# Huiling Tai

List of Publications by Year
in descending order

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|---|---|---|---|
| 169 papers | 9,678 citations | 23544 58 h-index | 39638 94 g-index |
| 170 all docs | 170 docs citations | 170 times ranked | 6799 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Facile, Flexible, Cost-Saving, and Environment-Friendly Paper-Based Humidity Sensor for Multifunctional Applications. ACS Applied Materials & Interfaces, 2019, 11, 21840-21849. | 4.0 | 326 |
| 2 | Paper-Based Sensors for Gas, Humidity, and Strain Detections: A Review. ACS Applied Materials & Interfaces, 2020, 12, 31037-31053. | 4.0 | 296 |
| 3 | Fabrication and gas sensitivity of polyanilineâ€“titanium dioxide nanocomposite thin film. Sensors and Actuators B: Chemical, 2007, 125, 644-650. | 4.0 | 291 |
| 4 | Flexible piezoelectric pressure sensor based on polydopamine-modified BaTiO3/PVDF composite film for human motion monitoring. Sensors and Actuators A: Physical, 2020, 301, 111789. | 2.0 | 272 |
| 5 | Alveolus-Inspired Active Membrane Sensors for Self-Powered Wearable Chemical Sensing and Breath Analysis. ACS Nano, 2020, 14, 6067-6075. | 7.3 | 271 |
| 6 | Enhanced ammonia response of Ti3C2T nanosheets supported by TiO2 nanoparticles at room temperature. Sensors and Actuators B: Chemical, 2019, 298, 126874. | 4.0 | 222 |
| 7 | Selfâ€Powered Respiration Monitoring Enabled By a Triboelectric Nanogenerator. Advanced Materials, 2021, 33, e2101262. | 11.1 | 217 |
| 8 | Evolution of breath analysis based on humidity and gas sensors: Potential and challenges. Sensors and Actuators B: Chemical, 2020, 318, 128104. | 4.0 | 217 |
| 9 | A high-performance flexible gas sensor based on self-assembled PANI-CeO2 nanocomposite thin film for trace-level NH3 detection at room temperature. Sensors and Actuators B: Chemical, 2018, 261, 587-597. | 4.0 | 196 |
| 10 | A wireless energy transmission enabled wearable active acetone biosensor for non-invasive prediabetes diagnosis. Nano Energy, 2020, 74, 104941. | 8.2 | 193 |
| 11 | Self-powered room temperature NO2 detection driven by triboelectric nanogenerator under UV illumination. Nano Energy, 2018, 47, 316-324. | 8.2 | 192 |
| 12 | Influence of polymerization temperature on NH3 response of PANI/TiO2 thin film gas sensor. Sensors and Actuators B: Chemical, 2008, 129, 319-326. | 4.0 | 188 |
| 13 | An integrated flexible self-powered wearable respiration sensor. Nano Energy, 2019, 63, 103829. | 8.2 | 181 |
| 14 | Visible light-assisted room temperature gas sensing with ZnO-Ag heterostructure nanoparticles. Sensors and Actuators B: Chemical, 2018, 259, 269-281. | 4.0 | 177 |
| 15 | Muscle Fibers Inspired Highâ€Performance Piezoelectric Textiles for Wearable Physiological Monitoring. Advanced Functional Materials, 2021, 31, 2010962. | 7.8 | 169 |
| 16 | Recent advances in humidity sensors for human body related humidity detection. Journal of Materials Chemistry C, 2021, 9, 14963-14980. | 2.7 | 167 |
| 17 | Halloysite nanotubes: Natural, environmental-friendly and low-cost nanomaterials for high-performance humidity sensor. Sensors and Actuators B: Chemical, 2020, 317, 128204. | 4.0 | 160 |
| 18 | Piezoelectric fiber composites with polydopamine interfacial layer for self-powered wearable biomonitoring. Nano Energy, 2021, 89, 106321. | 8.2 | 151 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Novel highly sensitive QCM humidity sensor with low hysteresis based on graphene oxide (GO)/poly(ethyleneimine) layered film. Sensors and Actuators B: Chemical, 2016, 234, 145-154. | 4.0 | 146 |
| 20 | A facile respiration-driven triboelectric nanogenerator for multifunctional respiratory monitoring. Nano Energy, 2019, 58, 312-321. | 8.2 | 143 |
| 21 | Novel high-performance self-powered humidity detection enabled by triboelectric effect. Sensors and Actuators B: Chemical, 2017, 251, 144-152. | 4.0 | 141 |
| 22 | Room temperature formaldehyde sensor with enhanced performance based on reduced graphene oxide/titanium dioxide. Sensors and Actuators B: Chemical, 2016, 223, 149-156. | 4.0 | 130 |
| 23 | Toward agricultural ammonia volatilization monitoring: A flexible polyaniline/Ti3C2T hybrid sensitive films based gas sensor. Sensors and Actuators B: Chemical, 2020, 316, 128144. | 4.0 | 130 |
| 24 | Ultrasensitive flexible NH3 gas sensor based on polyaniline/SrGe4O9 nanocomposite with ppt-level detection ability at room temperature. Sensors and Actuators B: Chemical, 2020, 319, 128293. | 4.0 | 129 |
| 25 | ZnO Nanoparticles/Reduced Graphene Oxide Bilayer Thin Films for Improved NH3-Sensing Performances at Room Temperature. Nanoscale Research Letters, 2016, 11, 130. | 3.1 | 126 |
| 26 | A flexible NO2 gas sensor based on polypyrrole/nitrogen-doped multiwall carbon nanotube operating at room temperature. Sensors and Actuators B: Chemical, 2019, 295, 86-92. | 4.0 | 121 |
| 27 | A review on Ti3C2Tx-based nanomaterials: synthesis and applications in gas and humidity sensors. Rare Metals, 2021, 40, 1459-1476. | 3.6 | 121 |
| 28 | Daily writing carbon ink: Novel application on humidity sensor with wide detection range, low detection limit and high detection resolution. Sensors and Actuators B: Chemical, 2021, 339, 129884. | 4.0 | 113 |
| 29 | PANI nanofibers-supported Nb2CTx nanosheets-enabled selective NH3 detection driven by TENG at room temperature. Sensors and Actuators B: Chemical, 2021, 327, 128923. | 4.0 | 108 |
| 30 | Preparation, Characterization and Comparative NH3-sensing Characteristic Studies of PANI/inorganic Oxides Nanocomposite Thin Films. Journal of Materials Science and Technology, 2010, 26, 605-613. | 5.6 | 104 |
| 31 | Highly sensitive and selective NO2 sensor of alkalized V2CT MXene driven by interlayer swelling. Sensors and Actuators B: Chemical, 2021, 344, 130150. | 4.0 | 104 |
| 32 | Ultrasensitive flexible self-powered ammonia sensor based on triboelectric nanogenerator at room temperature. Nano Energy, 2018, 51, 231-240. | 8.2 | 102 |
| 33 | A Highâ€Performances Flexible Temperature Sensor Composed of Polyethyleneimine/Reduced Graphene Oxide Bilayer for Realâ€Time Monitoring. Advanced Materials Technologies, 2019, 4, 1800594. | 3.0 | 102 |
| 34 | UV Illumination-Enhanced Molecular Ammonia Detection Based On a Ternary-Reduced Graphene Oxideâ€“Titanium Dioxideâ€“Au Composite Film at Room Temperature. Analytical Chemistry, 2019, 91, 3311-3318. | 3.2 | 97 |
| 35 | Ultrathin Nb2CT nanosheets-supported polyaniline nanocomposite: Enabling ultrasensitive NH3 detection. Sensors and Actuators B: Chemical, 2021, 343, 130069. | 4.0 | 94 |
| 36 | Enhanced ammonia-sensing properties of PANI-TiO2-Au ternary self-assembly nanocomposite thin film at room temperature. Sensors and Actuators B: Chemical, 2017, 246, 85-95. | 4.0 | 92 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Paper and carbon ink enabled low-cost, eco-friendly, flexible, multifunctional pressure and humidity sensors. Smart Materials and Structures, 2021, 30, 055012. | 1.8 | 91 |
| 38 | A novel sensing mechanism for resistive gas sensors based on layered reduced graphene oxide thin films at room temperature. Sensors and Actuators B: Chemical, 2014, 203, 135-142. | 4.0 | 88 |
| 39 | Simultaneous Biomechanical and Biochemical Monitoring for Self-Powered Breath Analysis. ACS Applied Materials & Interfaces, 2022, 14, 7301-7310. | 4.0 | 86 |
| 40 | A Nb2CTx/sodium alginate-based composite film with neuron-like network for self-powered humidity sensing. Chemical Engineering Journal, 2022, 438, 135588. | 6.6 | 86 |
| 41 | Facile development of high performance QCM humidity sensor based on protonated polyethylenimine-graphene oxide nanocomposite thin film. Sensors and Actuators B: Chemical, 2016, 230, 501-509. | 4.0 | 81 |
| 42 | Reduced graphene oxide-polyethylene oxide composite films for humidity sensing via quartz crystal microbalance. Sensors and Actuators B: Chemical, 2018, 255, 2203-2210. | 4.0 | 80 |
| 43 | Gas sensors based on multiple-walled carbon nanotubes-polyethylene oxide films for toluene vapor detection. Sensors and Actuators B: Chemical, 2014, 191, 24-30. | 4.0 | 79 |
| 44 | An ingenious strategy for improving humidity sensing properties of multi-walled carbon nanotubes via poly-L-lysine modification. Sensors and Actuators B: Chemical, 2019, 289, 182-185. | 4.0 | 79 |
| 45 | Novel application of attapulgite on high performance and low-cost humidity sensors. Sensors and Actuators B: Chemical, 2020, 305, 127534. | 4.0 | 79 |
| 46 | Vapor-assisted crystallization control toward high performance perovskite photovoltaics with over 18% efficiency in the ambient atmosphere. Journal of Materials Chemistry A, 2016, 4, 13203-13210. | 5.2 | 77 |
| 47 | Inspiration from Daily Goods: A Low-Cost, Facilely Fabricated, and Environment-Friendly Strain Sensor Based on Common Carbon Ink and Elastic Core-Spun Yarn. ACS Sustainable Chemistry and Engineering, 2019, 7, 17474-17481. | 3.2 | 76 |
| 48 | A do-it-yourself approach to achieving a flexible pressure sensor using daily use materials. Journal of Materials Chemistry C, 2021, 9, 13659-13667. | 2.7 | 76 |
| 49 | Edge-enriched MoS2 nanosheets modified porous nanosheet-assembled hierarchical In2O3 microflowers for room temperature detection of NO2 with ultrahigh sensitivity and selectivity. Journal of Hazardous Materials, 2022, 434, 128836. | 6.5 | 73 |
| 50 | Improving sensitivity of self-powered room temperature NO2 sensor by triboelectric-photoelectric coupling effect. Applied Physics Letters, 2019, 115, . | 1.5 | 72 |
| 51 | Excellent ammonia sensing performance of gas sensor based on graphene/titanium dioxide hybrid with improved morphology. Applied Surface Science, 2017, 419, 84-90. | 3.1 | 67 |
| 52 | Power generation humidity sensor based on primary battery structure. Chemical Engineering Journal, 2022, 446, 136910. | 6.6 | 66 |
| 53 | Enhanced humidity-sensing properties of novel graphene oxide/zinc oxide nanoparticles layered thin film QCM sensor. Materials Letters, 2016, 174, 28-31. | 1.3 | 64 |
| 54 | A wearable and highly sensitive strain sensor based on a polyethylenimineâ€“rGO layered nanocomposite thin film. Journal of Materials Chemistry C, 2017, 5, 7746-7752. | 2.7 | 64 |

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| 55 | A multifunctional wearable E-textile via integrated nanowire-coated fabrics. Journal of Materials Chemistry C, 2020, 8, 8399-8409. | 2.7 | 64 |
| 56 | Copper phthalocyanine thin film transistors for hydrogen sulfide detection. Sensors and Actuators B: Chemical, 2013, 176, 1191-1196. | 4.0 | 62 |
| 57 | Enhanced positive humidity sensitive behavior of p-reduced graphene oxide decorated with n-WS2 nanoparticles. Rare Metals, 2021, 40, 1762-1767. | 3.6 | 62 |
| 58 | Novel chitosan/ZnO bilayer film with enhanced humidity-tolerant property: Endowing triboelectric nanogenerator with acetone analysis capability. Nano Energy, 2020, 78, 105256. | 8.2 | 61 |
| 59 | NiWO<sub>4</sub> Microflowers on Multi-Walled Carbon Nanotubes for High-Performance NH<sub>3</sub> Detection. ACS Applied Materials & Interfaces, 2021, 13, 52850-52860. | 4.0 | 61 |
| 60 | MXeneâ€Sponge Based Highâ€Performance Piezoresistive Sensor for Wearable Biomonitoring and Realâ€Time Tactile Sensing. Small Methods, 2022, 6, e2101051. | 4.6 | 61 |
| 61 | Enhanced NH3 sensing performance of polyaniline via a facile morphology modification strategy. Sensors and Actuators B: Chemical, 2022, 369, 132302. | 4.0 | 61 |
| 62 | Edgeâ€Enriched Mo<sub>2</sub>TiC<sub>2</sub>T<sub>x</sub>/MoS<sub>2</sub> Heterostructure with Coupling Interface for Selective NO<sub>2</sub> Monitoring. Advanced Functional Materials, 2022, 32, . | 7.8 | 58 |
| 63 | Self-assembly of TiO2/polypyrrole nanocomposite ultrathin films and application for an NH3gas sensor. International Journal of Environmental Analytical Chemistry, 2007, 87, 539-551. | 1.8 | 54 |
| 64 | High performance humidity sensor based on 3D mesoporous Co3O4 hollow polyhedron for multifunctional applications. Applied Surface Science, 2022, 585, 152698. | 3.1 | 52 |
| 65 | The Art of Integrated Functionalization: Super Stable Black Phosphorus Achieved through Metalâ€Organic Framework Coating. Advanced Functional Materials, 2020, 30, 2002232. | 7.8 | 51 |
| 66 | Enhanced Blocking Effect: A New Strategy to Improve the NO<sub>2</sub> Sensing Performance of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> by Î³-Poly(<scp>l</scp>-glutamic acid) Modification. ACS Sensors, 2021, 6, 2858-2867. | 4.0 | 51 |
| 67 | A facile method to develop novel TiO 2 /rGO layered film sensor for detecting ammonia at room temperature. Materials Letters, 2016, 165, 127-130. | 1.3 | 49 |
| 68 | Gold-loaded tellurium nanobelts gas sensor for ppt-level NO2 detection at room temperature. Sensors and Actuators B: Chemical, 2022, 355, 131300. | 4.0 | 49 |
| 69 | Polymer coated sensor array based on quartz crystal microbalance for chemical agent analysis. European Polymer Journal, 2008, 44, 1157-1164. | 2.6 | 48 |
| 70 | Facilely constructed two-sided microstructure interfaces between electrodes and cellulose paper active layer: eco-friendly, low-cost and high-performance piezoresistive sensor. Cellulose, 2021, 28, 6389. | 2.4 | 48 |
| 71 | A chitosan/amido-graphene oxide-based self-powered humidity sensor enabled by triboelectric effect. Rare Metals, 2021, 40, 1995-2003. | 3.6 | 47 |
| 72 | Gas sensors for CO2 detection based on RGOâ€“PEI films at room temperature. Science Bulletin, 2014, 59, 1999-2005. | 1.7 | 46 |

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|---|---|---|---|
| 73 | A Simple Graphene NH3 Gas Sensor via Laser Direct Writing. Sensors, 2018, 18, 4405. | 2.1 | 46 |
| 74 | Constructing Electrically and Mechanically Self-Healing Elastomers by Hydrogen Bonded Intermolecular Network. Langmuir, 2020, 36, 3029-3037. | 1.6 | 45 |
| 75 | High performance ethylene sensor based on palladium-loaded tin oxide: Application in fruit quality detection. Chinese Chemical Letters, 2020, 31, 2045-2049. | 4.8 | 44 |
| 76 | Optimizing Piezoelectric Nanocomposites by Highâ€Throughput Phaseâ€Field Simulation and Machine Learning. Advanced Science, 2022, 9, e2105550. | 5.6 | 42 |
| 77 | Ag2Te nanowires for humidity-resistant trace-level NO2 detection at room temperature. Sensors and Actuators B: Chemical, 2022, 363, 131790. | 4.0 | 42 |
| 78 | Thin film transistors gas sensors based on reduced graphene oxide poly(3-hexylthiophene) bilayer film for nitrogen dioxide detection. Chemical Physics Letters, 2014, 614, 275-281. | 1.2 | 41 |
| 79 | Wind energy harvesting and self-powered flow rate sensor enabled by contact electrification. Journal Physics D: Applied Physics, 2016, 49, 215601. | 1.3 | 39 |
| 80 | Facile and low-cost fabrication of a humidity sensor using naturally available sepiolite nanofibers. Nanotechnology, 2020, 31, 355501. | 1.3 | 39 |
| 81 | The Enhanced Formaldehyde-Sensing Properties of P3HT-ZnO Hybrid Thin Film OTFT Sensor and Further Insight into Its Stability. Sensors, 2015, 15, 2086-2103. | 2.1 | 38 |
| 82 | Enhanced Formaldehyde-Sensing Performances of Mixed Polyethyleneimine-Multiwalled Carbon Nanotubes Composite Films on Quartz Crystal Microbalance. IEEE Sensors Journal, 2015, 15, 6904-6911. | 2.4 | 38 |
| 83 | The Fabrication and Optimization of Thin-Film Transistors Based on Poly(3-Hexylthiophene) Films for Nitrogen Dioxide Detection. IEEE Sensors Journal, 2016, 16, 1865-1871. | 2.4 | 38 |
| 84 | Surface Engineering of a 3D Topological Network for Ultrasensitive Piezoresistive Pressure Sensors. ACS Applied Materials & Interfaces, 2020, 12, 38805-38812. | 4.0 | 38 |
| 85 | The Investigation of Reduced Graphene Oxide/P3HT Composite Films for Ammonia Detection. Integrated Ferroelectrics, 2014, 154, 73-81. | 0.3 | 36 |
| 86 | Facile primary battery-based humidity sensor for multifunctional application. Sensors and Actuators B: Chemical, 2022, 370, 132369. | 4.0 | 34 |
| 87 | Integrated cross-section interface engineering and surface encapsulating strategy: A high-response, waterproof, and low-cost paper-based bending strain sensor. Journal of Materials Chemistry C, 2021, 9, 14003-14011. | 2.7 | 33 |
| 88 | The investigation of reduced graphene oxide@ SnO2â€“polyaniline composite thin films for ammonia detection at room temperature. Journal of Materials Science: Materials in Electronics, 2015, 26, 833-841. | 1.1 | 31 |
| 89 | Pâ€“P heterojunction sensor of self-assembled polyaniline nano-thin film/microstructure silicon array for NH3 detection. Chemical Physics Letters, 2015, 621, 58-64. | 1.2 | 30 |
| 90 | Novel p-n heterojunction-type rGO/CeO2 bilayer membrane for room-temperature nitrogen dioxide detection. Materials Letters, 2017, 186, 49-52. | 1.3 | 28 |

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| 91 | Protrusion Microstructure-Induced Sensitivity Enhancement for Zinc Oxideâ€“Carbon Nanotube Flexible Pressure Sensors. ACS Applied Electronic Materials, 2021, 3, 5506-5513. | 2.0 | 28 |
| 92 | Two-Sided Topological Architecture on a Monolithic Flexible Substrate for Ultrasensitive Strain Sensors. ACS Applied Materials & Interfaces, 2019, 11, 43543-43552. | 4.0 | 27 |
| 93 | Self-Polarization of PVDF Film Triggered by Hydrophilic Treatment for Pyroelectric Sensor with Ultra-Low Piezoelectric Noise. Nanoscale Research Letters, 2019, 14, 72. | 3.1 | 26 |
| 94 | Enhancing visible light-activated NO<sub>2</sub> sensing properties of Au NPs decorated ZnO nanorods by localized surface plasmon resonance and oxygen vacancies. Materials Research Express, 2020, 7, 015924. | 0.8 | 26 |
| 95 | A sensitive film structure improvement of reduced graphene oxide based resistive gas sensors. Applied Physics Letters, 2014, 105, . | 1.5 | 23 |
| 96 | Facilely constructed randomly distributed surface microstructure for flexible strain sensor with high sensitivity and low detection limit. Journal Physics D: Applied Physics, 2021, 54, 284003. | 1.3 | 23 |
| 97 | Enhancing responsivity of ZnO nanowire based photodetectors by piezo-phototronic effect. Sensors and Actuators A: Physical, 2016, 241, 169-175. | 2.0 | 22 |
| 98 | Synergetic SERS Enhancement in a Metal-Like/Metal Double-Shell Structure for Sensitive and Stable Application. ACS Applied Materials & Interfaces, 2017, 9, 13564-13570. | 4.0 | 22 |
| 99 | A New Model and Its Application for the Dynamic Response of RGO Resistive Gas Sensor. Sensors, 2019, 19, 889. | 2.1 | 21 |
| 100 | Self-assembled graphene oxide/polyethyleneimine films as high-performance quartz crystal microbalance humidity sensors. Rare Metals, 2021, 40, 1597-1603. | 3.6 | 21 |
| 101 | Humidity sensing properties of different single-walled carbon nanotube composite films fabricated by layer-by-layer self-assembly technique. Applied Physics A: Materials Science and Processing, 2012, 109, 111-118. | 1.1 | 19 |
| 102 | Enhanced Acetone-Sensing Properties of PEI Thin Film by GO-NH2 Functional Groups Modification at Room Temperature. Frontiers in Materials, 2019, 5, . | 1.2 | 19 |
| 103 | Adsorption behaviors of gas molecules on the surface of ZnO nanocrystals under UV irradiation. Science China Technological Sciences, 2019, 62, 2226-2235. | 2.0 | 18 |
| 104 | Wearable and washable textile-based strain sensors via a single-step, environment-friendly method. Science China Technological Sciences, 2021, 64, 441-450. | 2.0 | 18 |
| 105 | The fabrication and optimization of OTFT formaldehyde sensors based on Poly(3-hexythiophene)/ZnO composite films. Science China Technological Sciences, 2013, 56, 1877-1882. | 2.0 | 16 |
| 106 | The effect of the channel curve on the performance of micromachined gas chromatography column. Sensors and Actuators B: Chemical, 2017, 239, 304-310. | 4.0 | 16 |
| 107 | Nanocomposite films of p-type MoS2 nanosheets/n-type ZnO nanowires: Sensitive and low-temperature ppb-level NO2 detection. Materials Letters, 2020, 262, 127148. | 1.3 | 16 |
| 108 | Designing Cu<sup>2+</sup> as a Partial Substitution of Protons in Polyaniline Emeraldine Salt: Room-Temperature-Recoverable H<sub>2</sub>S Sensing Properties and Mechanism Study. ACS Applied Materials & Interfaces, 2022, 14, 27203-27213. | 4.0 | 16 |

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|---|---|---|---|
| 109 | Improved response/recovery speeds of ZnO nanoparticle-based sensor toward NO2 gas under UV irradiation induced by surface oxygen vacancies. Journal of Materials Science: Materials in Electronics, 2019, 30, 11395-11403. | 1.1 | 15 |
| 110 | Flexible organic thin-film transistors based on poly(3-hexylthiophene) films for nitrogen dioxide detection. Science China Technological Sciences, 2018, 61, 1696-1704. | 2.0 | 13 |
| 111 | A Facile Strategy for Low Young's Modulus PDMS Microbeads Enhanced Flexible Capacitive Pressure Sensors. Particle and Particle Systems Characterization, 2021, 38, 2100019. | 1.2 | 13 |
| 112 | Terahertz Absorption Characteristics of NiCr Film and Enhanced Absorption by Reactive Ion Etching in a Microbolometer Focal Plane Array. Journal of Infrared, Millimeter, and Terahertz Waves, 2013, 34, 431-436. | 1.2 | 12 |
| 113 | Improvement of column efficiency in MEMS-Based gas chromatography column. RSC Advances, 2014, 4, 3726-3731. | 1.7 | 12 |
| 114 | Self-adaptive temperature and humidity compensation based on improved deep BP neural network for NO2 detection in complex environment. Sensors and Actuators B: Chemical, 2022, 362, 131812. | 4.0 | 12 |
| 115 | A carbon monoxide sensor based on single-walled carbon nanotubes doped with copper chloride. Science China Technological Sciences, 2013, 56, 2576-2580. | 2.0 | 11 |
| 116 | The response comparison of a hydrogen-bond acidic polymer to sarin, soman and dimethyl methyl phosphonate based on a surface acoustic wave sensor. Analytical Methods, 2014, 6, 1951-1955. | 1.3 | 11 |
| 117 | High-separation efficiency micro-fabricated multi-capillary gas chromatographic columns for simulants of the nerve agents and blister agents. Nanoscale Research Letters, 2014, 9, 224. | 3.1 | 11 |
| 118 | A simple route to functionalize siloxane polymers for DMMP sensing. Journal of Applied Polymer Science, 2013, 130, 4516-4520. | 1.3 | 10 |
| 119 | Hydrogen-bond acidic polymers coated SAW sensors for 2,4-dinitrotoluene detection. RSC Advances, 2014, 4, 59643-59649. | 1.7 | 10 |
| 120 | Optimization of temperature uniformity of a serpentine thin film heater by a two-dimensional approach. Microsystem Technologies, 2019, 25, 69-82. | 1.2 | 10 |
| 121 | Development of a Novel Formaldehyde OTFT Sensor Based on P3HT/Fe<sub>2</sub>O<sub>3</sub> Nanocomposite Thin Film. Integrated Ferroelectrics, 2013, 144, 15-21. | 0.3 | 8 |
| 122 | MEMS-based column coated with reduced graphene oxide as stationary phase for gas chromatography. RSC Advances, 2017, 7, 32749-32756. | 1.7 | 8 |
| 123 | Effective Room-Temperature Ammonia-Sensitive Composite Sensor Based on Graphene Nanoplates and PANI. ECS Journal of Solid State Science and Technology, 2018, 7, Q3148-Q3152. | 0.9 | 8 |
| 124 | Selfâ€Assembly of 2D Nanosheets into 1D Nanostructures for Sensing NO 2. Small Structures, 2021, 2, 2100067. | 6.9 | 8 |
| 125 | Thermally Induced Antiâ€Aggregation Evolution of Thick Bulkâ€Heterojunction for visâ€“NIR Organic Photodetectors. Advanced Optical Materials, 2022, 10, . | 3.6 | 8 |
| 126 | Preparation of bilayer/three-layer PEO-carbon nanotube composite thin films and their toluene-sensing application. Science China Technological Sciences, 2013, 56, 1124-1128. | 2.0 | 7 |

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|---|---|---|---|
| 127 | Self-powered humidity sensor based on triboelectric nanogenerator. , 2017, , . | | 7 |
| 128 | Perspectives on self-powered respiration sensor based on triboelectric nanogenerator. Applied Physics Letters, 2021, 119, . | 1.5 | 7 |
| 129 | Gas sensors based on MWCNTs-PVP composite films for 1,2-dichloroethane vapor detection. Journal of Materials Science: Materials in Electronics, 2014, 25, 5095-5100. | 1.1 | 6 |
| 130 | Piezoelectric Textiles: Muscle Fibers Inspired Highâ€Performance Piezoelectric Textiles for Wearable Physiological Monitoring (Adv. Funct. Mater. 19/2021). Advanced Functional Materials, 2021, 31, 2170136. | 7.8 | 6 |
| 131 | Selfâ€Powered Respiration Monitoring Enabled By a Triboelectric Nanogenerator (Adv. Mater. 35/2021). Advanced Materials, 2021, 33, 2170277. | 11.1 | 6 |
| 132 | Design and Development of MEMS Capacitive Large-Scale Strain Sensors. Integrated Ferroelectrics, 2013, 147, 123-130. | 0.3 | 4 |
| 133 | Development and Comparison Analysis of OTFT Gas Sensors Based on P3HT-ZnO Composite Film and P3HT/ZnO Bilayer Film. Integrated Ferroelectrics, 2014, 153, 65-72. | 0.3 | 4 |
| 134 | One-pot preparation and applications of self-healing, self-adhesive PAA-PDMS elastomers. Journal of Semiconductors, 2019, 40, 112602. | 2.0 | 4 |
| 135 | MXeneâ€Sponge Based Highâ€Performance Piezoresistive Sensor for Wearable Biomonitoring and Realâ€Time Tactile Sensing (Small Methods 2/2022). Small Methods, 2022, 6, . | 4.6 | 4 |
| 136 | Temperatureâ€programmed multicapillary gas chromatograph microcolumn for the analysis of odorous sulfur pollutants. Journal of Separation Science, 2018, 41, 893-898. | 1.3 | 3 |
| 137 | Room-temperature light-activated chemical sensors for gas monitoring and applications: a review. Journal Physics D: Applied Physics, 2022, 55, 213001. | 1.3 | 3 |
| 138 | Comparative NH 3 -sensing characteristic studies of PANI/TiO 2 nanocomposite thin films doped with different acids. Proceedings of SPIE, 2008, , . | 0.8 | 2 |
| 139 | α-sexithiophene based organic thin film transistors as gas sensor. , 2010, , . | | 2 |
| 140 | Polyvinylpyrrolidone/reduced graphene oxide nanocomposites thin films coated on quartz crystal microbalance for NO<sub>2</sub>detection at room temperature. Proceedings of SPIE, 2014, , . | 0.8 | 2 |
| 141 | Detection of 2,4-dinitrotoluene using hydrogen-bond acidic polymer coated SAW sensor. Science Bulletin, 2014, 59, 2608-2612. | 1.7 | 2 |
| 142 | The effect of MWCNTs on the performance of Î±-sexithiophene OTFT device and its gas-sensing property. Science China Technological Sciences, 2014, 57, 1101-1108. | 2.0 | 2 |
| 143 | Facile depositing strategy to fabricate a hetero-affinity hybrid film for improving gas-sensing performance. Nanotechnology, 2021, 32, 205502. | 1.3 | 2 |
| 144 | Surface modified polysiloxane a sensitive coatings for QCM sensors. Proceedings of SPIE, 2008, , . | 0.8 | 1 |

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|---|---|---|---|
| 145 | Pentacene Nano-Particles Film Modified Microstructure Silicon for NH<sub>3</sub> Gas Sensor Application. Integrated Ferroelectrics, 2014, 152, 113-119. | 0.3 | 1 |
| 146 | Influence of humidity on CO<sub>2</sub>gas sensors based on polyetherimide polymer film. Proceedings of SPIE, 2014, , . | 0.8 | 1 |
| 147 | Enhanced selectivity over a photoresist film and process optimization for reactive ion etching of NiCr. Microelectronic Engineering, 2014, 113, 136-139. | 1.1 | 1 |
| 148 | UV-enhanced oxygen sensing with tunable ZnO nanorod arrays at room temperature. , 2017, , . | | 1 |
| 149 | Drawn a flexible, low-cost, eco-friendly, and multifunctional humidity sensor on paper using carbon ink. , 2020, , . | | 1 |
| 150 | Performance enhancement of an organic photodetector enabled by NPB modified hole transport layer. Journal Physics D: Applied Physics, 2022, 55, 234001. | 1.3 | 1 |
| 151 | MXeneåê•æ°”æ•œæ–™: æœ€æ–°è¿›å±•ä¸Žæœªæ¥æŒ‘æˆ˜. Chinese Science Bulletin, 2022, , . | 0.4 | 1 |
| 152 | Fabrication and NO 2 sensing properties of ChemFET sensors with self-assembly PAN/PSSA sensitive films based on nano-Au surface. , 2008, , . | | 0 |
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