Sang-Woo Kim

List of Publications by Year
in descending order

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345	24,726	3930 88	8618 146
papers	citations	h-index	g-index

354	354	354	21374
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanopatterned Textile-Based Wearable Triboelectric Nanogenerator. ACS Nano, 2015, 9, 3501-3509.	7.3	612
2	Transcutaneous ultrasound energy harvesting using capacitive triboelectric technology. Science, 2019, 365, 491-494.	6.0	569
3	Large-Scale Synthesis of High-Quality Hexagonal Boron Nitride Nanosheets for Large-Area Graphene Electronics. Nano Letters, 2012, 12, 714-718.	4.5	502
4	Coaxial Fiber Supercapacitor Using All-Carbon Material Electrodes. ACS Nano, 2013, 7, 5940-5947.	7.3	498
5	Highly Stretchable Piezoelectricâ€Pyroelectric Hybrid Nanogenerator. Advanced Materials, 2014, 26, 765-769.	11.1	469
6	Transparent Stretchable Self-Powered Patchable Sensor Platform with Ultrasensitive Recognition of Human Activities. ACS Nano, 2015, 9, 8801-8810.	7.3	450
7	Hydrophobic Sponge Structureâ€Based Triboelectric Nanogenerator. Advanced Materials, 2014, 26, 5037-5042.	11.1	426
8	Mechanically Powered Transparent Flexible Chargeâ€Generating Nanodevices with Piezoelectric ZnO Nanorods. Advanced Materials, 2009, 21, 2185-2189.	11.1	411
9	Transparent Flexible Graphene Triboelectric Nanogenerators. Advanced Materials, 2014, 26, 3918-3925.	11.1	391
10	Energy harvesting based on semiconducting piezoelectric ZnO nanostructures. Nano Energy, 2012, 1, 342-355.	8.2	346
11	Boosted output performance of triboelectric nanogenerator via electric double layer effect. Nature Communications, 2016, 7, 12985.	5.8	336
12	Micropatterned P(VDFâ€TrFE) Filmâ€Based Piezoelectric Nanogenerators for Highly Sensitive Selfâ€Powered Pressure Sensors. Advanced Functional Materials, 2015, 25, 3203-3209.	7.8	334
13	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.	15.6	315
14	Highly Stretchable 2D Fabrics for Wearable Triboelectric Nanogenerator under Harsh Environments. ACS Nano, 2015, 9, 6394-6400.	7.3	310
15	Soundâ€Driven Piezoelectric Nanowireâ€Based Nanogenerators. Advanced Materials, 2010, 22, 4726-4730.	11.1	305
16	Ultrafine SnO₂nanoparticle loading onto reduced graphene oxide as anodes for sodium-ion batteries with superior rate and cycling performances. Journal of Materials Chemistry A, 2014, 2, 529-534.	5.2	297
17	Highâ€Performance Triboelectric Nanogenerators Based on Electrospun Polyvinylidene Fluorideâ€“Silver Nanowire Composite Nanofibers. Advanced Functional Materials, 2018, 28, 1703778.	7.8	291
18	Fully Rollable Transparent Nanogenerators Based on Graphene Electrodes. Advanced Materials, 2010, 22, 2187-2192.	11.1	290

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19	Active Matrix Electronic Skin Strain Sensor Based on Piezopotentialâ€Powered Graphene Transistors. Advanced Materials, 2015, 27, 3411-3417.	11.1	287
20	Boosting Powerâ€Generating Performance of Triboelectric Nanogenerators via Artificial Control of Ferroelectric Polarization and Dielectric Properties. Advanced Energy Materials, 2017, 7, 1600988.	10.2	282
21	Unidirectional Highâ€Power Generation via Stressâ€Induced Dipole Alignment from ZnSnO₃ Nanocubes/Polymer Hybrid Piezoelectric Nanogenerator. Advanced Functional Materials, 2014, 24, 37-43.	7.8	249
22	Control of Electronic Structure of Graphene by Various Dopants and Their Effects on a Nanogenerator. Journal of the American Chemical Society, 2010, 132, 15603-15609.	6.6	247
23	All-in-one energy harvesting and storage devices. Journal of Materials Chemistry A, 2016, 4, 7983-7999.	5.2	245
24	Superâ€Flexible Nanogenerator for Energy Harvesting from Gentle Wind and as an Active Deformation Sensor. Advanced Functional Materials, 2013, 23, 2445-2449.	7.8	232
25	A Platform for Largeâ€Scale Graphene Electronics â€“ CVD Growth of Singleâ€Layer Graphene on CVDâ€Grown Hexagonal Boron Nitride. Advanced Materials, 2013, 25, 2746-2752.	11.1	227
26	Coreâ€“Shell Structured Silicon Nanoparticles@TiO_{2â€“x}/Carbon Mesoporous Microfiber Composite as a Safe and High-Performance Lithium-Ion Battery Anode. ACS Nano, 2014, 8, 2977-2985.	7.3	227
27	Hybrid Energy Harvesters: Toward Sustainable Energy Harvesting. Advanced Materials, 2019, 31, e1802898.	11.1	223
28	Silk Nanofiberâ€Networked Bioâ€Triboelectric Generator: Silk Bioâ€TEG. Advanced Energy Materials, 2016, 6, 1502329.	10.2	222
29	Piezoelectric properties in two-dimensional materials: Simulations and experiments. Materials Today, 2018, 21, 611-630.	8.3	219
30	High Output Piezo/Triboelectric Hybrid Generator. Scientific Reports, 2015, 5, 9309.	1.6	216
31	Graphene Tribotronics for Electronic Skin and Touch Screen Applications. Advanced Materials, 2017, 29, 1603544.	11.1	214
32	Fully Packaged Selfâ€Powered Triboelectric Pressure Sensor Using Hemispheresâ€Array. Advanced Energy Materials, 2016, 6, 1502566.	10.2	212
33	Shape memory polymer-based self-healing triboelectric nanogenerator. Energy and Environmental Science, 2015, 8, 3605-3613.	15.6	210
34	Robust nanogenerators based on graft copolymers via control of dielectrics for remarkable output power enhancement. Science Advances, 2017, 3, e1602902.	4.7	204
35	Transparent flexible stretchable piezoelectric and triboelectric nanogenerators for powering portable electronics. Nano Energy, 2015, 14, 139-160.	8.2	202
36	Highly sensitive stretchable transparent piezoelectric nanogenerators. Energy and Environmental Science, 2013, 6, 169-175.	15.6	197

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37	Directional dependent piezoelectric effect in CVD grown monolayer MoS 2 for flexible piezoelectric nanogenerators. Nano Energy, 2016, 22, 483-489.	8.2	197
38	P-Type Polymer-Hybridized High-Performance Piezoelectric Nanogenerators. Nano Letters, 2012, 12, 1959-1964.	4.5	196
39	Triboelectric Nanogenerators for Blue Energy Harvesting. ACS Nano, 2016, 10, 6429-6432.	7.3	191
40	Fully Stretchable Textile Triboelectric Nanogenerator with Knitted Fabric Structures. ACS Nano, 2017, 11, 10733-10741.	7.3	191
41	Triboelectrification-Induced Large Electric Power Generation from a Single Moving Droplet on Graphene/Polytetrafluoroethylene. ACS Nano, 2016, 10, 7297-7302.	7.3	183
42	Ferroelectric Polarization in CH₃NH₃PbI₃ Perovskite. Journal of Physical Chemistry Letters, 2015, 6, 1729-1735.	2.1	180
43	Triboelectric Series of 2D Layered Materials. Advanced Materials, 2018, 30, e1801210.	11.1	179
44	Controlled Growth of Semiconducting Nanowire, Nanowall, and Hybrid Nanostructures on Graphene for Piezoelectric Nanogenerators. ACS Nano, 2011, 5, 4197-4204.	7.3	178
45	Two-Dimensional Vanadium-Doped ZnO Nanosheet-Based Flexible Direct Current Nanogenerator. ACS Nano, 2013, 7, 8932-8939.	7.3	172
46	Surface energy and wettability of van der Waals structures. Nanoscale, 2016, 8, 5764-5770.	2.8	167
47	Recent Progress on Flexible Triboelectric Nanogenerators for SelfPowered Electronics. ChemSusChem, 2015, 8, 2327-2344.	3.6	164
48	Reliable Piezoelectricity in Bilayer WSe₂ for Piezoelectric Nanogenerators. Advanced Materials, 2017, 29, 1606667.	11.1	158
49	Self-rechargeable cardiac pacemaker system with triboelectric nanogenerators. Nature Communications, 2021, 12, 4374.	5.8	158
50	A high performance PZT ribbon-based nanogenerator using graphene transparent electrodes. Energy and Environmental Science, 2012, 5, 8970.	15.6	157
51	Sustainable direct current powering a triboelectric nanogenerator via a novel asymmetrical design. Energy and Environmental Science, 2018, 11, 2057-2063.	15.6	153
52	Highâ€Performance Piezoelectric, Pyroelectric, and Triboelectric Nanogenerators Based on P(VDFâ€TrFE) with Controlled Crystallinity and Dipole Alignment. Advanced Functional Materials, 2017, 27, 1700702.	7.8	149
53	Textileâ€Based Triboelectric Nanogenerators for Selfâ€Powered Wearable Electronics. Advanced Functional Materials, 2019, 29, 1804533.	7.8	148
54	Allâ€Solutionâ€Processed Flexible Thin Film Piezoelectric Nanogenerator. Advanced Materials, 2012, 24, 6022-6027.	11.1	143

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55	Synthesis, properties and potential applications of two-dimensional transition metal dichalcogenides. Nano Convergence, 2015, 2, .	6.3	143
56	Self-organized ZnO quantum dots on SiO2/Si substrates by metalorganic chemical vapor deposition. Applied Physics Letters, 2002, 81, 5036-5038.	1.5	140
57	Biomolecular Piezoelectric Materials: From Amino Acids to Living Tissues. Advanced Materials, 2020, 32, e1906989.	11.1	134
58	SnO₂ Nanoslab as NO₂ Sensor: Identification of the NO₂ Sensing Mechanism on a SnO₂ Surface. ACS Applied Materials & Interfaces, 2014, 6, 357-363.	4.0	133
59	Dry etch damage in n-type GaN and its recovery by treatment with an N2 plasma. Journal of Applied Physics, 2000, 87, 7667-7670.	1.1	132
60	Wearable and Implantable Mechanical Energy Harvesters for Self-Powered Biomedical Systems. ACS Nano, 2015, 9, 7742-7745.	7.3	132
61	Enhanced light extraction efficiency of GaN-based light-emitting diodes with ZnO nanorod arrays grown using aqueous solution. Applied Physics Letters, 2009, 94, .	1.5	131
62	Highâ€Performance Triboelectric Nanogenerators Based on Solid Polymer Electrolytes with Asymmetric Pairing of Ions. Advanced Energy Materials, 2017, 7, 1700289.	10.2	129
63	Highly Conductive Ferroelectric Cellulose Composite Papers for Efficient Triboelectric Nanogenerators. Advanced Functional Materials, 2019, 29, 1904066.	7.8	127
64	Fully stretchable and highly durable triboelectric nanogenerators based on gold-nanosheet electrodes for self-powered human-motion detection. Nano Energy, 2017, 42, 300-306.	8.2	126
65	Why Celluloseâ€Based Electrochemical Energy Storage Devices?. Advanced Materials, 2021, 33, e2000892.	11.1	125
66	Embossed Hollow Hemisphereâ€Based Piezoelectric Nanogenerator and Highly Responsive Pressure Sensor. Advanced Functional Materials, 2014, 24, 2038-2043.	7.8	124
67	Pointâ€Defectâ€Passivated MoS₂ Nanosheetâ€Based High Performance Piezoelectric Nanogenerator. Advanced Materials, 2018, 30, e1800342.	11.1	124
68	Highly anisotropic power generation in piezoelectric hemispheres composed stretchable composite film for self-powered motion sensor. Nano Energy, 2015, 11, 1-10.	8.2	121
69	High-performance piezoelectric nanogenerators based on chemically-reinforced composites. Energy and Environmental Science, 2018, 11, 1425-1430.	15.6	119
70	ZnO nanowires with high aspect ratios grown by metalorganic chemical vapor deposition using gold nanoparticles. Applied Physics Letters, 2005, 86, 153119.	1.5	118
71	Water droplet-driven triboelectric nanogenerator with superhydrophobic surfaces. Nano Energy, 2019, 58, 579-584.	8.2	118
72	In-built thermo-mechanical cooperative feedback mechanism for self-propelled multimodal locomotion and electricity generation. Nature Communications, 2018, 9, 3438.	5.8	117

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73	Versatile neuromorphic electronics by modulating synaptic decay of single organic synaptic transistor: From artificial neural networks to neuro-prosthetics. Nano Energy, 2019, 65, 104035.	8.2	115
74	Smart textile triboelectric nanogenerators: Current status and perspectives. MRS Bulletin, 2021, 46, 512-521.	1.7	111
75	Piezoelectric two-dimensional nanosheets/anionic layer heterojunction for efficient direct current power generation. Scientific Reports, 2013, 3, 2017.	1.6	110
76	Sustainable powering triboelectric nanogenerators: Approaches and the path towards efficient use. Nano Energy, 2018, 51, 270-285.	8.2	110
77	Piezo/triboelectric nanogenerators based on 2-dimensional layered structure materials. Nano Energy, 2019, 57, 680-691.	8.2	108
78	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.	15.6	107
79	High electron concentration and mobility in Al-doped n-ZnO epilayer achieved via dopant activation using rapid-thermal annealing. Journal of Applied Physics, 2005, 97, 066103.	1.1	106
80	Recent advances in power generation through piezoelectric nanogenerators. Journal of Materials Chemistry, 2011, 21, 18946.	6.7	103
81	Control of Triboelectrification by Engineering Surface Dipole and Surface Electronic State. ACS Applied Materials & Interfaces, 2016, 8, 18519-18525.	4.0	100
82	Control of Skin Potential by Triboelectrification with Ferroelectric Polymers. Advanced Materials, 2015, 27, 5553-5558.	11.1	98
83	Silk fibroin-based biodegradable piezoelectric composite nanogenerators using lead-free ferroelectric nanoparticles. Nano Energy, 2015, 14, 87-94.	8.2	97
84	Modeling of a GaN-based light-emitting diode for uniform current spreading. Applied Physics Letters, 2000, 77, 1903.	1.5	95
85	Hydrogen Silsequioxane-Derived Si/SiO_x Nanospheres for High-Capacity Lithium Storage Materials. ACS Applied Materials & Interfaces, 2014, 6, 9608-9613.	4.0	93
86	Paperâ€Based Piezoelectric Nanogenerators with High Thermal Stability. Small, 2011, 7, 2577-2580.	5.2	91
87	Selfâ€Compensated Insulating ZnOâ€Based Piezoelectric Nanogenerators. Advanced Functional Materials, 2014, 24, 6949-6955.	7.8	91
88	Understanding and modeling of triboelectric-electret nanogenerator. Nano Energy, 2018, 47, 401-409.	8.2	91
89	Triboelectrification induced self-powered microbial disinfection using nanowire-enhanced localized electric field. Nature Communications, 2021, 12, 3693.	5.8	87
90	High Permittivity CaCu₃Ti₄O₁₂ Particleâ€Induced Internal Polarization Amplification for High Performance Triboelectric Nanogenerators. Advanced Energy Materials, 2020, 10, 1903524.	10.2	85

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91	Chargeâ€Generating Mode Control in Highâ€Performance Transparent Flexible Piezoelectric Nanogenerators. Advanced Functional Materials, 2011, 21, 1187-1193.	7.8	84
92	Emerging Pyroelectric Nanogenerators to Convert Thermal Energy into Electrical Energy. Small, 2021, 17, e1903469.	5.2	84
93	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.	5.8	83
94	Tandem triboelectric nanogenerators for optimally scavenging mechanical energy with broadband vibration frequencies. Nano Energy, 2017, 33, 515-521.	8.2	82
95	A conditioning circuit with exponential enhancement of output energy for triboelectric nanogenerator. Nano Energy, 2018, 51, 173-184.	8.2	82
96	Epitaxial growth of ZnO nanowall networks on GaN/sapphire substrates. Applied Physics Letters, 2007, 90, 033107.	1.5	80
97	Application of ferroelectric materials for improving output power of energy harvesters. Nano Convergence, 2018, 5, 30.	6.3	80
98	A Facile Route To Recover Intrinsic Graphene over Large Scale. ACS Nano, 2012, 6, 7781-7788.	7.3	79
99	High-performance hybrid cell based on an organic photovoltaic device and a direct current piezoelectric nanogenerator. Nano Energy, 2015, 12, 547-555.	8.2	79
100	Controllable Charge Transfer by Ferroelectric Polarization Mediated Triboelectricity. Advanced Functional Materials, 2016, 26, 3067-3073.	7.8	79
101	Nanophotonic-Engineered Photothermal Harnessing for Waste Heat Management and Pyroelectric Generation. ACS Nano, 2017, 11, 10568-10574.	7.3	75
102	Synthesis of Monoclinic Potassium Niobate Nanowires That Are Stable at Room Temperature. Journal of the American Chemical Society, 2013, 135, 6-9.	6.6	74
103	Depletion width engineering via surface modification for high performance semiconducting piezoelectric nanogenerators. Nano Energy, 2014, 8, 165-173.	8.2	73
104	Materialsâ€Related Strategies for Highly Efficient Triboelectric Energy Generators. Advanced Energy Materials, 2021, 11, 2003802.	10.2	73
105	Freestanding ZnO nanorod/graphene/ZnO nanorod epitaxial double heterostructure for improved piezoelectric nanogenerators. Nano Energy, 2015, 12, 268-277.	8.2	72
106	Self-Powered Motion-Driven Triboelectric Electroluminescence Textile System. ACS Applied Materials & Interfaces, 2019, 11, 5200-5207.	4.0	72
107	Enhanced Power Conversion Efficiency of Inverted Organic Solar Cells with a Ga-Doped ZnO Nanostructured Thin Film Prepared Using Aqueous Solution. Journal of Physical Chemistry C, 2010, 114, 15782-15785.	1.5	71
108	Mechanically Robust Silver Nanowires Network for Triboelectric Nanogenerators. Advanced Functional Materials, 2016, 26, 7717-7724.	7.8	71

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109	Ultrasound-mediated triboelectric nanogenerator for powering on-demand transient electronics. Science Advances, 2022, 8, eabl8423.	4.7	71
110	Flexible High-Performance Lead-Free Na_{0.47}K_{0.47}Li_{0.06}NbO₃ Microcube-Structure-Based Piezoelectric Energy Harvester. ACS Applied Materials & Interfaces, 2016, 8, 1766-1773.	4.0	70
111	Morphology Control and Electroluminescence of ZnO Nanorod/GaN Heterojunctions Prepared Using Aqueous Solution. Journal of Physical Chemistry C, 2009, 113, 8954-8958.	1.5	67
112	High-performance triboelectric nanogenerators with artificially well-tailored interlocked interfaces. Nano Energy, 2016, 27, 595-601.	8.2	66
113	Selective growth of ZnO nanorods on SiO2/Si substrates using a graphene buffer layer. Nano Research, 2011, 4, 440-447.	5.8	63
114	Flexible hybrid cell for simultaneously harvesting thermal and mechanical energies. Nano Energy, 2013, 2, 817-825.	8.2	61
115	Reliable operation of a nanogenerator under ultraviolet light via engineering piezoelectric potential. Energy and Environmental Science, 2013, 6, 841.	15.6	61
116	Thermally Induced Strainâ€Coupled Highly Stretchable and Sensitive Pyroelectric Nanogenerators. Advanced Energy Materials, 2015, 5, 1500704.	10.2	61
117	Nanogenerators to Power Implantable Medical Systems. Joule, 2020, 4, 1398-1407.	11.7	61
118	General Route to Single-Crystalline SnO Nanosheets on Arbitrary Substrates. Journal of Physical Chemistry C, 2010, 114, 11050-11055.	1.5	60
119	Effect of Rapid Thermal Annealing on Al Dopedn-ZnO Films Grown by RF-Magnetron Sputtering. Japanese Journal of Applied Physics, 2005, 44, 4776-4779.	0.8	56
120	Nanoscale Networked Single-Walled Carbon-Nanotube Electrodes for Transparent Flexible Nanogenerators. Journal of Physical Chemistry C, 2010, 114, 1379-1384.	1.5	56
121	Fish-scale bio-inspired multifunctional ZnO nanostructures. NPG Asia Materials, 2015, 7, e232-e232.	3.8	56
122	Treefrog Toe Padâ€Inspired Micropatterning for Highâ€Power Triboelectric Nanogenerator. Advanced Functional Materials, 2019, 29, 1901638.	7.8	56
123	Integration of Transparent Supercapacitors and Electrodes Using Nanostructured Metallic Glass Films for Wirelessly Rechargeable, Skin Heat Patches. Nano Letters, 2020, 20, 4872-4881.	4.5	56
124	3D-printed biomimetic-villus structure with maximized surface area for triboelectric nanogenerator and dust filter. Nano Energy, 2019, 63, 103857.	8.2	55
125	A Metalâ€Like Conductive Elastomer with a Hierarchical Wrinkled Structure. Advanced Materials, 2020, 32, 1906460.	11.1	55
126	Fabrication of piezoresistive Si nanorod-based pressure sensor arrays: A promising candidate for portable breath monitoring devices. Nano Energy, 2021, 80, 105537.	8.2	55

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127	Surface dipole enhanced instantaneous charge pair generation in triboelectric nanogenerator. Nano Energy, 2016, 26, 360-370.	8.2	54
128	ITO-free inverted polymer solar cells using a GZO cathode modified by ZnO. Solar Energy Materials and Solar Cells, 2011, 95, 1610-1614.	3.0	52
129	Sustainable highly charged C₆₀-functionalized polyimide in a non-contact mode triboelectric nanogenerator. Energy and Environmental Science, 2021, 14, 1004-1015.	15.6	52
130	Control of naturally coupled piezoelectric and photovoltaic properties for multi-type energy scavengers. Energy and Environmental Science, 2011, 4, 4607.	15.6	51
131	Graphene surface induced specific self-assembly of poly(3-hexylthiophene) for nanohybrid optoelectronics: from first-principles calculation to experimental characterizations. Soft Matter, 2013, 9, 5355.	1.2	50
132	Recent trends of biocompatible triboelectric nanogenerators toward selfâ€powered eâ€skin. EcoMat, 2020, 2, e12065.	6.8	49
133	Catalyst-free synthesis of ZnO nanowall networks on Si3N4âˆ•Si substrates by metalorganic chemical vapor deposition. Applied Physics Letters, 2006, 88, 253114.	1.5	48
134	Layerâ€byâ€Layer Controlled Perovskite Nanocomposite Thin Films for Piezoelectric Nanogenerators. Advanced Functional Materials, 2014, 24, 6262-6269.	7.8	48
135	Lipids: Source of Static Electricity of Regenerative Natural Substances and Nondestructive Energy Harvesting. Advanced Materials, 2018, 30, e1804949.	11.1	48
136	A stamped PEDOT:PSSâ€“silicon nanowire hybrid solar cell. Nanotechnology, 2012, 23, 145401.	1.3	47
137	Thin Ag Layer Inserted GZO Multilayer Grown by Roll-to-Roll Sputtering for Flexible and Transparent Conducting Electrodes. Journal of the Electrochemical Society, 2010, 157, J301.	1.3	46
138	Microdischargeâ€Based Direct Current Triboelectric Nanogenerator via Accumulation of Triboelectric Charge in Atmospheric Condition. Advanced Energy Materials, 2020, 10, 2000730.	10.2	46
139	Ultrahigh Power Output from Triboelectric Nanogenerator Based on Serrated Electrode via Spark Discharge. Advanced Energy Materials, 2020, 10, 2002312.	10.2	45
140	Reactivation of Mg acceptor in Mg-doped GaN by nitrogen plasma treatment. Applied Physics Letters, 2000, 76, 3079-3081.	1.5	44
141	Effects of In or Ga doping on the growth behavior and optical properties of ZnO nanorods fabricated by hydrothermal process. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1552-1556.	0.8	44
142	Effective sulfur passivation of an n-type GaN surface by an alcohol-based sulfide solution. Journal of Applied Physics, 2000, 87, 4591-4593.	1.1	43
143	Hexagonal boron nitride assisted growth of stoichiometric Al 2 O 3 dielectric on graphene for triboelectric nanogenerators. Nano Energy, 2015, 12, 556-566.	8.2	43
144	Research Update: Nanogenerators for self-powered autonomous wireless sensors. APL Materials, 2017, 5, .	2.2	43

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145	Selective formation of ZnO nanodots on nanopatterned substrates by metalorganic chemical vapor deposition. Applied Physics Letters, 2003, 83, 3593-3595.	1.5	42
146	Highly flexible ZnO/Ag/ZnO conducting electrode for organic photonic devices. Ceramics International, 2015, 41, 7146-7150.	2.3	42
147	Self-powered transparent flexible graphene microheaters. Nano Energy, 2015, 17, 356-365.	8.2	42
148	Piezoelectric touch-sensitive flexible hybrid energy harvesting nanoarchitectures. Nanotechnology, 2010, 21, 405503.	1.3	40
149	Surface modification of triboelectric materials by neutral beams. Journal of Materials Chemistry A, 2019, 7, 25066-25077.	5.2	40
150	Ultrathin Noncontact-Mode Triboelectric Nanogenerator Triggered by Giant Dielectric Material Adaption. ACS Energy Letters, 0, , 1189-1197.	8.8	40
151	Noise and sensitivity characteristics of solid-state nanopores with a boron nitride 2-D membrane on a pyrex substrate. Nanoscale, 2016, 8, 5755-5763.	2.8	39
152	Electromigration-induced failure of GaN multi-quantum well light emitting diode. Electronics Letters, 2000, 36, 908.	0.5	38
153	High quality graphene-semiconducting oxide heterostructure for inverted organic photovoltaics. Journal of Materials Chemistry, 2012, 22, 13032.	6.7	38
154	Rewritable ghost floating gates by tunnelling triboelectrification for two-dimensional electronics. Nature Communications, 2017, 8, 15891.	5.8	38
155	Flexible chemical sensors based on hybrid layer consisting of molybdenum disulphide nanosheets and carbon nanotubes. Carbon, 2018, 129, 607-612.	5.4	38
156	Strategically Designed Zeolitic Imidazolate Frameworks for Controlling the Degree of Graphitization. Bulletin of the Chemical Society of Japan, 2018, 91, 1474-1480.	2.0	38
157	Observation of spatially-varying Fermi velocity in strained-graphene directly grown on hexagonal boron nitride. Carbon, 2014, 74, 139-145.	5.4	37
158	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.	4.0	36
159	Effect of alcohol-based sulfur treatment on Pt Ohmic contacts top-type GaN. Applied Physics Letters, 2001, 78, 1942-1944.	1.5	35
160	Graphene/h-BN/ZnO van der Waals tunneling heterostructure based ultraviolet photodetector. Optics Express, 2015, 23, 18864.	1.7	35
161	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.	4.0	35
162	Synthesis and field emission properties of triangular-shaped GaN nanowires on Si(100) substrates. Journal of Crystal Growth, 2009, 311, 495-499.	0.7	34

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163	Chlorine-trapped CVD bilayer graphene for resistive pressure sensor with high detection limit and high sensitivity. 2D Materials, 2017, 4, 025049.	2.0	34
164	Two-Dimensional Materials Inserted at the Metal/Semiconductor Interface: Attractive Candidates for Semiconductor Device Contacts. Nano Letters, 2018, 18, 4878-4884.	4.5	34
165	Fabrication of piezoelectric poly(l-lactic acid)/BaTiO3 fibre by the melt-spinning process. Scientific Reports, 2020, 10, 16339.	1.6	34
166	Effects of sulfur treatment on electrical and optical performance of InGaN/GaN multiple-quantum-well blue light-emitting diodes. Applied Physics Letters, 2001, 78, 1766-1768.	1.5	33
167	Tunable piezoelectric nanogenerators using flexoelectricity of well-ordered hollow 2D MoS2 shells arrays for energy harvesting. Nano Energy, 2019, 61, 471-477.	8.2	33
168	Dual Friction Mode Textileâ€Based Tire Cord Triboelectric Nanogenerator. Advanced Functional Materials, 2020, 30, 2002401.	7.8	33
169	InGaN/GaN multiple quantum well light-emitting diodes with highly transparent Pt thin film contact on p-GaN. Journal of Applied Physics, 2000, 87, 4464-4466.	1.1	31
170	ZnO growth on Si substrates by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2002, 240, 112-116.	0.7	31
171	ZnO nanotubes by template wetting process. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 241-244.	1.3	31
172	Highly flexible Al-doped ZnO/Ag/Al-doped ZnO multilayer films deposited on PET substrates at room temperature. Ceramics International, 2016, 42, 3473-3478.	2.3	31
173	Dynamic halide perovskite heterojunction generates direct current. Energy and Environmental Science, 2021, 14, 374-381.	15.6	31
174	Microbial Disinfection with Supercoiling Capacitive Triboelectric Nanogenerator. Advanced Energy Materials, 2022, 12, .	10.2	31
175	Ferroelectric Coupling Effect on the Energyâ€Band Structure of Hybrid Heterojunctions with Selfâ€Organized P(VDFâ€TrFE) Nanomatrices. Advanced Materials, 2014, 26, 5619-5625.	11.1	30
176	Patchable and Implantable 2D Nanogenerator. Small, 2021, 17, e1903519.	5.2	30
177	Analytical approach to bursting in tube hydroforming using diffuse plastic instability. International Journal of Mechanical Sciences, 2004, 46, 1535-1547.	3.6	29
178	Growth of ZnO nanostructures in a chemical vapor deposition process. Journal of Crystal Growth, 2006, 292, 306-310.	0.7	29
179	Optimization of an Electron Transport Layer to Enhance the Power Conversion Efficiency of Flexible Inverted Organic Solar Cells. Nanoscale Research Letters, 2010, 5, 1908-1912.	3.1	28
180	Metallic Grid Electrode Fabricated via Flow Coating for High-Performance Flexible Piezoelectric Nanogenerators. Journal of Physical Chemistry C, 2015, 119, 7802-7808.	1.5	28

#	Article	IF	Citations
181	Mechanoreceptorâ€Inspired Dynamic Mechanical Stimuli Perception based on Switchable Ionic Polarization. Advanced Functional Materials, 2021, 31, 2100649.	7.8	28
182	Direct Al cathode layer sputtering on LiFâ•Alq3 using facing target sputtering with a mixture of Ar and Kr. Applied Physics Letters, 2006, 88, 083513.	1.5	27
183	Formation of silicon oxide nanowires directly from Au/Si and Pdâ€“Au/Si substrates. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 158-162.	1.3	27
184	A Bi-layer TiO₂ photoanode for highly durable, flexible dye-sensitized solar cells. Journal of Materials Chemistry A, 2015, 3, 4679-4686.	5.2	27
185	Low-temperature growth and characterization of ZnO thin films for flexible inverted organic solar cells. Journal of Materials Chemistry, 2011, 21, 12274.	6.7	26
186	Hydrazine-based n-type doping process to modulate Dirac point of graphene and its application to complementary inverter. Organic Electronics, 2013, 14, 1586-1590.	1.4	26
187	Temperature-dependent piezotronic effect of MoS2 monolayer. Nano Energy, 2019, 58, 811-816.	8.2	26
188	High-Performance Dual-Mode Triboelectric Nanogenerator Based on Hierarchical Auxetic Structure. ACS Energy Letters, 2020, 5, 3507-3513.	8.8	26
189	Observation of negative differential resistance in mesoscopic graphene oxide devices. Scientific Reports, 2018, 8, 7144.	1.6	25
190	Self-Assembled Three-Dimensional ZnO Nanosize Islands on Si Substrates with SiO2 Intermediate Layer by Metalorganic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2002, 41, L543-L545.	0.8	24
191	Nanocrystallineâ€Grapheneâ€Tailored Hexagonal Boron Nitride Thin Films. Angewandte Chemie - International Edition, 2014, 53, 11493-11497.	7.2	24
192	Piezoelectric coupling in a field-effect transistor with a nanohybrid channel of ZnO nanorods grown vertically on graphene. Nanoscale, 2014, 6, 15144-15150.	2.8	24
193	Self-boosted power generation of triboelectric nanogenerator with glass transition by friction heat. Nano Energy, 2020, 74, 104840.	8.2	24
194	Highly sensitive and flexible pressure sensors using position- and dimension-controlled ZnO nanotube arrays grown on graphene films. NPG Asia Materials, 2021, 13, .	3.8	24
195	Thin film passivation of organic light emitting diodes by inductively coupled plasma chemical vapor deposition. Thin Solid Films, 2007, 515, 4758-4762.	0.8	23
196	Synthesis and Characterization of Monodispersed Î²-Ga₂O₃ Nanospheres via Morphology Controlled Ga₄(OH)₁₀SO₄ Precursors. Langmuir, 2015, 31, 833-838.	1.6	22
197	A Surfaceâ€Functionalized Ionovoltaic Device for Probing Ionâ€Specific Adsorption at the Solidâ€“Liquid Interface. Advanced Materials, 2019, 31, e1806268.	11.1	22
198	Metal nanowireâ€“polymer matrix hybrid layer for triboelectric nanogenerator. Nano Energy, 2019, 58, 227-233.	8.2	22

#	Article	IF	Citations
199	Poly-4-vinylphenol and poly(melamine-co-formaldehyde)-based graphene passivation method for flexible, wearable and transparent electronics. Nanoscale, 2014, 6, 3830.	2.8	21
200	Precise Layer Control and Electronic State Modulation of a Transition Metal Dichalcogenide via Phaseâ€Transitionâ€Induced Growth. Advanced Materials, 2022, 34, e2103286.	11.1	21
201	A graphene nanoplatelets-based high-performance, durable triboelectric nanogenerator for harvesting the energy of human motion. Energy Reports, 2022, 8, 1026-1033.	2.5	21
202	Bursting failure prediction in tube hydroforming using FLSD. International Journal of Advanced Manufacturing Technology, 2009, 41, 311-322.	1.5	20
203	Recent advanced in energy harvesting and storage applications with two-dimensional layered materials. FlatChem, 2017, 6, 37-47.	2.8	20
204	Piezoionic-powered graphene strain sensor based on solid polymer electrolyte. Nano Energy, 2021, 81, 105610.	8.2	20
205	Inverted Organic Solar Cells with ZnO Thin Films Prepared by Solâ€“Gel Method. Journal of Nanoelectronics and Optoelectronics, 2010, 5, 135-138.	0.1	20
206	Deformation-contributed negative triboelectric property of polytetrafluoroethylene: A density functional theory calculation. Nano Energy, 2022, 100, 107531.	8.2	20
207	Formation of Hexagonal Boron Nitride by Metal Atomic Vacancy-Assisted Bâ€“N Molecular Diffusion. ACS Nano, 2015, 9, 633-638.	7.3	19
208	Continuous bundles of aligned electrospun PAN nano-fiber using electrostatic spiral collector and converging coil. Polymer, 2016, 84, 52-58.	1.8	19
209	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.	2.5	19
210	Triboelectric Nanogenerators: High Permittivity CaCu₃Ti₄O₁₂ Particleâ€Induced Internal Polarization Amplification for High Performance Triboelectric Nanogenerators (Adv. Energy Mater. 9/2020). Advanced Energy Materials, 2020, 10, 2070040.	10.2	19
211	Nonchemical n- and p-Type Charge Transfer Doping of FAPbI₃ Perovskite. ACS Energy Letters, 2021, 6, 2817-2824.	8.8	19
212	Ambient Humidityâ€Induced Phase Separation for Fiber Morphology Engineering toward Piezoelectric Selfâ€Powered Sensing. Small, 2022, 18, e2105811.	5.2	19
213	Foldable and water-resist electrodes based on carbon nanotubes/methyl cellulose hybrid conducting papers. Composites Part B: Engineering, 2019, 160, 512-518.	5.9	18
214	Pulsed Gate Switching of MoS₂ Fieldâ€Effect Transistor Based on Flexible Polyimide Substrate for Ultrasonic Detectors. Advanced Functional Materials, 2021, 31, 2007389.	7.8	18
215	Mixed Triboelectric and Flexoelectric Charge Transfer at the Nanoscale. Advanced Science, 2021, 8, e2101793.	5.6	18
216	Individually addressable and flexible pressure sensor matrixes with ZnO nanotube arrays on graphene. NPG Asia Materials, 2022, 14, .	3.8	18

#	Article	IF	Citations
217	Artificial control of ZnO nanodots by ion-beam nanopatterning. Journal of Applied Physics, 2005, 97, 104316.	1.1	17
218	Bi3.25La0.75Ti3O12 (BLT) nanotube capacitors for semiconductor memories. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 274-278.	1.3	17
219	Healthcare management applications based on triboelectric nanogenerators. APL Materials, 2021, 9, .	2.2	17
220	Synthesis of Ga-Doped ZnO Nanorods Using an Aqueous Solution Method for a Piezoelectric Nanogenerator. Journal of Nanoscience and Nanotechnology, 2012, 12, 3430-3433.	0.9	16
221	Functionalization of carbon fiber tows with ZnO nanorods for stress sensor integration in smart composite materials. Nanotechnology, 2018, 29, 335501.	1.3	16
222	Solar-induced hybrid energy harvesters for advanced oxidation water treatment. IScience, 2021, 24, 102808.	1.9	16
223	Sintering behavior of aluminum nitride ceramics with MgOâ€“CaOâ€“Al2O3â€“SiO2 glass additive. International Journal of Refractory Metals and Hard Materials, 2015, 53, 46-50.	1.7	15
224	Investigation on energy bandgap states of amorphous SiZnSnO thin films. Scientific Reports, 2019, 9, 19246.	1.6	15
225	Cylindrical Free-Standing Mode Triboelectric Generator for Suspension System in Vehicle. Micromachines, 2019, 10, 17.	1.4	15
226	High-performance coaxial piezoelectric energy generator (C-PEG) yarn of Cu/PVDF-TrFE/PDMS/Nylon/Ag. Nanotechnology, 2021, 32, 145401.	1.3	15
227	Self-Tailored One-Dimensional ZnO Nanodot Arrays Formed by Metalorganic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2003, 42, L568-L571.	0.8	14
228	Electrical and optical properties of ITO:Ca composite thin films for TEOLED cathode. Thin Solid Films, 2008, 516, 5445-5448.	0.8	14
229	Free-Standing ZnO Nanorods and Nanowalls by Aqueous Solution Method. Journal of Nanoscience and Nanotechnology, 2008, 8, 4688-4691.	0.9	14
230	Synthesis of GaN nanowires and nanorods via self-growth mode control. Microelectronics Journal, 2009, 40, 373-376.	1.1	14
231	Growth and Characteristics of Zinc-Blende and Wurtzite GaN Junctioned Branch Nanostructures. Crystal Growth and Design, 2010, 10, 2581-2584.	1.4	14
232	Dewetted gold nanoparticles on ZnO nanorods for three-dimensionally distributed plasmonic hot spots. Scripta Materialia, 2013, 69, 654-657.	2.6	14
233	Highly efficient flexible piezoelectric nanogenerator and femtosecond two-photon absorption properties of nonlinear lithium niobate nanowires. Journal of Applied Physics, 2017, 121, .	1.1	14
234	Formation of Highly Efficient Dye-Sensitized Solar Cells by Effective Electron Injection with GaN Nanoparticles. Journal of the Electrochemical Society, 2011, 158, H693.	1.3	13

#	Article	IF	Citations
235	Growth behaviors and film properties of zinc oxide grown by atmospheric mist chemical vapor deposition. Journal of Alloys and Compounds, 2014, 614, 244-248.	2.8	13
236	Highly Efficient Photocurrent Generation from Nanocrystalline Grapheneâ€“Molybdenum Disulfide Lateral Interfaces. Advanced Materials, 2016, 28, 1793-1798.	11.1	13
237	RF Sputtered Nb-Doped MoS₂ Thin Film for Effective Detection of NO₂ Gas Molecules: Theoretical and Experimental Studies. ACS Omega, 2022, 7, 10492-10501.	1.6	13
238	Vertically Well-Aligned ZnO Nanowires on c-Al2O3 and GaN Substrates by Au Catalyst. ETRI Journal, 2006, 28, 787-789.	1.2	12
239	A homojunction of single-crystalline Î²-Ga2O3nanowires and nanocrystals. Nanotechnology, 2007, 18, 345305.	1.3	12
240	Binary Oxide p-n Heterojunction Piezoelectric Nanogenerators with an Electrochemically Deposited High p-Type Cu₂O Layer. ACS Applied Materials & Interfaces, 2016, 8, 22135-22141.	4.0	12
241	Transparent Supercapacitors: From Optical Theories to Optoelectronics Applications. Energy and Environmental Materials, 2020, 3, 265-285.	7.3	12
242	A triboelectric nanogenerator energy harvesting system based on load-aware control for input power from 2.4ÂÎ¼W to 15.6ÂÎ¼W. Nano Energy, 2020, 74, 104839.	8.2	12
243	Triboelectric energy harvesting using conjugated microporous polymer nanoparticles in polyurethane films. Journal of Materials Chemistry A, 2021, 9, 12560-12565.	5.2	12
244	Focused Ion Beam Patterning for Fabrication of Periodical Two-Dimensional Zinc Oxide Nanodot Arrays. Japanese Journal of Applied Physics, 2004, 43, L652-L654.	0.8	11
245	Artificial control of ZnO nanostructures grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2004, 272, 138-142.	0.7	11
246	Bulk GaN single crystal growth and characterization using various alkali metal flux. Journal of Crystal Growth, 2006, 292, 216-220.	0.7	11
247	Low-temperature synthesis of one-dimensional ZnO nanostructures on screen-printed carbon nanotube films. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2526-2530.	1.3	11
248	Mass production and characterization of free-standing ZnO nanotripods by thermal chemical vapor deposition. Journal of Crystal Growth, 2009, 311, 504-507.	0.7	11
249	Asymmetrically Coupled Plasmonic Core and Nanotriplet Satellites. Journal of Physical Chemistry C, 2014, 118, 18659-18667.	1.5	11
250	Flexible and transparent TiO₂/Ag/ITO multilayer electrodes on PET substrates for organic photonic devices. Journal of Materials Research, 2015, 30, 1593-1598.	1.2	11
251	Bennet's doubler working as a power booster for triboelectric nanoâ€generators. Electronics Letters, 2018, 54, 378-379.	0.5	11
252	Copper indium selenide water splitting photoanodes with artificially designed heterophasic blended structure and their high photoelectrochemical performances. Nano Energy, 2018, 46, 1-10.	8.2	11

#	Article	IF	Citations
253	Electrode Engineering with CNTs to Enhance the Electrochemical Performance of LiNi 0.6 Co 0.2 Mn 0.2 O 2 Cathodes with Commercial Level Design Parameters. ChemElectroChem, 2020, 7, 2621-2628.	1.7	11
254	Zero-writing-power tribotronic MoS2 touch memory. Nano Energy, 2020, 75, 104936.	8.2	11
255	Electrical and Interfacial Properties of Nonalloyed Ti/Au Ohmic and Pt Schottky Contacts on Zn-Terminated ZnO. Japanese Journal of Applied Physics, 2006, 45, 1560-1565.	0.8	10
256	ZnO nanotips and nanorods on carbon nanotube/Si substrates: anomalous p-type like optical properties of undoped ZnO nanotips. Nanotechnology, 2008, 19, 245708.	1.3	10
257	Preface for Special Topic: Nanogenerators. APL Materials, 2017, 5, .	2.2	10
258	Flexible graphite bipolar plates for vanadium redox flow batteries. International Journal of Energy Research, 2021, 45, 11098-11108.	2.2	10
259	Emerging Energy Harvesting Materials and Devices for Selfâ€Powered Water Disinfection. Small Methods, 2021, 5, e2100093.	4.6	10
260	Dry Etching of GaN/InGaN Multiquantum Wells Using Inductively Coupled Cl[sub 2]/CH[sub 4]/H[sub 2]/Ar Plasma. Journal of the Electrochemical Society, 2001, 148, G254.	1.3	9
261	Selective growth of ZnO nanodots prepared by metalorganic chemical vapor deposition on focused-ion beam-nanopatterned substrates. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 601-605.	1.3	9
262	Vertical growth of ZnO nanowires on c-Al2O3 substrate by controlling ramping rate in a vapor-phase epitaxy method. Journal of Physics and Chemistry of Solids, 2008, 69, 1486-1490.	1.9	9
263	Synthesis and properties of triangular-shaped GaN nanorods via growth mode control. Journal of Crystal Growth, 2009, 311, 490-494.	0.7	9
264	Nanogenerators: Transparent Flexible Graphene Triboelectric Nanogenerators (Adv. Mater. 23/2014). Advanced Materials, 2014, 26, 3778-3778.	11.1	9
265	Mechanical properties of individual nanorods and nanotubes in forest-like structures. Scripta Materialia, 2017, 133, 54-58.	2.6	9
266	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.	3.8	9
267	Covalent-bonding-induced strong phonon scattering in the atomically thin WSe2 layer. Scientific Reports, 2019, 9, 7612.	1.6	9
268	Mist-CVD Growth of High Quality ZnO Thin Films at Low Temperature for Inverted Organic Solar Cells. Journal of Nanoelectronics and Optoelectronics, 2010, 5, 247-251.	0.1	9
269	Selective Etching of HfO2 by Using Inductively-Coupled Ar/C4F8 Plasmas and the Removal of Etch Residue on Si by Using an O2 Plasma Treatment. Journal of the Korean Physical Society, 2008, 53, 1675-1679.	0.3	9
270	Virus blocking textile for SARS-CoV-2 using human body triboelectric energy harvesting. Cell Reports Physical Science, 2022, 3, 100813.	2.8	9

#	Article	IF	Citations
271	Growth of ferroelectric BLT and Pt nanotubes for semiconductor memories. Journal of Crystal Growth, 2006, 292, 315-319.	0.7	8
272	Electrical Characterization of ZnO Single Nanowire Device for Chemical Sensor Application. Journal of Nanoscience and Nanotechnology, 2008, 8, 4698-4701.	0.9	8
273	Artificially Controlled Two-Step Electrodeposition of Cu and Cu/In Metal Precursors with Improved Surface Roughness for Solar Applications. Journal of the Electrochemical Society, 2014, 161, D447-D452.	1.3	8
274	Energy Harvesting: Micropatterned P(VDFâ€TrFE) Filmâ€Based Piezoelectric Nanogenerators for Highly Sensitive Selfâ€Powered Pressure Sensors (Adv. Funct. Mater. 21/2015). Advanced Functional Materials, 2015, 25, 3276-3276.	7.8	8
275	Formation of Flexible and Transparent Indium Gallium Zinc Oxide/Ag/Indium Gallium Zinc Oxide Multilayer Film. Journal of Electronic Materials, 2016, 45, 4265-4269.	1.0	8
276	Suppression of Leakage Current in InGaN/GaN Multiple-Quantum Well LEDs by N[sub 2]O Plasma Treatment. Electrochemical and Solid-State Letters, 2004, 7, G241.	2.2	7
277	Effect of assist ion beam voltage on intrinsic stress and optical properties of Ta2O5 thin films deposited by dual ion beam sputtering. Thin Solid Films, 2008, 516, 3582-3585.	0.8	7
278	Growth of High Quality ZnO Nanowires on Graphene. Journal of Nanoscience and Nanotechnology, 2012, 12, 1551-1554.	0.9	7
279	Doping Effect of Electron Transport Layer on Nanoscale Phase Separation and Charge Transport in Bulk Heterojunction Solar Cells. Journal of Physical Chemistry C, 2013, 117, 24692-24699.	1.5	7
280	Fabrication of electrode Pt nanotubes for semiconductor capacitors. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 279-282.	1.3	6
281	Growth of Nanostructured Polycrystalline Cerium Oxide Through a Solvothermal Precipitation Using Near-Supercritical Fluids. Journal of Nanoscience and Nanotechnology, 2010, 10, 130-134.	0.9	6
282	Nanotubes: Self-Compensated Insulating ZnO-Based Piezoelectric Nanogenerators (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10	7.8	6
283	A Wireless Near-Infrared Spectroscopy Device for Flap Monitoring: Proof of Concept in a Porcine Musculocutaneous Flap Model. Journal of Reconstructive Microsurgery, 2022, 38, 096-105.	1.0	6
284	Catalyst-Free Synthesis of ZnO Nanorods on Metal Substrates by Using Thermal Chemical Vapor Deposition. Journal of the Korean Physical Society, 2008, 53, 183-187.	0.3	6
285	Prediction of Deflection of Reinforced Concrete Beams Considering Shear Effect. Materials, 2021, 14, 6684.	1.3	6
286	Effects of Flow Transport of the Ar Carrier on the Synthesis of ZnO Nanowires by Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2011, 50, 015001.	0.8	5
287	Inverted Organic Solar Cells with ZnO Nanowalls Prepared Using Wet Chemical Etching in a KOH Solution. Journal of Nanoscience and Nanotechnology, 2012, 12, 1234-1237.	0.9	5
288	Triboelectric Nanogenerators: Triboelectric Series of 2D Layered Materials (Adv. Mater. 39/2018). Advanced Materials, 2018, 30, 1870294.	11.1	5

#	Article	IF	Citations
289	1.4ÂÂµm-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.	1.0	5
290	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.	4.0	5
291	Low refraction properties of F-doped SiOC:H thin films prepared by PECVD. Thin Solid Films, 2008, 516, 1410-1413.	0.8	4
292	Low-Temperature Solution-Based Growth of ZnO Nanorods and Thin Films on Si Substrates. Journal of Nanoscience and Nanotechnology, 2009, 9, 7432-5.	0.9	4
293	Novel Architecture of Plasmon Excitation Based on Self-Assembled Nanoparticle Arrays for Photovoltaics. ACS Applied Materials & Interfaces, 2014, 6, 1030-1035.	4.0	4
294	Nanogenerators and piezo/tribo-tronics. Nano Energy, 2019, 61, 637-638.	8.2	4
295	Aim high energy conversion efficiency in triboelectric nanogenerators. Science and Technology of Advanced Materials, 2020, 21, 683-688.	2.8	4
296	Structural performance of reinforced concrete interior beamâ€“column joints with high-strength bars. Archives of Civil and Mechanical Engineering, 2021, 21, 1.	1.9	4
297	Evaluation of Shear Effect on Deflection of RC Beams. Applied Sciences (Switzerland), 2021, 11, 7690.	1.3	4
298	Percolation Transition in Correlated Static Model. Journal of the Korean Physical Society, 2008, 52, 145.	0.3	4
299	Triboelectric Nanogenerators for Self-powered Sensors. Journal of Sensor Science and Technology, 2022, 31, 79-84.	0.1	4
300	High quality GaN nanowires synthesized from Ga2O3 with graphite powder using VPE method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 313-314, 52-55.	2.3	3
301	Controllable Dimension of ZnO Nanowalls on GaN/c-Al2O3 Substrate by Vapor Phase Epitaxy Method. Journal of Nanoscience and Nanotechnology, 2008, 8, 4783-4786.	0.9	3
302	Homojunction of Single-Crystalline ZnO Nanowire/Nanowall Network onc-Al2O3Substrate Formed by Thermal Vapor Phase Epitaxy Method. Japanese Journal of Applied Physics, 2009, 48, 095502.	0.8	3
303	Nanogenerators: Highly Stretchable Piezoelectric-Pyroelectric Hybrid Nanogenerator (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	11.1	3
304	Synthesis of highly crystalline Ga-doped zinc-oxide nanoparticles for hybrid polymer solar cells. Journal of the Korean Physical Society, 2015, 66, 1422-1425.	0.3	3
305	Preparation of ZnO Nanorod/Graphene/ZnO Nanorod Epitaxial Double Heterostructure for Piezoelectrical Nanogenerator by Using Preheating Hydrothermal. Journal of Visualized Experiments, 2016, , e53491.	0.2	3
306	Graphene Tribotronics: Graphene Tribotronics for Electronic Skin and Touch Screen Applications (Adv. Mater. 1/2017). Advanced Materials, 2017, 29, .	11.1	3

#	Article	IF	Citations
307	Energy Harvesters: Hybrid Energy Harvesters: Toward Sustainable Energy Harvesting (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	11.1	3
308	Mechanical Energy Harvesting: Textileâ€Based Triboelectric Nanogenerators for Selfâ€Powered Wearable Electronics (Adv. Funct. Mater. 2/2019). Advanced Functional Materials, 2019, 29, 1970011.	7.8	3
309	Antiphase Boundaries as Faceted Metallic Wires in 2D Transition Metal Dichalcogenides. Advanced Science, 2020, 7, 2000788.	5.6	3
310	Recent development of the triboelectric properties of the polymer: A review. Advanced Materials Letters, 2018, 9, 462-470.	0.3	3
311	Prediction of Shear Strength of Reinforced High-Strength Concrete Beams Using Compatibility-Aided Truss Model. Applied Sciences (Switzerland), 2021, 11, 10585.	1.3	3
312	Multidimensional ZnO nanodot arrays by self-ordering on functionalised substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 896-899.	0.8	2
313	Characterization of low refractive index SiOCF:H films designed to enhance the efficiency of light emission. Journal of Electroceramics, 2006, 16, 469-472.	0.8	2
314	New approach to the growth of SiOx nanowire bunch using Au catalyst and SiNx film on Si substrate. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 3170-3172.	1.3	2
315	Fabrication of Transparent Semiconducting Indium Zinc Tin Oxide Thin Films and Its Wet Chemical Etching Characteristics in Hydrochloric Acid. Molecular Crystals and Liquid Crystals, 2010, 532, 141/[557]-147/[563].	0.4	2
316	Enhancement of Light Extraction Efficiency of GaN-Based Light-Emitting Diodes by ZnO Nanorods with Different Sizes. Journal of Nanoscience and Nanotechnology, 2013, 13, 3696-3699.	0.9	2
317	An 88% Efficiency 2.4Î¼W to 15.6Î¼W Triboelectric Nanogenerator Energy Harvesting System Based on a Single-Comparator Control Algorithm. , 2018, , .		2
318	nâ€ZnO/pâ€NiO Core/Shellâ€Structured Nanorods for Piezoelectric Nanogenerators. Energy Technology, 2020, 8, 2000462.	1.8	2
319	Conductive Elastomers: A Metalâ€Like Conductive Elastomer with a Hierarchical Wrinkled Structure (Adv. Mater. 7/2020). Advanced Materials, 2020, 32, 2070051.	11.1	2
320	Energyâ€Storage Materials: Why Celluloseâ€Based Electrochemical Energy Storage Devices? (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock	11.1	2
321	Route from ZnO Thin Films to Nanostructures on Si Substrates by Metal Organic Chemical Vapor Deposition. Journal of the Korean Physical Society, 2007, 51, 207.	0.3	2
322	Controlled Growth of Two-Dimensional ZnO Nanowalls by Thermal Chemical Vapor Deposition. Journal of the Korean Physical Society, 2007, 51, 303.	0.3	2
323	Airflow-induced P(VDF-TrFE) fiber arrays for enhanced piezoelectric energy harvesting. APL Materials, 2022, 10, .	2.2	2
324	Self-Organized ZnO Nanosize Islands with Low-Dimensional Characteristics on SiO2/Si Substrates by Metalorganic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2002, 739, 481.	0.1	1

#	Article	IF	Citations
325	Surface confinement of the InN-rich phase in thick InGaN on GaN. Superlattices and Microstructures, 2006, 40, 545-550.	1.4	1
326	Utilization of Bacteriophages as Molecular Label. Journal of Nanoscience and Nanotechnology, 2008, 8, 3988-3989.	0.9	1
327	Growth mode control and micro-Raman characterization of triangular GaN nanowires in a vapor phase epitaxy process. Materials Letters, 2009, 63, 1296-1298.	1.3	1
328	Computational analysis of the contributions to the piezoelectric coefficient $$e_{33}$$ e 33 in ZnO nanowires: first-principles calculations. Journal of Computational Electronics, 2014, 13, 983-988.	1.3	1
329	Effects of acceptor dopants on the enhanced piezoelectric potential of ZnO nanowires: limiting free charge-carrier density through neutralizing donors. Journal of Computational Electronics, 2014, 13, 606-612.	1.3	1
330	Synthesis of Functional ZnO Nanowall Networks Using Simple Solution Etching. Journal of Nanoscience and Nanotechnology, 2014, 14, 5207-5211.	0.9	1
331	Photocurrent Generation: Highly Efficient Photocurrent Generation from Nanocrystalline Grapheneâ€“Molybdenum Disulfide Lateral Interfaces (Adv. Mater. 9/2016). Advanced Materials, 2016, 28, 1899-1899.	11.1	1
332	Energy Harvesting: Highâ€Performance Piezoelectric, Pyroelectric, and Triboelectric Nanogenerators Based on P(VDFâ€TrFE) with Controlled Crystallinity and Dipole Alignment (Adv. Funct. Mater. 22/2017). Advanced Functional Materials, 2017, 27, .	7.8	1
333	nâ€ZnO/pâ€NiO Core/Shellâ€Structured Nanorods for Piezoelectric Nanogenerators. Energy Technology, 2020, 8, 2070103.	1.8	1
334	Energy Harvesting <I>Î´</I>-Phase Polyvinylidene-Fluoride Sponge. Science of Advanced Materials, 2016, 8, 817-824.	0.1	1
335	Recent Trends in Energy Harvesting Technology Using Composite Materials. Ceramist, 2019, 22, 110-121.	0.0	1
336	Recent Advances in the Piezo-Phototronic Effect for Optoelectronics. Journal of the Korean Ceramic Society, 2013, 50, 173-179.	1.1	1
337	Prediction of Deflection of Shear-Critical RC Beams Using Compatibility-Aided Truss Model. Applied Sciences (Switzerland), 2021, 11, 11478.	1.3	1
338	Flexible nanogenerators for self-powered touch and light sensor applications. , 2011, , .		0
339	Piezoelectric Materials: Allâ€Solutionâ€Processed Flexible Thin Film Piezoelectric Nanogenerator (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov	11.1	0
340	Piezoelectrics: Layerâ€byâ€Layer Controlled Perovskite Nanocomposite Thin Films for Piezoelectric Nanogenerators (Adv. Funct. Mater. 40/2014). Advanced Functional Materials, 2014, 24, 6246-6246.	7.8	0
341	2D Nanogenerators: Patchable and Implantable 2D Nanogenerator (Small 9/2021). Small, 2021, 17, 2170039.	5.2	0
342	3D Microstructures: Transparent, Compliant 3D Mesostructures for Precise Evaluation of Mechanical Characteristics of Organoids (Adv. Mater. 25/2021). Advanced Materials, 2021, 33, 2170196.	11.1	0

#	Article	IF	Citations
343	Introduction to research and current trend about nanogenerator. Vacuum Magazine, 2014, 1, 14-20.	0.0	0
344	INTERLAYER THERMAL BOUNDARY RESISTANCE OF WSe2 INVESTIGATED BY USING TIME-DOMAIN THERMOREFLECTANCE MEASUREMENT. , 2018, , .		0
345	Ambient Humidityâ€Induced Phase Separation for Fiber Morphology Engineering toward Piezoelectric Selfâ€Powered Sensing (Small 17/2022). Small, 2022, 18, .	5.2	0