Qingshen Jing

List of Publications by Citations

61 papers	11,059 citations	41 h-index	62 g-index
62 ext. papers	12,336 ext. citations	14 avg, IF	6.28 L-index

#	Paper	IF	Citations
61	Toward large-scale energy harvesting by a nanoparticle-enhanced triboelectric nanogenerator. *Nano Letters*, **2013**, 13, 847-53	11.5	804
60	Radial-arrayed rotary electrification for high performance triboelectric generator. *Nature Communications*, **2014**, 5, 3426	17.4	629
59	Harmonic-resonator-based triboelectric nanogenerator as a sustainable power source and a self-powered active vibration sensor. *Advanced Materials*, **2013**, 25, 6094-9	24	572
58	Human skin based triboelectric nanogenerators for harvesting biomechanical energy and as self-powered active tactile sensor system. *ACS Nano*, **2013**, 7, 9213-22	16.7	560
57	Sliding-triboelectric nanogenerators based on in-plane charge-separation mechanism. *Nano Letters*, **2013**, 13, 2226-33	11.5	496
56	Integrated multilayered triboelectric nanogenerator for harvesting biomechanical energy from human motions. *ACS Nano*, **2013**, 7, 3713-9	16.7	444
55	Networks of triboelectric nanogenerators for harvesting water wave energy: a potential approach toward blue energy. *ACS Nano*, **2015**, 9, 3324-31	16.7	419
54	Single-electrode-based sliding triboelectric nanogenerator for self-powered displacement vector sensor system. *ACS Nano*, **2013**, 7, 7342-51	16.7	418
53	Triboelectric nanogenerators as a new energy technology: From fundamentals, devices, to applications. *Nano Energy*, **2015**, 14, 126-138	17.1	400
52	Harvesting energy from the natural vibration of human walking. *ACS Nano*, **2013**, 7, 11317-24	16.7	400
51	Linear-grating triboelectric generator based on sliding electrification. *Nano Letters*, **2013**, 13, 2282-9	11.5	378
50	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
49	Segmentally structured disk triboelectric nanogenerator for harvesting rotational mechanical energy. *Nano Letters*, **2013**, 13, 2916-23	11.5	368
48	Eardrum-inspired active sensors for self-powered cardiovascular system characterization and throat-attached anti-interference voice recognition. *Advanced Materials*, **2015**, 27, 1316-26	24	366
47	Self-powered, ultrasensitive, flexible tactile sensors based on contact electrification. *Nano Letters*, **2014**, 14, 3208-13	11.5	352
46	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
45	Grating-structured freestanding triboelectric-layer nanogenerator for harvesting mechanical energy at 85% total conversion efficiency. *Advanced Materials*, **2014**, 26, 6599-607	24	337

44	Rotary triboelectric nanogenerator based on a hybridized mechanism for harvesting wind energy. *ACS Nano*, **2013**, 7, 7119-25	16.7	263
43	3D Stack Integrated Triboelectric Nanogenerator for Harvesting Vibration Energy. *Advanced Functional Materials*, **2014**, 24, 4090-4096	15.6	213
42	Cylindrical rotating triboelectric nanogenerator. *ACS Nano*, **2013**, 7, 6361-6	16.7	201
41	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
40	Personalized keystroke dynamics for self-powered human--machine interfacing. *ACS Nano*, **2015**, 9, 105-116	16.7	195
39	Thermoelectric nanogenerators based on single Sb-doped ZnO micro/nanobelts. *ACS Nano*, **2012**, 6, 6984-9	16.7	174
38	Triboelectric nanogenerator built on suspended 3D spiral structure as vibration and positioning sensor and wave energy harvester. *ACS Nano*, **2013**, 7, 10424-32	16.7	164
37	In situ quantitative study of nanoscale triboelectrification and patterning. *Nano Letters*, **2013**, 13, 2771-6	11.5	163
36	Harvesting broadband kinetic impact energy from mechanical triggering/vibration and water waves. *ACS Nano*, **2014**, 8, 7405-12	16.7	150
35	Self-powered magnetic sensor based on a triboelectric nanogenerator. *ACS Nano*, **2012**, 6, 10378-83	16.7	144
34	Triboelectrification based motion sensor for human-machine interfacing. *ACS Applied Materials & Interfaces*, **2014**, 6, 7479-84	9.5	133
33	Triboelectric sensor for self-powered tracking of object motion inside tubing. *ACS Nano*, **2014**, 8, 3843-50	16.7	124
32	Case-encapsulated triboelectric nanogenerator for harvesting energy from reciprocating sliding motion. *ACS Nano*, **2014**, 8, 3836-42	16.7	119
31	A Self-Powered Angle Measurement Sensor Based on Triboelectric Nanogenerator. *Advanced Functional Materials*, **2015**, 25, 2166-2174	15.6	103
30	Nanometer resolution self-powered static and dynamic motion sensor based on micro-grated triboelectrification. *Advanced Materials*, **2014**, 26, 1719-24	24	102
29	Self-powered thin-film motion vector sensor. *Nature Communications*, **2015**, 6, 8031	17.4	100
28	Multi-layered disk triboelectric nanogenerator for harvesting hydropower. *Nano Energy*, **2014**, 6, 129-136	17.1	86
27	Angle-shaped triboelectric nanogenerator for harvesting environmental wind energy. *Nano Energy*, **2019**, 56, 269-276	17.1	84

26	Fully Printed Organic-Inorganic Nanocomposites for Flexible Thermoelectric Applications. *ACS Applied Materials & Interfaces*, **2018**, 10, 19580-19587	9.5	72
25	A triboelectric generator based on self-poled Nylon-11 nanowires fabricated by gas-flow assisted template wetting. *Energy and Environmental Science*, **2017**, 10, 2180-2189	35.4	69
24	Nanogenerator as an active sensor for vortex capture and ambient wind-velocity detection. *Energy and Environmental Science*, **2012**, 5, 8528	35.4	69
23	Self-powered triboelectric velocity sensor for dual-mode sensing of rectified linear and rotary motions. *Nano Energy*, **2014**, 10, 305-312	17.1	65
22	Nanostructured polymer-based piezoelectric and triboelectric materials and devices for energy harvesting applications. *Journal Physics D: Applied Physics*, **2018**, 51, 303001	3	62
21	An elastic-spring-substrated nanogenerator as an active sensor for self-powered balance. *Energy and Environmental Science*, **2013**, 6, 1164	35.4	47
20	Transparent and flexible barcode based on sliding electrification for self-powered identification systems. *Nano Energy*, **2015**, 12, 278-286	17.1	32
19	A portable triboelectric spirometer for wireless pulmonary function monitoring. *Biosensors and Bioelectronics*, **2021**, 187, 113329	11.8	31
18	Wind energy harvesting and self-powered flow rate sensor enabled by contact electrification. *Journal Physics D: Applied Physics*, **2016**, 49, 215601	3	30
17	Aerosol-Jet Printed Fine-Featured Triboelectric Sensors for Motion Sensing. *Advanced Materials Technologies*, **2019**, 4, 1800328	6.8	27
16	Direct observation of shear piezoelectricity in poly-l-lactic acid nanowires. *APL Materials*, **2017**, 5, 074105	5.7	24
15	Enhanced thermoelectric properties of flexible aerosol-jet printed carbon nanotube-based nanocomposites. *APL Materials*, **2018**, 6, 096101	5.7	23
14	Freestanding Functional Structures by Aerosol-Jet Printing for Stretchable Electronics and Sensing Applications. *Advanced Materials Technologies*, **2019**, 4, 1900048	6.8	21
13	Biosensors Based on Mechanical and Electrical Detection Techniques. *Sensors*, **2020**, 20,	3.8	20
12	Localized electromechanical interactions in ferroelectric P(VDF-TrFE) nanowires investigated by scanning probe microscopy. *APL Materials*, **2016**, 4, 116106	5.7	17
11	Highly sensitive piezotronic pressure sensors based on undoped GaAs nanowire ensembles. *Journal Physics D: Applied Physics*, **2019**, 52, 294002	3	12
10	Needs and Enabling Technologies for Stretchable Electronics Commercialization. *MRS Advances*, **2017**, 2, 1721-1729	0.7	11
9	Compositionally Graded Organic–Inorganic Nanocomposites for Enhanced Thermoelectric Performance. *Advanced Electronic Materials*, **2020**, 6, 1900720	6.4	11

List of Publications

8	Optical multi-functionalities of Er3+- and Yb3+-sensitized strontium bismuth titanate nanoparticles. *Journal of Alloys and Compounds*, **2019**, 801, 1-9	5.7	10
7	Aerosol-jet printing facilitates the rapid prototyping of microfluidic devices with versatile geometries and precise channel functionalization. *Applied Materials Today*, **2020**, 19, 100618	6.6	10
6	Enhanced piezoelectricity and electromechanical efficiency in semiconducting GaN due to nanoscale porosity. *Applied Materials Today*, **2020**, 21, 100858	6.6	5
5	Aerosol-jet-printed, conformable microfluidic force sensors. *Cell Reports Physical Science*, **2021**, 2, 100386	6.1	4
4	3D-printed hierarchical pillar array electrodes for high-performance semi-artificial photosynthesis.. *Nature Materials*, **2022**,	27	3
3	Manufacturing routes toward flexible and smart energy harvesters and sensors based on functional nanomaterials **2020**, 381-437		1
2	A room-temperature non-volatile CNT-based molecular memory cell. *Journal of Applied Physics*, **2013**, 113, 144302	2.5	1
1	Conformable and robust microfluidic force sensors to enable precision joint replacement surgery. *Materials and Design*, **2022**, 110747	8.1	0