

Sang-Woo Kim

List of Publications by Citations

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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.

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	Nanopatterned textile-based wearable triboelectric nanogenerator. <i>ACS Nano</i> , 2015 , 9, 3501-9	16.7	495
335	Coaxial fiber supercapacitor using all-carbon material electrodes. <i>ACS Nano</i> , 2013 , 7, 5940-7	16.7	452
334	Large-scale synthesis of high-quality hexagonal boron nitride nanosheets for large-area graphene electronics. <i>Nano Letters</i> , 2012 , 12, 714-8	11.5	444
333	Highly stretchable piezoelectric-pyroelectric hybrid nanogenerator. <i>Advanced Materials</i> , 2014 , 26, 765-9	24	382
332	Transparent Stretchable Self-Powered Patchable Sensor Platform with Ultrasensitive Recognition of Human Activities. <i>ACS Nano</i> , 2015 , 9, 8801-10	16.7	369
331	Transcutaneous ultrasound energy harvesting using capacitive triboelectric technology. <i>Science</i> , 2019 , 365, 491-494	33.3	347
330	Mechanically Powered Transparent Flexible Charge-Generating Nanodevices with Piezoelectric ZnO Nanorods. <i>Advanced Materials</i> , 2009 , 21, 2185-2189	24	346
329	Hydrophobic sponge structure-based triboelectric nanogenerator. <i>Advanced Materials</i> , 2014 , 26, 5037-42	24	344
328	Transparent flexible graphene triboelectric nanogenerators. <i>Advanced Materials</i> , 2014 , 26, 3918-25	24	313
327	Energy harvesting based on semiconducting piezoelectric ZnO nanostructures. <i>Nano Energy</i> , 2012 , 1, 342-355	17.1	275
326	Ultrafine SnO ₂ nanoparticle loading onto reduced graphene oxide as anodes for sodium-ion batteries with superior rate and cycling performances. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 529-534 ¹³		272
325	Boosted output performance of triboelectric nanogenerator via electric double layer effect. <i>Nature Communications</i> , 2016 , 7, 12985	17.4	267
324	Highly Stretchable 2D Fabrics for Wearable Triboelectric Nanogenerator under Harsh Environments. <i>ACS Nano</i> , 2015 , 9, 6394-400	16.7	262
323	Fully rollable transparent nanogenerators based on graphene electrodes. <i>Advanced Materials</i> , 2010 , 22, 2187-92	24	258
322	Micropatterned P(VDF-TrFE) Film-Based Piezoelectric Nanogenerators for Highly Sensitive Self-Powered Pressure Sensors. <i>Advanced Functional Materials</i> , 2015 , 25, 3203-3209	15.6	253
321	Sound-driven piezoelectric nanowire-based nanogenerators. <i>Advanced Materials</i> , 2010 , 22, 4726-30	24	253
320	Mesoporous pores impregnated with Au nanoparticles as effective dielectrics for enhancing triboelectric nanogenerator performance in harsh environments. <i>Energy and Environmental Science</i> , 2015 , 8, 3006-3012	35.4	241

319	Active Matrix Electronic Skin Strain Sensor Based on Piezopotential-Powered Graphene Transistors. <i>Advanced Materials</i> , 2015 , 27, 3411-7	24	239
318	Control of electronic structure of graphene by various dopants and their effects on a nanogenerator. <i>Journal of the American Chemical Society</i> , 2010 , 132, 15603-9	16.4	223
317	Core-shell structured silicon nanoparticles@TiO ₂ -x/carbon mesoporous microfiber composite as a safe and high-performance lithium-ion battery anode. <i>ACS Nano</i> , 2014 , 8, 2977-85	16.7	202
316	Super-Flexible Nanogenerator for Energy Harvesting from Gentle Wind and as an Active Deformation Sensor. <i>Advanced Functional Materials</i> , 2013 , 23, 2445-2449	15.6	202
315	A platform for large-scale graphene electronics--CVD growth of single-layer graphene on CVD-grown hexagonal boron nitride. <i>Advanced Materials</i> , 2013 , 25, 2746-52	24	196
314	All-in-one energy harvesting and storage devices. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 7983-7999	13	195
313	Unidirectional High-Power Generation via Stress-Induced Dipole Alignment from ZnSnO ₃ Nanocubes/Polymer Hybrid Piezoelectric Nanogenerator. <i>Advanced Functional Materials</i> , 2014 , 24, 37-43	15.6	190
312	Highly sensitive stretchable transparent piezoelectric nanogenerators. <i>Energy and Environmental Science</i> , 2013 , 6, 169-175	35.4	179
311	p-Type polymer-hybridized high-performance piezoelectric nanogenerators. <i>Nano Letters</i> , 2012 , 12, 1959-64	16.4	174
310	High output piezo/triboelectric hybrid generator. <i>Scientific Reports</i> , 2015 , 5, 9309	4.9	170
309	High-Performance Triboelectric Nanogenerators Based on Electrospun Polyvinylidene Fluoride/Silver Nanowire Composite Nanofibers. <i>Advanced Functional Materials</i> , 2018 , 28, 1703778	15.6	168
308	Shape memory polymer-based self-healing triboelectric nanogenerator. <i>Energy and Environmental Science</i> , 2015 , 8, 3605-3613	35.4	166
307	Transparent flexible stretchable piezoelectric and triboelectric nanogenerators for powering portable electronics. <i>Nano Energy</i> , 2015 , 14, 139-160	17.1	166
306	Ferroelectric Polarization in CH ₃ NH ₃ PbI ₃ Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1729-35	16.5	165
305	Fully Packaged Self-Powered Triboelectric Pressure Sensor Using Hemispheres-Array. <i>Advanced Energy Materials</i> , 2016 , 6, 1502566	21.8	162
304	Graphene Tribotronics for Electronic Skin and Touch Screen Applications. <i>Advanced Materials</i> , 2017 , 29, 1603544	24	160
303	Controlled growth of semiconducting nanowire, nanowall, and hybrid nanostructures on graphene for piezoelectric nanogenerators. <i>ACS Nano</i> , 2011 , 5, 4197-204	16.7	159
302	Directional dependent piezoelectric effect in CVD grown monolayer MoS ₂ for flexible piezoelectric nanogenerators. <i>Nano Energy</i> , 2016 , 22, 483-489	17.1	154

301	Boosting Power-Generating Performance of Triboelectric Nanogenerators via Artificial Control of Ferroelectric Polarization and Dielectric Properties. <i>Advanced Energy Materials</i> , 2017 , 7, 1600988	21.8	153
300	Fully Stretchable Textile Triboelectric Nanogenerator with Knitted Fabric Structures. <i>ACS Nano</i> , 2017 , 11, 10733-10741	16.7	149
299	Two-dimensional vanadium-doped ZnO nanosheet-based flexible direct current nanogenerator. <i>ACS Nano</i> , 2013 , 7, 8932-9	16.7	147
298	Triboelectric Nanogenerators for Blue Energy Harvesting. <i>ACS Nano</i> , 2016 , 10, 6429-32	16.7	143
297	A high performance PZT ribbon-based nanogenerator using graphene transparent electrodes. <i>Energy and Environmental Science</i> , 2012 , 5, 8970	35.4	142
296	Robust nanogenerators based on graft copolymers via control of dielectrics for remarkable output power enhancement. <i>Science Advances</i> , 2017 , 3, e1602902	14.3	141
295	Silk Nanofiber-Networked Bio-Triboelectric Generator: Silk Bio-TEG. <i>Advanced Energy Materials</i> , 2016 , 6, 1502329	21.8	138
294	Self-organized ZnO quantum dots on SiO ₂ /Si substrates by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2002 , 81, 5036-5038	3.4	135
293	Piezoelectric properties in two-dimensional materials: Simulations and experiments. <i>Materials Today</i> , 2018 , 21, 611-630	21.8	127
292	Recent Progress on Flexible Triboelectric Nanogenerators for SelfPowered Electronics. <i>ChemSusChem</i> , 2015 , 8, 2327-44	8.3	127
291	Enhanced light extraction efficiency of GaN-based light-emitting diodes with ZnO nanorod arrays grown using aqueous solution. <i>Applied Physics Letters</i> , 2009 , 94, 071118	3.4	121
290	All-solution-processed flexible thin film piezoelectric nanogenerator. <i>Advanced Materials</i> , 2012 , 24, 6022-7	2.7	118
289	Dry etch damage in n-type GaN and its recovery by treatment with an N ₂ plasma. <i>Journal of Applied Physics</i> , 2000 , 87, 7667-7670	2.5	115
288	Hybrid Energy Harvesters: Toward Sustainable Energy Harvesting. <i>Advanced Materials</i> , 2019 , 31, e1802898	2.8	114
287	Reliable Piezoelectricity in Bilayer WSe for Piezoelectric Nanogenerators. <i>Advanced Materials</i> , 2017 , 29, 1606667	24	114
286	Triboelectrification-Induced Large Electric Power Generation from a Single Moving Droplet on Graphene/Polytetrafluoroethylene. <i>ACS Nano</i> , 2016 , 10, 7297-302	16.7	112
285	Surface energy and wettability of van der Waals structures. <i>Nanoscale</i> , 2016 , 8, 5764-70	7.7	112
284	SnO ₂ nanoslab as NO ₂ sensor: identification of the NO ₂ sensing mechanism on a SnO ₂ surface. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 357-63	9.5	111

283	Triboelectric Series of 2D Layered Materials. <i>Advanced Materials</i> , 2018 , 30, e1801210	24	110
282	ZnO nanowires with high aspect ratios grown by metalorganic chemical vapor deposition using gold nanoparticles. <i>Applied Physics Letters</i> , 2005 , 86, 153119	3.4	108
281	High-Performance Piezoelectric, Pyroelectric, and Triboelectric Nanogenerators Based on P(VDF-TrFE) with Controlled Crystallinity and Dipole Alignment. <i>Advanced Functional Materials</i> , 2017 , 27, 1700702	15.6	106
280	Embossed Hollow Hemisphere-Based Piezoelectric Nanogenerator and Highly Responsive Pressure Sensor. <i>Advanced Functional Materials</i> , 2014 , 24, 2038-2043	15.6	106
279	Wearable and Implantable Mechanical Energy Harvesters for Self-Powered Biomedical Systems. <i>ACS Nano</i> , 2015 , 9, 7742-5	16.7	104
278	Textile-Based Triboelectric Nanogenerators for Self-Powered Wearable Electronics. <i>Advanced Functional Materials</i> , 2019 , 29, 1804533	15.6	103
277	Sustainable direct current powering a triboelectric nanogenerator via a novel asymmetrical design. <i>Energy and Environmental Science</i> , 2018 , 11, 2057-2063	35.4	102
276	Highly anisotropic power generation in piezoelectric hemispheres composed stretchable composite film for self-powered motion sensor. <i>Nano Energy</i> , 2015 , 11, 1-10	17.1	100
275	High-Performance Triboelectric Nanogenerators Based on Solid Polymer Electrolytes with Asymmetric Pairing of Ions. <i>Advanced Energy Materials</i> , 2017 , 7, 1700289	21.8	95
274	Piezoelectric two-dimensional nanosheets/anionic layer heterojunction for efficient direct current power generation. <i>Scientific Reports</i> , 2013 , 3, 2017	4.9	95
273	Fully stretchable and highly durable triboelectric nanogenerators based on gold-nanosheet electrodes for self-powered human-motion detection. <i>Nano Energy</i> , 2017 , 42, 300-306	17.1	92
272	Modeling of a GaN-based light-emitting diode for uniform current spreading. <i>Applied Physics Letters</i> , 2000 , 77, 1903	3.4	89
271	Synthesis, properties and potential applications of two-dimensional transition metal dichalcogenides. <i>Nano Convergence</i> , 2015 , 2,	9.2	85
270	Paper-based piezoelectric nanogenerators with high thermal stability. <i>Small</i> , 2011 , 7, 2577-80	11	84
269	High-performance piezoelectric nanogenerators based on chemically-reinforced composites. <i>Energy and Environmental Science</i> , 2018 , 11, 1425-1430	35.4	83
268	Recent advances in power generation through piezoelectric nanogenerators. <i>Journal of Materials Chemistry</i> , 2011 , 21, 18946		82
267	Self-Compensated Insulating ZnO-Based Piezoelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2014 , 24, 6949-6955	15.6	80
266	Butylated melamine formaldehyde as a durable and highly positive friction layer for stable, high output triboelectric nanogenerators. <i>Energy and Environmental Science</i> , 2019 , 12, 3156-3163	35.4	78

265	Point-Defect-Passivated MoS Nanosheet-Based High Performance Piezoelectric Nanogenerator. <i>Advanced Materials</i> , 2018 , 30, e1800342	24	78
264	Highly Conductive Ferroelectric Cellulose Composite Papers for Efficient Triboelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2019 , 29, 1904066	15.6	78
263	Hydrogen silsequioxane-derived Si/SiO(x) nanospheres for high-capacity lithium storage materials. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 9608-13	9.5	78
262	Charge-Generating Mode Control in High-Performance Transparent Flexible Piezoelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2011 , 21, 1187-1193	15.6	78
261	Sustainable powering triboelectric nanogenerators: Approaches and the path towards efficient use. <i>Nano Energy</i> , 2018 , 51, 270-285	17.1	77
260	Control of Skin Potential by Triboelectrification with Ferroelectric Polymers. <i>Advanced Materials</i> , 2015 , 27, 5553-8	24	75
259	Silk fibroin-based biodegradable piezoelectric composite nanogenerators using lead-free ferroelectric nanoparticles. <i>Nano Energy</i> , 2015 , 14, 87-94	17.1	74
258	Epitaxial growth of ZnO nanowall networks on GaN/sapphire substrates. <i>Applied Physics Letters</i> , 2007 , 90, 033107	3.4	74
257	Piezo/triboelectric nanogenerators based on 2-dimensional layered structure materials. <i>Nano Energy</i> , 2019 , 57, 680-691	17.1	72
256	In-built thermo-mechanical cooperative feedback mechanism for self-propelled multimodal locomotion and electricity generation. <i>Nature Communications</i> , 2018 , 9, 3438	17.4	71
255	A facile route to recover intrinsic graphene over large scale. <i>ACS Nano</i> , 2012 , 6, 7781-8	16.7	68
254	Control of Triboelectrification by Engineering Surface Dipole and Surface Electronic State. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 18519-25	9.5	66
253	Synthesis of monoclinic potassium niobate nanowires that are stable at room temperature. <i>Journal of the American Chemical Society</i> , 2013 , 135, 6-9	16.4	66
252	Controllable Charge Transfer by Ferroelectric Polarization Mediated Triboelectricity. <i>Advanced Functional Materials</i> , 2016 , 26, 3067-3073	15.6	65
251	Enhanced Power Conversion Efficiency of Inverted Organic Solar Cells with a Ga-Doped ZnO Nanostructured Thin Film Prepared Using Aqueous Solution. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 15782-15785	3.8	64
250	Morphology Control and Electroluminescence of ZnO Nanorod/GaN Heterojunctions Prepared Using Aqueous Solution. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 8954-8958	3.8	64
249	Water droplet-driven triboelectric nanogenerator with superhydrophobic surfaces. <i>Nano Energy</i> , 2019 , 58, 579-584	17.1	63
248	High-performance hybrid cell based on an organic photovoltaic device and a direct current piezoelectric nanogenerator. <i>Nano Energy</i> , 2015 , 12, 547-555	17.1	63

247	Versatile neuromorphic electronics by modulating synaptic decay of single organic synaptic transistor: From artificial neural networks to neuro-prosthetics. <i>Nano Energy</i> , 2019 , 65, 104035	17.1	62
246	Tandem triboelectric nanogenerators for optimally scavenging mechanical energy with broadband vibration frequencies. <i>Nano Energy</i> , 2017 , 33, 515-521	17.1	61
245	Understanding and modeling of triboelectric-electret nanogenerator. <i>Nano Energy</i> , 2018 , 47, 401-409	17.1	61
244	Depletion width engineering via surface modification for high performance semiconducting piezoelectric nanogenerators. <i>Nano Energy</i> , 2014 , 8, 165-173	17.1	61
243	Mechanically Robust Silver Nanowires Network for Triboelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2016 , 26, 7717-7724	15.6	57
242	Flexible High-Performance Lead-Free Na _{0.47} K _{0.47} Li _{0.06} NbO ₃ Microcube-Structure-Based Piezoelectric Energy Harvester. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 1766-73	9.5	57
241	Reliable operation of a nanogenerator under ultraviolet light via engineering piezoelectric potential. <i>Energy and Environmental Science</i> , 2013 , 6, 841	35.4	57
240	Freestanding ZnO nanorod/graphene/ZnO nanorod epitaxial double heterostructure for improved piezoelectric nanogenerators. <i>Nano Energy</i> , 2015 , 12, 268-277	17.1	56
239	General Route to Single-Crystalline SnO Nanosheets on Arbitrary Substrates. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 11050-11055	3.8	56
238	A conditioning circuit with exponential enhancement of output energy for triboelectric nanogenerator. <i>Nano Energy</i> , 2018 , 51, 173-184	17.1	55
237	Selective growth of ZnO nanorods on SiO ₂ /Si substrates using a graphene buffer layer. <i>Nano Research</i> , 2011 , 4, 440-447	10	55
236	Effect of Rapid Thermal Annealing on Al Doped ZnO Films Grown by RF-Magnetron Sputtering. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 4776-4779	1.4	54
235	Flexible hybrid cell for simultaneously harvesting thermal and mechanical energies. <i>Nano Energy</i> , 2013 , 2, 817-825	17.1	53
234	Nanoscale Networked Single-Walled Carbon-Nanotube Electrodes for Transparent Flexible Nanogenerators. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1379-1384	3.8	51
233	Self-Powered Motion-Driven Triboelectric Electroluminescence Textile System. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 5200-5207	9.5	51
232	Why Cellulose-Based Electrochemical Energy Storage Devices?. <i>Advanced Materials</i> , 2021 , 33, e2000892	24	50
231	Biomolecular Piezoelectric Materials: From Amino Acids to Living Tissues. <i>Advanced Materials</i> , 2020 , 32, e1906989	24	50
230	ITO-free inverted polymer solar cells using a GZO cathode modified by ZnO. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 1610-1614	6.4	50

229	Nanophotonic-Engineered Photothermal Harnessing for Waste Heat Management and Pyroelectric Generation. <i>ACS Nano</i> , 2017 , 11, 10568-10574	16.7	49
228	Fish-scale bio-inspired multifunctional ZnO nanostructures. <i>NPG Asia Materials</i> , 2015 , 7, e232-e232	10.3	47
227	Graphene surface induced specific self-assembly of poly(3-hexylthiophene) for nanohybrid optoelectronics: from first-principles calculation to experimental characterizations. <i>Soft Matter</i> , 2013 , 9, 5355	3.6	46
226	Catalyst-free synthesis of ZnO nanowall networks on Si ₃ N ₄ /Si substrates by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2006 , 88, 253114	3.4	46
225	Application of ferroelectric materials for improving output power of energy harvesters. <i>Nano Convergence</i> , 2018 , 5, 30	9.2	46
224	High-performance triboelectric nanogenerators with artificially well-tailored interlocked interfaces. <i>Nano Energy</i> , 2016 , 27, 595-601	17.1	45
223	High Permittivity CaCu ₃ Ti ₄ O ₁₂ Particle-Induced Internal Polarization Amplification for High Performance Triboelectric Nanogenerators. <i>Advanced Energy Materials</i> , 2020 , 10, 1903524	21.8	44
222	Thin Ag Layer Inserted GZO Multilayer Grown by Roll-to-Roll Sputtering for Flexible and Transparent Conducting Electrodes. <i>Journal of the Electrochemical Society</i> , 2010 , 157, J301	3.9	44
221	Surface dipole enhanced instantaneous charge pair generation in triboelectric nanogenerator. <i>Nano Energy</i> , 2016 , 26, 360-370	17.1	43
220	Control of naturally coupled piezoelectric and photovoltaic properties for multi-type energy scavengers. <i>Energy and Environmental Science</i> , 2011 , 4, 4607	35.4	43
219	Reactivation of Mg acceptor in Mg-doped GaN by nitrogen plasma treatment. <i>Applied Physics Letters</i> , 2000 , 76, 3079-3081	3.4	41
218	Emerging Pyroelectric Nanogenerators to Convert Thermal Energy into Electrical Energy. <i>Small</i> , 2021 , 17, e1903469	11	41
217	Effective sulfur passivation of an n-type GaN surface by an alcohol-based sulfide solution. <i>Journal of Applied Physics</i> , 2000 , 87, 4591-4593	2.5	40
216	Layer-by-Layer Controlled Perovskite Nanocomposite Thin Films for Piezoelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2014 , 24, 6262-6269	15.6	39
215	Thermally Induced Strain-Coupled Highly Stretchable and Sensitive Pyroelectric Nanogenerators. <i>Advanced Energy Materials</i> , 2015 , 5, 1500704	21.8	39
214	A stamped PEDOT:PSS-silicon nanowire hybrid solar cell. <i>Nanotechnology</i> , 2012 , 23, 145401	3.4	39
213	Effects of In or Ga doping on the growth behavior and optical properties of ZnO nanorods fabricated by hydrothermal process. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 1552-1556	1.6	38
212	Electromigration-induced failure of GaN multi-quantum well light emitting diode. <i>Electronics Letters</i> , 2000 , 36, 908	1.1	37

211	Smart textile triboelectric nanogenerators: Current status and perspectives. <i>MRS Bulletin</i> , 2021 , 46, 512-521	36
210	High quality graphene-semiconducting oxide heterostructure for inverted organic photovoltaics. <i>Journal of Materials Chemistry</i> , 2012 , 22, 13032	35
209	Piezoelectric touch-sensitive flexible hybrid energy harvesting nanoarchitectures. <i>Nanotechnology</i> , 2010 , 21, 405503	3-4 35
208	Selective formation of ZnO nanodots on nanopatterned substrates by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2003 , 83, 3593-3595	3-4 35
207	Self-rechargeable cardiac pacemaker system with triboelectric nanogenerators. <i>Nature Communications</i> , 2021 , 12, 4374	17.4 35
206	A Metal-Like Conductive Elastomer with a Hierarchical Wrinkled Structure. <i>Advanced Materials</i> , 2020 , 32, e1906460	24 34
205	Treefrog Toe Pad-Inspired Micropatterning for High-Power Triboelectric Nanogenerator. <i>Advanced Functional Materials</i> , 2019 , 29, 1901638	15.6 33
204	Self-powered transparent flexible graphene microheaters. <i>Nano Energy</i> , 2015 , 17, 356-365	17.1 33
203	Strategically Designed Zeolitic Imidazolate Frameworks for Controlling the Degree of Graphitization. <i>Bulletin of the Chemical Society of Japan</i> , 2018 , 91, 1474-1480	5.1 33
202	Hexagonal boron nitride assisted growth of stoichiometric Al ₂ O ₃ dielectric on graphene for triboelectric nanogenerators. <i>Nano Energy</i> , 2015 , 12, 556-566	17.1 33
201	Synthesis and field emission properties of triangular-shaped GaN nanowires on Si(1 0 0) substrates. <i>Journal of Crystal Growth</i> , 2009 , 311, 495-499	1.6 33
200	Effect of alcohol-based sulfur treatment on Pt Ohmic contacts to p-type GaN. <i>Applied Physics Letters</i> , 2001 , 78, 1942-1944	3-4 32
199	Research Update: Nanogenerators for self-powered autonomous wireless sensors. <i>APL Materials</i> , 2017 , 5, 073803	5-7 31
198	InGaN/GaN multiple quantum well light-emitting diodes with highly transparent Pt thin film contact on p-GaN. <i>Journal of Applied Physics</i> , 2000 , 87, 4464-4466	2.5 31
197	Highly flexible ZnO/Ag/ZnO conducting electrode for organic photonic devices. <i>Ceramics International</i> , 2015 , 41, 7146-7150	5.1 30
196	Noise and sensitivity characteristics of solid-state nanopores with a boron nitride 2-D membrane on a pyrex substrate. <i>Nanoscale</i> , 2016 , 8, 5755-63	7-7 30
195	Effects of sulfur treatment on electrical and optical performance of InGaN/GaN multiple-quantum-well blue light-emitting diodes. <i>Applied Physics Letters</i> , 2001 , 78, 1766-1768	3-4 30
194	Lipids: Source of Static Electricity of Regenerative Natural Substances and Nondestructive Energy Harvesting. <i>Advanced Materials</i> , 2018 , 30, e1804949	24 30

193	3D-printed biomimetic-villus structure with maximized surface area for triboelectric nanogenerator and dust filter. <i>Nano Energy</i> , 2019 , 63, 103857	17.1	29
192	Metallic Grid Electrode Fabricated via Flow Coating for High-Performance Flexible Piezoelectric Nanogenerators. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 7802-7808	3.8	28
191	Graphene/h-BN/ZnO van der Waals tunneling heterostructure based ultraviolet photodetector. <i>Optics Express</i> , 2015 , 23, 18864-71	3.3	28
190	Integration of Transparent Supercapacitors and Electrodes Using Nanostructured Metallic Glass Films for Wirelessly Rechargeable, Skin Heat Patches. <i>Nano Letters</i> , 2020 , 20, 4872-4881	11.5	28
189	Highly flexible Al-doped ZnO/Ag/Al-doped ZnO multilayer films deposited on PET substrates at room temperature. <i>Ceramics International</i> , 2016 , 42, 3473-3478	5.1	28
188	Rewritable ghost floating gates by tunnelling triboelectrification for two-dimensional electronics. <i>Nature Communications</i> , 2017 , 8, 15891	17.4	27
187	Growth of ZnO nanostructures in a chemical vapor deposition process. <i>Journal of Crystal Growth</i> , 2006 , 292, 306-310	1.6	27
186	Nanogenerators to Power Implantable Medical Systems. <i>Joule</i> , 2020 , 4, 1398-1407	27.8	26
185	Low-temperature growth and characterization of ZnO thin films for flexible inverted organic solar cells. <i>Journal of Materials Chemistry</i> , 2011 , 21, 12274		26
184	Direct Al cathode layer sputtering on LiF/Alq ₃ using facing target sputtering with a mixture of Ar and Kr. <i>Applied Physics Letters</i> , 2006 , 88, 083513	3.4	26
183	Analytical approach to bursting in tube hydroforming using diffuse plastic instability. <i>International Journal of Mechanical Sciences</i> , 2004 , 46, 1535-1547	5.5	26
182	ZnO growth on Si substrates by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2002 , 240, 112-116	1.6	26
181	A Bi-layer TiO ₂ photoanode for highly durable, flexible dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 4679-4686	13	25
180	Flexible chemical sensors based on hybrid layer consisting of molybdenum disulphide nanosheets and carbon nanotubes. <i>Carbon</i> , 2018 , 129, 607-612	10.4	24
179	Observation of spatially-varying Fermi velocity in strained-graphene directly grown on hexagonal boron nitride. <i>Carbon</i> , 2014 , 74, 139-145	10.4	24
178	Ferroelectric coupling effect on the energy-band structure of hybrid heterojunctions with self-organized P(VDF-TrFE) nanomatrices. <i>Advanced Materials</i> , 2014 , 26, 5619-25	24	24
177	ZnO nanotubes by template wetting process. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007 , 37, 241-244	3	24
176	Formation of silicon oxide nanowires directly from Au/Si and Pd/Au/Si substrates. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007 , 37, 158-162	3	24

175	Surface modification of triboelectric materials by neutral beams. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25066-25077	13	24
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173	Crystal-Structure-Dependent Piezotronic and Piezo-Phototronic Effects of ZnO/ZnS Core/Shell Nanowires for Enhanced Electrical Transport and Photosensing Performance. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 28736-28744	9.5	23
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