Fangmeng Liu

List of Publications by Year
in descending order

71 papers	2,730 citations	136950 32 h-index	197818 49 g-index
71 all docs	71 docs citations	71 times ranked	2297 citing authors

#	Article	IF	Citations
1	Gas sensor based on cobalt-doped 3D inverse opal SnO2 for air quality monitoring. Sensors and Actuators B: Chemical, 2022, 350, 130807.	7.8	40
2	Ultra-fast and low detection limit of H2S sensor based on hydrothermal synthesized Cu7S4-CuO microflowers. Sensors and Actuators B: Chemical, 2022, 350, 130847.	7.8	21
3	Microwave gas sensor for detection of ammonia at room-temperature. Sensors and Actuators B: Chemical, 2022, 350, 130854.	7.8	24
4	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
5	Revealing the correlation between gas selectivity and semiconductor energy band structure derived from off-stoichiometric spinel CdGa2O4. Sensors and Actuators B: Chemical, 2022, 352, 131039.	7.8	8
6	Mixed potential type YSZ-based NO2 sensors with efficient three-dimensional three-phase boundary processed by electrospinning. Sensors and Actuators B: Chemical, 2022, 354, 131219.	7.8	14
7	Self-Assembly 3D Porous Crumpled MXene Spheres as Efficient Gas and Pressure Sensing Material for Transient All-MXene Sensors. Nano-Micro Letters, 2022, 14, 56.	27.0	33
8	Gold-Trisoctahedra-Coated Capillary-Based SERS Platform for Microsampling and Sensitive Detection of Trace Fentanyl. Analytical Chemistry, 2022, 94, 4850-4858.	6.5	23
9	Highly Selective Mixed Potential Methanol Gas Sensor Based on a Ce_{0.8}Gd_{0.2}O_{1.95} Solid Electrolyte and Au Sensing Electrode. ACS Sensors, 2022, 7, 972-984.	7.8	9
10	Understanding the Increasing Trend of Sensor Signal with Decreasing Oxygen Partial Pressure by a Sensing-Reaction Model Based on O^{2â€“} Species. ACS Sensors, 2022, 7, 1095-1104.	7.8	7
11	Introduction of MWCNT for enhancing sensitivity of room-temperature mixed-potential type NO sensor attached with Ni-MOF sensing electrode. Sensors and Actuators B: Chemical, 2022, 361, 131736.	7.8	9
12	Self-assembled multiprotein nanostructures with enhanced stability and signal amplification capability for sensitive fluorogenic immunoassays. Biosensors and Bioelectronics, 2022, 206, 114132.	10.1	6
13	Bioinspired laccase-mimicking catalyst for on-site monitoring of thiram in paper-based colorimetric platform. Biosensors and Bioelectronics, 2022, 207, 114199.	10.1	18
14	The Introduction of Defects in Ti₃C₂T_x and Ti₃C₂T_xâ€Assisted Reduction of Graphene Oxide for Highly Selective Detection of ppbâ€Level NO₂. Advanced Functional Materials, 2022, 32, .	14.9	21
15	The Introduction of Defects in Ti₃C₂T_x and Ti₃C₂T_xâ€Assisted Reduction of Graphene Oxide for Highly Selective Detection of ppbâ€Level NO₂ (Adv. Funct. Mater. 15/2022). Advanced Functional Materials, 2022, 32, .	14.9	2
16	Embedding Proteins within Spatially Controlled Hierarchical Nanoarchitectures for Ultrasensitive Immunoassay. Analytical Chemistry, 2022, 94, 6271-6280.	6.5	6
17	All-Nanofiber Network Structure for Ultrasensitive Piezoresistive Pressure Sensors. ACS Applied Materials & Interfaces, 2022, 14, 19949-19957.	8.0	35
18	Ti₃C₂ MXene Nanosheets Functionalized with NaErF₄:0.5%Tm@NaLuF₄ Nanoparticles for Dual-Modal Near-Infrared IIb/Magnetic Resonance Imaging-Guided Tumor Hyperthermia. ACS Applied Nano Materials, 2022, 5, 8142-8153.	5.0	15

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19	Molecular Conformation Engineering To Achieve Longer and Brighter Deep Red/Near-Infrared Emission in Crystalline State. Journal of Physical Chemistry Letters, 2022, 13, 4754-4761.	4.6	9
20	Mixed potential type acetone sensor based on GDC used for breath analysis. Sensors and Actuators B: Chemical, 2021, 326, 128846.	7.8	24
21	A TPA-DCPP organic semiconductor film-based room temperature NH3 sensor for insight into the sensing properties. Sensors and Actuators B: Chemical, 2021, 327, 128940.	7.8	25
22	Specificity improvement of the YSZ-based mixed potential gas sensor for acetone and hydrogen sulfide detection. Sensors and Actuators B: Chemical, 2021, 341, 129292.	7.8	15
23	Stimulated Emission Depletion (STED) Super-Resolution Imaging with an Advanced Organic Fluorescent Probe: Visualizing the Cellular Lipid Droplets at the Unprecedented Nanoscale Resolution. , 2021, 3, 516-524.		22
24	Novel quaternary oxide semiconductor for the application of gas sensors with long-term stability. Journal of Colloid and Interface Science, 2021, 592, 186-194.	9.4	8
25	MOF-Derived Mesoporous and Hierarchical Hollow-Structured In₂O₃-NiO Composites for Enhanced Triethylamine Sensing. ACS Sensors, 2021, 6, 3451-3461.	7.8	72
26	Ethanol sensor using gadolinia-doped ceria solid electrolyte and double perovskite structure sensing material. Sensors and Actuators B: Chemical, 2021, 349, 130771.	7.8	27
27	Background-free sensing platform for on-site detection of carbamate pesticide through upconversion nanoparticles-based hydrogel suit. Biosensors and Bioelectronics, 2021, 194, 113598.	10.1	40
28	Machine Learning-Assisted Development of Sensitive Electrode Materials for Mixed Potential-Type NO₂Gas Sensors. ACS Applied Materials & Interfaces, 2021, 13, 50121-50131.	8.0	16
29	Room-Temperature Mixed-Potential Type ppb-Level NO Sensors Based on K₂Fe₄O₇ Electrolyte and Ni/Feâ€“MOF Sensing Electrodes. ACS Sensors, 2021, 6, 4435-4442.	7.8	16
30	Insight into the effect of the continuous testing and aging on the SO2 sensing characteristics of a YSZ (Yttria-stabilized Zirconia)-based sensor utilizing ZnGa2O4 and Pt electrodes. Journal of Hazardous Materials, 2020, 388, 121772.	12.4	17
31	Mixed potential type H2S sensor based on stabilized zirconia and a Co2SnO4 sensing electrode for halitosis monitoring. Sensors and Actuators B: Chemical, 2020, 321, 128587.	7.8	23
32	Lab in hydrogel portable kit: On-site monitoring of oxalate. Biosensors and Bioelectronics, 2020, 167, 112457.	10.1	26
33	Smartphone-Assisted Robust Sensing Platform for On-Site Quantitation of 2,4-Dichlorophenoxyacetic Acid Using Red Emissive Carbon Dots. Analytical Chemistry, 2020, 92, 12716-12724.	6.5	58
34	A Redâ€Emissive Fluorescent Probe with a Compact Singleâ€Benzeneâ€Based Skeleton for Cell Imaging of Lipid Droplets. Advanced Optical Materials, 2020, 8, 1902123.	7.3	40
35	Highly sensitive detection of Pb2+ and Cu2+ based on ZIF-67/MWCNT/Nafion-modified glassy carbon electrode. Analytica Chimica Acta, 2020, 1124, 166-175.	5.4	46
36	Temperature-controlled resistive sensing of gaseous H2S or NO2 by using flower-like palladium-doped SnO2 nanomaterials. Mikrochimica Acta, 2020, 187, 297.	5.0	6

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37	Integrating Target-Responsive Hydrogels with Smartphone for On-Site ppb-Level Quantitation of Organophosphate Pesticides. ACS Applied Materials & Interfaces, 2019, 11, 27605-27614.	8.0	77
38	Tandem catalysis driven by enzymes directed hybrid nanoflowers for on-site ultrasensitive detection of organophosphorus pesticide. Biosensors and Bioelectronics, 2019, 141, 111473.	10.1	72
39	Fluorescent hydrogel test kit coordination with smartphone: Robust performance for on-site dimethoate analysis. Biosensors and Bioelectronics, 2019, 145, 111706.	10.1	35
40	Au₃₉Rh₆₁ Alloy Nanocrystal-Decorated W₁₈O₄₉ for Enhanced Detection of n-Butanol. ACS Sensors, 2019, 4, 2662-2670.	7.8	47
41	A rapid-response room-temperature planar type gas sensor based on DPA-Ph-DBPzDCN for the sensitive detection of NH₃. Journal of Materials Chemistry A, 2019, 7, 4744-4750.	10.3	37
42	NASICON-based gas sensor utilizing MMnO3 (M: Gd, Sm, La) sensing electrode for triethylamine detection. Sensors and Actuators B: Chemical, 2019, 295, 56-64.	7.8	32
43	Enhanced resistive acetone sensing by using hollow spherical composites prepared from MoO3 and In2O3. Mikrochimica Acta, 2019, 186, 359.	5.0	15
44	Improvement of Gas and Humidity Sensing Properties of Organ-like MXene by Alkaline Treatment. ACS Sensors, 2019, 4, 1261-1269.	7.8	232
45	Proteinâ€“Inorganic Hybrid Nanoflower-Rooted Agarose Hydrogel Platform for Point-of-Care Detection of Acetylcholine. ACS Applied Materials & Interfaces, 2019, 11, 11857-11864.	8.0	53
46	Realizing the Control of Electronic Energy Level Structure and Gas-Sensing Selectivity over Heteroatom-Doped In₂O₃ Spheres with an Inverse Opal Microstructure. ACS Applied Materials & Interfaces, 2019, 11, 9600-9611.	8.0	76
47	High-activity Mo, S co-doped carbon quantum dot nanozyme-based cascade colorimetric biosensor for sensitive detection of cholesterol. Journal of Materials Chemistry B, 2019, 7, 7042-7051.	5.8	98
48	Acetone sensing with a mixed potential sensor based on Ce0.8Gd0.2O1.95 solid electrolyte and Sr2MMoO6 (M: Fe, Mg, Ni) sensing electrode. Sensors and Actuators B: Chemical, 2019, 284, 751-758.	7.8	21
49	Preparation of silver-loaded titanium dioxide hedgehog-like architecture composed of hundreds of nanorods and its fast response to xylene. Journal of Colloid and Interface Science, 2019, 536, 215-223.	9.4	33
50	Ultrasensitive gas sensor based on hollow tungsten trioxide-nickel oxide (WO3-NiO) nanoflowers for fast and selective xylene detection. Journal of Colloid and Interface Science, 2019, 535, 458-468.	9.4	90
51	High-response and low-temperature nitrogen dioxide gas sensor based on gold-loaded mesoporous indium trioxide. Journal of Colloid and Interface Science, 2018, 524, 368-378.	9.4	34
52	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
53	YSZ-based mixed potential H2S sensor using La2NiO4 sensing electrode. Sensors and Actuators B: Chemical, 2018, 255, 3033-3039.	7.8	32
54	The room temperature gas sensor based on Polyaniline@flower-like WO3 nanocomposites and flexible PET substrate for NH3 detection. Sensors and Actuators B: Chemical, 2018, 259, 505-513.	7.8	159

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55	Hydrothermal synthesis of hierarchical CoO/SnO2 nanostructures for ethanol gas sensor. Journal of Colloid and Interface Science, 2018, 513, 760-766.	9.4	75
56	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
57	Facile synthesis of nitrogen and sulfur co-doped carbon dots for multiple sensing capacities: alkaline fluorescence enhancement effect, temperature sensing, and selective detection of Fe³⁺ ions. New Journal of Chemistry, 2018, 42, 13147-13156.	2.8	26
58	Gas sensor based on samarium oxide loaded mulberry-shaped tin oxide for highly selective and sub ppm-level acetone detection. Journal of Colloid and Interface Science, 2018, 531, 74-82.	9.4	35
59	The facile synthesis of MoO₃microsheets and their excellent gas-sensing performance toward triethylamine: high selectivity, excellent stability and superior repeatability. New Journal of Chemistry, 2018, 42, 15111-15120.	2.8	73
60	Fabrication of well-ordered porous array mounted with gold nanoparticles and enhanced sensing properties for mixed potential-type zirconia-based NH3 sensor. Sensors and Actuators B: Chemical, 2017, 243, 1083-1091.	7.8	37
61	High-temperature NO2 gas sensor based on stabilized zirconia and CoTa2O6 sensing electrode. Sensors and Actuators B: Chemical, 2017, 240, 148-157.	7.8	52
62	Improvement of NO₂ sensing characteristic for mixed potential type gas sensor based on YSZ and Rh/Co₃V₂O₈ sensing electrode. RSC Advances, 2017, 7, 49440-49445.	3.6	11
63	Highly sensitive mixed-potential type ethanol sensors based on stabilized zirconia and ZnNb2O6sensing electrode. RSC Advances, 2016, 6, 27197-27204.	3.6	5
64	Mesoporous ZnFe2O4 prepared through hard template and its acetone sensing properties. Materials Letters, 2016, 183, 378-381.	2.6	44
65	The enhanced CO gas sensing performance of Pd/SnO₂ hollow sphere sensors under hydrothermal conditions. RSC Advances, 2016, 6, 80455-80461.	3.6	15
66	Fabrication of Well-Ordered Three-Phase Boundary with Nanostructure Pore Array for Mixed Potential-Type Zirconia-Based NO₂ Sensor. ACS Applied Materials & Interfaces, 2016, 8, 16752-16760.	8.0	41
67	YSZ-based NO2 sensor utilizing hierarchical In2O3 electrode. Sensors and Actuators B: Chemical, 2016, 222, 698-706.	7.8	40
68	High performance mixed-potential type NO2 sensors based on three-dimensional TPB and Co3V2O8 sensing electrode. Sensors and Actuators B: Chemical, 2015, 216, 121-127.	7.8	40
69	Mixed-potential type NH3 sensor based on stabilized zirconia and Ni3V2O8 sensing electrode. Sensors and Actuators B: Chemical, 2015, 210, 795-802.	7.8	96
70	Mixed potential type acetone sensor using stabilized zirconia and M3V2O8 (M: Zn, Co and Ni) sensing electrode. Sensors and Actuators B: Chemical, 2015, 221, 673-680.	7.8	62
71	Synthesis, characterization and gas sensing properties of porous flower-like indium oxide nanostructures. RSC Advances, 2015, 5, 30297-30302.	3.6	21