Kwi-Il Park

List of Publications by Year in Descending Order

69 papers	5,092 citations	28 h-index	71 g-index
73 ext. papers	5,897 ext. citations	11.2 avg, IF	5.6 L-index

#	Paper	IF	Citations
69	High-temperature workable flexible piezoelectric energy harvester comprising thermally stable (K,Na)NbO3-based ceramic and polyimide composites. *Composites Part B: Engineering*, **2022**, 234, 109671	10	0
68	Ferroelectric Polymer Nanofibers Reminiscent of Morphotropic Phase Boundary Behavior for Improved Piezoelectric Energy Harvesting.. *Small*, **2022**, e2104472	11	1
67	Enhanced poling efficiency via a maximized organic-inorganic interfacial effect for water droplet-driven energy harvesting. *Nano Energy*, **2022**, 98, 107238	17.1	0
66	Ferroelectric Polymer Nanofibers Reminiscent of Morphotropic Phase Boundary Behavior for Improved Piezoelectric Energy Harvesting (Small 15/2022). *Small*, **2022**, 18, 2270072	11	
65	Ultra-magnetic field sensitive magnetoelectric composite with sub-pT detection limit at low frequency enabled by flash photon annealing. *Nano Energy*, **2021**, 90, 106598	17.1	2
64	Kinetic motion sensors based on flexible and lead-free hybrid piezoelectric composite energy harvesters with nanowires-embedded electrodes for detecting articular movements. *Composites Part B: Engineering*, **2021**, 212, 108705	10	17
63	Enhanced Energy Conversion Performance of a Magneto-Mechano-Electric Generator Using a Laminate Composite Made of Piezoelectric Polymer and Metallic Glass. *Advanced Electronic Materials*, **2021**, 7, 2000969	6.4	7
62	Synergistically Improved Thermoelectric Energy Harvesting of Edge-Oxidized-Graphene-Bridged N-Type Bismuth Telluride Thick Films. *ACS Applied Materials & Interfaces*, **2021**, 13, 5125-5132	9.5	5
61	Synergetic enhancement of the energy harvesting performance in flexible hybrid generator driven by human body using thermoelectric and piezoelectric combine effects. *Applied Surface Science*, **2021**, 558, 149784	6.7	5
60	Role of oxygen vacancy defects in piezoelectric thermal stability characteristics of Mn-doped (K,Na,Li)NbO3 piezoceramics. *Ceramics International*, **2021**, 47, 27803-27815	5.1	5
59	Synthesis and characterization of carbon-coated Cu-Ni alloy nanoparticles and their application in conductive films. *Applied Surface Science*, **2021**, 566, 150672	6.7	4
58	Flexoelectric-boosted piezoelectricity of BaTiO3@SrTiO3 core-shell nanostructure determined by multiscale simulations for flexible energy harvesters. *Nano Energy*, **2021**, 89, 106469	17.1	4
57	Enhanced output power of thermoelectric modules with reduced contact resistance by adopting the optimized Ni diffusion barrier layer. *Journal of Alloys and Compounds*, **2021**, 884, 161119	5.7	1
56	Enhanced thermoelectric composite performance from mesoporous carbon additives in a commercial Bi0.5Sb1.5Te3 matrix. *Journal of Materials Science and Technology*, **2021**, 94, 175-182	9.1	7
55	Piezoelectric BaTiO3 microclusters and embossed ZnSnO3 microspheres-based monolayer for highly-efficient and flexible composite generator. *Composites Part B: Engineering*, **2020**, 203, 108476	10	10
54	(K,Na)NbO3-LiNbO3 nanocube-based flexible and lead-free piezoelectric nanocomposite energy harvesters. *Journal of the Korean Ceramic Society*, **2020**, 57, 401-408	2.2	12
53	Piezoelectricity of picosecond laser-synthesized perovskite BaTiO3 nanoparticles. *Applied Surface Science*, **2020**, 511, 145614	6.7	8

52	Selective Phase Control of Dopant-Free Potassium Sodium Niobate Perovskites in Solution. *Inorganic Chemistry*, **2020**, 59, 3042-3052	5.1	16
51	Piezoelectric energy conversion by lead-free perovskite BaTiO3 nanotube arrays fabricated using electrochemical anodization. *Applied Surface Science*, **2020**, 512, 144784	6.7	14
50	Laser-directed synthesis of strain-induced crumpled MoS2 structure for enhanced triboelectrification toward haptic sensors. *Nano Energy*, **2020**, 78, 105266	17.1	40
49	Piezoelectric Flexible Energy Harvester Based on BaTiO3 Thin Film Enabled by Exfoliating the Mica Substrate. *Energy Technology*, **2019**, 7, 1980353	3.5	3
48	Piezoelectric Energy Harvesting from Two-Dimensional Boron Nitride Nanoflakes. *ACS Applied Materials & Interfaces*, **2019**, 11, 37920-37926	9.5	58
47	Vertically Aligned Piezoelectric Perovskite Nanowire Array on Flexible Conducting Substrate for Energy Harvesting Applications. *Advanced Materials Technologies*, **2019**, 4, 1900228	6.8	10
46	A Comparison Study of Fatigue Behavior of Hard and Soft Piezoelectric Single Crystal Macro-Fiber Composites for Vibration Energy Harvesting. *Sensors*, **2019**, 19,	3.8	25
45	Dual-Structured Flexible Piezoelectric Film Energy Harvesters for Effectively Integrated Performance. *Sensors*, **2019**, 19,	3.8	17
44	Piezoelectric Flexible Energy Harvester Based on BaTiO3 Thin Film Enabled by Exfoliating the Mica Substrate. *Energy Technology*, **2019**, 7, 1900638	3.5	18
43	Flexible Electronics: Vertically Aligned Piezoelectric Perovskite Nanowire Array on Flexible Conducting Substrate for Energy Harvesting Applications (Adv. Mater. Technol. 8/2019). *Advanced Materials Technologies*, **2019**, 4, 1970046	6.8	
42	Modulation of surface physics and chemistry in triboelectric energy harvesting technologies. *Science and Technology of Advanced Materials*, **2019**, 20, 758-773	7.1	65
41	Flexible Energy Harvester Made of Organic-Inorganic Hybrid Piezoelectric Nanocomposite. *Korean Journal of Materials Research*, **2019**, 29, 371-377	0.2	3
40	A Comparison Study of Output Performance of Organic-Inorganic Piezoelectric Nanocomposite Made of Piezoelectric/Non-piezoelectric Polymers and BaTiO3 Nanoparticles. *Journal of Korean Powder Metallurgy Institute*, **2019**, 26, 119-125	0.1	1
39	Nanowire-percolated piezoelectric copolymer-based highly transparent and flexible self-powered sensors. *Journal of Materials Chemistry A*, **2019**, 7, 25481-25489	13	43
38	Inverse size-dependence of piezoelectricity in single BaTiO3 nanoparticles. *Nano Energy*, **2019**, 58, 78-84	17.1	17
37	Self-powered flexible electronics beyond thermal limits. *Nano Energy*, **2019**, 56, 531-546	17.1	51
36	Lead-Free Perovskite Nanowire-Employed Piezopolymer for Highly Efficient Flexible Nanocomposite Energy Harvester. *Small*, **2018**, 14, e1704022	11	102
35	Enhanced output performance of a lead-free nanocomposite generator using BaTiO3 nanoparticles and nanowires filler. *Applied Surface Science*, **2018**, 429, 164-170	6.7	31

34	Recent Progress in Flexible Energy Harvesting Devices based on Piezoelectric Nanomaterials. *Journal of Korean Powder Metallurgy Institute*, **2018**, 25, 263-272	0.1	4
33	CO2 Capture & Separation in Microporous Materials: A Comparison Between Porous Carbon and Flexible MOFs. *Korean Journal of Materials Research*, **2018**, 28, 417-422	0.2	
32	Lead-free BaTiO3 Nanowire Arrays-based Piezoelectric Energy Harvester. *MRS Advances*, **2017**, 2, 3415-3420	0.7	7
31	Facile hydrothermal synthesis of BaZrxTi1−xO3 nanoparticles and their application to a lead-free nanocomposite generator. *RSC Advances*, **2017**, 7, 2851-2856	3.7	23
30	Piezoelectric energy harvesting from a PMN-PT single nanowire. *RSC Advances*, **2017**, 7, 260-265	3.7	48
29	All-inkjet-printed flexible piezoelectric generator made of solvent evaporation assisted BaTiO3 hybrid material. *Nano Energy*, **2017**, 41, 337-343	17.1	45
28	Flexible highly-effective energy harvester via crystallographic and computational control of nanointerfacial morphotropic piezoelectric thin film. *Nano Research*, **2017**, 10, 437-455	10	74
27	Self-Powered Devices: Self-Powered Wireless Sensor Node Enabled by an Aerosol-Deposited PZT Flexible Energy Harvester (Adv. Energy Mater. 13/2016). *Advanced Energy Materials*, **2016**, 6,	21.8	3
26	Recent progress in flexible and stretchable piezoelectric devices for mechanical energy harvesting, sensing and actuation. *Extreme Mechanics Letters*, **2016**, 9, 269-281	3.9	281
25	Stretchable piezoelectric nanocomposite generator. *Nano Convergence*, **2016**, 3, 12	9.2	71
24	Self-Powered Wireless Sensor Node Enabled by an Aerosol-Deposited PZT Flexible Energy Harvester. *Advanced Energy Materials*, **2016**, 6, 1600237	21.8	119
23	A flexible energy harvester based on a lead-free and piezoelectric BCTZ nanoparticle-polymer composite. *Nanoscale*, **2016**, 8, 17632-17638	7.7	78
22	A Reconfigurable Rectified Flexible Energy Harvester via Solid-State Single Crystal Grown PMN-PZT. *Advanced Energy Materials*, **2015**, 5, 1500051	21.8	95
21	High-Temperature Fracture Strength of a CVD-SiC Coating Layer for TRISO Nuclear Fuel Particles by a Micro-Tensile Test. *Journal of the Korean Ceramic Society*, **2015**, 52, 441-448	2.2	3
20	Highly-efficient, flexible piezoelectric PZT thin film nanogenerator on plastic substrates. *Advanced Materials*, **2014**, 26, 2514-20	24	538
19	Nanogenerators: Highly-Efficient, Flexible Piezoelectric PZT Thin Film Nanogenerator on Plastic Substrates (Adv. Mater. 16/2014). *Advanced Materials*, **2014**, 26, 2450-2450	24	9
18	Reliable control of filament formation in resistive memories by self-assembled nanoinsulators derived from a block copolymer. *ACS Nano*, **2014**, 8, 9492-502	16.7	77
17	Self-powered fully-flexible light-emitting system enabled by flexible energy harvester. *Energy and Environmental Science*, **2014**, 7, 4035-4043	35.4	144

16	Flexible crossbar-structured resistive memory arrays on plastic substrates via inorganic-based laser lift-off. *Advanced Materials*, **2014**, 26, 7480-7	24	102
15	Self-powered cardiac pacemaker enabled by flexible single crystalline PMN-PT piezoelectric energy harvester. *Advanced Materials*, **2014**, 26, 4880-7	24	445
14	Lead-free BaTiO3 nanowires-based flexible nanocomposite generator. *Nanoscale*, **2014**, 6, 8962-8	7.7	88
13	Nanogenerators: Self-Powered Cardiac Pacemaker Enabled by Flexible Single Crystalline PMN-PT Piezoelectric Energy Harvester (Adv. Mater. 28/2014). *Advanced Materials*, **2014**, 26, 4754-4754	24	1
12	Large-Area and Flexible Lead-Free Nanocomposite Generator Using Alkaline Niobate Particles and Metal Nanorod Filler. *Advanced Functional Materials*, **2014**, 24, 2620-2629	15.6	176
11	Flexible Electronics: Flexible Crossbar-Structured Resistive Memory Arrays on Plastic Substrates via Inorganic-Based Laser Lift-Off (Adv. Mater. 44/2014). *Advanced Materials*, **2014**, 26, 7418-7418	24	1
10	Flexible and Large-Area Nanocomposite Generators Based on Lead Zirconate Titanate Particles and Carbon Nanotubes. *Advanced Energy Materials*, **2013**, 3, 1539-1544	21.8	184
9	Virus-directed design of a flexible BaTiO3 nanogenerator. *ACS Nano*, **2013**, 7, 11016-25	16.7	187
8	Nanocomposites: Flexible and Large-Area Nanocomposite Generators Based on Lead Zirconate Titanate Particles and Carbon Nanotubes (Adv. Energy Mater. 12/2013). *Advanced Energy Materials*, **2013**, 3, 1530-1530	21.8	5
7	Bendable inorganic thin-film battery for fully flexible electronic systems. *Nano Letters*, **2012**, 12, 4810-6	11.5	431
6	Water-resistant flexible GaN LED on a liquid crystal polymer substrate for implantable biomedical applications. *Nano Energy*, **2012**, 1, 145-151	17.1	107
5	Flexible nanocomposite generator made of BaTiO nanoparticles and graphitic carbons. *Advanced Materials*, **2012**, 24, 2999-3004, 2937	24	511
4	Bendable and Transparent Barium Titanate Capacitors on Plastic Substrates for High Performance Flexible Ferroelectric Devices. *Electrochemical and Solid-State Letters*, **2010**, 13, G57		18
3	Piezoelectric BaTiO thin film nanogenerator on plastic substrates. *Nano Letters*, **2010**, 10, 4939-43	11.5	597
2	HIGH TEMPERATURE MECHANICAL PROPERTIES OF CVD-SiC THIN FILMS. *Modern Physics Letters B*, **2009**, 23, 3877-3886	1.6	9
1	Exceeding 50 mW RMS-Output Magneto-Mechano-Electric Generator by Hybridizing Piezoelectric and Electromagnetic Induction Effects. *Advanced Functional Materials*,2112028	15.6	2