

# Sang-Jae Kim

## List of Publications by Year in descending order

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311  
papers

17,800  
citations

11651

70  
h-index

19190

118  
g-index

324  
all docs

324  
docs citations

324  
times ranked

18977  
citing authors

#	ARTICLE	IF	CITATIONS
1	The chemical and structural analysis of graphene oxide with different degrees of oxidation. Carbon, 2013, 53, 38-49.	10.3	1,549
2	Antibacterial Efficiency of Graphene Nanosheets against Pathogenic Bacteria via Lipid Peroxidation. Journal of Physical Chemistry C, 2012, 116, 17280-17287.	3.1	377
3	Graphene oxide as a photocatalytic material. Applied Physics Letters, 2011, 98, .	3.3	299
4	A highly sensitive electrochemical sensor for nitrite detection based on Fe <sub>2</sub> O <sub>3</sub> nanoparticles decorated reduced graphene oxide nanosheets. Applied Catalysis B: Environmental, 2014, 148-149, 22-28.	20.2	296
5	One pot hydrothermal growth of hierarchical nanostructured Ni <sub>3</sub> S <sub>2</sub> on Ni foam for supercapacitor application. Chemical Engineering Journal, 2014, 251, 116-122.	12.7	287
6	Investigation of Raman and photoluminescence studies of reduced graphene oxide sheets. Applied Physics A: Materials Science and Processing, 2012, 106, 501-506.	2.3	279
7	Improved activity of a graphene-TiO <sub>2</sub> hybrid electrode in an electrochemical supercapacitor. Carbon, 2013, 63, 434-445.	10.3	276
8	Enhanced photocatalytic activity of Cu-doped ZnO nanorods. Solid State Communications, 2012, 152, 375-380.	1.9	248
9	Supercapacitive properties of hydrothermally synthesized sphere like MoS <sub>2</sub> nanostructures. Materials Research Bulletin, 2014, 50, 499-502.	5.2	234
10	Two-dimensional siloxene nanosheets: novel high-performance supercapacitor electrode materials. Energy and Environmental Science, 2018, 11, 1595-1602.	30.8	232
11	Flexible, Hybrid Piezoelectric Film (BaTi <sub>1-x</sub> Zr <sub>x</sub> O <sub>3</sub> )/PVDF Nanogenerator as a Self-Powered Fluid Velocity Sensor. ACS Applied Materials & Interfaces, 2015, 7, 9831-9840.	8.0	231
12	Enhanced activity of a hydrothermally synthesized mesoporous MoS <sub>2</sub> nanostructure for high performance supercapacitor applications. New Journal of Chemistry, 2014, 38, 2379.	2.8	229
13	Graphene nanosheets: Ultrasound assisted synthesis and characterization. Ultrasonics Sonochemistry, 2013, 20, 644-649.	8.2	228
14	Piezoelectric-Driven Self-Charging Supercapacitor Power Cell. ACS Nano, 2015, 9, 4337-4345.	14.6	226
15	Mechanistic investigation on the toxicity of MgO nanoparticles toward cancer cells. Journal of Materials Chemistry, 2012, 22, 24610.	6.7	221
16	An investigation of the electrical transport properties of graphene-oxide thin films. Materials Chemistry and Physics, 2012, 132, 29-33.	4.0	203
17	Antibacterial activity of MgO nanoparticles based on lipid peroxidation by oxygen vacancy. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	191
18	Graphdiyne-ZnO Nanohybrids as an Advanced Photocatalytic Material. Journal of Physical Chemistry C, 2015, 119, 22057-22065.	3.1	189

#	ARTICLE	IF	CITATIONS
19	Probing the energy conversion process in piezoelectric-driven electrochemical self-charging supercapacitor power cell using piezoelectrochemical spectroscopy. <i>Nature Communications</i> , 2020, 11, 2351.	12.8	189
20	Improved electrochemical performances of binder-free CoMoO <sub>4</sub> nanoplate arrays@Ni foam electrode using redox additive electrolyte. <i>Journal of Power Sources</i> , 2016, 306, 378-386.	7.8	183
21	Mechanically delaminated few layered MoS <sub>2</sub> nanosheets based high performance wire type solid-state symmetric supercapacitors. <i>Journal of Power Sources</i> , 2016, 321, 112-119.	7.8	182
22	Ruthenium sulfide nanoparticles as a new pseudocapacitive material for supercapacitor. <i>Electrochimica Acta</i> , 2017, 227, 85-94.	5.2	175
23	Comprehensive Insight into the Mechanism, Material Selection and Performance Evaluation of Supercapatteries. <i>Nano-Micro Letters</i> , 2020, 12, 85.	27.0	164
24	Graphene oxide nanopaint. <i>Carbon</i> , 2014, 72, 328-337.	10.3	163
25	Designing two dimensional nanoarchitected MoS <sub>2</sub> sheets grown on Mo foil as a binder free electrode for supercapacitors. <i>Electrochimica Acta</i> , 2016, 190, 305-312.	5.2	159
26	Removal of heavy metal ions from pharma-effluents using graphene-oxide nanosorbents and study of their adsorption kinetics. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 30, 14-19.	5.8	154
27	Nanostructured ternary metal chalcogenide-based binder-free electrodes for high energy density asymmetric supercapacitors. <i>Nano Energy</i> , 2019, 57, 307-316.	16.0	147
28	Titanium carbide sheet based high performance wire type solid state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5726-5736.	10.3	140
29	Metal-Organic Framework: A Novel Material for Triboelectric Nanogenerator-Based Self-Powered Sensors and Systems. <i>Advanced Energy Materials</i> , 2019, 9, 1803581.	19.5	138
30	Submicron stacked-junction fabrication from Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\delta$ whiskers by focused-ion-beam etching. <i>Applied Physics Letters</i> , 1999, 74, 1156-1158.	3.3	133
31	Graphdiyne nanostructures as a new electrode material for electrochemical supercapacitors. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 1672-1678.	7.1	124
32	Materials Beyond Conventional Triboelectric Series for Fabrication and Applications of Triboelectric Nanogenerators. <i>Advanced Energy Materials</i> , 2021, 11, 2101170.	19.5	122
33	Two-Dimensional Siloxene-Graphene Heterostructure-Based High-Performance Supercapacitor for Capturing Regenerative Braking Energy in Electric Vehicles. <i>Advanced Functional Materials</i> , 2021, 31, 2008422.	14.9	121
34	Antibacterial Activity of Graphene Oxide Nanosheets. <i>Science of Advanced Materials</i> , 2012, 4, 1111-1117.	0.7	116
35	Facile preparation and electrochemical characterization of graphene/ZnO nanocomposite for supercapacitor applications. <i>Materials Chemistry and Physics</i> , 2013, 140, 405-411.	4.0	114
36	Synthesis, characterization, and electrochemical properties of CoMoO <sub>4</sub> nanostructures. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 5186-5193.	7.1	114

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37	Copper tungsten sulfide anchored on Ni-foam as a high-performance binder free negative electrode for asymmetric supercapacitor. <i>Chemical Engineering Journal</i> , 2019, 359, 409-418.	12.7	114
38	Self-Powered pH Sensor Based on a Flexible Organic-Inorganic Hybrid Composite Nanogenerator. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 13716-13723.	8.0	110
39	Triboelectric nanogenerator for healthcare and biomedical applications. <i>Nano Today</i> , 2020, 33, 100882.	11.9	110
40	Polypyrrole-poly(3,4-ethylenedioxythiophene)-Ag (PPy-PEDOT-Ag) nanocomposite films for label-free electrochemical DNA sensing. <i>Biosensors and Bioelectronics</i> , 2013, 47, 133-140.	10.1	108
41	Graphene oxide nanostructures modified multifunctional cotton fabrics. <i>Applied Nanoscience (Switzerland)</i> , 2012, 2, 119-126.	3.1	106
42	Enhanced electrochemical performances of graphene based solid-state flexible cable type supercapacitor using redox mediated polymer gel electrolyte. <i>Carbon</i> , 2016, 105, 638-648.	10.3	104
43	Fabrication of reduced graphene oxide/TiO <sub>2</sub> nanorod/reduced graphene oxide hybrid nanostructures as electrode materials for supercapacitor applications. <i>CrystEngComm</i> , 2013, 15, 10222.	2.6	103
44	All edible materials derived biocompatible and biodegradable triboelectric nanogenerator. <i>Nano Energy</i> , 2019, 65, 104016.	16.0	103
45	Vertically aligned TiO <sub>2</sub> nanorod arrays for electrochemical supercapacitor. <i>Journal of Alloys and Compounds</i> , 2013, 561, 262-267.	5.5	102
46	Toxicity of Nano Molybdenum Trioxide toward Invasive Breast Cancer Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2980-2986.	8.0	102
47	Growth, characterization and electrochemical properties of hierarchical CuO nanostructures for supercapacitor applications. <i>Materials Research Bulletin</i> , 2013, 48, 3136-3139.	5.2	97
48	Highly porous piezoelectric PVDF membrane as effective lithium ion transfer channels for enhanced self-charging power cell. <i>Nano Energy</i> , 2015, 14, 77-86.	16.0	95
49	A fully packed water-proof, humidity resistant triboelectric nanogenerator for transmitting Morse code. <i>Nano Energy</i> , 2019, 60, 850-856.	16.0	95
50	Liquid electrolyte mediated flexible pouch-type hybrid supercapacitor based on binderless core-shell nanostructures assembled with honeycomb-like porous carbon. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11100-11113.	10.3	94
51	Zeolitic Imidazole Framework: Metal-Organic Framework Subfamily Members for Triboelectric Nanogenerators. <i>Advanced Functional Materials</i> , 2020, 30, 1910162.	14.9	94
52	Scavenging Biomechanical Energy Using High-Performance, Flexible BaTiO <sub>3</sub> Nanocube/PDMS Composite Films. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4730-4738.	6.7	92
53	Hierarchical copper selenide nanoneedles grown on copper foil as a binder free electrode for supercapacitors. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 14830-14835.	7.1	89
54	Novel Cu/CuO/ZnO hybrid hierarchical nanostructures for non-enzymatic glucose sensor application. <i>Journal of Electroanalytical Chemistry</i> , 2014, 717-718, 90-95.	3.8	86

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55	Biocompatible Collagen Nanofibrils: An Approach for Sustainable Energy Harvesting and Battery-Free Humidity Sensor Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 18650-18656.	8.0	86
56	A fully packed spheroidal hybrid generator for water wave energy harvesting and self-powered position tracking. <i>Nano Energy</i> , 2020, 69, 104439.	16.0	86
57	Antimonene dendritic nanostructures: Dual-functional material for high-performance energy storage and harvesting devices. <i>Nano Energy</i> , 2020, 77, 105248.	16.0	86
58	Fabrication of a ZnO nanogenerator for eco-friendly biomechanical energy harvesting. <i>RSC Advances</i> , 2013, 3, 16646.	3.6	85
59	A promising electrochemical sensing platform based on ternary composite of polyaniline-Fe <sub>2</sub> O <sub>3</sub> -reduced graphene oxide for sensitive hydroquinone determination. <i>Chemical Engineering Journal</i> , 2015, 259, 594-602.	12.7	85
60	Hydrothermally prepared $\pm$ -MnSe nanoparticles as a new pseudocapacitive electrode material for supercapacitor. <i>Electrochimica Acta</i> , 2018, 268, 403-410.	5.2	84
61	Sonochemical synthesis, characterization, and electrochemical properties of MnMoO <sub>4</sub> nanorods for supercapacitor applications. <i>Materials Chemistry and Physics</i> , 2014, 147, 836-842.	4.0	83
62	A High Efficacy Self-Charging MoSe <sub>2</sub> Solid-State Supercapacitor Using Electrospun Nanofibrous Piezoelectric Separator with Ionogel Electrolyte. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800055.	3.7	82
63	Blue TiO <sub>2</sub> nanosheets as a high-performance electrode material for supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2019, 536, 62-70.	9.4	82
64	High performance self-charging supercapacitors using a porous PVDF-ionic liquid electrolyte sandwiched between two-dimensional graphene electrodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21693-21703.	10.3	80
65	Thermally reduced graphene oxide-coated fabrics for flexible supercapacitors and self-powered systems. <i>Nano Energy</i> , 2015, 15, 587-597.	16.0	79
66	Trash to energy: A facile, robust and cheap approach for mitigating environment pollutant using household triboelectric nanogenerator. <i>Applied Energy</i> , 2018, 219, 338-349.	10.1	79
67	Electrodeposited molybdenum selenide sheets on nickel foam as a binder-free electrode for supercapacitor application. <i>Electrochimica Acta</i> , 2018, 265, 514-522.	5.2	77
68	New function of molybdenum trioxide nanoplates: Toxicity towards pathogenic bacteria through membrane stress. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 112, 521-524.	5.0	74
69	High energy symmetric supercapacitor based on mechanically delaminated few-layered MoS <sub>2</sub> sheets in organic electrolyte. <i>Journal of Alloys and Compounds</i> , 2019, 771, 803-809.	5.5	74
70	Understanding the Thermal Treatment Effect of Two-Dimensional Siloxene Sheets and the Origin of Superior Electrochemical Energy Storage Performances. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 624-633.	8.0	74
71	Nanostructured molybdenum oxide-based antibacterial paint: effective growth inhibition of various pathogenic bacteria. <i>Nanotechnology</i> , 2014, 25, 315101.	2.6	73
72	Facile synthesis of graphene/ZnO nanocomposites by low temperature hydrothermal method. <i>Materials Research Bulletin</i> , 2013, 48, 878-883.	5.2	72

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73	Electrochemical performance of an asymmetric supercapacitor based on graphene and cobalt molybdate electrodes. RSC Advances, 2015, 5, 16319-16327.	3.6	72
74	Piezoelectric BaTiO <sub>3</sub> /alginate spherical composite beads for energy harvesting and self-powered wearable flexion sensor. Composites Science and Technology, 2017, 142, 65-78.	7.8	71
75	An enzymatic biosensor for hydrogen peroxide based on one-pot preparation of CeO <sub>2</sub> -reduced graphene oxide nanocomposite. RSC Advances, 2015, 5, 12937-12943.	3.6	70
76	Designing ZnS decorated reduced graphene-oxide nanohybrid via microwave route and their application in photocatalysis. Journal of Alloys and Compounds, 2016, 683, 456-462.	5.5	70
77	Enhanced electroactive $\beta$ -phase of the sonication-process-derived PVDF-activated carbon composite film for efficient energy conversion and a battery-free acceleration sensor. Journal of Materials Chemistry C, 2017, 5, 4833-4844.	5.5	70
78	A highly reliable, impervious and sustainable triboelectric nanogenerator as a zero-power consuming active pressure sensor. Nanoscale Advances, 2020, 2, 746-754.	4.6	70
79	Activated carbon derived from cherry flower biowaste with a self-doped heteroatom and large specific surface area for supercapacitor and sodium-ion battery applications. Chemosphere, 2022, 303, 135290.	8.2	70
80	Synthesis and characterization of HfO <sub>2</sub> nanoparticles by sonochemical approach. Journal of Alloys and Compounds, 2012, 544, 115-119.	5.5	69
81	Investigation of UV photoresponse property of Al, N co-doped ZnO film. Journal of Alloys and Compounds, 2013, 580, 538-543.	5.5	69
82	Copper molybdenum sulfide: A novel pseudocapacitive electrode material for electrochemical energy storage device. International Journal of Hydrogen Energy, 2018, 43, 12222-12232.	7.1	66
83	ZIF-62: a mixed linker metal-organic framework for triboelectric nanogenerators. Journal of Materials Chemistry A, 2020, 8, 17817-17825.	10.3	66
84	Novel synthesis of hafnium oxide nanoparticles by precipitation method and its characterization. Materials Research Bulletin, 2012, 47, 2680-2684.	5.2	65
85	Highly stable hierarchical p-CuO/ZnO nanorod/nanobranched photoelectrode for efficient solar energy conversion. International Journal of Hydrogen Energy, 2016, 41, 2253-2262.	7.1	64
86	3D intrinsic Josephson junctions using c-axis thin films and single crystals. Superconductor Science and Technology, 1999, 12, 729-731.	3.5	62
87	A sustainable freestanding biomechanical energy harvesting smart backpack as a portable-wearable power source. Journal of Materials Chemistry C, 2017, 5, 1488-1493.	5.5	62
88	A flexible, planar energy harvesting device for scavenging road side waste mechanical energy via the synergistic piezoelectric response of K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> -BaTiO <sub>3</sub> /PVDF composite films. Nanoscale, 2017, 9, 15122-15130.	5.6	62
89	Human Interactive Triboelectric Nanogenerator as a Self-Powered Smart Seat. ACS Applied Materials & Interfaces, 2016, 8, 9692-9699.	8.0	61
90	Carbothermal conversion of siloxene sheets into silicon-oxy-carbide lamellae for high-performance supercapacitors. Chemical Engineering Journal, 2020, 387, 123886.	12.7	61

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91	Preparation of ZnO nanopaint for marine antifouling applications. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 29, 39-42.	5.8	60
92	Synthesis and characterization of NiCo <sub>2</sub> O <sub>4</sub> nanoplates as efficient electrode materials for electrochemical supercapacitors. <i>Applied Surface Science</i> , 2016, 370, 452-458.	6.1	60
93	A microcrystalline cellulose ingrained polydimethylsiloxane triboelectric nanogenerator as a self-powered locomotion detector. <i>Journal of Materials Chemistry C</i> , 2017, 5, 1810-1815.	5.5	60
94	Copper molybdenum sulfide anchored nickel foam: a high performance, binder-free, negative electrode for supercapacitors. <i>Nanoscale</i> , 2018, 10, 13883-13888.	5.6	59
95	Enhanced photocatalytic efficacy of organic dyes using $\text{I}^2$ -tin tungstate/reduced graphene oxide nanocomposites. <i>Materials Chemistry and Physics</i> , 2014, 145, 108-115.	4.0	58
96	A flexible piezoelectric composite nanogenerator based on doping enhanced lead-free nanoparticles. <i>Materials Letters</i> , 2019, 249, 73-76.	2.6	58
97	Hierarchically structured TiO <sub>2</sub> @MnO <sub>2</sub> nanowall arrays as potential electrode material for high-performance supercapacitors. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 12201-12212.	7.1	57
98	Growth of 2D ZnO Nanowall for Energy Harvesting Application. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8831-8836.	3.1	56
99	Surface chemistry of cerium oxide nanocubes: Toxicity against pathogenic bacteria and their mechanistic study. <i>Journal of Industrial and Engineering Chemistry</i> , 2014, 20, 3513-3517.	5.8	56
100	Fe <sub>2</sub> O <sub>3</sub> magnetic particles derived triboelectric-electromagnetic hybrid generator for zero-power consuming seismic detection. <i>Nano Energy</i> , 2019, 64, 103926.	16.0	56
101	Facile fabrication of NiS and a reduced graphene oxide hybrid film for nonenzymatic detection of glucose. <i>RSC Advances</i> , 2015, 5, 44346-44352.	3.6	55
102	Diameter dependent photocatalytic activity of ZnO nanowires grown by vapor transport technique. <i>Chemical Physics Letters</i> , 2012, 539-540, 83-88.	2.6	54
103	Two-dimensional molybdenum diselenide nanosheets as a novel electrode material for symmetric supercapacitors using organic electrolyte. <i>Electrochimica Acta</i> , 2019, 295, 591-598.	5.2	54
104	Triboelectric nanogenerator using multiferroic materials: An approach for energy harvesting and self-powered magnetic field detection. <i>Nano Energy</i> , 2021, 85, 105964.	16.0	53
105	Piezo/triboelectric hybrid nanogenerators based on Ca-doped barium zirconate titanate embedded composite polymers for wearable electronics. <i>Composites Science and Technology</i> , 2020, 188, 107963.	7.8	52
106	Biodegradable metal-organic framework MIL-88A for triboelectric nanogenerator. <i>IScience</i> , 2021, 24, 102064.	4.1	52
107	Fabrication of PDMS-based triboelectric nanogenerator for self-sustained power source application. <i>International Journal of Energy Research</i> , 2016, 40, 288-297.	4.5	51
108	A smart mobile pouch as a biomechanical energy harvester towards self-powered smart wireless power transfer applications. <i>Nanoscale</i> , 2017, 9, 9818-9824.	5.6	50



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109	BaTiO <sub>3</sub> nanoparticles as biomaterial film for self-powered glucose sensor application. <i>Sensors and Actuators B: Chemical</i> , 2016, 234, 395-403.	7.8	49
110	A High-Performance Aqueous Sodium-Ion Capacitor with Nickel Hexacyanoferrate and Graphene Electrodes. <i>ChemElectroChem</i> , 2017, 4, 3302-3308.	3.4	49
111	Fabrication of nanoscale three-dimensional graphite stacked-junctions by focused-ion-beam and observation of anomalous transport characteristics. <i>Carbon</i> , 2011, 49, 2766-2772.	10.3	48
112	A highly efficient 2D siloxene coated Ni foam catalyst for methane dry reforming and an effective approach to recycle the spent catalyst for energy storage applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18950-18958.	10.3	48
113	Hydrothermally synthesized chalcopyrite platelets as an electrode material for symmetric supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 1492-1502.	6.0	47
114	Fabrication of submicron BSCCO stacked junctions by focused ion beam (FIB). <i>IEEE Transactions on Applied Superconductivity</i> , 1999, 9, 4312-4315.	1.7	46
115	Graphene-oxide (GO)-Fe <sup>3+</sup> hybrid nanosheets with effective sonocatalytic degradation of Reactive Red 120 and study of their kinetics mechanism. <i>Ultrasonics Sonochemistry</i> , 2015, 24, 123-131.	8.2	46
116	Exalted Electric Output via Piezoelectric-Triboelectric Coupling/Sustainable Butterfly Wing Structure Type Multiunit Hybrid Nanogenerator. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 1919-1933.	6.7	46
117	Direct detection of cysteine using functionalized BaTiO <sub>3</sub> nanoparticles film based self-powered biosensor. <i>Biosensors and Bioelectronics</i> , 2017, 91, 203-210.	10.1	45
118	Fabrication of High-Performance Aqueous Li-Ion Hybrid Capacitor with LiMn <sub>2</sub> O <sub>4</sub> and Graphene. <i>ChemElectroChem</i> , 2017, 4, 396-403.	3.4	45
119	Topochemically synthesized MoS <sub>2</sub> nanosheets: A high performance electrode for wide-temperature tolerant aqueous supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2021, 584, 714-722.	9.4	45
120	Preparation of Copper Sulfide Nanoparticles by Sonochemical Method and Study on Their Electrochemical Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 4409-4413.	0.9	44
121	Synergetic enhancement of energy harvesting performance in triboelectric nanogenerator using ferroelectric polarization for self-powered IR signaling and body activity monitoring. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22257-22268.	10.3	44
122	Fabrication of an eco-friendly composite nanogenerator for self-powered photosensor applications. <i>Carbon</i> , 2015, 84, 56-65.	10.3	43
123	Adaptable piezoelectric hemispherical composite strips using a scalable groove technique for a self-powered muscle monitoring system. <i>Nanoscale</i> , 2018, 10, 907-913.	5.6	43
124	Sustainable yarn type-piezoelectric energy harvester as an eco-friendly, cost-effective battery-free breath sensor. <i>Applied Energy</i> , 2018, 228, 1767-1776.	10.1	43
125	Proton conducting solid electrolyte-piezoelectric PVDF hybrids: Novel bifunctional separator for self-charging supercapacitor power cell. <i>Nano Energy</i> , 2021, 83, 105753.	16.0	43
126	Remotely controlled self-powering electrical stimulators for osteogenic differentiation using bone inspired bioactive piezoelectric whitlockite nanoparticles. <i>Nano Energy</i> , 2021, 85, 105901.	16.0	43



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127	Enhanced photodynamic efficacy and efficient delivery of Rose Bengal using nanostructured poly(amidoamine) dendrimers: potential application in photodynamic therapy of cancer. <i>Cancer Nanotechnology</i> , 2011, 2, 95-103.	3.7	42
128	Photoactive piezoelectric energy harvester driven by antimony sulfide (Sb <sub>2</sub> S <sub>3</sub> ): A AVBICVII class ferroelectric-semiconductor compound. <i>Nano Energy</i> , 2018, 50, 256-265.	16.0	42
129	Sustainable Human-Machine Interactive Triboelectric Nanogenerator toward a Smart Computer Mouse. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7177-7182.	6.7	42
130	High-power graphene supercapacitors for the effective storage of regenerative energy during the braking and deceleration process in electric vehicles. <i>Materials Chemistry Frontiers</i> , 2021, 5, 6200-6211.	5.9	41
131	Enhanced supercapacitor performance using hierarchical TiO <sub>2</sub> nanorod/Co(OH) <sub>2</sub> nanowall array electrodes. <i>Electrochimica Acta</i> , 2014, 136, 105-111.	5.2	40
132	Junction parameter control of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> + $\hat{I}$ stacked junctions by annealing. <i>Applied Physics Letters</i> , 2003, 82, 769-771.	3.3	39
133	One-pot hydrothermal synthesis, characterization and electrochemical properties of CuS nanoparticles towards supercapacitor applications. <i>Materials Research Express</i> , 2014, 1, 035006.	1.6	39
134	Battery-Free Electronic Smart Toys: A Step toward the Commercialization of Sustainable Triboelectric Nanogenerators. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6110-6116.	6.7	39
135	Rational Combination of an Alabandite MnS Laminated Pyrrhotite Fe <sub>1-x</sub> S Nanocomposite as a Superior Anode Material for High Performance Sodium-Ion Battery. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5921-5930.	6.7	39
136	Lead-free piezoelectric nanogenerator using lightweight composite films for harnessing biomechanical energy. <i>Composites Part B: Engineering</i> , 2019, 161, 608-616.	12.0	39
137	Enhancing Hydrophobicity of Starch for Biodegradable Material-Based Triboelectric Nanogenerators. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9011-9017.	6.7	39
138	High-energy aqueous Li-ion hybrid capacitor based on metal-organic-framework-mimicking insertion-type copper hexacyanoferrate and capacitive-type graphitic carbon electrodes. <i>Journal of Alloys and Compounds</i> , 2018, 765, 1041-1048.	5.5	38
139	Two dimensional farnite sheets decorated on reduced graphene oxide: A novel electrode for high performance supercapacitors. <i>Journal of Power Sources</i> , 2019, 433, 126648.	7.8	38
140	Encapsulated Triboelectric-Electromagnetic Hybrid Generator for a Sustainable Blue Energy Harvesting and Self-Powered Oil Spill Detection. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3100-3108.	4.3	38
141	Aloe vera: A tropical desert plant to harness the mechanical energy by triboelectric and piezoelectric approaches. <i>Nano Energy</i> , 2020, 73, 104767.	16.0	38
142	Hydrothermal synthesis, characterization and electrochemical properties of cobalt sulfide nanoparticles. <i>Materials Science in Semiconductor Processing</i> , 2015, 40, 781-786.	4.0	37
143	Sustainable Biomechanical Energy Scavenger toward Self-Reliant Kids™ Interactive Battery-Free Smart Puzzle. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7310-7316.	6.7	37
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