

# Tianshuang Wang

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

1,228  
citations

471509

17  
h-index

713466

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23  
all docs

23  
docs citations

23  
times ranked

1243  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced Gas Sensing Properties of SnO <sub>2</sub> Hollow Spheres Decorated with CeO <sub>2</sub> Nanoparticles Heterostructure Composite Materials. ACS Applied Materials & Interfaces, 2016, 8, 6669-6677.	8.0	271
2	One step synthesis of branched SnO <sub>2</sub> /ZnO heterostructures and their enhanced gas-sensing properties. Sensors and Actuators B: Chemical, 2019, 281, 415-423.	7.8	185
3	Flower-like ZnO hollow microspheres loaded with CdO nanoparticles as high performance sensing material for gas sensors. Sensors and Actuators B: Chemical, 2017, 250, 692-702.	7.8	84
4	Realizing the Control of Electronic Energy Level Structure and Gas-Sensing Selectivity over Heteroatom-Doped In <sub>2</sub> O <sub>3</sub> Spheres with an Inverse Opal Microstructure. ACS Applied Materials & Interfaces, 2019, 11, 9600-9611.	8.0	76
5	MOF-Derived Mesoporous and Hierarchical Hollow-Structured In <sub>2</sub> O <sub>3</sub> -NiO Composites for Enhanced Triethylamine Sensing. ACS Sensors, 2021, 6, 3451-3461.	7.8	72
6	Self-Assembly Template Driven 3D Inverse Opal Microspheres Functionalized with Catalyst Nanoparticles Enabling a Highly Efficient Chemical Sensing Platform. ACS Applied Materials & Interfaces, 2018, 10, 5835-5844.	8.0	67
7	Nanosheet-assembled NiO microspheres modified by Sn <sup>2+</sup> ions isovalent interstitial doping for xylene gas sensors. Sensors and Actuators B: Chemical, 2018, 269, 210-222.	7.8	64
8	Rational design of 3D inverse opal heterogeneous composite microspheres as excellent visible-light-induced NO <sub>2</sub> sensors at room temperature. Nanoscale, 2018, 10, 4841-4851.	5.6	63
9	Design of Î±-Fe <sub>2</sub> O <sub>3</sub> nanorods functionalized tubular NiO nanostructure for discriminating toluene molecules. Scientific Reports, 2016, 6, 26432.	3.3	49
10	Novel Self-Assembly Route Assisted Ultra-Fast Trace Volatile Organic Compounds Gas Sensing Based on Three-Dimensional Opal Microspheres Composites for Diabetes Diagnosis. ACS Applied Materials & Interfaces, 2018, 10, 32913-32921.	8.0	40
11	Gas sensor based on cobalt-doped 3D inverse opal SnO <sub>2</sub> for air quality monitoring. Sensors and Actuators B: Chemical, 2022, 350, 130807.	7.8	40
12	Fluorescent hydrogel test kit coordination with smartphone: Robust performance for on-site dimethoate analysis. Biosensors and Bioelectronics, 2019, 145, 111706.	10.1	35
13	All-Nanofiber Network Structure for Ultrasensitive Piezoresistive Pressure Sensors. ACS Applied Materials & Interfaces, 2022, 14, 19949-19957.	8.0	35
14	3D inverse opal nanostructured multilayer films of two-component heterostructure composites: A new-generation synthetic route and potential application as high-performance acetone detector. Sensors and Actuators B: Chemical, 2018, 276, 262-270.	7.8	30
15	Unexpected and enhanced electrostatic adsorption capacity of oxygen vacancy-rich cobalt-doped In <sub>2</sub> O <sub>3</sub> for high-sensitive MEMS toluene sensor. Sensors and Actuators B: Chemical, 2021, 342, 129949.	7.8	26
16	Highly sensitive and selective xylene sensor based on p-p heterojunctions composites derived from off-stoichiometric cobalt tungstate. Sensors and Actuators B: Chemical, 2022, 351, 130973.	7.8	26
17	Microwave gas sensor for detection of ammonia at room-temperature. Sensors and Actuators B: Chemical, 2022, 350, 130854.	7.8	24
18	Ultra-fast and low detection limit of H <sub>2</sub> S sensor based on hydrothermal synthesized Cu <sub>7</sub> S <sub>4</sub> -CuO microflowers. Sensors and Actuators B: Chemical, 2022, 350, 130847.	7.8	21

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19	Revealing the correlation between gas selectivity and semiconductor energy band structure derived from off-stoichiometric spinel CdGa <sub>2</sub> O <sub>4</sub> . Sensors and Actuators B: Chemical, 2022, 352, 131039.	7.8	8
20	Understanding the Increasing Trend of Sensor Signal with Decreasing Oxygen Partial Pressure by a Sensing-Reaction Model Based on O <sup>2•-</sup> Species. ACS Sensors, 2022, 7, 1095-1104.	7.8	7
21	General analysis method for the signal enhancement of microwave gas sensor through variation of energy loss. Sensors and Actuators B: Chemical, 2022, 367, 132117.	7.8	5
22	Role of Sb and Co Doping in SnO <sub>2</sub> Sensing Properties toward Ethanol. Proceedings (mdpi), 2019, 14, 12.	0.2	0
23	Realizing the Control of Fermi Level and Gas-Sensing Selectivity over Gallium-Doped In <sub>2</sub> O <sub>3</sub> Inverse Opal Microspheres. Proceedings (mdpi), 2019, 14, 15.	0.2	0