

# Xing Wu

## List of Publications by Year in descending order

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195  
papers

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41258

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198  
docs citations

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citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Direct, Nonoxidative Conversion of Methane to Ethylene, Aromatics, and Hydrogen. <i>Science</i> , 2014, 344, 616-619.  | 6.0  | 1,113     |
| 2  | A single iron site confined in a graphene matrix for the catalytic oxidation of benzene at room temperature. <i>Science Advances</i> , 2015, 1, e1500462.  | 4.7  | 719       |
| 3  | Synthesis and Optical Properties of Large-Area Single-Crystalline 2D Semiconductor WS <sub>2</sub> Monolayer from Chemical Vapor Deposition. <i>Advanced Optical Materials</i> , 2014, 2, 131-136.     | 3.6  | 513       |
| 4  | Recommended Methods to Study Resistive Switching Devices. <i>Advanced Electronic Materials</i> , 2019, 5, 1800143.   | 2.6  | 452       |
| 5  | Layer-by-Layer Thinning of MoS <sub>2</sub> by Plasma. <i>ACS Nano</i> , 2013, 7, 4202-4209.   | 7.3  | 387       |
| 6  | Integrating the g-C <sub>3</sub> N <sub>4</sub> Nanosheet with B-H Bonding Decorated Metal-Organic Framework for CO <sub>2</sub> Activation and Photoreduction. <i>ACS Nano</i> , 2018, 12, 5333-5340. | 7.3  | 263       |
| 7  | Evolution of Raman spectra in nitrogen doped graphene. <i>Carbon</i> , 2013, 61, 57-62.  | 5.4  | 228       |
| 8  | Top-down fabrication of sub-nanometre semiconducting nanoribbons derived from molybdenum disulfide sheets. <i>Nature Communications</i> , 2013, 4, 1776.   | 5.8  | 220       |
| 9  | High efficiency and fast van der Waals hetero-photodiodes with a unilateral depletion region. <i>Nature Communications</i> , 2019, 10, 4663.   | 5.8  | 213       |
| 10 | Palladium Diselenide Long-Wavelength Infrared Photodetector with High Sensitivity and Stability. <i>ACS Nano</i> , 2019, 13, 2511-2519.  | 7.3  | 198       |
| 11 | Carbon Microbelt Aerogel Prepared by Waste Paper: An Efficient and Recyclable Sorbent for Oils and Organic Solvents. <i>Small</i> , 2014, 10, 3544-3550.   | 5.2  | 196       |
| 12 | Hierarchical MoS <sub>2</sub> Hollow Architectures with Abundant Mo Vacancies for Efficient Sodium Storage. <i>ACS Nano</i> , 2019, 13, 5533-5540.   | 7.3  | 187       |
| 13 | Silicon carbide-derived carbon nanocomposite as a substitute for mercury in the catalytic hydrochlorination of acetylene. <i>Nature Communications</i> , 2014, 5, 3688.                                | 5.8  | 181       |
| 14 | Room temperature ferromagnetism in ultra-thin van der Waals crystals of 1T-CrTe <sub>2</sub> . <i>Nano Research</i> , 2020, 13, 3358-3363.   | 5.8  | 175       |
| 15 | Zeeman splitting and dynamical mass generation in Dirac semimetal ZrTe <sub>5</sub> . <i>Nature Communications</i> , 2016, 7, 12516.   | 5.8  | 149       |
| 16 | Engineering the Coordination Sphere of Isolated Active Sites to Explore the Intrinsic Activity in Single-Atom Catalysts. <i>Nano-Micro Letters</i> , 2021, 13, 136.                                    | 14.4 | 138       |
| 17 | When Nanowires Meet Ultrahigh Ferroelectric Field-High-Performance Full-Depleted Nanowire Photodetectors. <i>Nano Letters</i> , 2016, 16, 2548-2555.   | 4.5  | 135       |
| 18 | Visible Light-Assisted High-Performance Mid-Infrared Photodetectors Based on Single InAs Nanowire. <i>Nano Letters</i> , 2016, 16, 6416-6424.  | 4.5  | 134       |

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|----|---|------|-----------|
| 19 | Dual-defect surface engineering of bimetallic sulfide nanotubes towards flexible asymmetric solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24053-24064.                                    | 5.2  | 133       |
| 20 | Effect of fluorine doping and sulfur vacancies of CuCo <sub>2</sub> S <sub>4</sub> on its electrochemical performance in supercapacitors. <i>Chemical Engineering Journal</i> , 2020, 390, 124643.                          | 6.6  | 132       |
| 21 | AsP/InSe Van der Waals Tunneling Heterojunctions with Ultrahigh Reverse Rectification Ratio and High Photosensitivity. <i>Advanced Functional Materials</i> , 2019, 29, 1900314.  | 7.8  | 121       |
| 22 | Construction of hierarchical CoS nanowire@NiCo <sub>2</sub> S <sub>4</sub> nanosheet arrays via one-step ion exchange for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 24033-24040. | 5.2  | 119       |
| 23 | Surface step decoration of isolated atom as electron pumping: Atomic-level insights into visible-light hydrogen evolution. <i>Nano Energy</i> , 2018, 45, 109-117.  | 8.2  | 118       |
| 24 | Recent Advances on Transition Metal Dichalcogenides for Electrochemical Energy Conversion. <i>Advanced Materials</i> , 2021, 33, e2008376.  | 11.1 | 114       |
| 25 | Ultrafast Dynamic Pressure Sensors Based on Graphene Hybrid Structure. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 24148-24154.  | 4.0  | 103       |
| 26 | High-Performance Near-Infrared Photodetectors Based on p-Type SnX (X = S, Se) Nanowires Grown via Chemical Vapor Deposition. <i>ACS Nano</i> , 2018, 12, 7239-7245.   | 7.3  | 101       |
| 27 | Defect-mediated phase transition temperature of VO <sub>2</sub> (M) nanoparticles with excellent thermochromic performance and low threshold voltage. <i>Journal of Materials Chemistry A</i> , 2014, 2, 4520.              | 5.2  | 90        |
| 28 | Metallic few-layered VSe <sub>2</sub> nanosheets: high two-dimensional conductivity for flexible in-plane solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8299-8306.                        | 5.2  | 89        |
| 29 | High-Performance Wafer-Scale MoS <sub>2</sub> Transistors toward Practical Application. <i>Small</i> , 2018, 14, e1803465.  | 5.2  | 88        |
| 30 | Controlled Doping of Wafer-Scale PtSe <sub>2</sub> Films for Device Application. <i>Advanced Functional Materials</i> , 2019, 29, 1805614.  | 7.8  | 87        |
| 31 | Review of Printed Electrodes for Flexible Devices. <i>Frontiers in Materials</i> , 2019, 5, .   | 1.2  | 85        |
| 32 | In Situ Transmission Electron Microscopy Characterization and Manipulation of Two-Dimensional Layered Materials beyond Graphene. <i>Small</i> , 2017, 13, 1604259.  | 5.2  | 75        |
| 33 | Preparation, performances and mechanisms of magnetic <i>Saccharomyces cerevisiae</i> bionanocomposites for atrazine removal. <i>Chemosphere</i> , 2018, 200, 380-387.   | 4.2  | 75        |
| 34 | Recent advances in ethanol gas sensors based on metal oxide semiconductor heterojunctions. <i>Rare Metals</i> , 2022, 41, 1818-1842.  | 3.6  | 71        |
| 35 | Properties of graphene-metal contacts probed by Raman spectroscopy. <i>Carbon</i> , 2018, 127, 491-497.   | 5.4  | 70        |
| 36 | Intrinsic nanofilamentation in resistive switching. <i>Journal of Applied Physics</i> , 2013, 113, 114503.  | 1.1  | 69        |

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|----|---|------|-----------|
| 37 | Graphene Scaffolds Enhanced Photogenerated Electron Transport in ZnO Photoanodes for High-Efficiency Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013, 117, 8619-8627.   | 1.5  | 69        |
| 38 | Efficient perovskite solar cells <i>via</i> surface passivation by a multifunctional small organic ionic compound. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8313-8322.  | 5.2  | 68        |
| 39 | Tunable Electroluminescence in Planar Graphene/SiO <sub>2</sub> Memristors. <i>Advanced Materials</i> , 2013, 25, 5593-5598.  | 11.1 | 67        |
| 40 | General Synthetic Strategy for Libraries of Supported Multicomponent Metal Nanoparticles. <i>ACS Nano</i> , 2018, 12, 4594-4604.  | 7.3  | 66        |
| 41 | <i>In situ</i> observation of nickel as an oxidizable electrode material for the solid-electrolyte-based resistive random access memory. <i>Applied Physics Letters</i> , 2013, 102, .  | 1.5  | 65        |
| 42 | Structure-Property Relationships in Graphene-Based Strain and Pressure Sensors for Potential Artificial Intelligence Applications. <i>Sensors</i> , 2019, 19, 1250.   | 2.1  | 64        |
| 43 | Vertically Aligned MoS <sub>2</sub> with In-Plane Selectively Cleaved Mo-S Bond for Hydrogen Production. <i>Nano Letters</i> , 2021, 21, 1848-1855.   | 4.5  | 63        |
| 44 | A facile approach for the synthesis of highly luminescent carbon dots using vitamin-based small organic molecules with benzene ring structure as precursors. <i>RSC Advances</i> , 2015, 5, 90245-90254.                                      | 1.7  | 60        |
| 45 | Liquid-phase epitaxial growth of a homochiral MOF thin film on poly( <i>l</i> -DOPA) functionalized substrate for improved enantiomer separation. <i>Chemical Communications</i> , 2016, 52, 772-775.   | 2.2  | 60        |
| 46 | Magnetic bionanoparticles of <i>Penicillium</i> sp. yz11-22N2 doped with Fe <sub>3</sub> O <sub>4</sub> and encapsulated within PVA-SA gel beads for atrazine removal. <i>Bioresource Technology</i> , 2018, 260, 196-203.                    | 4.8  | 60        |
| 47 | Ligand-Controlled Formation and Photoluminescence Properties of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> Nanocubes and Nanowires. <i>ChemNanoMat</i> , 2017, 3, 303-310.   | 1.5  | 57        |
| 48 | Interface Designing over WS <sub>2</sub> /W <sub>2</sub> C for Enhanced Hydrogen Evolution Catalysis. <i>ACS Applied Energy Materials</i> , 2018, 1, 3377-3384.   | 2.5  | 54        |
| 49 | Thermo-mechanical correlation in two-dimensional materials. <i>Nanoscale</i> , 2021, 13, 1425-1442.   | 2.8  | 53        |
| 50 | A high-performance flexible piezoelectric energy harvester based on lead-free (Na <sub>0.5</sub> Bi <sub>0.5</sub> )Ti <sub>3</sub> Bi <sub>3</sub> piezoelectric nanofibers. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23634-23640. | 5.2  | 48        |
| 51 | Highly Sensitive and Flexible Tactile Sensor Based on Porous Graphene Sponges for Distributed Tactile Sensing in Monitoring Human Motions. <i>Journal of Microelectromechanical Systems</i> , 2019, 28, 154-163.                              | 1.7  | 48        |
| 52 | Characterization of atomic defects on the photoluminescence in two-dimensional materials using transmission electron microscope. <i>Informa Mater</i> , 2019, 1, 85-97.   | 8.5  | 46        |
| 53 | Ultracompact Si-GST Hybrid Waveguides for Nonvolatile Light Wave Manipulation. <i>IEEE Photonics Journal</i> , 2018, 10, 1-10.  | 1.0  | 45        |
| 54 | Evidence for compliance controlled oxygen vacancy and metal filament based resistive switching mechanisms in RRAM. <i>Microelectronic Engineering</i> , 2011, 88, 1124-1128.  | 1.1  | 44        |

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|----|---|------|-----------|
| 55 | Facile fabrication of paper-based flexible thermoelectric generator. <i>Npj Flexible Electronics</i> , 2021, 5, .   | 5.1  | 41        |
| 56 | Atomically defined Co on two-dimensional TiO <sub>2</sub> nanosheet for photocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , 2021, 420, 127681.   | 6.6  | 40        |
| 57 | Raman spectroscopy characterization of two-dimensional materials. <i>Chinese Physics B</i> , 2018, 27, 037802.  | 0.7  | 38        |
| 58 | Evolution of Filament Formation in Ni/HfO <sub>2</sub> /SiO <sub>x</sub> /Si-Based RRAM Devices. <i>Advanced Electronic Materials</i> , 2015, 1, 1500130.   | 2.6  | 37        |
| 59 | The Trend of 2D Transistors toward Integrated Circuits: Scaling Down and New Mechanisms. <i>Advanced Materials</i> , 2022, 34, e2201916.  | 11.1 | 37        |
| 60 | Efficient removal of atrazine from aqueous solutions using magnetic <i>Saccharomyces cerevisiae</i> bionanomaterial. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 7597-7610.                          | 1.7  | 35        |
| 61 | A template-free method to synthesis high density iron single atoms anchored on carbon nanotubes for high temperature polymer electrolyte membrane fuel cells. <i>Nano Energy</i> , 2021, 80, 105534.                | 8.2  | 35        |
| 62 | Asymmetric induction in homochiral MOFs: from interweaving double helices to single helices. <i>Chemical Communications</i> , 2015, 51, 16331-16333.  | 2.2  | 34        |
| 63 | VSe <sub>2</sub> /carbon-nanotube compound for all solid-state flexible in-plane supercapacitor. <i>Applied Physics Letters</i> , 2019, 114, .  | 1.5  | 34        |
| 64 | In situ interface engineering for probing the limit of quantum dot photovoltaic devices. <i>Nature Nanotechnology</i> , 2019, 14, 950-956.  | 15.6 | 30        |
| 65 | A general and facile method for preparation of large-scale reduced graphene oxide films with controlled structures. <i>Carbon</i> , 2019, 143, 162-171.   | 5.4  | 30        |
| 66 | Enhanced Removal of Hydrophobic Short-Chain <i>n</i> -Alkanes from Gas Streams in Biotrickling Filters in Presence of Surfactant. <i>Environmental Science &amp; Technology</i> , 2022, 56, 10349-10360.            | 4.6  | 30        |
| 67 | Size-Dependent Enantioselective Adsorption of Racemic Molecules through Homochiral Metal-Organic Frameworks Embedding Helicity. <i>Chemistry - A European Journal</i> , 2015, 21, 10236-10240.                      | 1.7  | 29        |
| 68 | Atomic Scale Modulation of Self-Rectifying Resistive Switching by Interfacial Defects. <i>Advanced Science</i> , 2018, 5, 1800096.  | 5.6  | 29        |
| 69 | Engineering hydrogels with homogeneous mechanical properties for controlling stem cell lineage specification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 3.3  | 28        |
| 70 | Subnanometer iron clusters confined in a porous carbon matrix for highly efficient zinc-air batteries. <i>Nanoscale Horizons</i> , 2020, 5, 359-365.  | 4.1  | 27        |
| 71 | Comparative studies of redox behaviors of Pt-Co/SiO <sub>2</sub> and Au-Co/SiO <sub>2</sub> catalysts and their activities in CO oxidation. <i>Catalysis Science and Technology</i> , 2014, 4, 3151-3158.           | 2.1  | 26        |
| 72 | Hot-Electrons Mediated Efficient Visible-Light Photocatalysis of Hierarchical Black Au-TiO <sub>2</sub> Nanorod Arrays on Flexible Substrate. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600588.              | 1.9  | 26        |

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|----|---|------|-----------|
| 73 | Repetitive-Avalanche-Induced Electrical Parameters Shift for 4H-SiC Junction Barrier Schottky Diode. IEEE Transactions on Electron Devices, 2015, 62, 601-605.  | 1.6  | 25        |
| 74 | A flexible resistive temperature detector (RTD) based on in-situ growth of patterned Ag film on polyimide without lithography. Microelectronic Engineering, 2019, 216, 111052.                        | 1.1  | 25        |
| 75 | Chaotic phase code for radar pulse compression. , 0, , .  |      | 24        |
| 76 | Uncorrelated multiple conductive filament nucleation and rupture in ultra-thin high- $\epsilon_r$ dielectric based resistive random access memory. Applied Physics Letters, 2011, 99, 093502.         | 1.5  | 24        |
| 77 | Facile ion-exchange synthesis of silver films as flexible current collectors for micro-supercapacitors. Journal of Materials Chemistry A, 2015, 3, 21009-21015.                                       | 5.2  | 24        |
| 78 | Raman mapping investigation of chemical vapor deposition-fabricated twisted bilayer graphene with irregular grains. Physical Chemistry Chemical Physics, 2014, 16, 21682-21687.                       | 1.3  | 23        |
| 79 | In Situ Dynamic Manipulation of Graphene Strain Sensor with Drastically Sensing Performance Enhancement. Advanced Electronic Materials, 2020, 6, 2000269.   | 2.6  | 23        |
| 80 | Energy Band Alignment and Redox-Active Sites in Metalloporphyrin-Spaced Metal-Catechol Frameworks for Enhanced CO <sub>2</sub> Photoreduction. Angewandte Chemie - International Edition, 2022, 61, . | 7.2  | 23        |
| 81 | Recent advances in flexible sweat glucose biosensors. Journal Physics D: Applied Physics, 2021, 54, 423001.   | 1.3  | 22        |
| 82 | In situ atomic-scale observation of monolayer graphene growth from SiC. Nano Research, 2018, 11, 2809-2820.   | 5.8  | 21        |
| 83 | Probing and Manipulating the Interfacial Defects of InGaAs Dual-Layer Metal Oxides at the Atomic Scale. Advanced Materials, 2018, 30, 1703025.  | 11.1 | 21        |
| 84 | Oxygen-Soluble Gate Electrodes for Prolonged High- $\kappa$ Gate-Stack Reliability. IEEE Electron Device Letters, 2011, 32, 252-254.  | 2.2  | 20        |
| 85 | Dual-Mode Sensor and Actuator to Learn Human-Hand Tracking and Grasping. IEEE Transactions on Electron Devices, 2019, 66, 5407-5410.  | 1.6  | 20        |
| 86 | Physical analysis of breakdown in high- $\epsilon_r$ /metal gate stacks using TEM/EELS and STM for reliability enhancement (invited). Microelectronic Engineering, 2011, 88, 1365-1372.               | 1.1  | 19        |
| 87 | Percolative Model and Thermodynamic Analysis of Oxygen-Ion-Mediated Resistive Switching. IEEE Electron Device Letters, 2012, 33, 712-714.   | 2.2  | 19        |
| 88 | Raman Characterization on Two-Dimensional Materials-Based Thermoelectricity. Molecules, 2019, 24, 88.   | 1.7  | 19        |
| 89 | Agglomeration and removal characteristics of fine particles from coal combustion under different turbulent flow fields. Journal of Environmental Sciences, 2020, 89, 113-124.                         | 3.2  | 19        |
| 90 | Analog Sensing and Computing Systems with Low Power Consumption for Gesture Recognition. Advanced Intelligent Systems, 2021, 3, 2000184.  | 3.3  | 19        |

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|-----|---|-----|-----------|
| 91  | Aggregation mechanism of fine fly ash particles in uniform magnetic field. Korean Journal of Chemical Engineering, 2007, 24, 319-327.   | 1.2 | 18        |
| 92  | ZnSe-Based Longitudinal Twinning Nanowires. Advanced Engineering Materials, 2014, 16, 459-465.  | 1.6 | 18        |
| 93  | Polarization fluctuation behavior of lanthanum substituted Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> thin films. Journal of Applied Physics, 2015, 118, 104102.   | 1.1 | 18        |
| 94  | Green tea (Camellia sinensis) aqueous extract alleviates postmenopausal osteoporosis in ovariectomized rats and prevents RANKL-induced osteoclastogenesis in vitro. Food and Nutrition Research, 2018, 62, .                                    | 1.2 | 18        |
| 95  | HZIF-based hybrids for electrochemical energy applications. Nanoscale, 2019, 11, 15763-15769.   | 2.8 | 18        |
| 96  | Iron-doped VSe <sub>2</sub> nanosheets for enhanced hydrogen evolution reaction. Applied Physics Letters, 2020, 116, .  | 1.5 | 18        |
| 97  | Construction of Hierarchical Fe <sub>2</sub> O <sub>3</sub> /SnO <sub>2</sub> Nanoball Arrays with Superior Acetone Sensing Performance. Advanced Materials Interfaces, 2021, 8, 2001831.   | 1.9 | 18        |
| 98  | Directly integrated mixed-dimensional van der Waals graphene/perovskite heterojunction for fast photodetection. Information Materials, 2022, 4, .   | 8.5 | 18        |
| 99  | A novel approach for CFAR processors design. , 0, , .   |     | 15        |
| 100 | Ferromagnetic CoSe broadband photodetector at room temperature. Nanotechnology, 2020, 31, 374002.   | 1.3 | 15        |
| 101 | Tuning Electrical and Optical Properties of MoSe <sub>2</sub> Transistors via Elemental Doping. Advanced Materials Technologies, 2020, 5, 2000307.  | 3.0 | 15        |
| 102 | Catenation of Homochiral Metal-Organic Nanocages or Nanotubes. Inorganic Chemistry, 2016, 55, 5095-5097.  | 1.9 | 14        |
| 103 | A strategy using mesoporous polymer nanospheres as nanocarriers of Bcl-2 siRNA towards breast cancer therapy. Journal of Materials Chemistry B, 2019, 7, 477-487.   | 2.9 | 14        |
| 104 | Design of Hybrid Zeolitic Imidazolate Framework-Derived Material with Cu-MoS Triatomic Coordination for Electrochemical Oxygen Reduction. Small, 2021, 17, e2003256.  | 5.2 | 14        |
| 105 | Filamentation Mechanism of Resistive Switching in Fully Silicided High- $\kappa$ Gate Stacks. IEEE Electron Device Letters, 2011, 32, 455-457.  | 2.2 | 13        |
| 106 | Compliance current dominates evolution of NiSi <sub>2</sub> defect size in Ni/dielectric/Si RRAM devices. Microelectronics Reliability, 2016, 61, 71-77.  | 0.9 | 13        |
| 107 | Thickness-Dependent Asymmetric Potential Landscape and Polarization Relaxation in Ferroelectric Hf <sub>x</sub> Zr <sub>1-x</sub> O <sub>2</sub> Thin Films through Interfacial Bound Charges. Advanced Electronic Materials, 2019, 5, 1900554. | 2.6 | 13        |
| 108 | Using post-breakdown conduction study in a MIS structure to better understand the resistive switching mechanism in an MIM stack. Nanotechnology, 2011, 22, 455702.  | 1.3 | 12        |

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|-----|--|-----|-----------|
| 109 | RGO-Protected Electroless Plated Nickel Electrode with Enhanced Stability Performance for Flexible Micro-Supercapacitors. ACS Applied Energy Materials, 2018, 1, 7182-7190.                              | 2.5 | 12        |
| 110 | Substrates and interlayer coupling effects on Mo <sub>1-x</sub> W <sub>x</sub> Se <sub>2</sub> alloys. Journal of Semiconductors, 2019, 40, 062005.  | 2.0 | 12        |
| 111 | A Novel Flexible Silver Heater Fabricated by a Solution-Based Polyimide Metalization and Inkjet-Printed Carbon Masking Technique. ACS Applied Electronic Materials, 2019, 1, 928-935.                    | 2.0 | 12        |
| 112 | End-Bonded Contacts of Tellurium Transistors. ACS Applied Materials & Interfaces, 2021, 13, 7766-7772.   | 4.0 | 12        |
| 113 | Atomistic Observation of the Local Phase Transition in MoTe <sub>2</sub> for Application in Homojunction Photodetectors. Small, 2022, 18, e2200913.  | 5.2 | 12        |
| 114 | Cu-Al intermetallic compound investigation using ex-situ post annealing and in-situ annealing. Microelectronics Reliability, 2015, 55, 2316-2323.  | 0.9 | 11        |
| 115 | Synthesis of zeolite-like metal-organic frameworks via a dual-ligand strategy. CrystEngComm, 2017, 19, 2549-2552.  | 1.3 | 11        |
| 116 | One-step synthesis of oxygen-deficient manganese dioxides sponge-like 3D architecture for high-performance supercapacitors. Journal of Alloys and Compounds, 2019, 809, 151790.                          | 2.8 | 11        |
| 117 | Top gate engineering of field-effect transistors based on wafer-scale two-dimensional semiconductors. Journal of Materials Science and Technology, 2022, 106, 243-248.                                   | 5.6 | 11        |
| 118 | Two-Dimensional Layered Materials-Based Spintronics. Spin, 2015, 05, 1540011.  | 0.6 | 10        |
| 119 | High-performance flexible humidity sensors for breath detection and non-touch switches. Nano Select, 2022, 3, 1168-1177.   | 1.9 | 10        |
| 120 | Dynamic investigation of interface atom migration during heterostructure nanojoining. Nanoscale, 2014, 6, 405-411.   | 2.8 | 9         |
| 121 | Synthesis and gas sorption properties of a homochiral metal-organic framework with octahedral cages. CrystEngComm, 2015, 17, 6107-6109.  | 1.3 | 9         |
| 122 | Combined treatment with Dendrobium candidum and black tea extract promotes osteoprotective activity in ovariectomized estrogen deficient rats and osteoclast formation. Life Sciences, 2018, 200, 31-41. | 2.0 | 9         |
| 123 | A 10Ånm Short Channel MoS <sub>2</sub> Transistor without the Resolution Requirement of Photolithography. Advanced Electronic Materials, 2021, 7, 2100543.   | 2.6 | 9         |
| 124 | Engineering Top Gate Stack for Wafer-Scale Integrated Circuit Fabrication Based on Two-Dimensional Semiconductors. ACS Applied Materials & Interfaces, 2022, 14, 11610-11618.                            | 4.0 | 9         |
| 125 | Feasibility of SILC Recovery in Sub-10-Å... EOT Advanced Metal Gate-High-κ Stacks. IEEE Electron Device Letters, 2013, 34, 1053-1055.  | 2.2 | 8         |
| 126 | Resilience of ultra-thin oxynitride films to percolative wear-out and reliability implications for high-κ stacks at low voltage stress. Journal of Applied Physics, 2013, 114, 094504.                   | 1.1 | 8         |



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|-----|---|-----|-----------|
| 127 | In Situ Interfacial Sublimation of Zn <sub>2</sub> GeO <sub>4</sub> Nanowire for Atomic-Scale Manufacturing. ACS Applied Nano Materials, 2020, 3, 4747-4754.                                | 2.4 | 8         |
| 128 | Synthesis and photocatalytic activities of two homochiral metal-organic frameworks with cages and hydrogen bonding helices. CrystEngComm, 2020, 22, 4206-4209.                              | 1.3 | 8         |
| 129 | Infrared Gesture Recognition System Based on Near-Sensor Computing. IEEE Electron Device Letters, 2021, 42, 1053-1056.  | 2.2 | 8         |
| 130 | Pressure Sensor Array With Low-Power Near-Sensor CMOS Chip for Human Gait Monitoring. , 2021, 5, 1-4.   |     | 8         |
| 131 | Direct Visualization of Breakdown-Induced Metal Migration in Enhanced Modified Lateral Silicon-Controlled Rectifiers. IEEE Transactions on Electron Devices, 2021, 68, 1378-1381.           | 1.6 | 8         |
| 132 | In Situ Observation of Crystalline Silicon Growth from SiO <sub>2</sub> at Atomic Scale. Research, 2019, 2019, 3289247.   | 2.8 | 8         |
| 133 | Waterproof and Breathable Graphene-Based Electronic Fabric for Wearable Sensors. Advanced Materials Technologies, 2022, 7, .  | 3.0 | 8         |
| 134 | Simultaneous atomic-level visualization and high precision photocurrent measurements on photoelectric devices by <i>in situ</i> TEM. RSC Advances, 2018, 8, 948-953.                        | 1.7 | 7         |
| 135 | Experimental study on the magnetic characteristics of coal fly ash at different combustion temperatures. Environmental Technology (United Kingdom), 2018, 39, 1967-1975.                    | 1.2 | 7         |
| 136 | A hybrid zeolitic imidazolate framework-derived ZnO/ZnMoO <sub>4</sub> heterostructure for electrochemical hydrogen production. Dalton Transactions, 2021, 50, 11365-11369.                 | 1.6 | 7         |
| 137 | NS-MD: Near-Sensor Motion Detection With Energy Harvesting Image Sensor for Always-On Visual Perception. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3078-3082. | 2.2 | 7         |
| 138 | Graphene-Based Hydrogel Strain Sensors with Excellent Breathability for Motion Detection and Communication. Macromolecular Materials and Engineering, 2022, 307, .                          | 1.7 | 7         |
| 139 | Universal route to fabricate facile and flexible micro-supercapacitors with gold-coated silver electrodes. RSC Advances, 2016, 6, 81936-81942.  | 1.7 | 6         |
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