

# Caofeng Pan

## List of Publications by Year in descending order

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168  
papers

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times ranked

15066  
citing authors

#	ARTICLE	IF	CITATIONS
1	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. <i>Nature Communications</i> , 2018, 9, 244.	12.8	1,034
2	Toward Large-Scale Energy Harvesting by a Nanoparticle-Enhanced Triboelectric Nanogenerator. <i>Nano Letters</i> , 2013, 13, 847-853.	9.1	979
3	Triboelectric-Generator-Driven Pulse Electrodeposition for Micropatterning. <i>Nano Letters</i> , 2012, 12, 4960-4965.	9.1	874
4	Recent Progress in Electronic Skin. <i>Advanced Science</i> , 2015, 2, 1500169.	11.2	789
5	High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. <i>Nature Photonics</i> , 2013, 7, 752-758.	31.4	641
6	Dynamic Pressure Mapping of Personalized Handwriting by a Flexible Sensor Matrix Based on the Mechanoluminescence Process. <i>Advanced Materials</i> , 2015, 27, 2324-2331.	21.0	468
7	Linear-Grating Triboelectric Generator Based on Sliding Electrification. <i>Nano Letters</i> , 2013, 13, 2282-2289.	9.1	442
8	Progress in nanogenerators for portable electronics. <i>Materials Today</i> , 2012, 15, 532-543.	14.2	417
9	Rectangular Bunched Rutile TiO <sub>2</sub> Nanorod Arrays Grown on Carbon Fiber for Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 4437-4441.	13.7	349
10	Self-Powered High-Resolution and Pressure-Sensitive Triboelectric Sensor Matrix for Real-Time Tactile Mapping. <i>Advanced Materials</i> , 2016, 28, 2896-2903.	21.0	344
11	A Highly Stretchable Transparent Self-Powered Triboelectric Tactile Sensor with Metallized Nanofibers for Wearable Electronics. <i>Advanced Materials</i> , 2018, 30, e1706738.	21.0	315
12	Transparent and stretchable triboelectric nanogenerator for self-powered tactile sensing. <i>Nano Energy</i> , 2019, 59, 302-310.	16.0	285
13	Light-induced pyroelectric effect as an effective approach for ultrafast ultraviolet nanosensing. <i>Nature Communications</i> , 2015, 6, 8401.	12.8	261
14	Stretchable conductive nonwoven fabrics with self-cleaning capability for tunable wearable strain sensor. <i>Nano Energy</i> , 2019, 66, 104143.	16.0	249
15	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.	5.1	226
16	A Single ZnO Nanofiber-Based Highly Sensitive Amperometric Glucose Biosensor. <i>Journal of Physical Chemistry C</i> , 2010, 114, 9308-9313.	3.1	213
17	Piezotronics and Piezo-phototronics of Third Generation Semiconductor Nanowires. <i>Chemical Reviews</i> , 2019, 119, 9303-9359.	47.7	213
18	In Situ Quantitative Study of Nanoscale Triboelectrification and Patterning. <i>Nano Letters</i> , 2013, 13, 2771-2776.	9.1	210

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19	Bioinspired Self-Healing Human-Machine Interactive Touch Pad with Pressure-Sensitive Adhesiveness on Targeted Substrates. <i>Advanced Materials</i> , 2020, 32, e2004290.	21.0	210
20	Largely Enhanced Efficiency in ZnO Nanowire/p-Polymer Hybridized Inorganic/Organic Ultraviolet Light-Emitting Diode by Piezo-Phototronic Effect. <i>Nano Letters</i> , 2013, 13, 607-613.	9.1	209
21	Flexible and Controllable Piezo-Phototronic Pressure Mapping Sensor Matrix by ZnO NW/p-Polymer LED Array. <i>Advanced Functional Materials</i> , 2015, 25, 2884-2891.	14.9	200
22	A Universal high accuracy wearable pulse monitoring system via high sensitivity and large linearity graphene pressure sensor. <i>Nano Energy</i> , 2019, 59, 422-433.	16.0	198
23	Recent progress in flexible pressure sensor arrays: from design to applications. <i>Journal of Materials Chemistry C</i> , 2018, 6, 11878-11892.	5.5	194
24	Networks of High Performance Triboelectric Nanogenerators Based on Liquid-Solid Interface Contact Electrification for Harvesting Low-Frequency Blue Energy. <i>Advanced Energy Materials</i> , 2018, 8, 1800705.	19.5	182
25	Printable Skin-Driven Mechanoluminescence Devices via Nanodoped Matrix Modification. <i>Advanced Materials</i> , 2018, 30, e1800291.	21.0	178
26	Full Dynamic-Range Pressure Sensor Matrix Based on Optical and Electrical Dual-Mode Sensing. <i>Advanced Materials</i> , 2017, 29, 1605817.	21.0	176
27	Enhanced Cu <sub>2</sub> S/CdS Coaxial Nanowire Solar Cells by Piezo-Phototronic Effect. <i>Nano Letters</i> , 2012, 12, 3302-3307.	9.1	174
28	Enhanced Performance of a ZnO Nanowire-Based Self-Powered Glucose Sensor by Piezotronic Effect. <i>Advanced Functional Materials</i> , 2013, 23, 5868-5874.	14.9	174
29	Flexible Photodetector Arrays Based on Patterned CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Cl <sub>x</sub> Perovskite Film for Real-Time Photosensing and Imaging. <i>Advanced Materials</i> , 2019, 31, e1805913.	21.0	174
30	Piezotronics and piezo-phototronics - From single nanodevices to array of devices and then to integrated functional system. <i>Nano Today</i> , 2013, 8, 619-642.	11.9	141
31	Dynamic Triboelectrification-Induced Electroluminescence and its Use in Visualized Sensing. <i>Advanced Materials</i> , 2016, 28, 6656-6664.	21.0	140
32	Piezoelectric Polyacrylonitrile Nanofiber Film-Based Dual-Function Self-Powered Flexible Sensor. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 15855-15863.	8.0	132
33	Recent progress in tactile sensors and their applications in intelligent systems. <i>Science Bulletin</i> , 2020, 65, 70-88.	9.0	132
34	Highly Sensitive Amperometric Cholesterol Biosensor Based on Pt-Incorporated Fullerene-like ZnO Nanospheres. <i>Journal of Physical Chemistry C</i> , 2010, 114, 243-250.	3.1	131
35	Piezo-Phototronic Effect for Enhanced Flexible MoS <sub>2</sub> /WSe <sub>2</sub> van der Waals Photodiodes. <i>Advanced Functional Materials</i> , 2018, 28, 1802849.	14.9	130
36	Detection of non-joint areas tiny strain and anti-interference voice recognition by micro-cracked metal thin film. <i>Nano Energy</i> , 2017, 34, 578-585.	16.0	128

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37	Nanowire-Based High-Performance Micro Fuel Cells: One Nanowire, One Fuel Cell. <i>Advanced Materials</i> , 2008, 20, 1644-1648.	21.0	126
38	Piezo-Phototronic Effect Modulated Deep UV Photodetector Based on ZnO/Ga <sub>2</sub> O <sub>3</sub> Heterojunction Microwire. <i>Advanced Functional Materials</i> , 2018, 28, 1706379.	14.9	126
39	Piezophotonic effect based on mechanoluminescent materials for advanced flexible optoelectronic applications. <i>Nano Energy</i> , 2019, 55, 389-400.	16.0	126
40	Mechanically Induced Light Emission and Infrared-Laser-Induced Upconversion in the Er-Doped CaZnOS Multifunctional Piezoelectric Semiconductor for Optical Pressure and Temperature Sensing. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28136-28142.	3.1	123
41	Self-Powered Tactile Sensor Array Systems Based on the Triboelectric Effect. <i>Advanced Functional Materials</i> , 2019, 29, 1806379.	14.9	122
42	Optimizing Performance of Silicon-Based p-n Junction Photodetectors by the Piezo-Phototronic Effect. <i>ACS Nano</i> , 2014, 8, 12866-12873.	14.6	120
43	Achieving high-resolution pressure mapping via flexible GaN/ ZnO nanowire LEDs array by piezo-phototronic effect. <i>Nano Energy</i> , 2019, 58, 633-640.	16.0	120
44	Enhanced performances of flexible ZnO/perovskite solar cells by piezo-phototronic effect. <i>Nano Energy</i> , 2016, 23, 27-33.	16.0	119
45	Piezo-Phototronic Enhanced UV Sensing Based on a Nanowire Photodetector Array. <i>Advanced Materials</i> , 2015, 27, 7963-7969.	21.0	115
46	Piezotronic Effect on the Transport Properties of GaN Nanobelts for Active Flexible Electronics. <i>Advanced Materials</i> , 2012, 24, 3532-3537.	21.0	114
47	Progress in Piezo-Phototronic Effect-Enhanced Light-Emitting Diodes and Pressure Imaging. <i>Advanced Materials</i> , 2016, 28, 1535-1552.	21.0	110
48	High performance of ZnO nanowire protein sensors enhanced by the piezotronic effect. <i>Energy and Environmental Science</i> , 2013, 6, 494.	30.8	108
49	Hierarchical TiO <sub>2</sub> nanowire/graphite fiber photoelectrocatalysis setup powered by a wind-driven nanogenerator: A highly efficient photoelectrocatalytic device entirely based on renewable energy. <i>Nano Energy</i> , 2015, 11, 19-27.	16.0	107
50	Bioinspired Multifunctional Photonic-Electronic Smart Skin for Ultrasensitive Health Monitoring, for Visual and Self-Powered Sensing. <i>Advanced Materials</i> , 2021, 33, e2102332.	21.0	107
51	A Three Dimensional Multi-Layered Sliding Triboelectric Nanogenerator. <i>Advanced Energy Materials</i> , 2014, 4, 1301592.	19.5	106
52	Electrochemical Cathodic Protection Powered by Triboelectric Nanogenerator. <i>Advanced Functional Materials</i> , 2014, 24, 6691-6699.	14.9	104
53	A Streaming Potential/Current-Based Microfluidic Direct Current Generator for Self-Powered Nanosystems. <i>Advanced Materials</i> , 2015, 27, 6482-6487.	21.0	104
54	Electronic Skin for Closed-Loop Systems. <i>ACS Nano</i> , 2019, 13, 12287-12293.	14.6	103

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55	Recent advances of wearable and flexible piezoresistivity pressure sensor devices and its future prospects. <i>Journal of Materiomics</i> , 2020, 6, 86-101.	5.7	102
56	Piezotronic Effect on the Sensitivity and Signal Level of Schottky Contacted Proactive Micro/Nanowire Nanosensors. <i>ACS Nano</i> , 2013, 7, 1803-1810.	14.6	100
57	Generating Electricity from Biofluid with a Nanowire-Based Biofuel Cell for Self-Powered Nanodevices. <i>Advanced Materials</i> , 2010, 22, 5388-5392.	21.0	99
58	Hybrid cells for simultaneously harvesting multi-type energies for self-powered micro/nanosystems. <i>Nano Energy</i> , 2012, 1, 259-272.	16.0	97
59	ZnO nanowire based CIGS solar cell and its efficiency enhancement by the piezo-phototronic effect. <i>Nano Energy</i> , 2018, 49, 508-514.	16.0	95
60	Triboiontronic Transistor of MoS <sub>2</sub> . <i>Advanced Materials</i> , 2019, 31, e1806905.	21.0	93
61	Fiber-Based Hybrid Nanogenerators for/as Self-Powered Systems in Biological Liquid. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11192-11196.	13.8	92
62	Enhanced emission intensity of vertical aligned flexible ZnO nanowire/p-polymer hybridized LED array by piezo-phototronic effect. <i>Nano Energy</i> , 2015, 14, 364-371.	16.0	92
63	Vertically Aligned CdSe Nanowire Arrays for Energy Harvesting and Piezotronic Devices. <i>ACS Nano</i> , 2012, 6, 6478-6482.	14.6	91
64	Recent Progress in Optoelectronic Synapses for Artificial Visual-Perception System. <i>Small Structures</i> , 2020, 1, 2000029.	12.0	90
65	Photoluminescence Tuning in Stretchable PDMS Film Grafted Doped Core/Multishell Quantum Dots for Anticounterfeiting. <i>Advanced Functional Materials</i> , 2017, 27, 1700051.	14.9	89
66	Ultrathin and Conformable Lead Halide Perovskite Photodetector Arrays for Potential Application in Retina-Like Vision Sensing. <i>Advanced Materials</i> , 2021, 33, e2006006.	21.0	87
67	Enhancing Photoresponsivity of Self-Aligned MoS <sub>2</sub> Field-Effect Transistors by Piezo-Phototronic Effect from GaN Nanowires. <i>ACS Nano</i> , 2016, 10, 7451-7457.	14.6	86
68	Development and progress in piezotronics. <i>Nano Energy</i> , 2015, 14, 276-295.	16.0	84
69	Triboelectric Nanogenerators as a Self-Powered Motion Tracking System. <i>Advanced Functional Materials</i> , 2014, 24, 5059-5066.	14.9	83
70	Force-induced charge carrier storage: a new route for stress recording. <i>Light: Science and Applications</i> , 2020, 9, 182.	16.6	83
71	Piezo-phototronic Effect Enhanced Efficient Flexible Perovskite Solar Cells. <i>ACS Nano</i> , 2019, 13, 4507-4513.	14.6	82
72	Piezotronic effect enhanced Schottky-contact ZnO micro/nanowire humidity sensors. <i>Nano Research</i> , 2014, 7, 1083-1091.	10.4	81

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73	Enhancing Light Emission of ZnO Nanofilm/Si Micropillar Heterostructure Arrays by Piezo-Phototronic Effect. <i>Advanced Materials</i> , 2015, 27, 4447-4453.	21.0	81
74	Significance of Flexible Substrates for Wearable and Implantable Devices: Recent Advances and Perspectives. <i>Advanced Materials Technologies</i> , 2022, 7, .	5.8	81
75	Optical Fiber-Based Core-Shell Coaxially Structured Hybrid Cells for Self-Powered Nanosystems. <i>Advanced Materials</i> , 2012, 24, 3356-3361.	21.0	80
76	Flexible quantum dot-sensitized solar cells employing CoS nanorod arrays/graphite paper as effective counter electrodes. <i>Journal of Materials Chemistry A</i> , 2014, 2, 13661.	10.3	80
77	Tactile Sensors for Advanced Intelligent Systems. <i>Advanced Intelligent Systems</i> , 2019, 1, 1900090.	6.1	80
78	Enhancing the Efficiency of Silicon-Based Solar Cells by the Piezo-Phototronic Effect. <i>ACS Nano</i> , 2017, 11, 1894-1900.	14.6	79
79	CdS nanorods/organic hybrid LED array and the piezo-phototronic effect of the device for pressure mapping. <i>Nanoscale</i> , 2016, 8, 8078-8082.	5.6	78
80	Piezo-Phototronic Effect of CdSe Nanowires. <i>Advanced Materials</i> , 2012, 24, 5470-5475.	21.0	77
81	Self-powered Real-time Movement Monitoring Sensor Using Triboelectric Nanogenerator Technology. <i>Scientific Reports</i> , 2017, 7, 10521.	3.3	77
82	Tuning Light Emission of a Pressure-Sensitive Silicon/ZnO Nanowires Heterostructure Matrix through Piezo-phototronic Effects. <i>ACS Nano</i> , 2016, 10, 6074-6079.	14.6	75
83	Piezotronic effect enhanced detection of flammable/toxic gases by ZnO micro/nanowire sensors. <i>Nano Energy</i> , 2015, 12, 588-596.	16.0	74
84	A Stretchable Nanogenerator with Electric/Light Dual-Mode Energy Conversion. <i>Advanced Energy Materials</i> , 2016, 6, 1600829.	19.5	74
85	Self-powered high-performance flexible GaN/ZnO heterostructure UV photodetectors with piezo-phototronic effect enhanced photoresponse. <i>Nano Energy</i> , 2022, 94, 106945.	16.0	73
86	Piezotronic effect enhanced performance of Schottky-contacted optical, gas, chemical and biological nanosensors. <i>Nano Energy</i> , 2015, 14, 312-339.	16.0	71
87	A self-powered system based on triboelectric nanogenerators and supercapacitors for metal corrosion prevention. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22663-22668.	10.3	70
88	Real-time pressure mapping smart insole system based on a controllable vertical pore dielectric layer. <i>Microsystems and Nanoengineering</i> , 2020, 6, 62.	7.0	69
89	Tunable and Nacre-Mimetic Multifunctional Electronic Skins for Highly Stretchable Contact-Noncontact Sensing. <i>Small</i> , 2021, 17, e2100542.	10.0	69
90	Wafer-Scale High-Throughput Ordered Arrays of Si and Coaxial Si/SiGe Wires: Fabrication, Characterization, and Photovoltaic Application. <i>ACS Nano</i> , 2011, 5, 6629-6636.	14.6	67

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91	Light-Emission Enhancement in a Flexible and Size-Controllable ZnO Nanowire/Organic Light-Emitting Diode Array by the Piezotronic Effect. ACS Photonics, 2017, 4, 1344-1349.	6.6	65
92	Energy Conversion Analysis of Multilayered Triboelectric Nanogenerators for Synergistic Rain and Solar Energy Harvesting. Advanced Materials, 2022, 34, e2202238.	21.0	63
93	Progress in piezotronic and piezo-phototronic effect of 2D materials. 2D Materials, 2018, 5, 042003.	4.4	62
94	Mechanoluminescence materials for advanced artificial skin. Science Bulletin, 2020, 65, 1147-1149.	9.0	62
95	Piezo-Phototronic UV/Visible Photosensing with Optical-Fiber Nanowire Hybridized Structures. Advanced Materials, 2015, 27, 1553-1560.	21.0	60
96	Bioinspired Electronic Whisker Arrays by Pencil-Drawn Paper for Adaptive Tactile Sensing. Advanced Electronic Materials, 2016, 2, 1600093.	5.1	59
97	Visualization Recording and Storage of Pressure Distribution through a Smart Matrix Based on the Piezotronic Effect. Advanced Materials, 2017, 29, 1701253.	21.0	59
98	Optical-fiber/TiO <sub>2</sub> -nanowire-arrays hybrid structures with tubular counterelectrode for dye-sensitized solar cell. Nano Energy, 2012, 1, 176-182.	16.0	58
99	Piezophototronic Effect Enhanced Photoresponse of the Flexible Cu(In,Ga)Se <sub>2</sub> (CIGS) Heterojunction Photodetectors. Advanced Functional Materials, 2018, 28, 1707311.	14.9	58
100	Enhanced photoresponsivity of the MoS <sub>2</sub> -GaN heterojunction diode via the piezo-phototronic effect. NPG Asia Materials, 2017, 9, e418-e418.	7.9	57
101	Transparent conducting oxide-free and Pt-free flexible dye-sensitized solar cells employing CuS-nanosheet networks as counter electrodes. Journal of Materials Chemistry A, 2016, 4, 6569-6576.	10.3	56
102	Dynamically Modulated GaN Whispering Gallery Lasing Mode for Strain Sensor. Advanced Functional Materials, 2019, 29, 1905051.	14.9	56
103	Piezotronics in two-dimensional materials. Informa-Materially, 2021, 3, 987-1007.	17.3	54
104	Bimodal Tactile Sensor without Signal Fusion for User-Interactive Applications. ACS Nano, 2022, 16, 2789-2797.	14.6	54
105	A nanowire based triboelectric nanogenerator for harvesting water wave energy and its applications. APL Materials, 2017, 5, .	5.1	53
106	Flexible Light Emission Diode Arrays Made of Transferred Si Microwires-ZnO Nanofilm with Piezo-Phototronic Effect Enhanced Lighting. ACS Nano, 2017, 11, 3883-3889.	14.6	53
107	Mechanoluminescent hybrids from a natural resource for energy-related applications. Informa-Materially, 2021, 3, 1272-1284.	17.3	53
108	High-performance Sb-doped p-ZnO NW films for self-powered piezoelectric strain sensors. Nano Energy, 2020, 73, 104744.	16.0	52

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109	Piezoelectric Effect Tuning on ZnO Microwire Whispering-Gallery Mode Lasing. ACS Nano, 2018, 12, 11899-11906.	14.6	51
110	Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. Advanced Functional Materials, 2015, 25, 5277-5284.	14.9	50
111	Mechanoluminescence enhancement of ZnS:Cu,Mn with piezotronic effect induced trap-depth reduction originated from PVDF ferroelectric film. Nano Energy, 2019, 63, 103861.	16.0	50
112	Recent Advances in Large-Scale Tactile Sensor Arrays Based on a Transistor Matrix. Advanced Materials Interfaces, 2018, 5, 1801061.	3.7	48
113	WS <sub>2</sub> /CsPbBr <sub>3</sub> van der Waals heterostructure planar photodetectors with ultrahigh on/off ratio and piezo-phototronic effect-induced strain-gated characteristics. Nano Energy, 2019, 65, 104001.	16.0	48
114	High precision epidermal radio frequency antenna via nanofiber network for wireless stretchable multifunction electronics. Nature Communications, 2020, 11, 5629.	12.8	48
115	Spherical Triboelectric Nanogenerator with Dense Point Contacts for Harvesting Multidirectional Water Wave and Vibration Energy. ACS Energy Letters, 2021, 6, 2809-2816.	17.4	48
116	Progress in piezo-phototronic effect enhanced photodetectors. Journal of Materials Chemistry C, 2016, 4, 11341-11354.	5.5	47
117	Strain-Insensitive Self-Powered Tactile Sensor Arrays Based on Intrinsically Stretchable and Patternable Ultrathin Conformal Wrinkled Graphene-Elastomer Composite. Advanced Functional Materials, 2022, 32, .	14.9	47
118	Piezo-phototronic Boolean Logic and Computation Using Photon and Strain Dual-Gated Nanowire Transistors. Advanced Materials, 2015, 27, 940-947.	21.0	46
119	CoS NWs/Au Hybridized Networks as Efficient Counter Electrodes for Flexible Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1500141.	19.5	46
120	Oxygen-assisted preparation of mechanoluminescent ZnS:Mn for dynamic pressure mapping. Nano Research, 2018, 11, 1967-1976.	10.4	45
121	Nano-porous anodic aluminium oxide membranes with 6-19 nm pore diameters formed by a low-potential anodizing process. Nanotechnology, 2007, 18, 345302.	2.6	44
122	MXene enhanced self-powered alternating current electroluminescence devices for patterned flexible displays. Nano Energy, 2021, 86, 106077.	16.0	44
123	Enhanced performance of GaN nanobelt-based photodetectors by means of piezotronic effects. Nano Research, 2013, 6, 758-766.	10.4	42
124	Mechanically induced strong red emission in samarium ions doped piezoelectric semiconductor CaZnOS for dynamic pressure sensing and imaging. Optics Communications, 2017, 395, 24-28.	2.1	40
125	Fabrication of Large-Area Bimodal Sensors by Inkjet Printing. Advanced Materials Technologies, 2019, 4, 1800703.	5.8	40
126	Metal Halide Perovskite Arrays: From Construction to Optoelectronic Applications. Advanced Functional Materials, 2021, 31, 2005230.	14.9	40



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127	Piezo-phototronic effect on optoelectronic nanodevices. MRS Bulletin, 2018, 43, 952-958.	3.5	38
128	A high performance CsPbBr <sub>3</sub> microwire based photodetector boosted by coupling plasmonic and piezo-phototronic effects. Nano Energy, 2021, 85, 105951.	16.0	38
129	Piezopotential-Programmed Multilevel Nonvolatile Memory As Triggered by Mechanical Stimuli. ACS Nano, 2016, 10, 11037-11043.	14.6	37
130	“Energy Relay Center” for doped mechanoluminescence materials: a case study on Cu-doped and Mn-doped CaZnOS. Physical Chemistry Chemical Physics, 2017, 19, 1190-1208.	2.8	35
131	Biologically Inspired Stretchable, Multifunctional, and 3D Electronic Skin by Strain Visualization and Triboelectric Pressure Sensing. Small Science, 2022, 2, 2100083.	9.9	34
132	In <sub>2</sub> O <sub>3</sub> Nanowire Field-Effect Transistors with Sub-60 mV/dec Subthreshold Swing Stemming from Negative Capacitance and Their Logic Applications. ACS Nano, 2018, 12, 9608-9616.	14.6	32
133	Dynamic regulating of single-mode lasing in ZnO microcavity by piezoelectric effect. Materials Today, 2019, 24, 33-40.	14.2	32
134	Visually aided tactile enhancement system based on ultrathin highly sensitive crack-based strain sensors. Applied Physics Reviews, 2020, 7, .	11.3	30
135	Bidirectional Photoresponse in Perovskite/ZnO Heterostructure for Fully Optical Controlled Artificial Synapse. Advanced Optical Materials, 2022, 10, .	7.3	30
136	Features of the piezo-phototronic effect on optoelectronic devices based on wurtzite semiconductor nanowires. Physical Chemistry Chemical Physics, 2014, 16, 2790.	2.8	28
137	Lateral bipolar photoresistance effect in the CIGS heterojunction and its application in position sensitive detector and memory device. Science Bulletin, 2020, 65, 477-485.	9.0	28
138	Piezophototronic Effect in Nanosensors. Small Science, 2021, 1, 2000060.	9.9	28
139	Biodegradable, Breathable Leaf Vein-Based Tactile Sensors with Tunable Sensitivity and Sensing Range. Small, 2022, 18, e2106906.	10.0	28
140	Coupled Ion-Gel Channel Width Gating and Piezotronic Interface Gating in ZnO Nanowire Devices. Advanced Functional Materials, 2019, 29, 1807837.	14.9	27
141	Flexibly and Repeatedly Modulating Lasing Wavelengths in a Single Core-Shell Semiconductor Microrod. ACS Nano, 2017, 11, 5808-5814.	14.6	26
142	Piezotronic Synapse Based on a Single GaN Microwire for Artificial Sensory Systems. Nano Letters, 2020, 20, 3761-3768.	9.1	26
143	Stable Ultrathin Perovskite/Polyvinylidene Fluoride Composite Films for Imperceptible Multi-Color Fluorescent Anti-Counterfeiting Labels. Advanced Materials Technologies, 2021, 6, 2100229.	5.8	26
144	Bulk synthesis route of the oriented arrays of tip-shape ZnO nanowires and an investigation of their sensing capabilities. Chemical Physics Letters, 2009, 480, 105-109.	2.6	24

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145	Piezotronics and piezo-phototronics based on <i>a</i> -axis nano/microwires: fundamentals and applications. <i>Semiconductor Science and Technology</i> , 2017, 32, 043005.	2.0	22
146	Recent progress in piezo-phototronics with extended materials, application areas and understanding. <i>Semiconductor Science and Technology</i> , 2017, 32, 053002.	2.0	22
147	Crystal-Orientation-Related Dynamic Tuning of the Lasing Spectra of CdS Nanobelts by Piezoelectric Polarization. <i>ACS Nano</i> , 2019, 13, 5049-5057.	14.6	21
148	Molten Salt Shielded Synthesis of Monodisperse Layered CaZnOS <sub>2</sub> -Based Semiconductors for Piezophotonic and X-Ray Detection Applications. <i>Small</i> , 2022, 18, e2107437.	10.0	20
149	Flexible and Stretchable Strategies for Electronic Skins: Materials, Structure, and Integration. <i>ACS Applied Electronic Materials</i> , 2022, 4, 1-26.	4.3	20
150	Interface-Free Area-Scalable Self-Powered Electroluminescent System Driven by Triboelectric Generator. <i>Scientific Reports</i> , 2015, 5, 13658.	3.3	18
151	Interfacial-engineering enhanced performance and stability of ZnO nanowire-based perovskite solar cells. <i>Nanotechnology</i> , 2021, 32, 475204.	2.6	18
152	Piezo-phototronic effect enhanced performance of a p-ZnO NW based UV-Vis-NIR photodetector. <i>Nano Energy</i> , 2021, 86, 106090.	16.0	17
153	Wavelength-tunable infrared light emitting diode based on ordered ZnO nanowire/Si <sub>1-x</sub> Ge <sub>x</sub> alloy heterojunction. <i>Nano Research</i> , 2015, 8, 2676-2685.	10.4	16
154	Progress in piezo-phototronic effect modulated photovoltaics. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 433001.	1.8	16
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