

Yan Zhang

List of Publications by Year in descending order

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papers

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13078

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116
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all docs

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docs citations

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times ranked

15817
citing authors

#	ARTICLE	IF	CITATIONS
1	Pyroelectric Nanogenerators for Harvesting Thermoelectric Energy. <i>Nano Letters</i> , 2012, 12, 2833-2838.	9.5	673
2	Fiber-Based Generator for Wearable Electronics and Mobile Medication. <i>ACS Nano</i> , 2014, 8, 6273-6280.	15.3	558
3	Enhancing Sensitivity of a Single ZnO Micro-/Nanowire Photodetector by Piezo-phototronic Effect. <i>ACS Nano</i> , 2010, 4, 6285-6291.	15.3	482
4	Fundamental Theory of Piezotronics. <i>Advanced Materials</i> , 2011, 23, 3004-3013.	24.3	473
5	Enhanced Ferroelectric-Nanocrystal-Based Hybrid Photocatalysis by Ultrasonic-Wave-Generated Piezophototronic Effect. <i>Nano Letters</i> , 2015, 15, 2372-2379.	9.5	452
6	Self-Powered System with Wireless Data Transmission. <i>Nano Letters</i> , 2011, 11, 2572-2577.	9.5	389
7	Piezo-potential enhanced photocatalytic degradation of organic dye using ZnO nanowires. <i>Nano Energy</i> , 2015, 13, 414-422.	16.5	384
8	Finger typing driven triboelectric nanogenerator and its use for instantaneously lighting up LEDs. <i>Nano Energy</i> , 2013, 2, 491-497.	16.5	267
9	Hybridizing Energy Conversion and Storage in a Mechanical-to-Electrochemical Process for Self-Charging Power Cell. <i>Nano Letters</i> , 2012, 12, 5048-5054.	9.5	265
10	Replacing a Battery by a Nanogenerator with 20 V Output. <i>Advanced Materials</i> , 2012, 24, 110-114.	24.3	260
11	A chemically self-charging aqueous zinc-ion battery. <i>Nature Communications</i> , 2020, 11, 2199.	13.2	260
12	High-Output Nanogenerator by Rational Unipolar Assembly of Conical Nanowires and Its Application for Driving a Small Liquid Crystal Display. <i>Nano Letters</i> , 2010, 10, 5025-5031.	9.5	247
13	A Nanogenerator for Energy Harvesting from a Rotating Tire and its Application as a Self-Powered Pressure/Speed Sensor. <i>Advanced Materials</i> , 2011, 23, 4068-4071.	24.3	237
14	Flexible, Stretchable and Wearable Multifunctional Sensor Array as Artificial Electronic Skin for Static and Dynamic Strain Mapping. <i>Advanced Electronic Materials</i> , 2015, 1, 1500142.	5.4	236
15	Pyroelectric Nanogenerators for Driving Wireless Sensors. <i>Nano Letters</i> , 2012, 12, 6408-6413.	9.5	226
16	In Situ Fabrication of Vertical Multilayered MoS ₂ /Si Homotype Heterojunction for High-Speed Visible-Near-Infrared Photodetectors. <i>Small</i> , 2016, 12, 1062-1071.	11.2	198
17	Triboelectric nanogenerator based self-powered sensor for artificial intelligence. <i>Nano Energy</i> , 2021, 84, 105887.	16.5	191
18	Piezo-phototronic Effect Enhanced Visible and Ultraviolet Photodetection Using a ZnO@CdS Core-Shell Micro/nanowire. <i>ACS Nano</i> , 2012, 6, 9229-9236.	15.3	185

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19	Ultrahigh Sensitive Piezotronic Strain Sensors Based on a ZnSnO ₃ Nanowire/Microwire. ACS Nano, 2012, 6, 4369-4374.	15.3	185
20	A flexible self-powered T-ZnO/PVDF/fabric electronic-skin with multi-functions of tactile-perception, atmosphere-detection and self-clean. Nano Energy, 2017, 31, 37-48.	16.5	184
21	Transparent flexible nanogenerator as self-powered sensor for transportation monitoring. Nano Energy, 2013, 2, 75-81.	16.5	172
22	Surface free-carrier screening effect on the output of a ZnO nanowire nanogenerator and its potential as a self-powered active gas sensor. Nanotechnology, 2013, 24, 225501.	2.7	165
23	Fundamental theories of piezotronics and piezo-phototronics. Nano Energy, 2015, 14, 257-275.	16.5	163
24	Piezotronics and piezo-phototronics – From single nanodevices to array of devices and then to integrated functional system. Nano Today, 2013, 8, 619-642.	12.3	146
25	Control of electro-chemical processes using energy harvesting materials and devices. Chemical Society Reviews, 2017, 46, 7757-7786.	40.3	146
26	Lattice Strain Induced Remarkable Enhancement in Piezoelectric Performance of ZnO-Based Flexible Nanogenerators. ACS Applied Materials & Interfaces, 2016, 8, 1381-1387.	8.3	141
27	Piezoelectric Polyacrylonitrile Nanofiber Film-Based Dual-Function Self-Powered Flexible Sensor. ACS Applied Materials & Interfaces, 2018, 10, 15855-15863.	8.3	139
28	Piezo-phototronics effect on nano/microwire solar cells. Energy and Environmental Science, 2012, 5, 6850.	32.2	138
29	Piezotronic Effect on the Output Voltage of P3HT/ZnO Micro/Nanowire Heterojunction Solar Cells. Nano Letters, 2011, 11, 4812-4817.	9.5	137
30	Lead-Free Nanogenerator Made from Single ZnSnO ₃ Microbelt. ACS Nano, 2012, 6, 4335-4340.	15.3	135
31	Construction of Bio-Piezoelectric Platforms: From Structures and Synthesis to Applications. Advanced Materials, 2021, 33, e2008452.	24.3	132
32	Nanowire Piezo-Phototronic Photodetector: Theory and Experimental Design. Advanced Materials, 2012, 24, 1410-1417.	24.3	128
33	Optimizing the Power Output of a ZnO Photocell by Piezopotential. ACS Nano, 2010, 4, 4220-4224.	15.3	125
34	A Self-Powered Wearable Noninvasive Electronic-Skin for Perspiration Analysis Based on Piezo-Biosensing Unit Matrix of Enzyme/ZnO Nanoarrays. ACS Applied Materials & Interfaces, 2017, 9, 29526-29537.	8.3	122
35	Room-temperature self-powered ethanol sensing of a Pd/ZnO nanoarray nanogenerator driven by human finger movement. Nanoscale, 2014, 6, 4604-4610.	5.8	118
36	A self-powered wearable sweat-evaporation-biosensing analyzer for building sports big data. Nano Energy, 2019, 59, 754-761.	16.5	118

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37	Strain-Gated Piezotronic Transistors Based on Vertical Zinc Oxide Nanowires. ACS Nano, 2012, 6, 3760-3766.	15.3	116
38	Micro-scale to nano-scale generators for energy harvesting: Self powered piezoelectric, triboelectric and hybrid devices. Physics Reports, 2019, 792, 1-33.	26.1	115
39	Flexible and Transparent Nanogenerators Based on a Composite of Lead-Free ZnSnO ₃ Triangular Belts. Advanced Materials, 2012, 24, 6094-6099.	24.3	114
40	Progress in Piezo-Phototronic Effect Enhanced Light-Emitting Diodes and Pressure Imaging. Advanced Materials, 2016, 28, 1535-1552.	24.3	114
41	High thermostable ordered mesoporous SiO ₂ -TiO ₂ coated circulating-bed biofilm reactor for unpredictable photocatalytic and biocatalytic performance. Applied Catalysis B: Environmental, 2016, 180, 521-529.	20.7	114
42	A Streaming Potential/Current-Based Microfluidic Direct Current Generator for Self-Powered Nanosystems. Advanced Materials, 2015, 27, 6482-6487.	24.3	112
43	Enhanced H ₂ Production of TiO ₂ /ZnO Nanowires Co-Using Solar and Mechanical Energy through Piezo-Photocatalytic Effect. ACS Sustainable Chemistry and Engineering, 2018, 6, 10162-10172.	6.9	108
44	Polar Charges Induced Electric Hysteresis of ZnO Nano/Microwire for Fast Data Storage. Nano Letters, 2011, 11, 2829-2834.	9.5	105
45	All-solid-state flexible self-charging power cell basing on piezo-electrolyte for harvesting/storing body-motion energy and powering wearable electronics. Nano Energy, 2017, 39, 590-600.	16.5	105
46	Outputting Olfactory Bionic Electric Impulse by PANI/PTFE/PANI Sandwich Nanostructures and their Application as Flexible, Smelling Electronic Skin. Advanced Functional Materials, 2016, 26, 3128-3138.	16.5	104
47	In-situ synthesized polypyrrole-cellulose conductive networks for potential-tunable foldable power paper. Nano Energy, 2017, 31, 174-182.	16.5	100
48	Vertically Aligned CdSe Nanowire Arrays for Energy Harvesting and Piezotronic Devices. ACS Nano, 2012, 6, 6478-6482.	15.3	95
49	Nano-Newton Transverse Force Sensor Using a Vertical GaN Nanowire based on the Piezotronic Effect. Advanced Materials, 2013, 25, 883-888.	24.3	94
50	Flexible Self-Charging Power Cell for One-Step Energy Conversion and Storage. Advanced Energy Materials, 2014, 4, 1301329.	22.2	94
51	PVDF mesoporous nanostructures as the piezo-separator for a self-charging power cell. Nano Energy, 2014, 10, 44-52.	16.5	94
52	Strain Modulated Electronic, Mechanical, and Optical Properties of the Monolayer PdS ₂ , PdSe ₂ , and PtSe ₂ for Tunable Devices. ACS Applied Nano Materials, 2018, 1, 1932-1939.	5.2	93
53	Piezoelectric Materials for Controlling Electro-Chemical Processes. Nano-Micro Letters, 2020, 12, 149.	27.9	93
54	Self-powered acoustic source locator in underwater environment based on organic film triboelectric nanogenerator. Nano Research, 2015, 8, 765-773.	10.6	86

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55	Theoretical study on two-dimensional MoS ₂ piezoelectric nanogenerators. Nano Research, 2016, 9, 800-807.	10.6	86
56	A Self-Powered Breath Analyzer Based on PANI/PVDF Piezo-Gas-Sensing Arrays for Potential Diagnostics Application. Nano-Micro Letters, 2018, 10, 76.	27.9	83
57	Piezoelectric Nanotopography Induced Neuron-Like Differentiation of Stem Cells. Advanced Functional Materials, 2019, 29, 1900372.	16.5	80
58	A Self-Powered Brain-Linked Vision Electronic-Skin Based on Triboelectric-Photodetecting Pixel-Addressable Matrix for Visual Image Recognition and Behavior Intervention. Advanced Functional Materials, 2018, 28, 1800275.	16.5	79
59	Nanogenerator as an active sensor for vortex capture and ambient wind-velocity detection. Energy and Environmental Science, 2012, 5, 8528.	32.2	78
60	Pt/ZnO nanoarray nanogenerator as self-powered active gas sensor with linear ethanol sensing at room temperature. Nanotechnology, 2014, 25, 115502.	2.7	78
61	Piezoelectric Phototronic Effect of CdSe Nanowires. Advanced Materials, 2012, 24, 5470-5475.	24.3	77
62	BaTiO ₃ nanocrystal-mediated micro pseudo-electrochemical cells with ultrasound-driven piezotronic enhancement for polymerization. Nano Energy, 2017, 39, 461-469.	16.5	77
63	Biomolecule-adsorption-dependent piezoelectric output of ZnO nanowire nanogenerator and its application as self-powered active biosensor. Biosensors and Bioelectronics, 2014, 57, 269-275.	10.4	76
64	Self-powered electronic-skin for detecting glucose level in body fluid basing on piezo-enzymatic-reaction coupling process. Nano Energy, 2016, 26, 148-156.	16.5	75
65	Portable room-temperature self-powered/active H ₂ sensor driven by human motion through piezoelectric screening effect. Nano Energy, 2014, 8, 34-43.	16.5	72
66	Self-Heating and External Strain Coupling Induced Phase Transition of VO ₂ Nanobeam as Single Domain Switch. Advanced Materials, 2011, 23, 3536-3541.	24.3	71
67	A self-powered flexibly-arranged gas monitoring system with evaporating rainwater as fuel for building atmosphere big data. Nano Energy, 2019, 60, 52-60.	16.5	71
68	Demonstration of Enhanced Piezo-Catalysis for Hydrogen Generation and Water Treatment at the Ferroelectric Curie Temperature. Science, 2020, 23, 101095.	4.1	71
69	Theory of piezotronics and piezo-phototronics. MRS Bulletin, 2018, 43, 928-935.	4.2	70
70	High-performance piezo-phototronic solar cell based on two-dimensional materials. Nano Energy, 2017, 32, 448-453.	16.5	69
71	Detecting Liquefied Petroleum Gas (LPG) at Room Temperature Using ZnSnO ₃ /ZnO Nanowire Piezo-Nanogenerator as Self-Powered Gas Sensor. ACS Applied Materials & Interfaces, 2015, 7, 10482-10490.	8.3	68
72	Triboelectric Nanogenerator Enhanced Schottky Nanowire Sensor for Highly Sensitive Ethanol Detection. Nano Letters, 2020, 20, 4968-4974.	9.5	68

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73	High output nanogenerator based on assembly of GaN nanowires. <i>Nanotechnology</i> , 2011, 22, 475401.	2.7	66
74	PVDF/PZT nanocomposite film based self-charging power cell. <i>Nanotechnology</i> , 2014, 25, 105401.	2.7	66
75	Piezotronic Effect on Rashba Spin-Orbit Coupling in a ZnO/P3HT Nanowire Array Structure. <i>ACS Nano</i> , 2018, 12, 1811-1820.	15.3	65
76	Reversible Conversion between Schottky and Ohmic Contacts for Highly Sensitive, Multifunctional Biosensors. <i>Advanced Functional Materials</i> , 2020, 30, 1907999.	16.5	62
77	Theory of Piezo-Phototronics for Light-Emitting Diodes. <i>Advanced Materials</i> , 2012, 24, 4712-4718.	24.3	61
78	Piezo-Phototronic Effect on Electroluminescence Properties of p-Type GaN Thin Films. <i>Nano Letters</i> , 2012, 12, 3851-3856.	9.5	60
79	Self-powered, wireless-control, neural-stimulating electronic skin for in vivo characterization of synaptic plasticity. <i>Nano Energy</i> , 2020, 67, 104182.	16.5	60
80	A self-powered piezotronic strain sensor based on single ZnSnO ₃ microbelts. <i>RSC Advances</i> , 2013, 3, 25184.	3.7	59
81	Piezotronic Transistor Based on Topological Insulators. <i>ACS Nano</i> , 2018, 12, 779-785.	15.3	59
82	Anisotropic Outputs of a Nanogenerator from Oblique-Aligned ZnO Nanowire Arrays. <i>ACS Nano</i> , 2011, 5, 6707-6713.	15.3	57
83	Magnetic-Mechanical-Electrical-Optical Coupling Effects in GaN-Based LED/Rare-Earth Terfenol Structures. <i>Advanced Materials</i> , 2014, 26, 6767-6772.	24.3	56
84	The conversion of PN-junction influencing the piezoelectric output of a CuO/ZnO nanoarray nanogenerator and its application as a room-temperature self-powered active H ₂ S sensor. <i>Nanotechnology</i> , 2014, 25, 265501.	2.7	56
85	An elastic-spring-substrated nanogenerator as an active sensor for self-powered balance. <i>Energy and Environmental Science</i> , 2013, 6, 1164.	32.2	55
86	A self-powered electronic-skin for real-time perspiration analysis and application in motion state monitoring. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9624-9630.	5.6	54
87	A water-evaporation-induced self-charging hybrid power unit for application in the Internet of Things. <i>Science Bulletin</i> , 2019, 64, 1409-1417.	11.1	54
88	Self-powered implantable electronic-skin for in situ analysis of urea/uric-acid in body fluids and the potential applications in real-time kidney-disease diagnosis. <i>Nanoscale</i> , 2018, 10, 2099-2107.	5.8	51
89	Magnetic-Induced Piezopotential Gated MoS ₂ Field-Effect Transistor at Room Temperature. <i>Advanced Materials</i> , 2018, 30, 1704524.	24.3	51
90	Electricity generation based on vertically aligned PbZr _{0.2} Ti _{0.8} O ₃ nanowire arrays. <i>Nano Energy</i> , 2012, 1, 424-428.	16.5	48

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91	Piezo-phototronic Effect Enhanced Responsivity of Photon Sensor Based on Composition-Tunable Ternary CdS _x Se _{1-x} Nanowires. ACS Photonics, 2017, 4, 2495-2503.	6.9	48
92	An artificial triboelectricity-brain-behavior closed loop for intelligent olfactory substitution. Nano Energy, 2019, 63, 103884.	16.5	48
93	Interaction of carbamazepine and other drugs with adenosine (A1 and A2) receptors. Psychopharmacology, 1986, 90, 332-5.	3.1	47
94	A self-powered brain multi-perception receptor for sensory-substitution application. Nano Energy, 2018, 44, 43-52.	16.5	46
95	First principle simulations of piezotronic transistors. Nano Energy, 2015, 14, 355-363.	16.5	45
96	High performance piezotronic logic nanodevices based on GaN/InN/GaN topological insulator. Nano Energy, 2018, 50, 544-551.	16.5	42
97	Generalized projective synchronization in time-delayed chaotic systems. Chaos, Solitons and Fractals, 2008, 38, 743-747.	5.2	39
98	Low frequency wideband nano generators for energy harvesting from natural environment. Nano Energy, 2014, 6, 66-72.	16.5	39
99	Engineering Nanoscale Stem Cell Niche: Direct Stem Cell Behavior at Cell-Matrix Interface. Advanced Healthcare Materials, 2015, 4, 1900-1914.	8.5	38
100	Self-powered wearable sensing-textiles for real-time detecting environmental atmosphere and body motion based on surface-triboelectric coupling effect. Nanotechnology, 2018, 29, 405504.	2.7	38
101	Triboelectric nanogenerator and artificial intelligence to promote precision medicine for cancer. Nano Energy, 2022, 92, 106783.	16.5	38
102	Diversity of rationality affects the evolution of cooperation. Physical Review E, 2009, 79, 055101.	2.1	37
103	Enhanced thermoelectric performance of monolayer MoSSe, bilayer MoSSe and graphene/MoSSe heterogeneous nanoribbons. Physical Chemistry Chemical Physics, 2019, 21, 18161-18169.	2.9	37
104	Dynamical charge transfer model for high surface charge density triboelectric nanogenerators. Nano Energy, 2020, 70, 104513.	16.5	36
105	Triboelectric-polarization-enhanced high sensitive ZnO UV sensor. Nano Today, 2020, 33, 100873.	12.3	35
106	Pulse sensor based on single-electrode triboelectric nanogenerator. Sensors and Actuators A: Physical, 2018, 280, 326-331.	4.2	34
107	A self-powered flexible vision electronic-skin for image recognition based on a pixel-addressable matrix of piezophototronic ZnO nanowire arrays. Journal of Materials Chemistry C, 2017, 5, 6005-6013.	5.6	32
108	Controlling the luminescence of monolayer MoS ₂ based on the piezoelectric effect. Nano Research, 2017, 10, 2527-2534.	10.6	30

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109	Linear humidity response of carbon dot-modified molybdenum disulfide. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 4083-4091.	2.9	28
110	Ultra-high sensitivity strain sensor based on piezotronic bipolar transistor. <i>Nano Energy</i> , 2018, 50, 744-749.	16.5	28
111	Enhanced thermoelectric performance of twisted bilayer graphene nanoribbons junction. <i>Carbon</i> , 2019, 145, 622-628.	10.7	27
112	Piezo-phototronic effect enhanced photodetectors based on MAPbI ₃ perovskite. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2709-2718.	5.6	27
113	Clostridioides difficile Colonization Is Differentially Associated With Gut Microbiome Profiles by Infant Feeding Modality at 3–4 Months of Age. <i>Frontiers in Immunology</i> , 2019, 10, 2866.	4.9	25
114	A self-powered brain-linked biosensing electronic-skin for actively tasting beverage and its potential application in artificial gustation. <i>Nanoscale</i> , 2018, 10, 19987-19994.	5.8	24
115	Enhanced Efficiency of Flexible GaN/Perovskite Solar Cells Based on the Piezo-Phototronic Effect. <i>ACS Applied Energy Materials</i> , 2018, 1, 3063-3069.	5.3	24
116	Study on electronic and optical properties of the twisted and strained MoS ₂ /PtS ₂ heterogeneous interface. <i>Applied Surface Science</i> , 2019, 476, 308-316.	6.3	24
117	Effects of piezopotential spatial distribution on local contact dictated transport property of ZnO micro/nanowires. <i>Applied Physics Letters</i> , 2010, 97, 033509.	3.2	23
118	A self-powered closed-loop brain-machine-interface system for real-time detecting and rapidly adjusting blood glucose concentration. <i>Nano Energy</i> , 2022, 93, 106817.	16.5	22
119	Density functional studies on edge-contacted single-layer MoS ₂ piezotronic transistors. <i>Applied Physics Letters</i> , 2015, 107, .	3.2	20
120	Piezo-phototronic solar cell based on 2D monochalcogenides materials. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 204001.	2.9	20
121	Nanogenerator-based self-powered sensors for data collection. <i>Beilstein Journal of Nanotechnology</i> , 2021, 12, 680-693.	2.9	20
122	Constructing nanocomposites with robust covalent connection between nanoparticles and polymer for high discharged energy density and excellent tensile properties. <i>Journal of Energy Chemistry</i> , 2022, 68, 195-205.	13.4	20
123	Synthesis of CdS nanorod arrays and their applications in flexible piezo-driven active H ₂ S sensors. <i>Nanotechnology</i> , 2014, 25, 075501.	2.7	19
124	Piezophototronic effect enhanced luminescence of zinc oxide nanowires. <i>Nano Energy</i> , 2016, 22, 533-538.	16.5	19
125	Dynamic model for piezotronic and piezo-phototronic devices under low and high frequency external compressive stresses. <i>Journal of Applied Physics</i> , 2018, 123, .	2.3	19
126	High performance piezotronic devices based on non-uniform strain. <i>Nano Energy</i> , 2019, 60, 649-655.	16.5	19

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127	Quantum piezotronic devices based on ZnO/CdO quantum well topological insulator. <i>Nano Energy</i> , 2020, 77, 105154.	16.5	19
128	Enhanced Electrical Performance of Monolayer MoS2 with Rare Earth Element Sm Doping. <i>Nanomaterials</i> , 2021, 11, 769.	4.2	19
129	Ballistic transport in single-layer MoS2 piezotronic transistors. <i>Nano Research</i> , 2016, 9, 282-290.	10.6	18
130	Theoretical study of output of piezoelectric nanogenerator based on composite of PZT nanowires and polymers. <i>Journal of Alloys and Compounds</i> , 2016, 675, 306-310.	5.7	18
131	Study of the Application of Deep Convolutional Neural Networks (CNNs) in Processing Sensor Data and Biomedical Images. <i>Sensors</i> , 2019, 19, 3584.	4.0	18
132	Piezotronic spin and valley transistors based on monolayer MoS2. <i>Nano Energy</i> , 2020, 72, 104678.	16.5	18
133	A self-powered wearable body-detecting/brain-stimulating system for improving sports endurance performance. <i>Nano Energy</i> , 2022, 93, 106851.	16.5	17
134	Implantable self-powered therapeutic pellet for wireless photodynamic/sonodynamic hybrid therapy of cancer recurrence inhibition and tumor regression. <i>Nano Energy</i> , 2023, 105, 108002.	16.5	17
135	Theoretical study of piezotronic heterojunction. <i>Science China Technological Sciences</i> , 2013, 56, 2615-2621.	4.0	16
136	A self-powered AC magnetic sensor based on piezoelectric nanogenerator. <i>Nanotechnology</i> , 2014, 25, 455503.	2.7	16
137	High-performance piezo-phototronic multijunction solar cells based on single-type two-dimensional materials. <i>Nano Energy</i> , 2020, 76, 105091.	16.5	16
138	A Cu/ZnO Nanowire/Cu Resistive Switching Device. <i>Nano-Micro Letters</i> , 2013, 5, 159-162.	27.9	15
139	A tactile sensor translating texture and sliding motion information into electrical pulses. <i>Nanoscale</i> , 2015, 7, 10801-10806.	5.8	15
140	Dynamical charge transfer for high-performance triboelectric nanogenerators. <i>Nano Select</i> , 2020, 1, 461-470.	3.8	15
141	Modeling the open circuit output voltage of piezoelectric nanogenerator. <i>Science China Technological Sciences</i> , 2013, 56, 2622-2629.	4.0	14
142	High-efficiency and stable piezo-phototronic organic perovskite solar cell. <i>RSC Advances</i> , 2018, 8, 8694-8698.	3.7	14
143	Density functional studies on wurtzite piezotronic transistors: influence of different semiconductors and metals on piezoelectric charge distribution and Schottky barrier. <i>Nanotechnology</i> , 2016, 27, 205204.	2.7	13
144	One-to-Many Chaotic Synchronization with Application in Wireless Sensor Network. <i>IEEE Communications Letters</i> , 2013, 17, 1782-1785.	4.4	12

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145	Piezotronic analog-to-digital converters based on strain-gated transistors. <i>Nano Energy</i> , 2018, 46, 423-427.	16.5	12
146	Piezotronic effect on the luminescence of quantum dots for micro/nano-newton force measurement. <i>Nano Research</i> , 2018, 11, 1977-1986.	10.6	12
147	Theoretical study on the top- and enclosed-contacted single-layer MoS ₂ piezotronic transistors. <i>Applied Physics Letters</i> , 2016, 108, 181603.	3.2	11
148	Atomic-thick 2D MoS ₂ /insulator interjection structures for enhancing nanogenerator output. <i>Journal of Materials Chemistry C</i> , 2018, 6, 899-906.	5.6	10
149	Two-dimensional electron gas in piezotronic devices. <i>Nano Energy</i> , 2019, 59, 667-673.	16.5	10
150	High performance quantum piezotronic tunneling transistor based on edge states of MoS ₂ nanoribbon. <i>Nano Energy</i> , 2022, 98, 107275.	16.5	10
151	Piezotronic PIN diode for microwave and piezophototronic devices. <i>Semiconductor Science and Technology</i> , 2017, 32, 044002.	2.1	9
152	Quantum information memory based on reconfigurable topological insulators by piezotronic effect. <i>Nano Energy</i> , 2019, 60, 36-42.	16.5	9
153	Combining triboelectric nanogenerator with piezoelectric effect for optimizing Schottky barrier height modulation. <i>Science Bulletin</i> , 2021, 66, 1409-1418.	11.1	9
154	Piezophototronic Effect Enhanced Perovskite Solar Cell Based on P(VDF-TrFE). <i>Solar Rrl</i> , 2021, 5, 2100692.	6.0	9
155	A self-powered wireless detachable drug/light injector for metronomic photodynamic therapy in cancer treatment. <i>Nano Energy</i> , 2023, 116, 108826.	16.5	9
156	C-V characteristics of piezotronic metal-insulator-semiconductor transistor. <i>Science Bulletin</i> , 2020, 65, 161-168.	11.1	8
157	Polarization-Driven Edge-State Transport in Transition-Metal Dichalcogenides. <i>Physical Review Applied</i> , 2020, 13, .	3.8	8
158	Optimizing care coordination to address social determinants of health needs for dual-use veterans. <i>BMC Health Services Research</i> , 2022, 22, 59.	2.2	8
159	High-Performance Piezo-Phototronic Devices Based on Intersubband Transition of Wurtzite Quantum Well. <i>Small</i> , 2021, 17, e2008106.	11.2	7
160	Simulation of wavelength selection using ZnO nanowires array. <i>Journal of Applied Physics</i> , 2017, 121, .	2.3	7
161	Piezo-phototronic intersubband terahertz devices based on layer-dependent van der Waals quantum well. <i>Nano Energy</i> , 2022, 94, 106912.	16.5	7
162	High performance piezotronic thermoelectric devices based on zigzag MoS ₂ nanoribbon. <i>Nano Energy</i> , 2022, 104, 107888.	16.5	7

#	ARTICLE	IF	CITATIONS
163	High-Performance Piezophototronic Solar Cells Based on Polarization Modulation Perovskite. Advanced Devices & Instrumentation, 2023, 4, .	6.8	7
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