High Sensitivity ZnO/glass Surface Acoustic Wave Humidity Sensors Using Graphene Oxide Sensing Layer. Scientific Reports, 2014, 4, 7206.	1.6	149
3	High-performance triboelectric nanogenerator based on electrospun PVDF-graphene nanosheet composite nanofibers for energy harvesting. Nano Energy, 2021, 80, 105599.	8.2	142
4	Emulsion Electrospinning of Polytetrafluoroethylene (PTFE) Nanofibrous Membranes for High-Performance Triboelectric Nanogenerators. ACS Applied Materials & Interfaces, 2018, 10, 5880-5891.	4.0	137
5	High performance triboelectric nanogenerators based on phase-inversion piezoelectric membranes of poly(vinylidene fluoride)-zinc stannate (PVDF-ZnSnO3) and polyamide-6 (PA6). Nano Energy, 2016, 30, 470-480.	8.2	134
6	Waist-wearable wireless respiration sensor based on triboelectric effect. Nano Energy, 2019, 59, 75-83.	8.2	117
7	Conjunction of triboelectric nanogenerator with induction coils as wireless power sources and self-powered wireless sensors. Nature Communications, 2020, 11, 58.	5.8	114
8	High sensitivity flexible Lamb-wave humidity sensors with a graphene oxide sensing layer. Nanoscale, 2015, 7, 7430-7436.	2.8	95
9	Carbon electrodes enable flat surface PDMS and PA6 triboelectric nanogenerators to achieve significantly enhanced triboelectric performance. Nano Energy, 2019, 55, 548-557.	8.2	85
10	Realizing the potential of polyethylene oxide as new positive tribo-material: Over 40â€¯W/m2 high power flat surface triboelectric nanogenerators. Nano Energy, 2018, 46, 63-72.	8.2	84
11	A general optimization approach for contact-separation triboelectric nanogenerator. Nano Energy, 2019, 56, 700-707.	8.2	70
12	Enhanced performance triboelectric nanogenerators based on solid polymer electrolytes with different concentrations of cations. Nano Energy, 2019, 64, 103960.	8.2	59
13	Triboelectric effect based instantaneous self-powered wireless sensing with self-determined identity. Nano Energy, 2018, 51, 1-9.	8.2	56
14	Fully self-powered instantaneous wireless humidity sensing system based on triboelectric nanogenerator. Nano Energy, 2021, 83, 105814.	8.2	49
15	Transparent triboelectric generators based on glass and polydimethylsiloxane. Nano Energy, 2016, 30, 235-241.	8.2	47
16	Bendable transparent ZnO thin film surface acoustic wave strain sensors on ultra-thin flexible glass substrates. Journal of Materials Chemistry C, 2014, 2, 9109-9114.	2.7	44
17	A self-power-transmission and non-contact-reception keyboard based on a novel resonant triboelectric nanogenerator (R-TENG). Nano Energy, 2018, 50, 16-24.	8.2	44
18	Self-powered transparent glass-based single electrode triboelectric motion tracking sensor array. Nano Energy, 2017, 34, 442-448.	8.2	40

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19	Significant triboelectric enhancement using interfacial piezoelectric ZnO nanosheet layer. Nano Energy, 2017, 40, 471-480.	8.2	39
20	Significantly Enhanced Performance of Triboelectric Nanogenerator by Incorporating BaTiO₃ Nanoparticles in Poly(vinylidene fluoride) Film. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900068.	0.8	35
21	Bendable ZnO thin film surface acoustic wave devices on polyethylene terephthalate substrate. Applied Physics Letters, 2014, 104, .	1.5	31
22	Thermal annealing effect on ZnO surface acoustic wave-based ultraviolet light sensors on glass substrates. Applied Physics Letters, 2014, 104, .	1.5	29
23	AlScN thin film based surface acoustic wave devices with enhanced microfluidic performance. Journal of Micromechanics and Microengineering, 2016, 26, 075006.	1.5	29
24	A self-powered radio frequency (RF) transmission system based on the combination of triboelectric nanogenerator (TENG) and piezoelectric element for disaster rescue/relief. Nano Energy, 2018, 54, 331-340.	8.2	23
25	Fully self-powered instantaneous wireless traffic monitoring system based on triboelectric nanogenerator and magnetic resonance coupling. Nano Energy, 2021, 89, 106429.	8.2	23
26	Development of flexible ZnO thin film surface acoustic wave strain sensors on ultrathin glass substrates. Journal of Micromechanics and Microengineering, 2015, 25, 115005.	1.5	21
27	Triboelectric nanogenerator-enabled fully self-powered instantaneous wireless sensor systems. Nano Energy, 2022, 92, 106770.	8.2	21
28	Predicting the fluid behavior of random microfluidic mixers using convolutional neural networks. Lab on A Chip, 2021, 21, 296-309.	3.1	20
29	Comparative Study on Microfluidic Performance of ZnO Surface Acoustic Wave Devices on Various Substrates. Journal of the Electrochemical Society, 2014, 161, B230-B236.	1.3	19
30	Controlling Performance of Organicâ€“Inorganic Hybrid Perovskite Triboelectric Nanogenerators via Chemical Composition Modulation and Electric Fieldâ€Induced Ion Migration. Advanced Energy Materials, 2020, 10, 2002470.	10.2	19
31	Electric-Field-Resonance-Based Wireless Triboelectric Nanogenerators and Sensors. ACS Applied Materials & Interfaces, 2022, 14, 794-804.	4.0	18
32	Flexible dual-mode surface acoustic wave strain sensor based on crystalline LiNbO₃ thin film. Journal of Micromechanics and Microengineering, 2019, 29, 025003.	1.5	17
33	Self-powered pumping switched TENG enabled real-time wireless metal tin height and position recognition and counting for production line management. Nano Energy, 2021, 90, 106544.	8.2	14
34	Transparent ZnO/glass surface acoustic wave based high performance ultraviolet light sensors. Chinese Physics B, 2015, 24, 057701.	0.7	13
35	A langasite surface acoustic wave wide-range temperature sensor with excellent linearity and high sensitivity. AIP Advances, 2021, 11, .	0.6	12
36	Fully self-powered instantaneous wireless liquid level sensor system based on triboelectric nanogenerator. Nano Research, 2022, 15, 5425-5434.	5.8	12

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37	Flexible Surface Acoustic Wave Humidity Sensor with on Chip Temperature Compensation. Procedia Engineering, 2015, 120, 364-367.	1.2	11
38	Triboelectric Nanogenerator-Based Self-Powered Resonant Sensor for Non-Destructive Defect Detection. Sensors, 2019, 19, 3262.	2.1	10
39	Automatic Classification of Normalâ€"Abnormal Heart Sounds Using Convolution Neural Network and Long-Short Term Memory. Electronics (Switzerland), 2022, 11, 1246.	1.8	10
40	Universal Triboelectric Nanogenerator Simulation Based on Dynamic Finite Element Method Model. Sensors, 2020, 20, 4838.	2.1	9
41	Comparison of sputtering and atomic layer deposition based ultra-thin alumina protective layers for high temperature surface acoustic wave devices. Journal of Materials Research and Technology, 2021, 15, 4714-4724.	2.6	9
42	Flexible and Transparent Surface Acoustic Wave Microsensors and Microfluidics. Procedia Engineering, 2015, 120, 717-720.	1.2	8
43	Bulk acoustic wave resonator based wireless and passive pressure sensor. Vacuum, 2020, 178, 109433.	1.6	8
44	Ultra-thin atom layer deposited alumina film enables the precise lifetime control of fully biodegradable electronic devices. Nanoscale, 2019, 11, 22369-22377.	2.8	7
45	Mode Analysis of Pt/LGS Surface Acoustic Wave Devices. Sensors, 2020, 20, 7111.	2.1	5
46	Surface Acoustic Wave Strain Sensor With Ultra-Thin Langasite. IEEE Sensors Journal, 2022, 22, 11509-11516.	2.4	5
47	Surface electrical properties modulation by multimode polarizations inside hybrid perovskite films investigated through contact electrification effect. Nano Energy, 2021, 89, 106318.	8.2	4
48	High temperature effects on surface acoustic wave strain sensor. Sensors and Actuators A: Physical, 2022, 338, 113464.	2.0	4
49	Rapid Determination of Phenylalanine by Micro-chip Based Field Asymmetric Waveform Ion Mobility Spectrometry Technology. Chinese Journal of Analytical Chemistry, 2016, 44, 617-624.	0.9	3
50	Flexible surface acoustic wave broadband strain sensors based on ultra-thin flexible glass substrate. MRS Advances, 2016, 1, 1519-1524.	0.5	2
51	New composite electrode for high temperature surface acoustic wave device. Materials Letters, 2021, 294, 129768.	1.3	2
52	Analytical Study of the Film Bulk Acoustic Resonators Based on Single Crystal $LiNbO_3$ with Different Crystal Orientations. Integrated Ferroelectrics, 2021, 213, 182-193.	0.3	2