Guang Zhu

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.

73 papers	10,023 citations	40 h-index	77 g-index
77 ext. papers	11,460 ext. citations	14.1 avg, IF	6.31 L-index

#	Paper	IF	Citations
73	Ultra-robust stretchable electrode for e-skin: In situ assembly using a nanofiber scaffold and liquid metal to mimic water-to-net interaction. *Informa□□Materi□*, **2022**, 4,	23.1	6
72	Triboelectric Nanogenerator Based on Direct Image Lithography and Surface Fluorination for Biomechanical Energy Harvesting and Self-powered Sterilization. *Nano Energy*, **2022**, 107279	17.1	2
71	A flexible dual parameter sensor with hierarchical porous structure for fully decoupled pressure□emperature sensing. *Chemical Engineering Journal*, **2021**, 133158	14.7	5
70	Boosting the Power and Lowering the Impedance of Triboelectric Nanogenerators through Manipulating the Permittivity for Wearable Energy Harvesting. *ACS Nano*, **2021**, 15, 7513-7521	16.7	31
69	All-Fabric Ultrathin Capacitive Sensor with High Pressure Sensitivity and Broad Detection Range for Electronic Skin. *ACS Applied Materials & Interfaces*, **2021**, 13, 24062-24069	9.5	13
68	Differentiation of Multiple Mechanical Stimuli by a Flexible Sensor Using a Dual-Interdigital-Electrode Layout for Bodily Kinesthetic Identification. *ACS Applied Materials & Interfaces*, **2021**, 13, 26394-26403	9.5	4
67	Facile Fabrication of Flexible Pressure Sensor with Programmable Lattice Structure. *ACS Applied Materials & Interfaces*, **2021**, 13, 10388-10396	9.5	21
66	Polymer Materials for High-Performance Triboelectric Nanogenerators. *Advanced Science*, **2020**, 7, 2000186	15.6	73
65	Layer-by-Layer Assembly of Nanofiber/Nanoparticle Artificial Skin for Strain-Insensitive UV Shielding and Visualized UV Detection. *Advanced Materials Technologies*, **2020**, 5, 1900976	6.8	7
64	Charge Distribution and Stability of SiO2 Nanoarray Electret. *ChemNanoMat*, **2020**, 6, 212-217	3.5	1
63	Electret-induced electric field assisted luminescence modulation for interactive visualized sensing in a non-contact mode. *Materials Horizons*, **2020**, 7, 1144-1149	14.4	7
62	Stretchable shape-adaptive liquid-solid interface nanogenerator enabled by in-situ charged nanocomposite membrane. *Nano Energy*, **2020**, 69, 104414	17.1	18
61	Large-Area Integrated Triboelectric Sensor Array for Wireless Static and Dynamic Pressure Detection and Mapping. *Small*, **2020**, 16, e1906352	11	26
60	A Contact-Sliding-Triboelectrification-Driven Dynamic Optical Transmittance Modulator for Self-Powered Information Covering and Selective Visualization. *Advanced Materials*, **2020**, 32, e1904988	24	10
59	Ultracomfortable Hierarchical Nanonetwork for Highly Sensitive Pressure Sensor. *ACS Nano*, **2020**, 14, 9605-9612	16.7	66
58	Highly conductive, stretchable, and breathable epidermal electrode based on hierarchically interactive nano-network. *Nanoscale*, **2020**, 12, 16053-16062	7.7	14
57	Self-Powered Optical Switch Based on Triboelectrification-Triggered Liquid Crystal Alignment for Wireless Sensing. *Advanced Functional Materials*, **2019**, 29, 1808633	15.6	15

56	Self-powered, on-demand transdermal drug delivery system driven by triboelectric nanogenerator. *Nano Energy*, **2019**, 62, 610-619	17.1	61
55	Small-Sized, Lightweight, and Flexible Triboelectric Nanogenerator Enhanced by PTFE/PDMS Nanocomposite Electret. *ACS Applied Materials & Interfaces*, **2019**, 11, 20370-20377	9.5	41
54	Nanofiber-Reinforced Silver Nanowires Network as a Robust, Ultrathin, and Conformable Epidermal Electrode for Ambulatory Monitoring of Physiological Signals. *Small*, **2019**, 15, e1900755	11	36
53	Enhanced High-Resolution Triboelectrification-Induced Electroluminescence for Self-Powered Visualized Interactive Sensing. *ACS Applied Materials & Interfaces*, **2019**, 11, 13796-13802	9.5	20
52	Wide-spectrum manipulation of triboelectrification-induced electroluminescence by long afterglow phosphors in elastomeric zinc sulfide composites. *Journal of Materials Chemistry C*, **2019**, 7, 4567-4572	7.1	10
51	Fully-integrated motion-driven electroluminescence enabled by triboelectrification for customized flexible display. *Nano Energy*, **2019**, 61, 158-164	17.1	17
50	Keystroke Dynamics Identification Based on Triboelectric Nanogenerator for Intelligent Keyboard Using Deep Learning Method. *Advanced Materials Technologies*, **2019**, 4, 1800167	6.8	36
49	Nanocomposite electret with surface potential self-recovery from water dipping for environmentally stable energy harvesting. *Nano Energy*, **2019**, 64, 103913	17.1	13
48	Nanowire-array-based gene electro-transfection system driven by human-motion operated triboelectric nanogenerator. *Nano Energy*, **2019**, 64, 103901	17.1	19
47	Self-Powered Electrowetting Valve for Instantaneous and Simultaneous Actuation of Paper-Based Microfluidic Assays. *Advanced Functional Materials*, **2019**, 29, 1808974	15.6	17
46	Stretchable Hybrid Bilayered Luminescent Composite Based on the Combination of Strain-Induced and Triboelectrification-Induced Electroluminescence. *ACS Omega*, **2019**, 4, 20470-20475	3.9	8
45	Highly Adaptive Solid-Liquid Interfacing Triboelectric Nanogenerator for Harvesting Diverse Water Wave Energy. *ACS Nano*, **2018**, 12, 4280-4285	16.7	94
44	Triboelectrification-Induced Self-Assembly of Macro-Sized Polymer Beads on a Nanostructured Surface for Self-Powered Patterning. *ACS Nano*, **2018**, 12, 441-447	16.7	8
43	Fully Rollable Lead-Free Poly(vinylidene fluoride)-Niobate-Based Nanogenerator with Ultra-Flexible Nano-Network Electrodes. *ACS Nano*, **2018**, 12, 4803-4811	16.7	76
42	In Situ Active Poling of Nanofiber Networks for Gigantically Enhanced Particulate Filtration. *ACS Applied Materials & Interfaces*, **2018**, 10, 24332-24338	9.5	30
41	Highly Robust, Transparent, and Breathable Epidermal Electrode. *ACS Nano*, **2018**, 12, 9326-9332	16.7	102
40	Triboelectric□thermoelectric Hybrid Nanogenerator for Harvesting Energy from Ambient Environments. *Advanced Materials Technologies*, **2018**, 3, 1800166	6.8	40
39	High-Intensity Triboelectrification-Induced Electroluminescence by Microsized Contacts for Self-Powered Display and Illumination. *Advanced Materials Interfaces*, **2018**, 5, 1701063	4.6	20

38	Flexible Porous Polydimethylsiloxane/Lead Zirconate Titanate-Based Nanogenerator Enabled by the Dual Effect of Ferroelectricity and Piezoelectricity. *ACS Applied Materials & Interfaces*, **2018**, 10, 33105-33111	9.5	29
37	Triboelectrification-enabled thin-film tactile matrix for self-powered high-resolution imaging. *Nano Energy*, **2018**, 50, 497-503	17.1	24
36	A Self-Powered Implantable Drug-Delivery System Using Biokinetic Energy. *Advanced Materials*, **2017**, 29, 1605668	24	89
35	Multilayered flexible nanocomposite for hybrid nanogenerator enabled by conjunction of piezoelectricity and triboelectricity. *Nano Research*, **2017**, 10, 785-793	10	37
34	Triboelectrification-enabled touch sensing for self-powered position mapping and dynamic tracking by a flexible and area-scalable sensor array. *Nano Energy*, **2017**, 41, 387-393	17.1	50
33	Stretchable Porous Carbon Nanotube-Elastomer Hybrid Nanocomposite for Harvesting Mechanical Energy. *Advanced Materials*, **2017**, 29, 1603115	24	137
32	Functional Nanomaterials for Sustainable Energy Technologies. *Journal of Nanomaterials*, **2016**, 2016, 1-2	3.2	5
31	Dynamic Triboelectrification-Induced Electroluminescence and its Use in Visualized Sensing. *Advanced Materials*, **2016**, 28, 6656-64	24	107
30	Triboelectric-Potential-Regulated Charge Transport Through p-n Junctions for Area-Scalable Conversion of Mechanical Energy. *Advanced Materials*, **2016**, 28, 668-76	24	19
29	Triboelectric Charging at the Nanostructured Solid/Liquid Interface for Area-Scalable Wave Energy Conversion and Its Use in Corrosion Protection. *ACS Nano*, **2015**, 9, 7671-7	16.7	83
28	Self-powered thin-film motion vector sensor. *Nature Communications*, **2015**, 6, 8031	17.4	100
27	Triboelectric nanogenerators as a new energy technology: From fundamentals, devices, to applications. *Nano Energy*, **2015**, 14, 126-138	17.1	400
26	Significant Enhancement of Triboelectric Charge Density by Fluorinated Surface Modification in Nanoscale for Converting Mechanical Energy. *Advanced Functional Materials*, **2015**, 25, 5691-5697	15.6	150
25	Membrane-Based Self-Powered Triboelectric Sensors for Pressure Change Detection and Its Uses in Security Surveillance and Healthcare Monitoring. *Advanced Functional Materials*, **2014**, 24, 5807-5813	15.6	199
24	Self-powered, ultrasensitive, flexible tactile sensors based on contact electrification. *Nano Letters*, **2014**, 14, 3208-13	11.5	352
23	Dipole-moment-induced effect on contact electrification for triboelectric nanogenerators. *Nano Research*, **2014**, 7, 990-997	10	139
22	Surface-charge engineering for high-performance triboelectric nanogenerator based on identical electrification materials. *Nano Energy*, **2014**, 10, 83-89	17.1	62
21	Harvesting water wave energy by asymmetric screening of electrostatic charges on a nanostructured hydrophobic thin-film surface. *ACS Nano*, **2014**, 8, 6031-7	16.7	376

20	A shape-adaptive thin-film-based approach for 50% high-efficiency energy generation through micro-grating sliding electrification. *Advanced Materials*, **2014**, 26, 3788-96	24	346
19	3D Stack Integrated Triboelectric Nanogenerator for Harvesting Vibration Energy. *Advanced Functional Materials*, **2014**, 24, 4090-4096	15.6	213
18	Radial-arrayed rotary electrification for high performance triboelectric generator. *Nature Communications*, **2014**, 5, 3426	17.4	629
17	High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. *Nature Photonics*, **2013**, 7, 752-758	33.9	534
16	Harvesting vibration energy by a triple-cantilever based triboelectric nanogenerator. *Nano Research* , **2013**, 6, 880-886	10	161
15	Integrated multilayered triboelectric nanogenerator for harvesting biomechanical energy from human motions. *ACS Nano*, **2013**, 7, 3713-9	16.7	444
14	Enhanced triboelectric nanogenerators and triboelectric nanosensor using chemically modified TiO2 nanomaterials. *ACS Nano*, **2013**, 7, 4554-60	16.7	222
13	In situ quantitative study of nanoscale triboelectrification and patterning. *Nano Letters*, **2013**, 13, 2771-6	11.5	163
12	Linear-grating triboelectric generator based on sliding electrification. *Nano Letters*, **2013**, 13, 2282-9	11.5	378
11	Toward large-scale energy harvesting by a nanoparticle-enhanced triboelectric nanogenerator. *Nano Letters*, **2013**, 13, 847-53	11.5	804
10	Enhanced Performance of a ZnO Nanowire-Based Self-Powered Glucose Sensor by Piezotronic Effect. *Advanced Functional Materials*, **2013**, 23, 5868-5874	15.6	150
9	A Self-Powered Triboelectric Nanosensor for Mercury Ion Detection. *Angewandte Chemie*, **2013**, 125, 5169-5173	3.6	42
8	Triboelectric-generator-driven pulse electrodeposition for micropatterning. *Nano Letters*, **2012**, 12, 4960-5	11.5	690
7	Progress in nanogenerators for portable electronics. *Materials Today*, **2012**, 15, 532-543	21.8	351
6	A self-powered electrochromic device driven by a nanogenerator. *Energy and Environmental Science* , **2012**, 5, 9462	35.4	96
5	Synthesis of vertically aligned ultra-long ZnO nanowires on heterogeneous substrates with catalyst at the root. *Nanotechnology*, **2012**, 23, 055604	3.4	63
4	Functional electrical stimulation by nanogenerator with 58 V output voltage. *Nano Letters*, **2012**, 12, 3086-90	11.5	253
3	Flexible nanocomposite generator made of BaTiO3 nanoparticles and graphitic carbons. *Advanced Materials*, **2012**, 24, 2999-3004, 2937	24	511

2	Flexible high-output nanogenerator based on lateral ZnO nanowire array. *Nano Letters*, **2010**, 10, 3151-5	11.5	628
1	Effects of rosin-type nucleating agent on polypropylene crystallization. *Journal of Applied Polymer Science*, **2002**, 83, 1069-1073	2.9	9