Jikui Luo

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

128 papers	3,518 citations	35 h-index	54 g-index
135 ext. papers	4,379 ext. citations	7.9 avg, IF	5.33 L-index

#	Paper	IF	Citations
128	Novel Adjustable Self-compensation Flipped Voltage Follower of ZnO TFTs for Transparent Pixel Circuits. *IEEE Electron Device Letters*, **2022**, 1-1	4.4	1
127	Triboelectric nanogenerator-enabled fully self-powered instantaneous wireless sensor systems. *Nano Energy*, **2022**, 92, 106770	17.1	4
126	Transparent Floating Gate Memory Based on ZnO Thin Film Transistor With Controllable Memory Window. *IEEE Journal of the Electron Devices Society*, **2022**, 10, 275-280	2.3	1
125	High temperature effects on surface acoustic wave strain sensor. *Sensors and Actuators A: Physical*, **2022**, 338, 113464	3.9	
124	Automatic Classification of Normal⁄Abnormal Heart Sounds Using Convolution Neural Network and Long-Short Term Memory. *Electronics (Switzerland)*, **2022**, 11, 1246	2.6	1
123	Silicon-Controlled Rectifier Embedded Diode for 7 nm FinFET Process Electrostatic Discharge Protection. *Nanomaterials*, **2022**, 12, 1743	5.4	0
122	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**,	5.5	2
121	Fully self-powered instantaneous wireless humidity sensing system based on triboelectric nanogenerator. *Nano Energy*, **2021**, 83, 105814	17.1	19
120	Flexible and bendable acoustofluidics for particle and cell patterning. *International Journal of Mechanical Sciences*, **2021**, 202-203, 106536	5.5	2
119	Piezoelectric boron nitride nanosheets for high performance energy harvesting devices. *Nano Energy*, **2021**, 80, 105561	17.1	16
118	High-performance triboelectric nanogenerator based on electrospun PVDF-graphene nanosheet composite nanofibers for energy harvesting. *Nano Energy*, **2021**, 80, 105599	17.1	39
117	Engineering inclined orientations of piezoelectric films for integrated acoustofluidics and lab-on-a-chip operated in liquid environments. *Lab on A Chip*, **2021**, 21, 254-271	7.2	9
116	Interface modulated 0-D piezoceramic nanoparticles/PDMS based piezoelectric composites for highly efficient energy harvesting application. *Nano Energy*, **2021**, 82, 105709	17.1	16
115	Novel insights from the ultra-thin film, strain-modulated dynamic triboelectric characterizations. *Nano Energy*, **2021**, 80, 105560	17.1	7
114	A Flexible Capacitive 3D Tactile Sensor With Cross-Shaped Capacitor Plate Pair and Composite Structure Dielectric. *IEEE Sensors Journal*, **2021**, 21, 1378-1385	4	14
113	A langasite surface acoustic wave wide-range temperature sensor with excellent linearity and high sensitivity. *AIP Advances*, **2021**, 11, 015143	1.5	3
112	Emotion Recognition Based on Skin Potential Signals with a Portable Wireless Device. *Sensors*, **2021**, 21,	3.8	6

111	Flexible Strain Sensor Based on Ultra-Thin Quartz Plate. *IEEE Sensors Journal*, **2021**, 21, 18571-18577	4	2
110	Bismuth oxyhalide based photo-enhanced triboelectric nanogenerators. *Nano Energy*, **2021**, 89, 106419	17.1	3
109	Fully self-powered instantaneous wireless traffic monitoring system based on triboelectric nanogenerator and magnetic resonance coupling. *Nano Energy*, **2021**, 89, 106429	17.1	6
108	Surface electrical properties modulation by multimode polarizations inside hybrid perovskite films investigated through contact electrification effect. *Nano Energy*, **2021**, 89, 106318	17.1	2
107	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	17.1	3
106	Analytical Study of the Film Bulk Acoustic Resonators Based on Single Crystal LiNbO3 with Different Crystal Orientations. *Integrated Ferroelectrics*, **2021**, 213, 182-193	0.8	0
105	Single Crystal Bulk Acoustic Resonator for 5 GHz and High-Power Applications. *Integrated Ferroelectrics*, **2021**, 221, 64-72	0.8	
104	Electric-Field-Resonance-Based Wireless Triboelectric Nanogenerators and Sensors.. *ACS Applied Materials & Interfaces*, **2021**,	9.5	1
103	Controlling Performance of Organic□Inorganic Hybrid Perovskite Triboelectric Nanogenerators via Chemical Composition Modulation and Electric Field-Induced Ion Migration. *Advanced Energy Materials*, **2020**, 10, 2002470	21.8	11
102	Recent Advances in Porous 3D Cellulose Aerogels for Tissue Engineering Applications: A Review. *Journal of Composites Science*, **2020**, 4, 152	3	16
101	Replacing the metal electrodes in triboelectric nanogenerators: High-performance laser-induced graphene electrodes. *Nano Energy*, **2020**, 75, 104958	17.1	35
100	Hierarchical Nanotexturing Enables Acoustofluidics on Slippery yet Sticky, Flexible Surfaces. *Nano Letters*, **2020**, 20, 3263-3270	11.5	23
99	A Flexible Film Bulk Acoustic Resonator Based on -Phase Polyvinylidene Fluoride Polymer. *Sensors*, **2020**, 20,	3.8	4
98	Flexible and fully biodegradable resistance random access memory based on a gelatin dielectric. *Nanotechnology*, **2020**, 31, 255204	3.4	8
97	Three-Dimensional Tetrapodal ZnO Microstructured Network Based Flexible Surface Acoustic Wave Device for Ultraviolet and Respiration Monitoring Applications. *ACS Applied Nano Materials*, **2020**, 3, 1468-1478	5.6	16
96	Ultrathin single-crystalline LiNbO3 film bulk acoustic resonator for 5G communication. *Electronics Letters*, **2020**, 56, 1142-1143	1.1	4
95	Review on Biomedical Sensors, Technologies and Algorithms for Diagnosis of Sleep Disordered Breathing: Comprehensive Survey. *IEEE Reviews in Biomedical Engineering*, **2020**, PP,	6.4	3
94	Highly porous polymer cryogel based tribopositive material for high performance triboelectric nanogenerators. *Nano Energy*, **2020**, 68, 104294	17.1	22

93	Conjunction of triboelectric nanogenerator with induction coils as wireless power sources and self-powered wireless sensors. *Nature Communications*, **2020**, 11, 58	17.4	65
92	A novel rhombic-shaped paper-based triboelectric nanogenerator for harvesting energy from environmental vibration. *Sensors and Actuators A: Physical*, **2020**, 302, 111806	3.9	17
91	Expanding the portfolio of tribo-positive materials: Aniline formaldehyde condensates for high charge density triboelectric nanogenerators. *Nano Energy*, **2020**, 67, 104291	17.1	13
90	Crosslinked porous three-dimensional cellulose nanofibers-gelatine biocomposite scaffolds for tissue regeneration. *International Journal of Biological Macromolecules*, **2020**, 164, 1949-1959	7.9	14
89	Origami-tessellation-based triboelectric nanogenerator for energy harvesting with application in road pavement. *Nano Energy*, **2020**, 78, 105177	17.1	19
88	Universal Triboelectric Nanogenerator Simulation Based on Dynamic Finite Element Method Model. *Sensors*, **2020**, 20,	3.8	2
87	Mode Analysis of Pt/LGS Surface Acoustic Wave Devices. *Sensors*, **2020**, 20,	3.8	4
86	Waist-wearable wireless respiration sensor based on triboelectric effect. *Nano Energy*, **2019**, 59, 75-83	17.1	70
85	Bioresorbable Electrode Array for Electrophysiological and Pressure Signal Recording in the Brain. *Advanced Healthcare Materials*, **2019**, 8, e1801649	10.1	20
84	Effects of liquid metal particles on performance of triboelectric nanogenerator with electrospun polyacrylonitrile fiber films. *Nano Energy*, **2019**, 61, 381-388	17.1	34
83	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	1.6	15
82	Graphene-Based Fully Transparent Thin Film Surface Acoustic Wave Devices for Sensing and Lab-on-Chip Applications. *Journal of the Electrochemical Society*, **2019**, 166, B432-B440	3.9	11
81	Enhanced performance triboelectric nanogenerators based on solid polymer electrolytes with different concentrations of cations. *Nano Energy*, **2019**, 64, 103960	17.1	26
80	A model for the triboelectric nanogenerator with inductive load and its energy boost potential. *Nano Energy*, **2019**, 63, 103883	17.1	10
79	Triboelectric Nanogenerator-Based Self-Powered Resonant Sensor for Non-Destructive Defect Detection. *Sensors*, **2019**, 19,	3.8	4
78	Surface-Acoustic-Wave-Based Lab-on-Chip for Rapid Transport of Cryoprotectants across Cell Membrane for Cryopreservation with Significantly Improved Cell Viability. *Small*, **2019**, 15, e1805361	11	13
77	Ultra-thin atom layer deposited alumina film enables the precise lifetime control of fully biodegradable electronic devices. *Nanoscale*, **2019**, 11, 22369-22377	7.7	4
76	A Portable Triboelectric Nanogenerator for Real-Time Respiration Monitoring. *Nanoscale Research Letters*, **2019**, 14, 354	5	30

75	Carbon electrodes enable flat surface PDMS and PA6 triboelectric nanogenerators to achieve significantly enhanced triboelectric performance. *Nano Energy*, **2019**, 55, 548-557	17.1	55
74	A general optimization approach for contact-separation triboelectric nanogenerator. *Nano Energy*, **2019**, 56, 700-707	17.1	44
73	Flexible dual-mode surface acoustic wave strain sensor based on crystalline LiNbO3 thin film. *Journal of Micromechanics and Microengineering*, **2019**, 29, 025003	2	7
72	First-principle approach based bandgap engineering for cubic boron nitride doped with group IIA elements. *AIP Advances*, **2018**, 8, 035106	1.5	1
71	Realizing the potential of polyethylene oxide as new positive tribo-material: Over 40 W/m2 high power flat surface triboelectric nanogenerators. *Nano Energy*, **2018**, 46, 63-72	17.1	51
70	Emulsion Electrospinning of Polytetrafluoroethylene (PTFE) Nanofibrous Membranes for High-Performance Triboelectric Nanogenerators. *ACS Applied Materials & Interfaces*, **2018**, 10, 5880-5891	9.5	82
69	Fully biodegradable triboelectric nanogenerators based on electrospun polylactic acid and nanostructured gelatin films. *Nano Energy*, **2018**, 45, 193-202	17.1	128
68	Flexible surface acoustic wave strain sensor based on single crystalline LiNbO3 thin film. *Applied Physics Letters*, **2018**, 112, 093502	3.4	27
67	Biomaterial Gelatin Film Based Crossbar Structure Resistive Switching Devices. *IEEE Nanotechnology Magazine*, **2018**, 17, 78-83	2.6	14
66	A self-power-transmission and non-contact-reception keyboard based on a novel resonant triboelectric nanogenerator (R-TENG). *Nano Energy*, **2018**, 50, 16-24	17.1	32
65	Significant Effects of Electrode Metal Work Function on Resistive Memory Devices with Gelatin Biodielectric Layer. *Journal of the Electrochemical Society*, **2018**, 165, G90-G95	3.9	5
64	Triboelectric effect based instantaneous self-powered wireless sensing with self-determined identity. *Nano Energy*, **2018**, 51, 1-9	17.1	40
63	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	17.1	17
62	Film bulk acoustic resonators (FBARs) as biosensors: A review. *Biosensors and Bioelectronics*, **2018**, 116, 1-15	11.8	43
61	Distilling determination of water content in hydraulic oil with a ZnO/glass surface acoustic wave device. *Microsystem Technologies*, **2017**, 23, 1841-1845	1.7	7
60	Designing an Efficient Multimode Environmental Sensor Based on Graphene–Silicon Heterojunction. *Advanced Materials Technologies*, **2017**, 2, 1600262	6.8	38
59	Self-powered transparent glass-based single electrode triboelectric motion tracking sensor array. *Nano Energy*, **2017**, 34, 442-448	17.1	28
58	Ultrafast chemical-free cell lysis by high speed stream collision induced by surface acoustic waves. *Applied Physics Letters*, **2017**, 110, 143504	3.4	15

57	A film bulk acoustic resonator oscillator based humidity sensor with graphene oxide as the sensitive layer. *Journal of Micromechanics and Microengineering*, **2017**, 27, 055017	2	27
56	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. *Npj 2D Materials and Applications*, **2017**, 1,	8.8	144
55	Photodetectors: A Broadband Fluorographene Photodetector (Adv. Mater. 22/2017). *Advanced Materials*, **2017**, 29,	24	1
54	A Broadband Fluorographene Photodetector. *Advanced Materials*, **2017**, 29, 1700463	24	72
53	A humidity sensor based on quartz crystal microbalance using graphene oxide as a sensitive layer. *Vacuum*, **2017**, 140, 101-105	3.7	25
52	Mechanism and Origin of Hysteresis in Oxide Thin-Film Transistor and Its Application on 3-D Nonvolatile Memory. *IEEE Transactions on Electron Devices*, **2017**, 64, 438-446	2.9	41
51	Significant triboelectric enhancement using interfacial piezoelectric ZnO nanosheet layer. *Nano Energy*, **2017**, 40, 471-480	17.1	25
50	Flexible surface acoustic wave respiration sensor for monitoring obstructive sleep apnea syndrome. *Journal of Micromechanics and Microengineering*, **2017**, 27, 115006	2	26
49	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	17.1	97
48	Determination of n-alkanes contamination in soil samples by micro gas chromatography functionalized by multi-walled carbon nanotubes. *Chemosphere*, **2016**, 158, 154-62	8.4	7
47	A micro gas chromatography with separation capability enhanced by polydimethylsiloxane stationary phase functionalized by carbon nanotubes and graphene. *Talanta*, **2016**, 154, 99-108	6.2	18
46	Flexible surface acoustic wave broadband strain sensors based on ultra-thin flexible glass substrate. *MRS Advances*, **2016**, 1, 1519-1524	0.7	2
45	Transient Resistive Switching Devices Made from Egg Albumen Dielectrics and Dissolvable Electrodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 10954-60	9.5	100
44	Flexible film bulk acoustic resonators and filter-like structure made directly on polymer substrates. *Integrated Ferroelectrics*, **2016**, 168, 157-162	0.8	8
43	High pressure effects in high-field asymmetric waveform ion mobility spectrometry. *Rapid Communications in Mass Spectrometry*, **2016**, 30, 1914-22	2.2	1
42	Transparent triboelectric generators based on glass and polydimethylsiloxane. *Nano Energy*, **2016**, 30, 235-241	17.1	40
41	High sensitivity flexible Lamb-wave humidity sensors with a graphene oxide sensing layer. *Nanoscale*, **2015**, 7, 7430-6	7.7	80
40	Discrete microfluidics based on aluminum nitride surface acoustic wave devices. *Microfluidics and Nanofluidics*, **2015**, 18, 537-548	2.8	37

39	Film bulk acoustic resonators integrated on arbitrary substrates using a polymer support layer. *Scientific Reports*, **2015**, 5, 9510	4.9	30
38	Exclusive self-aligned β-phase PVDF films with abnormal piezoelectric coefficient prepared via phase inversion. *Chemical Communications*, **2015**, 51, 8257-60	5.8	123
37	UV sensing using film bulk acoustic resonators based on Au/n-ZnO/piezoelectric-ZnO/Al structure. *Scientific Reports*, **2015**, 5, 9123	4.9	23
36	Comprehensive theoretical analysis and experimental exploration of ultrafast microchip-based high-field asymmetric ion mobility spectrometry (FAIMS) technique. *Journal of Mass Spectrometry*, **2015**, 50, 792-801	2.2	3
35	Fast and sensitive determination of sulfur dioxide in herbal medicines by microchip-based field asymmetric-wave ion mobility spectrometry. *Analytical Methods*, **2015**, 7, 1036-1045	3.2	4
34	Development of flexible ZnO thin film surface acoustic wave strain sensors on ultrathin glass substrates. *Journal of Micromechanics and Microengineering*, **2015**, 25, 115005	2	15
33	Determination of melamine in milk and dairy products by microchip-based high-field asymmetric ion mobility spectrometry combined with solid-phase extraction. *Food Chemistry*, **2015**, 188, 489-95	8.5	21
32	Flexible Surface Acoustic Wave Humidity Sensor with on Chip Temperature Compensation. *Procedia Engineering*, **2015**, 120, 364-367		9
31	Fast response and high sensitivity ZnO/glass surface acoustic wave humidity sensors using graphene oxide sensing layer. *Scientific Reports*, **2014**, 4, 7206	4.9	115
30	Resistive switching of in situ and ex situ oxygen plasma treated ZnO thin film deposited by atomic layer deposition. *Applied Physics A: Materials Science and Processing*, **2014**, 116, 663-669	2.6	10
29	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	7.1	35
28	Bendable ZnO thin film surface acoustic wave devices on polyethylene terephthalate substrate. *Applied Physics Letters*, **2014**, 104, 213504	3.4	18
27	Thermal annealing effect on ZnO surface acoustic wave-based ultraviolet light sensors on glass substrates. *Applied Physics Letters*, **2014**, 104, 212107	3.4	25
26	Surface smoothing effect of an amorphous thin film deposited by atomic layer deposition on a surface with nano-sized roughness. *AIP Advances*, **2014**, 4, 027120	1.5	19
25	Flexible surface acoustic wave devices and its applications in microfluidics. *Materials Research Society Symposia Proceedings*, **2014**, 1659, 27-33		
24	Vertically aligned smooth ZnO nanorod films for planar device applications. *Journal of Materials Chemistry C*, **2013**, 1, 2525	7.1	13
23	Ab initio study of electronic and optical behavior of two-dimensional silicon carbide. *Journal of Materials Chemistry C*, **2013**, 1, 2131	7.1	111
22	High sensitivity humidity sensors using flexible surface acoustic wave devices made on nanocrystalline ZnO/polyimide substrates. *Journal of Materials Chemistry C*, **2013**, 1, 6210	7.1	71

21	Bipolar resistive switching characteristics of low temperature grown ZnO thin films by plasma-enhanced atomic layer deposition. *Applied Physics Letters*, **2013**, 102, 012113	3.4	50
20	High stability fluorinated zinc oxide thin film transistor and its application on high precision active-matrix touch panel **2013**,		6
19	Flexible surface acoustic wave resonators built on disposable plastic film for electronics and lab-on-a-chip applications. *Scientific Reports*, **2013**, 3, 2140	4.9	94
18	Crystalline structure effect on the performance of flexible ZnO/polyimide surface acoustic wave devices. *Journal of Applied Physics*, **2013**, 114, 044502	2.5	27
17	Making shape memory polymers reprocessable and reusable by a simple chemical method. *Journal of Materials Chemistry*, **2012**, 22, 8192		15
16	Microfluidics based on ZnO/nanocrystalline diamond surface acoustic wave devices. *Biomicrofluidics* , **2012**, 6, 24105-2410511	3.2	55
15	Ab initio study of energy-band modulation in graphene-based two-dimensional layered superlattices. *Journal of Materials Chemistry*, **2012**, 22, 23821		17
14	High Performance Shape Memory Polyurethane Synthesized with High Molecular Weight Polyol as the Soft Segment. *Applied Sciences (Switzerland)*, **2012**, 2, 535-548	2.6	38
13	Influence of Substrate Temperature on Structural Properties and Deposition Rate of AlN Thin Film Deposited by Reactive Magnetron Sputtering. *Journal of Electronic Materials*, **2012**, 41, 1948-1954	1.9	28
12	Quantum and thermo-mechanical noise squeezing in nanoresonators: A comparative study. *Applied Physics Letters*, **2012**, 100, 023105	3.4	1
11	Feasibility study of polyurethane shape-memory polymer actuators for pressure bandage application. *Science and Technology of Advanced Materials*, **2012**, 13, 015006	7.1	31
10	Synthesis and Characterization of Polyurethane-Based Shape-Memory Polymers for Tailored Tg around Body Temperature for Medical Applications. *Macromolecular Chemistry and Physics*, **2011**, 212, 592-602	2.6	62
9	Deep reactive ion etching as a tool for nanostructure fabrication. *Journal of Vacuum Science & Technology B*, **2009**, 27, 1520		91
8	Microfluidic pumps employing surface acoustic waves generated in ZnO thin films. *Journal of Applied Physics*, **2009**, 105, 024508	2.5	60
7	Surface acoustic wave induced streaming and pumping in 128°Y-cut LiNbO3for microfluidic applications. *Journal of Micromechanics and Microengineering*, **2009**, 19, 035016	2	52
6	Moving-part-free microfluidic systems for lab-on-a-chip. *Journal of Micromechanics and Microengineering*, **2009**, 19, 054001	2	59
5	ZnO film thickness effect on surface acoustic wave modes and acoustic streaming. *Applied Physics Letters*, **2008**, 93, 094105	3.4	85
4	Integrated ZnO Surface Acoustic Wave Microfluidic and Biosensor System **2007**,		4

3	Uniformity Control of Ni Thin-Film Microstructures Deposited by Through-Mask Plating. *Journal of the Electrochemical Society*, **2005**, 152, C36	3.9	40
2	Fully self-powered instantaneous wireless liquid level sensor system based on triboelectric nanogenerator. *Nano Research*,1	10	1
1	Advancement of Electroadhesion Technology for Intelligent and Self-Reliant Robotic Applications. *Advanced Intelligent Systems*,2200064	6	2