Daewon Kim

List of Publications by Citations

81 papers	2,178 citations	26 h-index	44 g-index
90 ext. papers	2,785 ext. citations	10.8 avg, IF	5.48 L-index

#	Paper	IF	Citations
81	Simultaneous Reduction and Surface Functionalization of Graphene Oxide by Mussel-Inspired Chemistry. *Advanced Functional Materials*, **2011**, 21, 108-112	15.6	368
80	Vertically stacked thin triboelectric nanogenerator for wind energy harvesting. *Nano Energy*, **2015**, 14, 201-208	17.1	132
79	Self-cleaning hybrid energy harvester to generate power from raindrop and sunlight. *Nano Energy*, **2015**, 12, 636-645	17.1	118
78	High-performance nanopattern triboelectric generator by block copolymer lithography. *Nano Energy*, **2015**, 12, 331-338	17.1	101
77	Impact of contact pressure on output voltage of triboelectric nanogenerator based on deformation of interfacial structures. *Nano Energy*, **2015**, 17, 63-71	17.1	88
76	All-in-one cellulose based triboelectric nanogenerator for electronic paper using simple filtration process. *Nano Energy*, **2018**, 53, 975-981	17.1	78
75	Surface structural analysis of a friction layer for a triboelectric nanogenerator. *Nano Energy*, **2017**, 42, 34-42	17.1	52
74	A Triboelectric Sponge Fabricated from a Cube Sugar Template by 3D Soft Lithography for Superhydrophobicity and Elasticity. *Advanced Electronic Materials*, **2016**, 2, 1500331	6.4	52
73	Design strategy for a piezoelectric nanogenerator with a well-ordered nanoshell array. *ACS Nano*, **2013**, 7, 10773-9	16.7	51
72	Direct-laser-patterned friction layer for the output enhancement of a triboelectric nanogenerator. *Nano Energy*, **2017**, 35, 379-386	17.1	48
71	3-Dimensional broadband energy harvester based on internal hydrodynamic oscillation with a package structure. *Nano Energy*, **2015**, 17, 82-90	17.1	47
70	Triboelectric nanogenerator based on rolling motion of beads for harvesting wind energy as active wind speed sensor. *Nano Energy*, **2018**, 52, 256-263	17.1	46
69	Self-powered electro-coagulation system driven by a wind energy harvesting triboelectric nanogenerator for decentralized water treatment. *Nano Energy*, **2016**, 28, 288-295	17.1	46
68	Self-powered wearable keyboard with fabric based triboelectric nanogenerator. *Nano Energy*, **2018**, 53, 596-603	17.1	44
67	Enhancing humidity sensing performance of polyaniline/water soluble graphene oxide composite. *Talanta*, **2019**, 196, 337-344	6.2	43
66	Self-Powered Ion Concentration Sensor with Triboelectricity from Liquid–Solid Contact Electrification. *Advanced Electronic Materials*, **2016**, 2, 1600006	6.4	42
65	Triboelectric nanogenerator with nanostructured metal surface using water-assisted oxidation. *Nano Energy*, **2016**, 21, 258-264	17.1	42

64	Surface Engineering of Triboelectric Nanogenerator with an Electrodeposited Gold Nanoflower Structure. *Scientific Reports*, **2015**, 5, 13866	4.9	40
63	Triboelectric Nanogenerator Based on the Internal Motion of Powder with a Package Structure Design. *ACS Nano*, **2016**, 10, 1017-24	16.7	39
62	Self-powered fall detection system using pressure sensing triboelectric nanogenerators. *Nano Energy*, **2017**, 41, 139-147	17.1	39
61	Disk-based triboelectric nanogenerator operated by rotational force converted from linear force by a gear system. *Nano Energy*, **2018**, 50, 489-496	17.1	35
60	Conducting polymer nanocomposite based temperature sensors: A review. *Inorganic Chemistry Communication*, **2018**, 98, 11-28	3.1	34
59	Ultrathin unified harvesting module capable of generating electrical energy during rainy, windy, and sunny conditions. *Nano Energy*, **2020**, 70, 104515	17.1	31
58	Self-powered transparent and flexible touchpad based on triboelectricity towards artificial intelligence. *Nano Energy*, **2020**, 78, 105325	17.1	30
57	Physically Transient Memory on a Rapidly Dissoluble Paper for Security Application. *Scientific Reports*, **2016**, 6, 38324	4.9	30
56	Multilayer Graphene with a Rippled Structure as a Spacer for Improving Plasmonic Coupling. *Advanced Functional Materials*, **2016**, 26, 5093-5101	15.6	28
55	Performance-enhanced triboelectric nanogenerator using the glass transition of polystyrene. *Nano Energy*, **2016**, 27, 306-312	17.1	23
54	Self-sustainable wind speed sensor system with omni-directional wind based triboelectric generator. *Nano Energy*, **2019**, 55, 115-122	17.1	23
53	A Superamphiphobic Sponge with Mechanical Durability and a Self-Cleaning Effect. *Scientific Reports*, **2016**, 6, 29993	4.9	22
52	Self-powered wearable touchpad composed of all commercial fabrics utilizing a crossline array of triboelectric generators. *Nano Energy*, **2019**, 65, 103994	17.1	22
51	Levitating oscillator-based triboelectric nanogenerator for harvesting from rotational motion and sensing seismic oscillation. *Nano Energy*, **2020**, 72, 104674	17.1	19
50	Bioinspired Polydopamine-Based Resistive-Switching Memory on Cotton Fabric for Wearable Neuromorphic Device Applications. *Advanced Materials Technologies*, **2019**, 4, 1900151	6.8	17
49	Multidirection and Multiamplitude Triboelectric Nanogenerator Composed of Porous Conductive Polymer with Prolonged Time of Current Generation. *Advanced Energy Materials*, **2018**, 8, 1800654	21.8	17
48	Large-sized sandpaper coated with solution-processed aluminum for a triboelectric nanogenerator with reliable durability. *RSC Advances*, **2017**, 7, 137-144	3.7	16
47	Boron Nitride Nanotube-Based Contact Electrification-Assisted Piezoelectric Nanogenerator as a Kinematic Sensor for Detecting the Flexion–Extension Motion of a Robot Finger. *ACS Energy Letters*, **2020**, 5, 1577-1585	20.1	16

46	Ferromagnetic nanoparticle-embedded hybrid nanogenerator for harvesting omnidirectional vibration energy. *Nanoscale*, **2018**, 10, 12276-12283	7.7	15
45	Dynamic Analysis to Enhance the Performance of a Rotating-Disk-Based Triboelectric Nanogenerator by Injected Gas. *ACS Applied Materials & Interfaces*, **2019**, 11, 25170-25178	9.5	14
44	Willow-like portable triboelectric respiration sensor based on polyethylenimine-assisted CO2 capture. *Nano Energy*, **2019**, 65, 103990	17.1	14
43	Controlled anisotropic wetting of scalloped silicon nanogroove. *RSC Advances*, **2016**, 6, 41914-41918	3.7	14
42	Ternary Nanocomposite for Solar Light Photocatalyic Degradation of Methyl Orange. *Inorganic Chemistry Communication*, **2018**, 97, 191-195	3.1	14
41	Reduced Graphene Oxide/ZnO Nanorods Nanocomposite: Structural, Electrical and Electrochemical Properties. *Journal of Inorganic and Organometallic Polymers and Materials*, **2019**, 29, 2282-2290	3.2	13
40	Omnidirectional Triboelectric Nanogenerator Operated by Weak Wind Towards a Self-Powered Anemoscope. *Micromachines*, **2020**, 11,	3.3	13
39	3D Carbon Electrode Based Triboelectric Nanogenerator. *Advanced Materials Technologies*, **2016**, 1, 1600180	6.8	13
38	Copper ferrite-yttrium oxide (CFYO) nanocomposite as remarkable humidity sensor. *Inorganic Chemistry Communication*, **2019**, 99, 180-188	3.1	13
37	ZnO nanorods@conductive carbon black nanocomposite based flexible integrated system for energy conversion and storage through triboelectric nanogenerator and supercapacitor. *Nano Energy*, **2021**, 82, 105726	17.1	12
36	A triboelectric nanogenerator using silica-based powder for appropriate technology. *Sensors and Actuators A: Physical*, **2018**, 280, 85-91	3.9	11
35	Role of molybdenum trioxide in enhancing the humidity sensing performance of magnesium ferrite/molybdenum trioxide composite. *Inorganic Chemistry Communication*, **2018**, 98, 68-74	3.1	11
34	Preparation of NiO decorated CNT/ZnO core-shell hybrid nanocomposites with the aid of ultrasonication for enhancing the performance of hybrid supercapacitors. *Ultrasonics Sonochemistry* , **2021**, 71, 105374	8.9	10
33	Self-powered data erasing of nanoscale flash memory by triboelectricity. *Nano Energy*, **2018**, 52, 63-70	17.1	9
32	Novel Conductive Ag-Decorated NiFe Mixed Metal Telluride Hierarchical Nanorods for High-Performance Hybrid Supercapacitors. *ACS Applied Materials & Interfaces*, **2021**, 13, 19938-19949	9.5	9
31	Paint based triboelectric nanogenerator using facile spray deposition towards smart traffic system and security application. *Nano Energy*, **2021**, 88, 106236	17.1	8
30	A multi-directional wind based triboelectric generator with investigation of frequency effects. *Extreme Mechanics Letters*, **2018**, 19, 46-53	3.9	7
29	Self-Power Dynamic Sensor Based on Triboelectrification for Tilt of Direction and Angle. *Sensors*, **2018**, 18,	3.8	7

28	Air-gap embedded triboelectric nanogenerator surface modification of non-contact layer using sandpapers. *Nanoscale*, **2021**, 13, 8837-8847	7.7	7
27	CuCo LDHs Coated CuCoTe Honeycomb-Like Nanosheets as a Novel Anode Material for Hybrid Supercapacitors. *Small*, **2021**, 17, e2102369	11	6
26	Boosting a Power Performance of a Hybrid Nanogenerator via Frictional Heat Combining a Triboelectricity and Thermoelectricity toward Advanced Smart Sensors. *Advanced Materials Technologies*, **2021**, 6, 2000752	6.8	6
25	A study of the charge distribution and output characteristics of an ultra-thin tribo-dielectric layer. *Nano Energy*, **2019**, 62, 458-464	17.1	5
24	Dual output from unitary input for a hybrid coaxial triboelectric nanogenerator inspired by a crank engine. *Nano Energy*, **2020**, 71, 104599	17.1	5
23	Enhanced transconductance in a double-gate graphene field-effect transistor. *Solid-State Electronics*, **2018**, 141, 65-68	1.7	5
22	rGO/ZnO nanorods/Cu based nanocomposite having flower shaped morphology: AC conductivity and humidity sensing response studies at room temperature. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 15544-15552	2.1	5
21	Hybrid tribo-thermoelectric generator for effectively harvesting thermal energy activated by the shape memory alloy. *Nano Energy*, **2021**, 82, 105696	17.1	5
20	Antibacterial and Soluble Paper-Based Skin-Attachable Human Motion Sensor Using Triboelectricity. *ACS Sustainable Chemistry and Engineering*, **2020**,	8.3	4
19	A waterwheel hybrid generator with disk triboelectric nanogenerator and electromagnetic generator as a power source for an electrocoagulation system. *Nano Energy*, **2022**, 107048	17.1	4
18	Disk Triboelectric Nanogenerator-Based Nonvolatile Memory toward Smart Identification System. *Advanced Functional Materials*, **2021**, 31, 2102536	15.6	4
17	Facile Process for Surface Passivation Using (NH)S for the InP MOS Capacitor with ALD AlO. *Materials*, **2019**, 12,	3.5	4
16	Hybrid energy harvesting system based on Stirling engine towards next-generation heat recovery system in industrial fields. *Nano Energy*, **2021**, 90, 106508	17.1	4
15	Robust and flexible triboelectric nanogenerator using non-Newtonian fluid characteristics towards smart traffic and human-motion detecting system. *Nano Energy*, **2022**, 107246	17.1	4
14	Flexible Hybrid Nanogenerator for Self-Powered Weather and Healthcare Monitoring Sensor. *Advanced Electronic Materials*,2100785	6.4	3
13	Liquid-metal embedded sponge-typed triboelectric nanogenerator for omnidirectionally detectable self-powered motion sensor. *Nano Energy*, **2021**, 89, 106442	17.1	3
12	Clay-assisted hierarchical growth of metal-telluride nanostructures as an anode material for hybrid supercapacitors. *Applied Clay Science*, **2022**, 225, 106539	5.2	3
11	Facile Fabrication of Double-Layered Electrodes for a Self-Powered Energy Conversion and Storage System. *Nanomaterials*, **2020**, 10,	5.4	2

10	Rational design of cobalt-iron bimetal layered hydroxide on conductive fabric as a flexible battery-type electrode for enhancing the performance of hybrid supercapacitor. *Journal of Alloys and Compounds*, **2022**, 904, 164082	5.7	2
9	Film-Sponge-Coupled Triboelectric Nanogenerator with Enhanced Contact Area Based on Direct Ultraviolet Laser Ablation. *ACS Applied Materials & Interfaces*, **2021**, 13, 48281-48291	9.5	2
8	Co/Zn bimetal organic framework elliptical nanosheets on flexible conductive fabric for energy harvesting and environmental monitoring via triboelectricity. *Nano Energy*, **2021**, 89, 106355	17.1	2
7	Triboelectrification driven fin-fact (flip-flop actuated channel transistor) for security application **2017**,		1
6	All-polymer waterproof triboelectric nanogenerator towards blue energy harvesting and self-powered human motion detection. *Energy*, **2022**, 247, 123422	7.9	1
5	Performance-Enhanced Triboelectric Nanogenerator Based on the Double-Layered Electrode Effect. *Polymers*, **2020**, 12,	4.5	1
4	Hybridized generator: Freely movable ferromagnetic nanoparticle-embedded balls for a self-powered tilt and direction sensor. *Extreme Mechanics Letters*, **2020**, 41, 101063	3.9	1
3	Triboelectric energy harvester with an ultra-thin tribo-dielectric layer by initiated CVD and investigation of underlying physics in the triboelectricity **2016**,		1
2	Hybridized generator to simultaneously harvest tribo-thermal energy induced by vibration of fluorine rich-beads. *Nano Energy*, **2022**, 97, 107211	17.1	1
1	Smart Sensors: Boosting a Power Performance of a Hybrid Nanogenerator via Frictional Heat Combining a Triboelectricity and Thermoelectricity toward Advanced Smart Sensors (Adv. Mater. Technol. 1/2021). *Advanced Materials Technologies*, **2021**, 6, 2170005	6.8	