# Bowen Zhu

List of Publications by Year
in descending order



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|---|---|---|---|
| 73 papers | 7,199 citations | 87401 40 h-index | 93651 72 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 12055 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Self-assembled peptides-modified flexible field-effect transistors for tyrosinase detection. IScience, 2022, 25, 103673. | 1.9 | 11 |
| 2 | Silk Protein Based Volatile Threshold Switching Memristors for Neuromorphic Computing. Advanced Electronic Materials, 2022, 8, . | 2.6 | 21 |
| 3 | On-Skin Chemical Sensors. , 2022, , 129-141. | | 1 |
| 4 | Tunable Plasticity in Printed Optoelectronic Synaptic Transistors by Contact Engineering. IEEE Electron Device Letters, 2022, 43, 882-885. | 2.2 | 12 |
| 5 | Fully Printed Optoelectronic Synaptic Transistors Based on Quantum Dotâ€“Metal Oxide Semiconductor Heterojunctions. ACS Nano, 2022, 16, 8651-8661. | 7.3 | 70 |
| 6 | Bioâ€Inspired Inâ€Sensor Compression and Computing Based on Phototransistors. Small, 2022, 18, e2201111. | 5.2 | 16 |
| 7 | Aqueousâ€Printed Ga<sub>2</sub>O<sub>3</sub> Films for Highâ€Performance Flexible and Heatâ€Resistant Deep Ultraviolet Photodetector and Array. Advanced Optical Materials, 2022, 10, . | 3.6 | 24 |
| 8 | Direct Optical Patterning of Nanocrystal-Based Thin-Film Transistors and Light-Emitting Diodes through Native Ligand Cleavage. ACS Applied Nano Materials, 2022, 5, 8457-8466. | 2.4 | 7 |
| 9 | Inorganicâ€“Organic Hybrid Phototransistor Array with Enhanced Photogating Effect for Dynamic Near-Infrared Light Sensing and Image Preprocessing. Nano Letters, 2022, 22, 5434-5442. | 4.5 | 19 |
| 10 | Towards wearable and implantable continuous drug monitoring: A review. Journal of Pharmaceutical Analysis, 2021, 11, 1-14. | 2.4 | 48 |
| 11 | Fully-printed flexible n-type tin oxide thin-film transistors and logic circuits. Journal of Materials Chemistry C, 2021, 9, 11662-11668. | 2.7 | 26 |
| 12 | On-Skin Chemical Sensors. , 2021, , 1-13. | | 0 |
| 13 | Flexible and Airâ€Stable Nearâ€Infrared Sensors Based on Solutionâ€Processed Inorganicâ€“Organic Hybrid Phototransistors. Advanced Functional Materials, 2021, 31, 2105887. | 7.8 | 47 |
| 14 | Fully Printed High-Performance n-Type Metal Oxide Thin-Film Transistors Utilizing Coffee-Ring Effect. Nano-Micro Letters, 2021, 13, 164. | 14.4 | 30 |
| 15 | Interface Engineering of Metalâ€Oxide Fieldâ€Effect Transistors for Lowâ€Drift pH Sensing. Advanced Materials Interfaces, 2021, 8, 2100314. | 1.9 | 13 |
| 16 | A Skin-Inspired Artificial Mechanoreceptor for Tactile Enhancement and Integration. ACS Nano, 2021, 15, 16422-16431. | 7.3 | 66 |
| 17 | Soft gold nanowire sponges for strain-insensitive conductors, wearable energy storage and catalytic converters. Journal of Materials Chemistry C, 2021, 9, 15329-15336. | 2.7 | 8 |
| 18 | Disruptive, Soft, Wearable Sensors. Advanced Materials, 2020, 32, e1904664. | 11.1 | 272 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Multiscale Softâ€“Hard Interface Design for Flexible Hybrid Electronics. Advanced Materials, 2020, 32, e1902278. | 11.1 | 65 |
| 20 | Design of Stretchable Holey Gold Biosensing Electrode for Real-Time Cell Monitoring. ACS Sensors, 2020, 5, 3165-3171. | 4.0 | 22 |
| 21 | Detecting DNA and RNA and Differentiating Single-Nucleotide Variations via Field-Effect Transistors. Nano Letters, 2020, 20, 5982-5990. | 4.5 | 47 |
| 22 | Flexible low-power source-gated transistors with solution-processed metalâ€“oxide semiconductors. Nanoscale, 2020, 12, 21610-21616. | 2.8 | 23 |
| 23 | Hybrid Integrated Photomedical Devices for Wearable Vital Sign Tracking. ACS Sensors, 2020, 5, 1582-1588. | 4.0 | 14 |
| 24 | A Soft Resistive Acoustic Sensor Based on Suspended Standing Nanowire Membranes with Point Crack Design. Advanced Functional Materials, 2020, 30, 1910717. | 7.8 | 68 |
| 25 | Hierarchically Structured Vertical Gold Nanowire Array-Based Wearable Pressure Sensors for Wireless Health Monitoring. ACS Applied Materials & Interfaces, 2019, 11, 29014-29021. | 4.0 | 148 |
| 26 | Local Crackâ€Programmed Gold Nanowire Electronic Skin Tattoos for Inâ€Plane Multisensor Integration. Advanced Materials, 2019, 31, e1903789. | 11.1 | 161 |
| 27 | Softening gold for elastronics. Chemical Society Reviews, 2019, 48, 1668-1711. | 18.7 | 138 |
| 28 | Free-standing 2D nanorafts by assembly of 1D nanorods for biomolecule sensing. Nanoscale, 2019, 11, 12169-12176. | 2.8 | 30 |
| 29 | Covalent-Cross-Linked Plasmene Nanosheets. ACS Nano, 2019, 13, 6760-6769. | 7.3 | 19 |
| 30 | High-adhesion vertically aligned gold nanowire stretchable electrodesviaa thin-layer soft nailing strategy. Nanoscale Horizons, 2019, 4, 1380-1387. | 4.1 | 11 |
| 31 | A Janus gold nanowire electrode for stretchable micro-supercapacitors with distinct capacitances. Journal of Materials Chemistry A, 2019, 7, 14233-14238. | 5.2 | 23 |
| 32 | Generalized Preparation of Two-Dimensional Quasi-nanosheets via Self-assembly of Nanoparticles. Journal of the American Chemical Society, 2019, 141, 1725-1734. | 6.6 | 29 |
| 33 | Patterning Vertically Grown Gold Nanowire Electrodes for Intrinsically Stretchable Organic Transistors. Advanced Electronic Materials, 2019, 5, 1800509. | 2.6 | 48 |
| 34 | 20% Efficient Perovskite Solar Cells with 2D Electron Transporting Layer. Advanced Functional Materials, 2019, 29, 1805168. | 7.8 | 67 |
| 35 | A Wearable Second Skinâ€Like Multifunctional Supercapacitor with Vertical Gold Nanowires and Electrochromic Polyaniline. Advanced Materials Technologies, 2019, 4, 1800473. | 3.0 | 88 |
| 36 | Achieving ordered and stable binary metal perovskite via strain engineering. Nano Energy, 2018, 48, 117-127. | 8.2 | 60 |

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|---|---|---|---|
| 37 | High Efficiency Non-fullerene Organic Tandem Photovoltaics Based on Ternary Blend Subcells. Nano Letters, 2018, 18, 7977-7984. | 4.5 | 27 |
| 38 | Aptamerâ€“field-effect transistors overcome Debye length limitations for small-molecule sensing. Science, 2018, 362, 319-324. | 6.0 | 570 |
| 39 | 3Dâ€Structured Stretchable Strain Sensors for Outâ€ofâ€Plane Force Detection. Advanced Materials, 2018, 30, e1707285. | 11.1 | 86 |
| 40 | High Mobility Indium Oxide Electron Transport Layer for an Efficient Charge Extraction and Optimized Nanomorphology in Organic Photovoltaics. Nano Letters, 2018, 18, 5805-5811. | 4.5 | 31 |
| 41 | Interface Engineering of Metal Oxide Semiconductors for Biosensing Applications. Advanced Materials Interfaces, 2017, 4, 1700020. | 1.9 | 72 |
| 42 | Quasi-Two-Dimensional Metal Oxide Semiconductors Based Ultrasensitive Potentiometric Biosensors. ACS Nano, 2017, 11, 4710-4718. | 7.3 | 79 |
| 43 | Metal-sulfide-decorated ZnO/Si nano-heterostructure arrays with enhanced photoelectrochemical performance. Materials Research Bulletin, 2017, 96, 503-508. | 2.7 | 7 |
| 44 | Stretchable Motion Memory Devices Based on Mechanical Hybrid Materials. Advanced Materials, 2017, 29, 1701780. | 11.1 | 68 |
| 45 | Alcoholâ€Mediated Resistanceâ€Switching Behavior in Metalâ€“Organic Frameworkâ€Based Electronic Devices. Angewandte Chemie, 2016, 128, 9030-9034. | 1.6 | 19 |
| 46 | Flexible Integrated Electrical Cables Based on Biocomposites for Synchronous Energy Transmission and Storage. Advanced Functional Materials, 2016, 26, 3472-3479. | 7.8 | 72 |
| 47 | Silk Fibroin for Flexible Electronic Devices. Advanced Materials, 2016, 28, 4250-4265. | 11.1 | 466 |
| 48 | Alcoholâ€Mediated Resistanceâ€Switching Behavior in Metalâ€“Organic Frameworkâ€Based Electronic Devices. Angewandte Chemie - International Edition, 2016, 55, 8884-8888. | 7.2 | 72 |
| 49 | Ultraâ€Lightweight Resistive Switching Memory Devices Based on Silk Fibroin. Small, 2016, 12, 3360-3365. | 5.2 | 97 |
| 50 | Memory Arrays: Skin-Inspired Haptic Memory Arrays with an Electrically Reconfigurable Architecture (Adv. Mater. 8/2016). Advanced Materials, 2016, 28, 1526-1526. | 11.1 | 3 |
| 51 | Hierarchically branched Fe<sub>2</sub>O<sub>3</sub>@TiO<sub>2</sub>nanorod arrays for photoelectrochemical water splitting: facile synthesis and enhanced photoelectrochemical performance. Nanoscale, 2016, 8, 11284-11290. | 2.8 | 87 |
| 52 | Flexible Piezoelectric Nanocomposite Generators Based on Formamidinium Lead Halide Perovskite Nanoparticles. Advanced Functional Materials, 2016, 26, 7708-7716. | 7.8 | 163 |
| 53 | Physically Transient Resistive Switching Memory Based on Silk Protein. Small, 2016, 12, 2715-2719. | 5.2 | 148 |
| 54 | Resistive Switching: Physically Transient Resistive Switching Memory Based on Silk Protein (Small) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 5.2 | 0 |

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|---|---|---|---|
| 55 | Skinâ€Inspired Haptic Memory Arrays with an Electrically Reconfigurable Architecture. Advanced Materials, 2016, 28, 1559-1566. | 11.1 | 173 |
| 56 | Memory Devices: Configurable Resistive Switching between Memory and Threshold Characteristics for Proteinâ€Based Devices (Adv. Funct. Mater. 25/2015). Advanced Functional Materials, 2015, 25, 3980-3980. | 7.8 | 2 |
| 57 | Colorimetric Detection of Creatinine Based on Plasmonic Nanoparticles via Synergistic Coordination Chemistry. Small, 2015, 11, 4104-4110. | 5.2 | 54 |
| 58 | Configurable Resistive Switching between Memory and Threshold Characteristics for Proteinâ€Based Devices. Advanced Functional Materials, 2015, 25, 3825-3831. | 7.8 | 175 |
| 59 | Thicknessâ€Gradient Films for High Gauge Factor Stretchable Strain Sensors. Advanced Materials, 2015, 27, 6230-6237. | 11.1 | 300 |
| 60 | Resistive Switching Memory Devices Based on Proteins. Advanced Materials, 2015, 27, 7670-7676. | 11.1 | 140 |
| 61 | Suspended Wavy Graphene Microribbons for Highly Stretchable Microsupercapacitors. Advanced Materials, 2015, 27, 5559-5566. | 11.1 | 268 |
| 62 | Contaminant Detection: Optical Reading of Contaminants in Aqueous Media Based on Gold Nanoparticles (Small 17/2014). Small, 2014, 10, 3426-3426. | 5.2 | 1 |
| 63 | Optoelectronics of Organic Nanofibers Formed by Coâ€Assembly of Porphyrin and Perylenediimide. Small, 2014, 10, 2776-2781. | 5.2 | 24 |
| 64 | A Mechanically and Electrically Selfâ€Healing Supercapacitor. Advanced Materials, 2014, 26, 3638-3643. | 11.1 | 351 |
| 65 | Optical Reading of Contaminants in Aqueous Media Based on Gold Nanoparticles. Small, 2014, 10, 3461-3479. | 5.2 | 72 |
| 66 | Artificial Skin: Microstructured Graphene Arrays for Highly Sensitive Flexible Tactile Sensors (Small) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 5.2 | 3 |
| 67 | Microstructured Graphene Arrays for Highly Sensitive Flexible Tactile Sensors. Small, 2014, 10, 3625-3631. | 5.2 | 540 |
| 68 | Programmable Photoâ€Electrochemical Hydrogen Evolution Based on Multiâ€Segmented CdSâ€Au Nanorod Arrays. Advanced Materials, 2014, 26, 3506-3512. | 11.1 | 150 |
| 69 | Supercapacitors: A Mechanically and Electrically Self-Healing Supercapacitor (Adv. Mater. 22/2014). Advanced Materials, 2014, 26, 3637-3637. | 11.1 | 6 |
| 70 | Innentitelbild: A Synergistic Capture Strategy for Enhanced Detection and Elimination of Bacteria (Angew. Chem. 23/2014). Angewandte Chemie, 2014, 126, 5822-5822. | 1.6 | 0 |
| 71 | Highly Stretchable, Integrated Supercapacitors Based on Singleâ€Walled Carbon Nanotube Films with Continuous Reticulate Architecture. Advanced Materials, 2013, 25, 1058-1064. | 11.1 | 496 |
| 72 | Allâ€Solidâ€State Flexible Ultrathin Microâ€Supercapacitors Based on Graphene. Advanced Materials, 2013, 25, 4035-4042. | 11.1 | 503 |

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|---|---|---|---|
| 73 | Urine for Plasmonic Nanoparticleâ€Based Colorimetric Detection of Mercury Ion. Small, 2013, 9, 4104-4111. | 5.2 | 102 |