Sang-Woo Kim

List of Publications by Year in Descending Order

336 papers	18,513 citations	77 h-index	126 g-index
354 ext. papers	21,358 ext. citations	11.2 avg, IF	7.16 L-index

#	Paper	IF	Citations
336	Ultrasound-mediated triboelectric nanogenerator for powering on-demand transient electronics.. *Science Advances*, **2022**, 8, eabl8423	14.3	12
335	A graphene nanoplatelets-based high-performance, durable triboelectric nanogenerator for harvesting the energy of human motion. *Energy Reports*, **2022**, 8, 1026-1033	4.6	2
334	Ambient Humidity-Induced Phase Separation for Fiber Morphology Engineering toward Piezoelectric Self-Powered Sensing.. *Small*, **2022**, 18, e2105811	11	0
333	Airflow-induced P(VDF-TrFE) fiber arrays for enhanced piezoelectric energy harvesting. *APL Materials*, **2022**, 10, 031110	5.7	
332	RF Sputtered Nb-Doped MoS Thin Film for Effective Detection of NO Gas Molecules: Theoretical and Experimental Studies.. *ACS Omega*, **2022**, 7, 10492-10501	3.9	0
331	Virus blocking textile for SARS-CoV-2 using human body triboelectric energy harvesting.. *Cell Reports Physical Science*, **2022**, 100813	6.1	2
330	Triboelectric Nanogenerators for Self-powered Sensors. *Journal of Sensor Science and Technology*, **2022**, 31, 79-84	0.3	0
329	Ambient Humidity-Induced Phase Separation for Fiber Morphology Engineering toward Piezoelectric Self-Powered Sensing (Small 17/2022). *Small*, **2022**, 18, 2270086	11	
328	Why Cellulose-Based Electrochemical Energy Storage Devices?. *Advanced Materials*, **2021**, 33, e2000892	24	50
327	Prediction of Deflection of Reinforced Concrete Beams Considering Shear Effect. *Materials*, **2021**, 14,	3.5	3
326	Prediction of Shear Strength of Reinforced High-Strength Concrete Beams Using Compatibility-Aided Truss Model. *Applied Sciences (Switzerland)*, **2021**, 11, 10585	2.6	0
325	Flexible graphite bipolar plates for vanadium redox flow batteries. *International Journal of Energy Research*, **2021**, 45, 11098-11108	4.5	7
324	Mechanoreceptor-Inspired Dynamic Mechanical Stimuli Perception based on Switchable Ionic Polarization. *Advanced Functional Materials*, **2021**, 31, 2100649	15.6	11
323	2D Nanogenerators: Patchable and Implantable 2D Nanogenerator (Small 9/2021). *Small*, **2021**, 17, 2170039	13	
322	3D Microstructures: Transparent, Compliant 3D Mesostructures for Precise Evaluation of Mechanical Characteristics of Organoids (Adv. Mater. 25/2021). *Advanced Materials*, **2021**, 33, 2170196	24	
321	Structural performance of reinforced concrete interior beam–column joints with high-strength bars. *Archives of Civil and Mechanical Engineering*, **2021**, 21, 1	3.4	1
320	Smart textile triboelectric nanogenerators: Current status and perspectives. *MRS Bulletin*, **2021**, 46, 512-521	3.1	36

319	Emerging Energy Harvesting Materials and Devices for Self-Powered Water Disinfection.. *Small Methods*, **2021**, 5, e2100093	12.8	3
318	Healthcare management applications based on triboelectric nanogenerators. *APL Materials*, **2021**, 9, 060703	5.7	6
317	Triboelectrification induced self-powered microbial disinfection using nanowire-enhanced localized electric field. *Nature Communications*, **2021**, 12, 3693	17.4	19
316	Energy-Storage Materials: Why Cellulose-Based Electrochemical Energy Storage Devices? (Adv. Mater. 28/2021). *Advanced Materials*, **2021**, 33, 2170217	24	0
315	Self-rechargeable cardiac pacemaker system with triboelectric nanogenerators. *Nature Communications*, **2021**, 12, 4374	17.4	35
314	Precise Layer Control and Electronic State Modulation of a Transition Metal Dichalcogenide via Phase-Transition-Induced Growth. *Advanced Materials*, **2021**, e2103286	24	5
313	Piezoionic-powered graphene strain sensor based on solid polymer electrolyte. *Nano Energy*, **2021**, 81, 105610	17.1	9
312	Pulsed Gate Switching of MoS2 Field-Effect Transistor Based on Flexible Polyimide Substrate for Ultrasonic Detectors. *Advanced Functional Materials*, **2021**, 31, 2007389	15.6	5
311	Fabrication of piezoresistive Si nanorod-based pressure sensor arrays: A promising candidate for portable breath monitoring devices. *Nano Energy*, **2021**, 80, 105537	17.1	14
310	Patchable and Implantable 2D Nanogenerator. *Small*, **2021**, 17, e1903519	11	15
309	Emerging Pyroelectric Nanogenerators to Convert Thermal Energy into Electrical Energy. *Small*, **2021**, 17, e1903469	11	41
308	Sustainable highly charged C60-functionalized polyimide in a non-contact mode triboelectric nanogenerator. *Energy and Environmental Science*, **2021**, 14, 1004-1015	35.4	17
307	High-performance coaxial piezoelectric energy generator (C-PEG) yarn of Cu/PVDF-TrFE/PDMS/Nylon/Ag. *Nanotechnology*, **2021**, 32, 145401	3.4	9
306	Materials-Related Strategies for Highly Efficient Triboelectric Energy Generators. *Advanced Energy Materials*, **2021**, 11, 2003802	21.8	24
305	Dynamic halide perovskite heterojunction generates direct current. *Energy and Environmental Science*, **2021**, 14, 374-381	35.4	11
304	Nonchemical n- and p-Type Charge Transfer Doping of FAPbI3 Perovskite. *ACS Energy Letters*, **2021**, 6, 2817-2824	20.1	5
303	Solar-induced hybrid energy harvesters for advanced oxidation water treatment. *IScience*, **2021**, 24, 102808	6.1	2
302	Evaluation of Shear Effect on Deflection of RC Beams. *Applied Sciences (Switzerland)*, **2021**, 11, 7690	2.6	2

301	Battery-free, wireless soft sensors for continuous multi-site measurements of pressure and temperature from patients at risk for pressure injuries. *Nature Communications*, **2021**, 12, 5008	17.4	21
300	Mixed Triboelectric and Flexoelectric Charge Transfer at the Nanoscale. *Advanced Science*, **2021**, 8, e2101783	15.1	4
299	Simultaneous enhancement of specific capacitance and potential window of graphene-based electric double-layer capacitors using ferroelectric polymers. *Journal of Power Sources*, **2021**, 507, 230268	8.9	1
298	Prediction of Deflection of Shear-Critical RC Beams Using Compatibility-Aided Truss Model. *Applied Sciences (Switzerland)*, **2021**, 11, 11478	2.6	0
297	Integration of Transparent Supercapacitors and Electrodes Using Nanostructured Metallic Glass Films for Wirelessly Rechargeable, Skin Heat Patches. *Nano Letters*, **2020**, 20, 4872-4881	11.5	28
296	Microdischarge-Based Direct Current Triboelectric Nanogenerator via Accumulation of Triboelectric Charge in Atmospheric Condition. *Advanced Energy Materials*, **2020**, 10, 2000730	21.8	19
295	Electrode Engineering with CNTs to Enhance the Electrochemical Performance of LiNi0.6Co0.2Mn0.2O2 Cathodes with Commercial Level Design Parameters. *ChemElectroChem*, **2020**, 7, 2621-2628	4.3	5
294	Zero-writing-power tribotronic MoS2 touch memory. *Nano Energy*, **2020**, 75, 104936	17.1	6
293	Transparent Supercapacitors: From Optical Theories to Optoelectronics Applications. *Energy and Environmental Materials*, **2020**, 3, 265-285	13	6
292	Antiphase Boundaries as Faceted Metallic Wires in 2D Transition Metal Dichalcogenides. *Advanced Science*, **2020**, 7, 2000788	13.6	3
291	Nanogenerators to Power Implantable Medical Systems. *Joule*, **2020**, 4, 1398-1407	27.8	26
290	Triboelectric Nanogenerators: High Permittivity CaCu3Ti4O12 Particle-Induced Internal Polarization Amplification for High Performance Triboelectric Nanogenerators (Adv. Energy Mater. 9/2020). *Advanced Energy Materials*, **2020**, 10, 2070040	21.8	8
289	Biomolecular Piezoelectric Materials: From Amino Acids to Living Tissues. *Advanced Materials*, **2020**, 32, e1906989	24	50
288	Conductive Elastomers: A Metal-Like Conductive Elastomer with a Hierarchical Wrinkled Structure (Adv. Mater. 7/2020). *Advanced Materials*, **2020**, 32, 2070051	24	1
287	High Permittivity CaCu3Ti4O12 Particle-Induced Internal Polarization Amplification for High Performance Triboelectric Nanogenerators. *Advanced Energy Materials*, **2020**, 10, 1903524	21.8	44
286	A triboelectric nanogenerator energy harvesting system based on load-aware control for input power from 2.4 μW to 15.6 μW. *Nano Energy*, **2020**, 74, 104839	17.1	5
285	Self-boosted power generation of triboelectric nanogenerator with glass transition by friction heat. *Nano Energy*, **2020**, 74, 104840	17.1	13
284	A Metal-Like Conductive Elastomer with a Hierarchical Wrinkled Structure. *Advanced Materials*, **2020**, 32, e1906460	24	34

283	Ultrahigh Power Output from Triboelectric Nanogenerator Based on Serrated Electrode via Spark Discharge. *Advanced Energy Materials*, **2020**, 10, 2002312	21.8	23
282	High-Performance Dual-Mode Triboelectric Nanogenerator Based on Hierarchical Auxetic Structure. *ACS Energy Letters*, **2020**, 5, 3507-3513	20.1	13
281	n-ZnO/p-NiO Core/Shell-Structured Nanorods for Piezoelectric Nanogenerators. *Energy Technology*, **2020**, 8, 2070103	3.5	1
280	Fabrication of piezoelectric poly(L-lactic acid)/BaTiO fibre by the melt-spinning process. *Scientific Reports*, **2020**, 10, 16339	4.9	10
279	Recent trends of biocompatible triboelectric nanogenerators toward self-powered e-skin. *EcoMat*, **2020**, 2, e12065	9.4	19
278	Aim high energy conversion efficiency in triboelectric nanogenerators. *Science and Technology of Advanced Materials*, **2020**, 21, 683-688	7.1	2
277	n-ZnO/p-NiO Core/Shell-Structured Nanorods for Piezoelectric Nanogenerators. *Energy Technology*, **2020**, 8, 2000462	3.5	1
276	Dual Friction Mode Textile-Based Tire Cord Triboelectric Nanogenerator. *Advanced Functional Materials*, **2020**, 30, 2002401	15.6	14
275	Versatile neuromorphic electronics by modulating synaptic decay of single organic synaptic transistor: From artificial neural networks to neuro-prosthetics. *Nano Energy*, **2019**, 65, 104035	17.1	62
274	Butylated melamine formaldehyde as a durable and highly positive friction layer for stable, high output triboelectric nanogenerators. *Energy and Environmental Science*, **2019**, 12, 3156-3163	35.4	78
273	Water droplet-driven triboelectric nanogenerator with superhydrophobic surfaces. *Nano Energy*, **2019**, 58, 579-584	17.1	63
272	Covalent-bonding-induced strong phonon scattering in the atomically thin WSe layer. *Scientific Reports*, **2019**, 9, 7612	4.9	6
271	Treefrog Toe Pad-Inspired Micropatterning for High-Power Triboelectric Nanogenerator. *Advanced Functional Materials*, **2019**, 29, 1901638	15.6	33
270	Tunable piezoelectric nanogenerators using flexoelectricity of well-ordered hollow 2D MoS2 shells arrays for energy harvesting. *Nano Energy*, **2019**, 61, 471-477	17.1	22
269	Nanogenerators and piezo/tribo-tronics. *Nano Energy*, **2019**, 61, 637-638	17.1	3
268	Hybrid Energy Harvesters: Toward Sustainable Energy Harvesting. *Advanced Materials*, **2019**, 31, e1802898	24	114
267	Transcutaneous ultrasound energy harvesting using capacitive triboelectric technology. *Science*, **2019**, 365, 491-494	33.3	347
266	Energy Harvesters: Hybrid Energy Harvesters: Toward Sustainable Energy Harvesting (Adv. Mater. 34/2019). *Advanced Materials*, **2019**, 31, 1970244	24	2

265	Highly Conductive Ferroelectric Cellulose Composite Papers for Efficient Triboelectric Nanogenerators. *Advanced Functional Materials*, **2019**, 29, 1904066	15.6	78
264	3D-printed biomimetic-villus structure with maximized surface area for triboelectric nanogenerator and dust filter. *Nano Energy*, **2019**, 63, 103857	17.1	29
263	Recent Trends in Energy Harvesting Technology Using Composite Materials. *Ceramist*, **2019**, 22, 110-121	0.3	1
262	Temperature-dependent piezotronic effect of MoS2 monolayer. *Nano Energy*, **2019**, 58, 811-816	17.1	15
261	Investigation on energy bandgap states of amorphous SiZnSnO thin films. *Scientific Reports*, **2019**, 9, 19246	4.9	7
260	Surface modification of triboelectric materials by neutral beams. *Journal of Materials Chemistry A*, **2019**, 7, 25066-25077	13	24
259	An Organic/Inorganic Nanocomposite of Cellulose Nanofibers and ZnO Nanorods for Highly Sensitive, Reliable, Wireless, and Wearable Multifunctional Sensor Applications. *ACS Applied Materials & Interfaces*, **2019**, 11, 48239-48248	9.5	20
258	Foldable and water-resist electrodes based on carbon nanotubes/methyl cellulose hybrid conducting papers. *Composites Part B: Engineering*, **2019**, 160, 512-518	10	13
257	Piezo/triboelectric nanogenerators based on 2-dimensional layered structure materials. *Nano Energy*, **2019**, 57, 680-691	17.1	72
256	A Surface-Functionalized Ionovoltaic Device for Probing Ion-Specific Adsorption at the Solid-Liquid Interface. *Advanced Materials*, **2019**, 31, e1806268	24	17
255	Textile-Based Triboelectric Nanogenerators for Self-Powered Wearable Electronics. *Advanced Functional Materials*, **2019**, 29, 1804533	15.6	103
254	Metal nanowire–polymer matrix hybrid layer for triboelectric nanogenerator. *Nano Energy*, **2019**, 58, 227-233	17.1	13
253	Self-Powered Motion-Driven Triboelectric Electroluminescence Textile System. *ACS Applied Materials & Interfaces*, **2019**, 11, 5200-5207	9.5	51
252	Mechanical Energy Harvesting: Textile-Based Triboelectric Nanogenerators for Self-Powered Wearable Electronics (Adv. Funct. Mater. 2/2019). *Advanced Functional Materials*, **2019**, 29, 1970011	15.6	2
251	Transparent and flexible high frequency transmission lines based on composite structure comprising silver nanowires and polyvinyl butyral. *Composites Science and Technology*, **2018**, 159, 25-32	8.6	9
250	Understanding and modeling of triboelectric-electret nanogenerator. *Nano Energy*, **2018**, 47, 401-409	17.1	61
249	Piezoelectric properties in two-dimensional materials: Simulations and experiments. *Materials Today*, **2018**, 21, 611-630	21.8	127
248	Point-Defect-Passivated MoS Nanosheet-Based High Performance Piezoelectric Nanogenerator. *Advanced Materials*, **2018**, 30, e1800342	24	78

247	Bennet doubler working as a power booster for triboelectric nano-generators. *Electronics Letters*, **2018**, 54, 378-379	1.1	5
246	Copper indium selenide water splitting photoanodes with artificially designed heterophasic blended structure and their high photoelectrochemical performances. *Nano Energy*, **2018**, 46, 1-10	17.1	5
245	Flexible chemical sensors based on hybrid layer consisting of molybdenum disulphide nanosheets and carbon nanotubes. *Carbon*, **2018**, 129, 607-612	10.4	24
244	Eco-friendly cellulose based solid electrolyte with high performance and enhanced low humidity performance by hybridizing with aluminum fumarate MOF. *Materials Today Energy*, **2018**, 9, 11-18	7	13
243	Sustainable direct current powering a triboelectric nanogenerator via a novel asymmetrical design. *Energy and Environmental Science*, **2018**, 11, 2057-2063	35.4	102
242	High-performance piezoelectric nanogenerators based on chemically-reinforced composites. *Energy and Environmental Science*, **2018**, 11, 1425-1430	35.4	83
241	A conditioning circuit with exponential enhancement of output energy for triboelectric nanogenerator. *Nano Energy*, **2018**, 51, 173-184	17.1	55
240	Crystal-Structure-Dependent Piezotronic and Piezo-Phototronic Effects of ZnO/ZnS Core/Shell Nanowires for Enhanced Electrical Transport and Photosensing Performance. *ACS Applied Materials & Interfaces*, **2018**, 10, 28736-28744	9.5	23
239	Two-Dimensional Materials Inserted at the Metal/Semiconductor Interface: Attractive Candidates for Semiconductor Device Contacts. *Nano Letters*, **2018**, 18, 4878-4884	11.5	23
238	Strategically Designed Zeolitic Imidazolate Frameworks for Controlling the Degree of Graphitization. *Bulletin of the Chemical Society of Japan*, **2018**, 91, 1474-1480	5.1	33
237	1.4 μm-Thick Transparent Radio Frequency Transmission Lines Based on Instant Fusion of Polyethylene Terephthalate Through Surface of Ag Nanowires. *Electronic Materials Letters*, **2018**, 14, 599-609	2.9	5
236	Observation of negative differential resistance in mesoscopic graphene oxide devices. *Scientific Reports*, **2018**, 8, 7144	4.9	15
235	In-built thermo-mechanical cooperative feedback mechanism for self-propelled multimodal locomotion and electricity generation. *Nature Communications*, **2018**, 9, 3438	17.4	71
234	Triboelectric Series of 2D Layered Materials. *Advanced Materials*, **2018**, 30, e1801210	24	110
233	Recent development of the triboelectric properties of the polymer: A review. *Advanced Materials Letters*, **2018**, 9, 462-470	2.4	2
232	Cylindrical Free-Standing Mode Triboelectric Generator for Suspension System in Vehicle. *Micromachines*, **2018**, 10,	3.3	5
231	High-Performance Triboelectric Nanogenerators Based on Electrospun Polyvinylidene Fluoride–Silver Nanowire Composite Nanofibers. *Advanced Functional Materials*, **2018**, 28, 1703778	15.6	168
230	Application of ferroelectric materials for improving output power of energy harvesters. *Nano Convergence*, **2018**, 5, 30	9.2	46

229	An 88% Efficiency 2.4μW to 15.6μW Triboelectric Nanogenerator Energy Harvesting System Based on a Single-Comparator Control Algorithm **2018**,		1
228	Triboelectric Nanogenerators: Triboelectric Series of 2D Layered Materials (Adv. Mater. 39/2018). *Advanced Materials*, **2018**, 30, 1870294	24	2
227	Lipids: Source of Static Electricity of Regenerative Natural Substances and Nondestructive Energy Harvesting. *Advanced Materials*, **2018**, 30, e1804949	24	30
226	Functionalization of carbon fiber tows with ZnO nanorods for stress sensor integration in smart composite materials. *Nanotechnology*, **2018**, 29, 335501	3.4	10
225	Sustainable powering triboelectric nanogenerators: Approaches and the path towards efficient use. *Nano Energy*, **2018**, 51, 270-285	17.1	77
224	Tandem triboelectric nanogenerators for optimally scavenging mechanical energy with broadband vibration frequencies. *Nano Energy*, **2017**, 33, 515-521	17.1	61
223	High-Performance Piezoelectric, Pyroelectric, and Triboelectric Nanogenerators Based on P(VDF-TrFE) with Controlled Crystallinity and Dipole Alignment. *Advanced Functional Materials*, **2017**, 27, 1700702	15.6	106
222	Research Update: Nanogenerators for self-powered autonomous wireless sensors. *APL Materials*, **2017**, 5, 073803	5.7	31
221	High-Performance Triboelectric Nanogenerators Based on Solid Polymer Electrolytes with Asymmetric Pairing of Ions. *Advanced Energy Materials*, **2017**, 7, 1700289	21.8	95
220	Highly efficient flexible piezoelectric nanogenerator and femtosecond two-photon absorption properties of nonlinear lithium niobate nanowires. *Journal of Applied Physics*, **2017**, 121, 175103	2.5	8
219	Energy Harvesting: High-Performance Piezoelectric, Pyroelectric, and Triboelectric Nanogenerators Based on P(VDF-TrFE) with Controlled Crystallinity and Dipole Alignment (Adv. Funct. Mater. 22/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	1
218	Robust nanogenerators based on graft copolymers via control of dielectrics for remarkable output power enhancement. *Science Advances*, **2017**, 3, e1602902	14.3	141
217	Chlorine-trapped CVD bilayer graphene for resistive pressure sensor with high detection limit and high sensitivity. *2D Materials*, **2017**, 4, 025049	5.9	21
216	Mechanical properties of individual nanorods and nanotubes in forest-like structures. *Scripta Materialia*, **2017**, 133, 54-58	5.6	7
215	Graphene Tribotronics: Graphene Tribotronics for Electronic Skin and Touch Screen Applications (Adv. Mater. 1/2017). *Advanced Materials*, **2017**, 29,	24	3
214	Fully Stretchable Textile Triboelectric Nanogenerator with Knitted Fabric Structures. *ACS Nano*, **2017**, 11, 10733-10741	16.7	149
213	Nanophotonic-Engineered Photothermal Harnessing for Waste Heat Management and Pyroelectric Generation. *ACS Nano*, **2017**, 11, 10568-10574	16.7	49
212	Preface for Special Topic: Nanogenerators. *APL Materials*, **2017**, 5, 073701	5.7	9

211	Recent advanced in energy harvesting and storage applications with two-dimensional layered materials. *FlatChem*, **2017**, 6, 37-47	5.1	15
210	Fully stretchable and highly durable triboelectric nanogenerators based on gold-nanosheet electrodes for self-powered human-motion detection. *Nano Energy*, **2017**, 42, 300-306	17.1	92
209	Rewritable ghost floating gates by tunnelling triboelectrification for two-dimensional electronics. *Nature Communications*, **2017**, 8, 15891	17.4	27
208	Reliable Piezoelectricity in Bilayer WSe for Piezoelectric Nanogenerators. *Advanced Materials*, **2017**, 29, 1606667	24	114
207	Graphene Tribotronics for Electronic Skin and Touch Screen Applications. *Advanced Materials*, **2017**, 29, 1603544	24	160
206	Boosting Power-Generating Performance of Triboelectric Nanogenerators via Artificial Control of Ferroelectric Polarization and Dielectric Properties. *Advanced Energy Materials*, **2017**, 7, 1600988	21.8	153
205	Binary Oxide p-n Heterojunction Piezoelectric Nanogenerators with an Electrochemically Deposited High p-Type Cu2O Layer. *ACS Applied Materials & Interfaces*, **2016**, 8, 22135-41	9.5	10
204	Mechanically Robust Silver Nanowires Network for Triboelectric Nanogenerators. *Advanced Functional Materials*, **2016**, 26, 7717-7724	15.6	57
203	Triboelectrification-Induced Large Electric Power Generation from a Single Moving Droplet on Graphene/Polytetrafluoroethylene. *ACS Nano*, **2016**, 10, 7297-302	16.7	112
202	Triboelectric Nanogenerators for Blue Energy Harvesting. *ACS Nano*, **2016**, 10, 6429-32	16.7	143
201	Boosted output performance of triboelectric nanogenerator via electric double layer effect. *Nature Communications*, **2016**, 7, 12985	17.4	267
200	Preparation of ZnO Nanorod/Graphene/ZnO Nanorod Epitaxial Double Heterostructure for Piezoelectrical Nanogenerator by Using Preheating Hydrothermal. *Journal of Visualized Experiments* , **2016**, e53491	1.6	2
199	Controllable Charge Transfer by Ferroelectric Polarization Mediated Triboelectricity. *Advanced Functional Materials*, **2016**, 26, 3067-3073	15.6	65
198	Formation of Flexible and Transparent Indium Gallium Zinc Oxide/Ag/Indium Gallium Zinc Oxide Multilayer Film. *Journal of Electronic Materials*, **2016**, 45, 4265-4269	1.9	7
197	Surface dipole enhanced instantaneous charge pair generation in triboelectric nanogenerator. *Nano Energy*, **2016**, 26, 360-370	17.1	43
196	Control of Triboelectrification by Engineering Surface Dipole and Surface Electronic State. *ACS Applied Materials & Interfaces*, **2016**, 8, 18519-25	9.5	66
195	Highly flexible Al-doped ZnO/Ag/Al-doped ZnO multilayer films deposited on PET substrates at room temperature. *Ceramics International*, **2016**, 42, 3473-3478	5.1	28
194	Surface energy and wettability of van der Waals structures. *Nanoscale*, **2016**, 8, 5764-70	7.7	112

193	Noise and sensitivity characteristics of solid-state nanopores with a boron nitride 2-D membrane on a pyrex substrate. *Nanoscale*, **2016**, 8, 5755-63	7.7	30
192	Directional dependent piezoelectric effect in CVD grown monolayer MoS 2 for flexible piezoelectric nanogenerators. *Nano Energy*, **2016**, 22, 483-489	17.1	154
191	Continuous bundles of aligned electrospun PAN nano-fiber using electrostatic spiral collector and converging coil. *Polymer*, **2016**, 84, 52-58	3.9	18
190	Flexible High-Performance Lead-Free Na0.47K0.47Li0.06NbO3 Microcube-Structure-Based Piezoelectric Energy Harvester. *ACS Applied Materials & Interfaces*, **2016**, 8, 1766-73	9.5	57
189	Silk Nanofiber-Networked Bio-Triboelectric Generator: Silk Bio-TEG. *Advanced Energy Materials*, **2016**, 6, 1502329	21.8	138
188	Highly Efficient Photocurrent Generation from Nanocrystalline Graphene-Molybdenum Disulfide Lateral Interfaces. *Advanced Materials*, **2016**, 28, 1793-8	24	8
187	Fully Packaged Self-Powered Triboelectric Pressure Sensor Using Hemispheres-Array. *Advanced Energy Materials*, **2016**, 6, 1502566	21.8	162
186	Photocurrent Generation: Highly Efficient Photocurrent Generation from Nanocrystalline Graphene□Molybdenum Disulfide Lateral Interfaces (Adv. Mater. 9/2016). *Advanced Materials*, **2016**, 28, 1899-1899	24	1
185	All-in-one energy harvesting and storage devices. *Journal of Materials Chemistry A*, **2016**, 4, 7983-7999	13	195
184	High-performance triboelectric nanogenerators with artificially well-tailored interlocked interfaces. *Nano Energy*, **2016**, 27, 595-601	17.1	45
183	Sintering behavior of aluminum nitride ceramics with MgO□CaO□Al2O3□SiO2 glass additive. *International Journal of Refractory Metals and Hard Materials*, **2015**, 53, 46-50	4.1	8
182	High output piezo/triboelectric hybrid generator. *Scientific Reports*, **2015**, 5, 9309	4.9	170
181	Highly flexible ZnO/Ag/ZnO conducting electrode for organic photonic devices. *Ceramics International*, **2015**, 41, 7146-7150	5.1	30
180	Ferroelectric Polarization in CH3NH3PbI3 Perovskite. *Journal of Physical Chemistry Letters*, **2015**, 6, 172963	6.4	165
179	Metallic Grid Electrode Fabricated via Flow Coating for High-Performance Flexible Piezoelectric Nanogenerators. *Journal of Physical Chemistry C*, **2015**, 119, 7802-7808	3.8	28
178	Micropatterned P(VDF-TrFE) Film-Based Piezoelectric Nanogenerators for Highly Sensitive Self-Powered Pressure Sensors. *Advanced Functional Materials*, **2015**, 25, 3203-3209	15.6	253
177	Active Matrix Electronic Skin Strain Sensor Based on Piezopotential-Powered Graphene Transistors. *Advanced Materials*, **2015**, 27, 3411-7	24	239
176	Self-powered transparent flexible graphene microheaters. *Nano Energy*, **2015**, 17, 356-365	17.1	33

175	Graphene/h-BN/ZnO van der Waals tunneling heterostructure based ultraviolet photodetector. *Optics Express*, **2015**, 23, 18864-71	3.3	28
174	Mesoporous pores impregnated with Au nanoparticles as effective dielectrics for enhancing triboelectric nanogenerator performance in harsh environments. *Energy and Environmental Science*, **2015**, 8, 3006-3012	35.4	241
173	Transparent Stretchable Self-Powered Patchable Sensor Platform with Ultrasensitive Recognition of Human Activities. *ACS Nano*, **2015**, 9, 8801-10	16.7	369
172	Wearable and Implantable Mechanical Energy Harvesters for Self-Powered Biomedical Systems. *ACS Nano*, **2015**, 9, 7742-5	16.7	104
171	Shape memory polymer-based self-healing triboelectric nanogenerator. *Energy and Environmental Science*, **2015**, 8, 3605-3613	35.4	166
170	Synthesis, properties and potential applications of two-dimensional transition metal dichalcogenides. *Nano Convergence*, **2015**, 2,	9.2	85
169	Formation of hexagonal boron nitride by metal atomic vacancy-assisted B-N molecular diffusion. *ACS Nano*, **2015**, 9, 633-8	16.7	17
168	Transparent flexible stretchable piezoelectric and triboelectric nanogenerators for powering portable electronics. *Nano Energy*, **2015**, 14, 139-160	17.1	166
167	Highly anisotropic power generation in piezoelectric hemispheres composed stretchable composite film for self-powered motion sensor. *Nano Energy*, **2015**, 11, 1-10	17.1	100
166	Flexible and transparent TiO2/Ag/ITO multilayer electrodes on PET substrates for organic photonic devices. *Journal of Materials Research*, **2015**, 30, 1593-1598	2.5	10
165	Energy Harvesting: Micropatterned P(VDF-TrFE) Film-Based Piezoelectric Nanogenerators for Highly Sensitive Self-Powered Pressure Sensors (Adv. Funct. Mater. 21/2015). *Advanced Functional Materials*, **2015**, 25, 3276-3276	15.6	8
164	Control of Skin Potential by Triboelectrification with Ferroelectric Polymers. *Advanced Materials*, **2015**, 27, 5553-8	24	75
163	Thermally Induced Strain-Coupled Highly Stretchable and Sensitive Pyroelectric Nanogenerators. *Advanced Energy Materials*, **2015**, 5, 1500704	21.8	39
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