Cao-Feng Pan

List of Publications by Citations

244 papers	16,069 citations	68 h-index	118 g-index
254 ext. papers	19,334 ext. citations	13.3 avg, IF	7.05 L-index

#	Paper	IF	Citations
244	Toward large-scale energy harvesting by a nanoparticle-enhanced triboelectric nanogenerator. *Nano Letters*, **2013**, 13, 847-53	11.5	804
243	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. *Nature Communications*, **2018**, 9, 244	17.4	710
242	Triboelectric-generator-driven pulse electrodeposition for micropatterning. *Nano Letters*, **2012**, 12, 4960-5	11.5	690
241	Recent Progress in Electronic Skin. *Advanced Science*, **2015**, 2, 1500169	13.6	586
240	High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. *Nature Photonics*, **2013**, 7, 752-758	33.9	534
239	Linear-grating triboelectric generator based on sliding electrification. *Nano Letters*, **2013**, 13, 2282-9	11.5	378
238	Dynamic pressure mapping of personalized handwriting by a flexible sensor matrix based on the mechanoluminescence process. *Advanced Materials*, **2015**, 27, 2324-31	24	353
237	Progress in nanogenerators for portable electronics. *Materials Today*, **2012**, 15, 532-543	21.8	351
236	Rectangular bunched rutile TiO2 nanorod arrays grown on carbon fiber for dye-sensitized solar cells. *Journal of the American Chemical Society*, **2012**, 134, 4437-41	16.4	321
235	Self-Powered High-Resolution and Pressure-Sensitive Triboelectric Sensor Matrix for Real-Time Tactile Mapping. *Advanced Materials*, **2016**, 28, 2896-903	24	268
234	A Highly Stretchable Transparent Self-Powered Triboelectric Tactile Sensor with Metallized Nanofibers for Wearable Electronics. *Advanced Materials*, **2018**, 30, e1706738	24	230
233	A Single ZnO Nanofiber-Based Highly Sensitive Amperometric Glucose Biosensor. *Journal of Physical Chemistry C*, **2010**, 114, 9308-9313	3.8	194
232	Largely enhanced efficiency in ZnO nanowire/p-polymer hybridized inorganic/organic ultraviolet light-emitting diode by piezo-phototronic effect. *Nano Letters*, **2013**, 13, 607-13	11.5	190
231	Transparent and stretchable triboelectric nanogenerator for self-powered tactile sensing. *Nano Energy*, **2019**, 59, 302-310	17.1	184
230	Light-induced pyroelectric effect as an effective approach for ultrafast ultraviolet nanosensing. *Nature Communications*, **2015**, 6, 8401	17.4	180
229	Flexible, Stretchable and Wearable Multifunctional Sensor Array as Artificial Electronic Skin for Static and Dynamic Strain Mapping. *Advanced Electronic Materials*, **2015**, 1, 1500142	6.4	177
228	Flexible and Controllable Piezo-Phototronic Pressure Mapping Sensor Matrix by ZnO NW/p-Polymer LED Array. *Advanced Functional Materials*, **2015**, 25, 2884-2891	15.6	171

227	In situ quantitative study of nanoscale triboelectrification and patterning. *Nano Letters*, **2013**, 13, 2771-6	11.5	163
226	Enhanced CuS/CdS coaxial nanowire solar cells by piezo-phototronic effect. *Nano Letters*, **2012**, 12, 3302-7	11.5	161
225	Stretchable conductive nonwoven fabrics with self-cleaning capability for tunable wearable strain sensor. *Nano Energy*, **2019**, 66, 104143	17.1	154
224	Significant Enhancement of Triboelectric Charge Density by Fluorinated Surface Modification in Nanoscale for Converting Mechanical Energy. *Advanced Functional Materials*, **2015**, 25, 5691-5697	15.6	150
223	Enhanced Performance of a ZnO Nanowire-Based Self-Powered Glucose Sensor by Piezotronic Effect. *Advanced Functional Materials*, **2013**, 23, 5868-5874	15.6	150
222	Black Phosphorus Quantum Dots with Tunable Memory Properties and Multilevel Resistive Switching Characteristics. *Advanced Science*, **2017**, 4, 1600435	13.6	135
221	Full Dynamic-Range Pressure Sensor Matrix Based on Optical and Electrical Dual-Mode Sensing. *Advanced Materials*, **2017**, 29, 1605817	24	129
220	Piezotronics and piezo-phototronics From single nanodevices to array of devices and then to integrated functional system. *Nano Today*, **2013**, 8, 619-642	17.9	129
219	Lightweight, Superelastic, and Hydrophobic Polyimide Nanofiber /MXene Composite Aerogel for Wearable Piezoresistive Sensor and Oil/Water Separation Applications. *Advanced Functional Materials*, **2021**, 31, 2008006	15.6	127
218	Highly Sensitive Amperometric Cholesterol Biosensor Based on Pt-Incorporated Fullerene-like ZnO Nanospheres. *Journal of Physical Chemistry C*, **2010**, 114, 243-250	3.8	119
217	Recent progress in flexible pressure sensor arrays: from design to applications. *Journal of Materials Chemistry C*, **2018**, 6, 11878-11892	7.1	116
216	A Universal high accuracy wearable pulse monitoring system via high sensitivity and large linearity graphene pressure sensor. *Nano Energy*, **2019**, 59, 422-433	17.1	113
215	Piezotronics and Piezo-phototronics of Third Generation Semiconductor Nanowires. *Chemical Reviews*, **2019**, 119, 9303-9359	68.1	112
214	Flexible Photodetector Arrays Based on Patterned CH NH PbI Cl Perovskite Film for Real-Time Photosensing and Imaging. *Advanced Materials*, **2019**, 31, e1805913	24	110
213	Nanowire-Based High-Performance Micro Fuel Cells One Nanowire, One Fuel Cell. *Advanced Materials*, **2008**, 20, 1644-1648	24	109
212	Printable Skin-Driven Mechanoluminescence Devices via Nanodoped Matrix Modification. *Advanced Materials*, **2018**, 30, e1800291	24	108
211	Dynamic Triboelectrification-Induced Electroluminescence and its Use in Visualized Sensing. *Advanced Materials*, **2016**, 28, 6656-64	24	107
210	Networks of High Performance Triboelectric Nanogenerators Based on Liquid Solid Interface Contact Electrification for Harvesting Low-Frequency Blue Energy. *Advanced Energy Materials*, **2018**, 8, 1800705	21.8	104

209	Piezotronic effect on the transport properties of GaN nanobelts for active flexible electronics. *Advanced Materials*, **2012**, 24, 3532-7	24	103
208	Piezo-Phototronic Effect Modulated Deep UV Photodetector Based on ZnO-Ga2O3 Heterojuction Microwire. *Advanced Functional Materials*, **2018**, 28, 1706379	15.6	101
207	Optimizing performance of silicon-based p-n junction photodetectors by the piezo-phototronic effect. *ACS Nano*, **2014**, 8, 12866-73	16.7	100
206	High performance of ZnO nanowire protein sensors enhanced by the piezotronic effect. *Energy and Environmental Science*, **2013**, 6, 494	35.4	99
205	Enhanced performances of flexible ZnO/perovskite solar cells by piezo-phototronic effect. *Nano Energy*, **2016**, 23, 27-33	17.1	94
204	Progress in Piezo-Phototronic-Effect-Enhanced Light-Emitting Diodes and Pressure Imaging. *Advanced Materials*, **2016**, 28, 1535-52	24	93
203	Hierarchical TiO2 nanowire/graphite fiber photoelectrocatalysis setup powered by a wind-driven nanogenerator: A highly efficient photoelectrocatalytic device entirely based on renewable energy. *Nano Energy*, **2015**, 11, 19-27	17.1	92
202	Ultra-stretchable triboelectric nanogenerator as high-sensitive and self-powered electronic skins for energy harvesting and tactile sensing. *Nano Energy*, **2020**, 70, 104546	17.1	91
201	Piezo-Phototronic Enhanced UV Sensing Based on a Nanowire Photodetector Array. *Advanced Materials*, **2015**, 27, 7963-9	24	90
200	Generating electricity from biofluid with a nanowire-based biofuel cell for self-powered nanodevices. *Advanced Materials*, **2010**, 22, 5388-92	24	90
199	Piezo-Phototronic Effect for Enhanced Flexible MoS2/WSe2 van der Waals Photodiodes. *Advanced Functional Materials*, **2018**, 28, 1802849	15.6	90
198	A vertically layered MoS2/Si heterojunction for an ultrahigh and ultrafast photoresponse photodetector. *Journal of Materials Chemistry C*, **2018**, 6, 3233-3239	7.1	89
197	Piezotronic effect on the sensitivity and signal level of Schottky contacted proactive micro/nanowire nanosensors. *ACS Nano*, **2013**, 7, 1803-10	16.7	89
196	A Three Dimensional Multi-Layered Sliding Triboelectric Nanogenerator. *Advanced Energy Materials* , **2014**, 4, 1301592	21.8	88
195	Hybrid cells for simultaneously harvesting multi-type energies for self-powered micro/nanosystems. *Nano Energy*, **2012**, 1, 259-272	17.1	87
194	Piezophotonic effect based on mechanoluminescent materials for advanced flexible optoelectronic applications. *Nano Energy*, **2019**, 55, 389-400	17.1	87
193	Fiber-based hybrid nanogenerators for/as self-powered systems in biological liquid. *Angewandte Chemie - International Edition*, **2011**, 50, 11192-6	16.4	85
192	Mechanically Induced Light Emission and Infrared-Laser-Induced Upconversion in the Er-Doped CaZnOS Multifunctional Piezoelectric Semiconductor for Optical Pressure and Temperature Sensing. *Journal of Physical Chemistry C*, **2015**, 119, 28136-28142	3.8	84

191	Detection of non-joint areas tiny strain and anti-interference voice recognition by micro-cracked metal thin film. *Nano Energy*, **2017**, 34, 578-585	17.1	83
190	Bioinspired Self-Healing Human-Machine Interactive Touch Pad with Pressure-Sensitive Adhesiveness on Targeted Substrates. *Advanced Materials*, **2020**, 32, e2004290	24	83
189	Piezoelectric Polyacrylonitrile Nanofiber Film-Based Dual-Function Self-Powered Flexible Sensor. *ACS Applied Materials & Interfaces*, **2018**, 10, 15855-15863	9.5	83
188	Enhanced emission intensity of vertical aligned flexible ZnO nanowire/p-polymer hybridized LED array by piezo-phototronic effect. *Nano Energy*, **2015**, 14, 364-371	17.1	79
187	Vertically aligned CdSe nanowire arrays for energy harvesting and piezotronic devices. *ACS Nano*, **2012**, 6, 6478-82	16.7	79
186	Achieving high-resolution pressure mapping via flexible GaN/ ZnO nanowire LEDs array by piezo-phototronic effect. *Nano Energy*, **2019**, 58, 633-640	17.1	78
185	High Br Content CsPb(Cl Br) Perovskite Nanocrystals with Strong Mn Emission through Diverse Cation/Anion Exchange Engineering. *ACS Applied Materials & Interfaces*, **2018**, 10, 11739-11746	9.5	74
184	Flexible quantum dot-sensitized solar cells employing CoS nanorod arrays/graphite paper as effective counter electrodes. *Journal of Materials Chemistry A*, **2014**, 2, 13661	13	74
183	Optical fiber-based core-shell coaxially structured hybrid cells for self-powered nanosystems. *Advanced Materials*, **2012**, 24, 3356-61	24	73
182	Photoluminescence Tuning in Stretchable PDMS Film Grafted Doped Core/Multishell Quantum Dots for Anticounterfeiting. *Advanced Functional Materials*, **2017**, 27, 1700051	15.6	72
181	Piezo-phototronic effect of CdSe nanowires. *Advanced Materials*, **2012**, 24, 5470-5	24	72
180	A Streaming Potential/Current-Based Microfluidic Direct Current Generator for Self-Powered Nanosystems. *Advanced Materials*, **2015**, 27, 6482-7	24	71
179	Development and progress in piezotronics. *Nano Energy*, **2015**, 14, 276-295	17.1	70
178	Piezotronic effect enhanced Schottky-contact ZnO micro/nanowire humidity sensors. *Nano Research*, **2014**, 7, 1083-1091	10	70
177	Self-Powered Tactile Sensor Array Systems Based on the Triboelectric Effect. *Advanced Functional Materials*, **2019**, 29, 1806379	15.6	68
176	Enhancing Photoresponsivity of Self-Aligned MoS2 Field-Effect Transistors by Piezo-Phototronic Effect from GaN Nanowires. *ACS Nano*, **2016**, 10, 7451-7	16.7	67
175	Electrochemical Cathodic Protection Powered by Triboelectric Nanogenerator. *Advanced Functional Materials*, **2014**, 24, 6691-6699	15.6	67
174	Tunable Tribotronic Dual-Gate Logic Devices Based on 2D MoS and Black Phosphorus. *Advanced Materials*, **2018**, 30, e1705088	24	66

173	ZnO nanowire based CIGS solar cell and its efficiency enhancement by the piezo-phototronic effect. *Nano Energy*, **2018**, 49, 508-514	17.1	66
172	Investigation of Hydrogen Storage Capabilities of ZnO-Based Nanostructures. *Journal of Physical Chemistry C*, **2010**, 114, 2560-2565	3.8	66
171	Electrochemical determination of L-Cysteine by an elbow shaped, Sb-doped ZnO nanowire-modified electrode. *Journal of Materials Chemistry*, **2010**, 20, 7169		66
170	Enhancing Light Emission of ZnO-Nanofilm/Si-Micropillar Heterostructure Arrays by Piezo-Phototronic Effect. *Advanced Materials*, **2015**, 27, 4447-4453	24	65
169	Recent progress in tactile sensors and their applications in intelligent systems. *Science Bulletin*, **2020**, 65, 70-88	10.6	65
168	Large and Ultrastable All-Inorganic CsPbBr Monocrystalline Films: Low-Temperature Growth and Application for High-Performance Photodetectors. *Advanced Materials*, **2018**, 30, e1802110	24	65
167	Triboelectric Nanogenerators as a Self-Powered Motion Tracking System. *Advanced Functional Materials*, **2014**, 24, 5059-5066	15.6	64
166	Tuning Light Emission of a Pressure-Sensitive Silicon/ZnO Nanowires Heterostructure Matrix through Piezo-phototronic Effects. *ACS Nano*, **2016**, 10, 6074-9	16.7	62
165	Piezotronic effect enhanced detection of flammable/toxic gases by ZnO micro/nanowire sensors. *Nano Energy*, **2015**, 12, 588-596	17.1	62
164	Wafer-scale high-throughput ordered arrays of Si and coaxial Si/Si(1-x)Ge(x) wires: fabrication, characterization, and photovoltaic application. *ACS Nano*, **2011**, 5, 6629-36	16.7	62
163	CdS nanorods/organic hybrid LED array and the piezo-phototronic effect of the device for pressure mapping. *Nanoscale*, **2016**, 8, 8078-82	7.7	62
162	A Stretchable Nanogenerator with Electric/Light Dual-Mode Energy Conversion. *Advanced Energy Materials*, **2016**, 6, 1600829	21.8	62
161	MoS Negative-Capacitance Field-Effect Transistors with Subthreshold Swing below the Physics Limit. *Advanced Materials*, **2018**, 30, e1800932	24	61
160	Electronic Skin for Closed-Loop Systems. *ACS Nano*, **2019**, 13, 12287-12293	16.7	59
159	Piezotronic effect enhanced performance of Schottky-contacted optical, gas, chemical and biological nanosensors. *Nano Energy*, **2015**, 14, 312-339	17.1	58
158	Ultrahigh, Ultrafast, and Self-Powered Visible-Near-Infrared Optical Position-Sensitive Detector Based on a CVD-Prepared Vertically Standing Few-Layer MoS/Si Heterojunction. *Advanced Science*, **2018**, 5, 1700502	13.6	57
157	Optical-fiber/TiO2-nanowire-arrays hybrid structures with tubular counterelectrode for dye-sensitized solar cell. *Nano Energy*, **2012**, 1, 176-182	17.1	56
156	Enhancing the Efficiency of Silicon-Based Solar Cells by the Piezo-Phototronic Effect. *ACS Nano*, **2017**, 11, 1894-1900	16.7	55

155	Triboiontronic Transistor of MoS. *Advanced Materials*, **2019**, 31, e1806905	24	54
154	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	6.3	53
153	Controllable Growth of Aligned Monocrystalline CsPbBr Microwire Arrays for Piezoelectric-Induced Dynamic Modulation of Single-Mode Lasing. *Advanced Materials*, **2019**, 31, e1900647	24	50
152	Triboelectrification-enabled touch sensing for self-powered position mapping and dynamic tracking by a flexible and area-scalable sensor array. *Nano Energy*, **2017**, 41, 387-393	17.1	50
151	Piezo-phototronic UV/visible photosensing with optical-fiber-nanowire hybridized structures. *Advanced Materials*, **2015**, 27, 1553-60	24	50
150	Piezo-phototronic Effect Enhanced Efficient Flexible Perovskite Solar Cells. *ACS Nano*, **2019**, 13, 4507-4516	13.7	49
149	The syntheses, properties and applications of Si, ZnO, metal, and heterojunction nanowires. *Journal of Materials Chemistry*, **2009**, 19, 869		48
148	Capping Modes in PVP-Directed Silver Nanocrystal Growth: Multi-Twinned Nanorods versus Single-Crystalline Nano-Hexapods. *Crystal Growth and Design*, **2008**, 8, 1916-1923	3.5	48
147	Piezo-phototronic Effect Enhanced Photodetector Based on CHNHPbI Single Crystals. *ACS Nano*, **2018**, 12, 10501-10508	16.7	48
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145	Self-powered Real-time Movement Monitoring Sensor Using Triboelectric Nanogenerator Technology. *Scientific Reports*, **2017**, 7, 10521	4.9	47
144	A self-powered system based on triboelectric nanogenerators and supercapacitors for metal corrosion prevention. *Journal of Materials Chemistry A*, **2015**, 3, 22663-22668	13	46
143	Bioinspired Electronic Whisker Arrays by Pencil-Drawn Paper for Adaptive Tactile Sensing. *Advanced Electronic Materials*, **2016**, 2, 1600093	6.4	46
142	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	13	46
141	Piezophototronic Effect Enhanced Photoresponse of the Flexible Cu(In,Ga)Se2 (CIGS) Heterojunction Photodetectors. *Advanced Functional Materials*, **2018**, 28, 1707311	15.6	45
140	Enhanced photoresponsivity of the MoS2-GaN heterojunction diode via the piezo-phototronic effect. *NPG Asia Materials*, **2017**, 9, e418-e418	10.3	45
139	Piezo-phototronic Boolean logic and computation using photon and strain dual-gated nanowire transistors. *Advanced Materials*, **2015**, 27, 940-7	24	44
138	Visualization Recording and Storage of Pressure Distribution through a Smart Matrix Based on the Piezotronic Effect. *Advanced Materials*, **2017**, 29, 1701253	24	43

137	Piezoelectricity in Multilayer Black Phosphorus for Piezotronics and Nanogenerators. *Advanced Materials*, **2020**, 32, e1905795	24	43
136	Flexible Light Emission Diode Arrays Made of Transferred Si Microwires-ZnO Nanofilm with Piezo-Phototronic Effect Enhanced Lighting. *ACS Nano*, **2017**, 11, 3883-3889	16.7	42
135	CoS NWs/Au Hybridized Networks as Efficient Counter Electrodes for Flexible Sensitized Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1500141	21.8	42
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133	Controlled synthesis of high-quality crystals of monolayer MoS2 for nanoelectronic device application. *Science China Materials*, **2016**, 59, 182-190	7.1	41
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131	Recent advances of wearable and flexible piezoresistivity pressure sensor devices and its future prospects. *Journal of Materiomics*, **2020**, 6, 86-101	6.7	40
130	Highly flexible, conductive and catalytic Pt networks as transparent counter electrodes for wearable dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 23028-23034	13	39
129	Enhanced performance of GaN nanobelt-based photodetectors by means of piezotronic effects. *Nano Research*, **2013**, 6, 758-766	10	39
128	CVD growth of perovskite/graphene films for high-performance flexible image sensor. *Science Bulletin*, **2020**, 65, 343-349	10.6	39
127	Reversible Conversion between Schottky and Ohmic Contacts for Highly Sensitive, Multifunctional Biosensors. *Advanced Functional Materials*, **2020**, 30, 1907999	15.6	39
126	Force-induced charge carrier storage: a new route for stress recording. *Light: Science and Applications*, **2020**, 9, 182	16.7	39
125	Piezoelectric Effect Tuning on ZnO Microwire Whispering-Gallery Mode Lasing. *ACS Nano*, **2018**, 12, 11898-11906	16.7	39
124	Triboelectric Nanogenerator Enhanced Schottky Nanowire Sensor for Highly Sensitive Ethanol Detection. *Nano Letters*, **2020**, 20, 4968-4974	11.5	38
123	The Exploration of Carrier Behavior in the Inverted Mixed Perovskite Single-Crystal Solar Cells. *Advanced Materials Interfaces*, **2018**, 5, 1800224	4.6	38
122	Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. *Advanced Functional Materials*, **2015**, 25, 5277-5284	15.6	37
121	Nano-porous anodic aluminium oxide membranes with 619 nm pore diameters formed by a low-potential anodizing process. *Nanotechnology*, **2007**, 18, 345302	3.4	37
120	Progress in piezo-phototronic effect enhanced photodetectors. *Journal of Materials Chemistry C*, **2016**, 4, 11341-11354	7.1	35

119	Dynamically Modulated GaN Whispering Gallery Lasing Mode for Strain Sensor. *Advanced Functional Materials*, **2019**, 29, 1905051	15.6	34
118	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	33
117	Plasmon-Induced Accelerated Exciton Recombination Dynamics in ZnO/Ag Hybrid Nanolasers. *ACS Photonics*, **2017**, 4, 2419-2424	6.3	33
116	Recent Progress in Optoelectronic Synapses for Artificial Visual-Perception System. *Small Structures*, **2020**, 1, 2000029	8.7	33
115	Oxygen-assisted preparation of mechanoluminescent ZnS:Mn for dynamic pressure mapping. *Nano Research*, **2018**, 11, 1967-1976	10	32
114	WS2/CsPbBr3 van der Waals heterostructure planar photodetectors with ultrahigh on/off ratio and piezo-phototronic effect-induced strain-gated characteristics. *Nano Energy*, **2019**, 65, 104001	17.1	31
113	Performance Limits of the Self-Aligned Nanowire Top-Gated MoS2 Transistors. *Advanced Functional Materials*, **2017**, 27, 1602250	15.6	31
112	Highly-efficient all-inorganic lead-free 1D CsCu2I3 single crystal for white-light emitting diodes and UV photodetection. *Nano Energy*, **2021**, 81, 105570	17.1	31
111	Recent Advances in Large-Scale Tactile Sensor Arrays Based on a Transistor Matrix. *Advanced Materials Interfaces*, **2018**, 5, 1801061	4.6	31
110	Mechanoluminescence materials for advanced artificial skin. *Science Bulletin*, **2020**, 65, 1147-1149	10.6	30
109	Tunable and Nacre-Mimetic Multifunctional Electronic Skins for Highly Stretchable Contact-Noncontact Sensing. *Small*, **2021**, 17, e2100542	11	30
108	Ultrathin and Conformable Lead Halide Perovskite Photodetector Arrays for Potential Application in Retina-Like Vision Sensing. *Advanced Materials*, **2021**, 33, e2006006	24	30
107	Effect of Pb-doping on the morphology, structural and optical properties of ZnO nanowires synthesized via modified thermal evaporation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 174, 55-58	3.1	29
106	Piezo-phototronic effect on optoelectronic nanodevices. *MRS Bulletin*, **2018**, 43, 952-958	3.2	29
105	Mechanoluminescence enhancement of ZnS:Cu,Mn with piezotronic effect induced trap-depth reduction originated from PVDF ferroelectric film. *Nano Energy*, **2019**, 63, 103861	17.1	28
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102	Voltage-Driven Room-Temperature Resistance and Magnetization Switching in Ceramic TiO/PAA Nanoporous Composite Films. *ACS Applied Materials & Interfaces*, **2019**, 11, 21661-21667	9.5	26

101	Fabrication of Large-Area Bimodal Sensors by All-Inkjet-Printing. *Advanced Materials Technologies*, **2019**, 4, 1800703	6.8	26
100	Flexible sliding sensor for simultaneous monitoring deformation and displacement on a robotic hand/arm. *Nano Energy*, **2020**, 73, 104764	17.1	26
99	Real-time pressure mapping smart insole system based on a controllable vertical pore dielectric layer. *Microsystems and Nanoengineering*, **2020**, 6, 62	7.7	26
98	Piezopotential-Programmed Multilevel Nonvolatile Memory As Triggered by Mechanical Stimuli. *ACS Nano*, **2016**, 10, 11037-11043	16.7	26
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94	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	2.5	24
93	InO 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	16.7	23
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91	Dynamic regulating of single-mode lasing in ZnO microcavity by piezoelectric effect. *Materials Today*, **2019**, 24, 33-40	21.8	21
90	Bioinspired Multifunctional Photonic-Electronic Smart Skin for Ultrasensitive Health Monitoring, for Visual and Self-Powered Sensing. *Advanced Materials*, **2021**, 33, e2102332	24	21
89	Controlled fabrication, lasing behavior and excitonic recombination dynamics in single crystal CH3NH3PbBr3 perovskite cuboids. *Science Bulletin*, **2019**, 64, 698-704	10.6	20
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87	Ultrahigh secondary electron emission of carbon nanotubes. *Applied Physics Letters*, **2010**, 96, 213113	3.4	20
86	Controlled synthesis and methanol sensing capabilities of Pt-incorporated ZnO nanospheres. *Electrochimica Acta*, **2010**, 55, 6885-6891	6.7	20
85	Anisotropic magnetic liquid metal film for wearable wireless electromagnetic sensing and smart electromagnetic interference shielding. *Nano Energy*, **2022**, 92, 106700	17.1	20
84	Flexibly and Repeatedly Modulating Lasing Wavelengths in a Single Core-Shell Semiconductor Microrod. *ACS Nano*, **2017**, 11, 5808-5814	16.7	19

83	Piezotronics and piezo-phototronics based ona-axis nano/microwires: fundamentals and applications. *Semiconductor Science and Technology*, **2017**, 32, 043005	1.8	19
82	Ferroelectricity-induced performance enhancement of V-doped ZnO/Si photodetector by direct energy band modulation. *Nano Energy*, **2019**, 65, 104046	17.1	19
81	High-performance Sb-doped p-ZnO NW films for self-powered piezoelectric strain sensors. *Nano Energy*, **2020**, 73, 104744	17.1	19
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79	Asymmetric Superhydrophobic Textiles for Electromagnetic Interference Shielding, Photothermal Conversion, and Solar Water Evaporation. *ACS Applied Materials & Interfaces*, **2021**, 13, 28996-29007	9.5	19
78	Metal Halide Perovskite Arrays: From Construction to Optoelectronic Applications. *Advanced Functional Materials*, **2021**, 31, 2005230	15.6	19
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