Caofeng Pan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1289760/publications.pdf Version: 2024-02-01



| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Biologically Inspired Stretchable, Multifunctional, and 3D Electronic Skin by Strain Visualization and Triboelectric Pressure Sensing. Small Science, 2022, 2, 2100083. | 5.8 | 34 |
| 2 | Significance of Flexible Substrates for Wearable and Implantable Devices: Recent Advances and Perspectives. Advanced Materials Technologies, 2022, 7, . | 3.0 | 81 |
| 3 | Recent advances in curved image sensor arrays for bioinspired vision system. Nano Today, 2022, 42, 101366. | 6.2 | 16 |
| 4 | Bimodal Tactile Sensor without Signal Fusion for User-Interactive Applications. ACS Nano, 2022, 16, 2789-2797. | 7.3 | 54 |
| 5 | Anisotropic Carrier Mobility from 2H WSe ₂ . Advanced Materials, 2022, 34, e2108615. | 11.1 | 11 |
| 6 | Self-powered high-performance flexible GaN/ZnO heterostructure UV photodetectors with piezo-phototronic effect enhanced photoresponse. Nano Energy, 2022, 94, 106945. | 8.2 | 73 |
| 7 | Molten Salt Shielded Synthesis of Monodisperse Layered CaZnOSâ€Based Semiconductors for Piezophotonic and Xâ€Ray Detection Applications. Small, 2022, 18, e2107437. | 5.2 | 20 |
| 8 | Bidirectional Photoresponse in Perovskiteâ€ZnO Heterostructure for Fully Optical ontrolled Artificial Synapse. Advanced Optical Materials, 2022, 10, . | 3.6 | 30 |
| 9 | Biodegradable, Breathable Leaf Veinâ€Based Tactile Sensors with Tunable Sensitivity and Sensing Range. Small, 2022, 18, e2106906. | 5.2 | 28 |
| 10 | Flexible and Stretchable Strategies for Electronic Skins: Materials, Structure, and Integration. ACS Applied Electronic Materials, 2022, 4, 1-26. | 2.0 | 20 |
| 11 | Strainâ€Insensitive Selfâ€Powered Tactile Sensor Arrays Based on Intrinsically Stretchable and Patternable Ultrathin Conformal Wrinkled Grapheneâ€Elastomer Composite. Advanced Functional Materials, 2022, 32, . | 7.8 | 47 |
| 12 | Energy Conversion Analysis of Multilayered Triboelectric Nanogenerators for Synergistic Rain and Solar Energy Harvesting. Advanced Materials, 2022, 34, e2202238. | 11.1 | 63 |
| 13 | Ultrathin and Conformable Lead Halide Perovskite Photodetector Arrays for Potential Application in Retinaâ€Like Vision Sensing. Advanced Materials, 2021, 33, e2006006. | 11.1 | 87 |
| 14 | Wavelength tunable single-mode lasing from cesium lead halide perovskite microwires. Applied Physics Letters, 2021, 118, . | 1.5 | 11 |
| 15 | Piezophototronic Effect in Nanosensors. Small Science, 2021, 1, 2000060. | 5.8 | 28 |
| 16 | Stable Ultrathin Perovskite/Polyvinylidene Fluoride Composite Films for Imperceptible Multiâ€Color Fluorescent Antiâ€Counterfeiting Labels. Advanced Materials Technologies, 2021, 6, 2100229. | 3.0 | 26 |
| 17 | Tunable and Nacreâ€Mimetic Multifunctional Electronic Skins for Highly Stretchable Contactâ€Noncontact Sensing. Small, 2021, 17, e2100542. | 5.2 | 69 |
| 18 | Spherical Triboelectric Nanogenerator with Dense Point Contacts for Harvesting Multidirectional Water Wave and Vibration Energy. ACS Energy Letters, 2021, 6, 2809-2816. | 8.8 | 48 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 19 | A high performance CsPbBr3 microwire based photodetector boosted by coupling plasmonic and piezo-phototronic effects. Nano Energy, 2021, 85, 105951. | 8.2 | 38 |
| 20 | Piezotronics in twoâ€dimensional materials. InformaÄnÃ-Materiály, 2021, 3, 987-1007. | 8.5 | 54 |
| 21 | MXene enhanced self-powered alternating current electroluminescence devices for patterned flexible displays. Nano Energy, 2021, 86, 106077. | 8.2 | 44 |
| 22 | Piezo-phototronic effect enhanced performance of a p-ZnO NW based UV–Vis–NIR photodetector. Nano Energy, 2021, 86, 106090. | 8.2 | 17 |
| 23 | Bioinspired Multifunctional Photonicâ€Electronic Smart Skin for Ultrasensitive Health Monitoring, for Visual and Selfâ€Powered Sensing. Advanced Materials, 2021, 33, e2102332. | 11.1 | 107 |
| 24 | Mechanoluminescent hybrids from a natural resource for energyâ€related applications. InformaÄnÃ- Materiály, 2021, 3, 1272-1284. | 8.5 | 53 |
| 25 | Interfacial-engineering enhanced performance and stability of ZnO nanowire-based perovskite solar cells. Nanotechnology, 2021, 32, 475204. | 1.3 | 18 |
| 26 | Metal Halide Perovskite Arrays: From Construction to Optoelectronic Applications. Advanced Functional Materials, 2021, 31, 2005230. | 7.8 | 40 |
| 27 | Recent progress in tactile sensors and their applications in intelligent systems. Science Bulletin, 2020, 65, 70-88. | 4.3 | 132 |
| 28 | Lateral bipolar photoresistance effect in the CIGS heterojunction and its application in position sensitive detector and memory device. Science Bulletin, 2020, 65, 477-485. | 4.3 | 28 |
| 29 | Flexible GaN microwire-based piezotronic sensory memory device. Nano Energy, 2020, 78, 105312. | 8.2 | 13 |
| 30 | 53â€5: Lateâ€News Paper: aâ€IGZO TFT Based Active Matrix Pressure Sensor by Integrating ZnO Nanowires as Sensing Unit. Digest of Technical Papers SID International Symposium, 2020, 51, 789-791. | 0.1 | 1 |
| 31 | Real-time pressure mapping smart insole system based on a controllable vertical pore dielectric layer. Microsystems and Nanoengineering, 2020, 6, 62. | 3.4 | 69 |
| 32 | Force-induced charge carrier storage: a new route for stress recording. Light: Science and Applications, 2020, 9, 182. | 7.7 | 83 |
| 33 | Recent Progress in Optoelectronic Synapses for Artificial Visualâ€Perception System. Small Structures, 2020, 1, 2000029. | 6.9 | 90 |
| 34 | High precision epidermal radio frequency antenna via nanofiber network for wireless stretchable multifunction electronics. Nature Communications, 2020, 11, 5629. | 5.8 | 48 |
| 35 | Bioinspired Selfâ€Healing Human–Machine Interactive Touch Pad with Pressure‧ensitive Adhesiveness on Targeted Substrates. Advanced Materials, 2020, 32, e2004290. | 11.1 | 210 |
| 36 | Visually aided tactile enhancement system based on ultrathin highly sensitive crack-based strain sensors. Applied Physics Reviews, 2020, 7, . | 5.5 | 30 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Recent advances of wearable and flexible piezoresistivity pressure sensor devices and its future prospects. Journal of Materiomics, 2020, 6, 86-101. | 2.8 | 102 |
| 38 | Human spinal reflex like strain-controlled power devices based on piezotronic effect. Science Bulletin, 2020, 65, 1228-1230. | 4.3 | 1 |
| 39 | High-performance Sb-doped p-ZnO NW films for self-powered piezoelectric strain sensors. Nano Energy, 2020, 73, 104744. | 8.2 | 52 |
| 40 | Mechanoluminescence materials for advanced artificial skin. Science Bulletin, 2020, 65, 1147-1149. | 4.3 | 62 |
| 41 | Piezotronic Synapse Based on a Single GaN Microwire for Artificial Sensory Systems. Nano Letters, 2020, 20, 3761-3768. | 4.5 | 26 |
| 42 | Dynamically Modulated GaN Whispering Gallery Lasing Mode for Strain Sensor. Advanced Functional Materials, 2019, 29, 1905051. | 7.8 | 56 |
| 43 | Fiber-Integrated Reversibly Wavelength-Tunable Nanowire Laser Based on Nanocavity Mode Coupling. ACS Nano, 2019, 13, 9965-9972. | 7.3 | 11 |
| 44 | Piezotronics and Piezo-phototronics of Third Generation Semiconductor Nanowires. Chemical Reviews, 2019, 119, 9303-9359. | 23.0 | 213 |
| 45 | Mechanoluminescence enhancement of ZnS:Cu,Mn with piezotronic effect induced trap-depth reduction originated from PVDF ferroelectric film. Nano Energy, 2019, 63, 103861. | 8.2 | 50 |
| 46 | Electronic Skin for Closed-Loop Systems. ACS Nano, 2019, 13, 12287-12293. | 7.3 | 103 |
| 47 | Two Photon–Pumped Whisperingâ€Gallery Mode Lasing and Dynamic Regulation. Advanced Science, 2019, 6, 1900916. | 5.6 | 9 |
| 48 | 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. | 8.2 | 48 |
| 49 | Tactile Sensors for Advanced Intelligent Systems. Advanced Intelligent Systems, 2019, 1, 1900090. | 3.3 | 80 |
| 50 | Stretchable conductive nonwoven fabrics with self-cleaning capability for tunable wearable strain sensor. Nano Energy, 2019, 66, 104143. | 8.2 | 249 |
| 51 | Achieving high-resolution pressure mapping via flexible GaN/ ZnO nanowire LEDs array by piezo-phototronic effect. Nano Energy, 2019, 58, 633-640. | 8.2 | 120 |
| 52 | Wavelength‶unable Micro/Nanolasers. Advanced Optical Materials, 2019, 7, 1900275. | 3.6 | 13 |
| 53 | Crystal-Orientation-Related Dynamic Tuning of the Lasing Spectra of CdS Nanobelts by Piezoelectric Polarization. ACS Nano, 2019, 13, 5049-5057. | 7.3 | 21 |
| 54 | Piezo-phototronic Effect Enhanced Efficient Flexible Perovskite Solar Cells. ACS Nano, 2019, 13, 4507-4513. | 7.3 | 82 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 55 | Transparent and stretchable triboelectric nanogenerator for self-powered tactile sensing. Nano Energy, 2019, 59, 302-310. | 8.2 | 285 |
| 56 | Coupled Ionâ€Gel Channelâ€Width Gating and Piezotronic Interface Gating in ZnO Nanowire Devices. Advanced Functional Materials, 2019, 29, 1807837. | 7.8 | 27 |
| 57 | Fabrication of Largeâ€Area Bimodal Sensors by Allâ€Inkjetâ€Printing. Advanced Materials Technologies, 2019, 4, 1800703. | 3.0 | 40 |
| 58 | A Universal high accuracy wearable pulse monitoring system via high sensitivity and large linearity graphene pressure sensor. Nano Energy, 2019, 59, 422-433. | 8.2 | 198 |
| 59 | Triboiontronic Transistor of MoS ₂ . Advanced Materials, 2019, 31, e1806905. | 11.1 | 93 |
| 60 | Dynamic regulating of single-mode lasing in ZnO microcavity by piezoelectric effect. Materials Today, 2019, 24, 33-40. | 8.3 | 32 |
| 61 | Flexible Photodetector Arrays Based on Patterned CH ₃ NH ₃ PbI _{3â^²} <i>_x</i> Cl <i>_x</i> Perovskite Film for Realâ€Time Photosensing and Imaging. Advanced Materials, 2019, 31, e1805913. | 11.1 | 174 |
| 62 | Piezophotonic effect based on mechanoluminescent materials for advanced flexible optoelectronic applications. Nano Energy, 2019, 55, 389-400. | 8.2 | 126 |
| 63 | Selfâ€Powered Tactile Sensor Array Systems Based on the Triboelectric Effect. Advanced Functional Materials, 2019, 29, 1806379. | 7.8 | 122 |
| 64 | Piezoelectric Polyacrylonitrile Nanofiber Film-Based Dual-Function Self-Powered Flexible Sensor. ACS Applied Materials & Interfaces, 2018, 10, 15855-15863. | 4.0 | 132 |
| 65 | Piezophototronic Effect Enhanced Photoresponse of the Flexible Cu(In,Ga)Se ₂ (CIGS) Heterojunction Photodetectors. Advanced Functional Materials, 2018, 28, 1707311. | 7.8 | 58 |
| 66 | A Highly Stretchable Transparent Selfâ€Powered Triboelectric Tactile Sensor with Metallized Nanofibers for Wearable Electronics. Advanced Materials, 2018, 30, e1706738. | 11.1 | 315 |
| 67 | Piezoâ€Phototronic Effect Modulated Deep UV Photodetector Based on ZnOâ€Ga ₂ O ₃ Heterojuction Microwire. Advanced Functional Materials, 2018, 28, 1706379. | 7.8 | 126 |
| 68 | Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. Nature Communications, 2018, 9, 244. | 5.8 | 1,034 |
| 69 | Printable Skinâ€Driven Mechanoluminescence Devices via Nanodoped Matrix Modification. Advanced Materials, 2018, 30, e1800291. | 11.1 | 178 |
| 70 | Networks of High Performance Triboelectric Nanogenerators Based on Liquid–Solid Interface Contact Electrification for Harvesting Lowâ€Frequency Blue Energy. Advanced Energy Materials, 2018, 8, 1800705. | 10.2 | 182 |
| 71 | ZnO nanowire based CIGS solar cell and its efficiency enhancement by the piezo-phototronic effect. Nano Energy, 2018, 49, 508-514. | 8.2 | 95 |
| 72 | Oxygen-assisted preparation of mechanoluminescent ZnS:Mn for dynamic pressure mapping. Nano Research, 2018, 11, 1967-1976. | 5.8 | 45 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Piezoelectric Effect Tuning on ZnO Microwire Whispering-Gallery Mode Lasing. ACS Nano, 2018, 12, 11899-11906. | 7.3 | 51 |
| 74 | Piezo-phototronic effect on optoelectronic nanodevices. MRS Bulletin, 2018, 43, 952-958. | 1.7 | 38 |
| 75 | Recent Advances in Largeâ€Scale Tactile Sensor Arrays Based on a Transistor Matrix. Advanced Materials Interfaces, 2018, 5, 1801061. | 1.9 | 48 |
| 76 | In ₂ O ₃ 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. | 7.3 | 32 |
| 77 | Piezoâ€Phototronic Effect for Enhanced Flexible MoS ₂ /WSe ₂ van der Waals Photodiodes. Advanced Functional Materials, 2018, 28, 1802849. | 7.8 | 130 |
| 78 | Recent progress in flexible pressure sensor arrays: from design to applications. Journal of Materials Chemistry C, 2018, 6, 11878-11892. | 2.7 | 194 |
| 79 | Progress in piezotronic and piezo-phototronic effect of 2D materials. 2D Materials, 2018, 5, 042003. | 2.0 | 62 |
| 80 | Tunable single-mode lasing in a single semiconductor microrod. Optics Express, 2018, 26, 30021. | 1.7 | 6 |
| 81 | Mechanically induced strong red emission in samarium ions doped piezoelectric semiconductor CaZnOS for dynamic pressure sensing and imaging. Optics Communications, 2017, 395, 24-28. | 1.0 | 40 |
| 82 | Full Dynamicâ€Range Pressure Sensor Matrix Based on Optical and Electrical Dualâ€Mode Sensing. Advanced Materials, 2017, 29, 1605817. | 11.1 | 176 |
| 83 | Enhancing the Efficiency of Silicon-Based Solar Cells by the Piezo-Phototronic Effect. ACS Nano, 2017, 11, 1894-1900. | 7.3 | 79 |
| 84 | A nanowire based triboelectric nanogenerator for harvesting water wave energy and its applications. APL Materials, 2017, 5, . | 2.2 | 53 |
| 85 | Visualization Recording and Storage of Pressure Distribution through a Smart Matrix Based on the Piezotronic Effect. Advanced Materials, 2017, 29, 1701253. | 11.1 | 59 |
| 86 | 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. | 3.2 | 65 |
| 87 | Flexibly and Repeatedly Modulating Lasing Wavelengths in a Single Core–Shell Semiconductor Microrod. ACS Nano, 2017, 11, 5808-5814. | 7.3 | 26 |
| 88 | Piezotronics and piezo-phototronics based on <i>a</i> -axis nano/microwires: fundamentals and applications. Semiconductor Science and Technology, 2017, 32, 043005. | 1.0 | 22 |
| 89 | Flexible Light Emission Diode Arrays Made of Transferred Si Microwires-ZnO Nanofilm with Piezo-Phototronic Effect Enhanced Lighting. ACS Nano, 2017, 11, 3883-3889. | 7.3 | 53 |
| 90 | Detection of non-joint areas tiny strain and anti-interference voice recognition by micro-cracked metal thin film. Nano Energy, 2017, 34, 578-585. | 8.2 | 128 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Recent progress in piezo-phototronics with extended materials, application areas and understanding. Semiconductor Science and Technology, 2017, 32, 053002. | 1.0 | 22 |
| 92 | Photoluminescence Tuning in Stretchable PDMS Film Grafted Doped Core/Multishell Quantum Dots for Anticounterfeiting. Advanced Functional Materials, 2017, 27, 1700051. | 7.8 | 89 |
| 93 | "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. | 1.3 | 35 |
| 94 | Self-powered Real-time Movement Monitoring Sensor Using Triboelectric Nanogenerator Technology. Scientific Reports, 2017, 7, 10521. | 1.6 | 77 |
| 95 | Enhanced photoresponsivity of the MoS2-GaN heterojunction diode via the piezo-phototronic effect. NPG Asia Materials, 2017, 9, e418-e418. | 3.8 | 57 |
| 96 | Efficiency enhance the photoluminescence of ZnO nanowires array by the surface plasmonic effect of Au nanoparticles. International Journal of Nanomanufacturing, 2016, 12, 308. | 0.3 | 0 |
| 97 | Progress in Piezoâ€Phototronicâ€Effectâ€Enhanced Lightâ€Emitting Diodes and Pressure Imaging. Advanced Materials, 2016, 28, 1535-1552. | 11.1 | 110 |
| 98 | Dynamic Triboelectrificationâ€Induced Electroluminescence and its Use in Visualized Sensing. Advanced Materials, 2016, 28, 6656-6664. | 11.1 | 140 |
| 99 | Piezopotential-Programmed Multilevel Nonvolatile Memory As Triggered by Mechanical Stimuli. ACS Nano, 2016, 10, 11037-11043. | 7.3 | 37 |
| 100 | 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. | 5.2 | 56 |
| 101 | CdS nanorods/organic hybrid LED array and the piezo-phototronic effect of the device for pressure mapping. Nanoscale, 2016, 8, 8078-8082. | 2.8 | 78 |
| 102 | Enhanced performances of flexible ZnO/perovskite solar cells by piezo-phototronic effect. Nano Energy, 2016, 23, 27-33. | 8.2 | 119 |
| 103 | Progress in piezo-phototronic effect modulated photovoltaics. Journal of Physics Condensed Matter, 2016, 28, 433001. | 0.7 | 16 |
| 104 | A Stretchable Nanogenerator with Electric/Light Dualâ€Mode Energy Conversion. Advanced Energy Materials, 2016, 6, 1600829. | 10.2 | 74 |
| 105 | CdS@SiO ₂ Core-Shell Electroluminescent Nanorod Arrays Based on a Metal-Insulator-Semiconductor Structure. Small, 2016, 12, 5734-5740. | 5.2 | 14 |
| 106 | Enhancing Photoresponsivity of Self-Aligned MoS ₂ Field-Effect Transistors by Piezo-Phototronic Effect from GaN Nanowires. ACS Nano, 2016, 10, 7451-7457. | 7.3 | 86 |
| 107 | Progress in piezo-phototronic effect enhanced photodetectors. Journal of Materials Chemistry C, 2016, 4, 11341-11354. | 2.7 | 47 |
| 108 | Bioinspired Electronic Whisker Arrays by Pencilâ€Drawn Paper for Adaptive Tactile Sensing. Advanced Electronic Materials, 2016, 2, 1600093. | 2.6 | 59 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Selfâ€Powered Highâ€Resolution and Pressureâ€Sensitive Triboelectric Sensor Matrix for Realâ€Time Tactile Mapping. Advanced Materials, 2016, 28, 2896-2903. | 11.1 | 344 |
| 110 | Tuning Light Emission of a Pressure-Sensitive Silicon/ZnO Nanowires Heterostructure Matrix through Piezo-phototronic Effects. ACS Nano, 2016, 10, 6074-6079. | 7.3 | 75 |
| 111 | Recent Progress in Electronic Skin. Advanced Science, 2015, 2, 1500169. | 5.6 | 789 |
| 112 | Interface-Free Area-Scalable Self-Powered Electroluminescent System Driven by Triboelectric Generator. Scientific Reports, 2015, 5, 13658. | 1.6 | 18 |
| 113 | Piezoâ€phototronic Boolean Logic and Computation Using Photon and Strain Dualâ€Gated Nanowire Transistors. Advanced Materials, 2015, 27, 940-947. | 11.1 | 46 |
| 114 | Enhancing Light Emission of ZnOâ€Nanofilm/Siâ€Micropillar Heterostructure Arrays by Piezoâ€Phototronic Effect. Advanced Materials, 2015, 27, 4447-4453. | 11.1 | 81 |
| 115 | A Streaming Potential/Currentâ€Based Microfluidic Direct Current Generator for Selfâ€Powered Nanosystems. Advanced Materials, 2015, 27, 6482-6487. | 11.1 | 104 |
| 116 | Flexible, Stretchable and Wearable Multifunctional Sensor Array as Artificial Electronic Skin for Static and Dynamic Strain Mapping. Advanced Electronic Materials, 2015, 1, 1500142. | 2.6 | 226 |
| 117 | Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. Advanced Functional Materials, 2015, 25, 5277-5284. | 7.8 | 50 |
| 118 | Piezoâ€Phototronic Enhanced UV Sensing Based on a Nanowire Photodetector Array. Advanced Materials, 2015, 27, 7963-7969. | 11.1 | 115 |
| 119 | Dynamic Pressure Mapping of Personalized Handwriting by a Flexible Sensor Matrix Based on the Mechanoluminescence Process. Advanced Materials, 2015, 27, 2324-2331. | 11.1 | 468 |
| 120 | Enhanced emission intensity of vertical aligned flexible ZnO nanowire/p-polymer hybridized LED array by piezo-phototronic effect. Nano Energy, 2015, 14, 364-371. | 8.2 | 92 |
| 121 | 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. | 1.5 | 123 |
| 122 | Piezotronic effect enhanced detection of flammable/toxic gases by ZnO micro/nanowire sensors. Nano Energy, 2015, 12, 588-596. | 8.2 | 74 |
| 123 | Piezoâ€Phototronic UV/Visible Photosensing with Opticalâ€Fiber–Nanowire Hybridized Structures. Advanced Materials, 2015, 27, 1553-1560. | 11.1 | 60 |
| 124 | Wavelength-tunable infrared light emitting diode based on ordered ZnO nanowire/Si1–x Ge x alloy heterojunction. Nano Research, 2015, 8, 2676-2685. | 5.8 | 16 |
| 125 | Flexible and Controllable Piezoâ€₽hototronic Pressure Mapping Sensor Matrix by ZnO NW/pâ€Polymer LED Array. Advanced Functional Materials, 2015, 25, 2884-2891. | 7.8 | 200 |
| 126 | Piezotronic effect enhanced performance of Schottky-contacted optical, gas, chemical and biological nanosensors. Nano Energy, 2015, 14, 312-339. | 8.2 | 71 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | CoS NWs/Au Hybridized Networks as Efficient Counter Electrodes for Flexible Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1500141. | 10.2 | 46 |
| 128 | Light-induced pyroelectric effect as an effective approach for ultrafast ultraviolet nanosensing. Nature Communications, 2015, 6, 8401. | 5.8 | 261 |
| 129 | A self-powered system based on triboelectric nanogenerators and supercapacitors for metal corrosion prevention. Journal of Materials Chemistry A, 2015, 3, 22663-22668. | 5.2 | 70 |
| 130 | Development and progress in piezotronics. Nano Energy, 2015, 14, 276-295. | 8.2 | 84 |
| 131 | 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. | 8.2 | 107 |
| 132 | Mapping strain/pressure with nanowire light- emitting-diode arrays by piezo-phototronic effect. , 2015, , . | | 0 |
| 133 | Optimizing Performance of Silicon-Based p–n Junction Photodetectors by the Piezo-Phototronic Effect. ACS Nano, 2014, 8, 12866-12873. | 7.3 | 120 |
| 134 | Electrochemical Cathodic Protection Powered by Triboelectric Nanogenerator. Advanced Functional Materials, 2014, 24, 6691-6699. | 7.8 | 104 |
| 135 | A Three Dimensional Multi‣ayered Sliding Triboelectric Nanogenerator. Advanced Energy Materials, 2014, 4, 1301592. | 10.2 | 106 |
| 136 | Triboelectric Nanogenerators as a Selfâ€₽owered Motion Tracking System. Advanced Functional Materials, 2014, 24, 5059-5066. | 7.8 | 83 |
| 137 | Features of the piezo-phototronic effect on optoelectronic devices based on wurtzite semiconductor nanowires. Physical Chemistry Chemical Physics, 2014, 16, 2790. | 1.3 | 28 |
| 138 | Piezotronic effect enhanced Schottky-contact ZnO micro/nanowire humidity sensors. Nano Research, 2014, 7, 1083-1091. | 5.8 | 81 |
| 139 | Flexible quantum dot-sensitized solar cells employing CoS nanorod arrays/graphite paper as effective counter electrodes. Journal of Materials Chemistry A, 2014, 2, 13661. | 5.2 | 80 |
| 140 | High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. Nature Photonics, 2013, 7, 752-758. | 15.6 | 641 |
| 141 | Piezotronic Effect on the Sensitivity and Signal Level of Schottky Contacted Proactive Micro/Nanowire Nanosensors. ACS Nano, 2013, 7, 1803-1810. | 7.3 | 100 |
| 142 | Piezotronics and piezo-phototronics – From single nanodevices to array of devices and then to integrated functional system. Nano Today, 2013, 8, 619-642. | 6.2 | 141 |
| 143 | High performance of ZnO nanowire protein sensors enhanced by the piezotronic effect. Energy and Environmental Science, 2013, 6, 494. | 15.6 | 108 |
| 144 | In Situ Quantitative Study of Nanoscale Triboelectrification and Patterning. Nano Letters, 2013, 13, 2771-2776. | 4.5 | 210 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 145 | Linear-Grating Triboelectric Generator Based on Sliding Electrification. Nano Letters, 2013, 13, 2282-2289. | 4.5 | 442 |
| 146 | Toward Large-Scale Energy Harvesting by a Nanoparticle-Enhanced Triboelectric Nanogenerator. Nano Letters, 2013, 13, 847-853. | 4.5 | 979 |
| 147 | Enhanced performance of GaN nanobelt-based photodetectors by means of piezotronic effects. Nano Research, 2013, 6, 758-766. | 5.8 | 42 |
| 148 | Largely Enhanced Efficiency in ZnO Nanowire/p-Polymer Hybridized Inorganic/Organic Ultraviolet Light-Emitting Diode by Piezo-Phototronic Effect. Nano Letters, 2013, 13, 607-613. | 4.5 | 209 |
| 149 | Enhanced Performance of a ZnO Nanowireâ€Based Selfâ€Powered Glucose Sensor by Piezotronic Effect. Advanced Functional Materials, 2013, 23, 5868-5874. | 7.8 | 174 |
| 150 | Triboelectric-Generator-Driven Pulse Electrodeposition for Micropatterning. Nano Letters, 2012, 12, 4960-4965. | 4.5 | 874 |
| 151 | Progress in nanogenerators for portable electronics. Materials Today, 2012, 15, 532-543. | 8.3 | 417 |
| 152 | Optical-fiber/TiO2-nanowire-arrays hybrid structures with tubular counterelectrode for dye-sensitized solar cell. Nano Energy, 2012, 1, 176-182. | 8.2 | 58 |
| 153 | Hybrid cells for simultaneously harvesting multi-type energies for self-powered micro/nanosystems. Nano Energy, 2012, 1, 259-272. | 8.2 | 97 |
| 154 | Piezoâ€Phototronic Effect of CdSe Nanowires. Advanced Materials, 2012, 24, 5470-5475. | 11.1 | 77 |
| 155 | Rectangular Bunched Rutile TiO ₂ Nanorod Arrays Grown on Carbon Fiber for Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2012, 134, 4437-4441. | 6.6 | 349 |
| 156 | Vertically Aligned CdSe Nanowire Arrays for Energy Harvesting and Piezotronic Devices. ACS Nano, 2012, 6, 6478-6482. | 7.3 | 91 |
| 157 | Enhanced Cu ₂ S/CdS Coaxial Nanowire Solar Cells by Piezo-Phototronic Effect. Nano Letters, 2012, 12, 3302-3307. | 4.5 | 174 |
| 158 | Piezotronic Effect on the Transport Properties of GaN Nanobelts for Active Flexible Electronics. Advanced Materials, 2012, 24, 3532-3537. | 11.1 | 114 |
| 159 | Optical Fiberâ€Based Core–Shell Coaxially Structured Hybrid Cells for Selfâ€Powered Nanosystems. Advanced Materials, 2012, 24, 3356-3361. | 11.1 | 80 |
| 160 | Wafer-Scale High-Throughput Ordered Arrays of Si and Coaxial Si/Si _{1–<i>x</i>} Ge _{<i>x</i>} Wires: Fabrication, Characterization, and Photovoltaic Application. ACS Nano, 2011, 5, 6629-6636. | 7.3 | 67 |
| 161 | From proton conductive nanowires to nanofuel cells: A powerful candidate for generating electricity for self-powered nanosystems. Nano Research, 2011, 4, 1099-1109. | 5.8 | 9 |
| 162 | Fiberâ€Based Hybrid Nanogenerators for/as Selfâ€Powered Systems in Biological Liquid. Angewandte Chemie - International Edition, 2011, 50, 11192-11196. | 7.2 | 92 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | Generating Electricity from Biofluid with a Nanowireâ€Based Biofuel Cell for Selfâ€Powered Nanodevices. Advanced Materials, 2010, 22, 5388-5392. | 11.1 | 99 |
| 164 | Highly Sensitive Amperometric Cholesterol Biosensor Based on Pt-Incorporated Fullerene-like ZnO Nanospheres. Journal of Physical Chemistry C, 2010, 114, 243-250. | 1.5 | 131 |
| 165 | A Single ZnO Nanofiber-Based Highly Sensitive Amperometric Glucose Biosensor. Journal of Physical Chemistry C, 2010, 114, 9308-9313. | 1.5 | 213 |
| 166 | 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. | 1.2 | 24 |
| 167 | Nanowireâ€Based Highâ€Performance "Micro Fuel Cells― One Nanowire, One Fuel Cell. Advanced Materials, 2008, 20, 1644-1648. | 11.1 | 126 |
| 168 | Nano-porous anodic aluminium oxide membranes with 6–19 nm pore diameters formed by a low-potential anodizing process. Nanotechnology, 2007, 18, 345302. | 1.3 | 44 |