NO_2 sensing properties of macroporous In_2O_3-based po ultrasonic spray pyrolysis employing polymethylmetha

Sensors and Actuators B: Chemical

151, 265-273

DOI: 10.1016/j.snb.2010.09.002

Citation Report

#	Article	IF	Citations
1	Transparent conducting oxide electrodes for novel metal oxide gas sensors. Sensors and Actuators B: Chemical, 2011, 160, 357-363.	4.0	26
2	Ultrasensitive and low operating temperature NO2 gas sensor using nanosheets assembled hierarchical WO3 hollow microspheres. Sensors and Actuators B: Chemical, 2012, 173, 426-432.	4.0	85
3	NO sensors based on semiconducting metal oxide nanostructures: Progress and perspectives. Sensors and Actuators B: Chemical, 2012, 171-172, 25-42.	4.0	371
4	Porous hierarchical In2O3 nanostructures: Hydrothermal preparation and gas sensing properties. Sensors and Actuators B: Chemical, 2012, 171-172, 1066-1072.	4.0	61
5	Effective VOCs gas sensor based on porous SnO2 microcubes prepared via spontaneous phase segregation. Sensors and Actuators B: Chemical, 2012, 173, 599-606.	4.0	64
6	Effect of Fuel on the Synthesis and Properties of Poly(methyl methacrylate) Modified SrFe12O19 Nanoparticles. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1957-1963.	0.8	20
7	Biomolecule-assisted synthesis and gas-sensing properties of porous nanosheet-based corundum In2O3 microflowers. Journal of Solid State Chemistry, 2012, 186, 29-35.	1.4	27
8	Developing novel gas sensors for NO2 detection based on Ce(1-x)MXO2, {Mâ€‰=â€‰Ru, In} solid solutions. Journal of Electroceramics, 2012, 28, 34-44.	0.8	5
9	Gas sensing response analysis of p-type porous chromium oxide thin films. Journal of Materials Chemistry C, 2013, 1, 8167.	2.7	59
10	Template-free synthesis of novel In2O3 nanostructures and their application to gas sensors. Sensors and Actuators B: Chemical, 2013, 185, 32-38.	4.0	39
11	Preparation and gas sensing properties of hierarchical flower-like In2O3 microspheres. Sensors and Actuators B: Chemical, 2013, 176, 405-412.	4.0	84
12	One-step synthesis and gas sensing characteristics of urchin-like In2O3. Sensors and Actuators B: Chemical, 2013, 186, 61-66.	4.0	31
13	Porous In2O3 powders prepared by ultrasonic-spray pyrolysis as a NO2-sensing material: Utilization of polymethylmethacrylate microspheres synthesized by ultrasonic-assisted emulsion polymerization as a template. Sensors and Actuators B: Chemical, 2013, 187, 495-502.	4.0	34
14	Facile Synthesis of Monodispersed <scp><scp>In</scp></scp>₂<scp><scp>O</scp></scp>₃ Hollow Spheres and Application in Photocatalysis and Gas Sensing. Journal of the American Ceramic Society, 2013, 96, 719-725.	1.9	37
15	Dip-pen-based direct writing of conducting silver dots. Journal of Colloid and Interface Science, 2013, 406, 256-262.	5.0	11
16	Temperature dependence of NO2 sensitivity of YSZ-based mixed potential type sensor attached with NiO sensing electrode. Ionics, 2013, 19, 1681-1686.	1.2	16
17	Progress in Ultrasonic Spray Pyrolysis for Condensed Matter Sciences Developed From Ultrasonic Nebulization Theories Since Michael Faraday. Critical Reviews in Solid State and Materials Sciences, 2014, 39, 46-80.	6.8	34
18	Metal Oxide-Based Nanostructures. Integrated Analytical Systems, 2014, , 47-71.	0.4	2

#	Article	IF	Citations
19	Enhancement of NO2 gas sensing response based on ordered mesoporous Fe-doped In2O3. Sensors and Actuators B: Chemical, 2014, 191, 806-812.	4.0	141
20	Highly enhanced methanol gas sensing properties by Pd_{0.5}Pd₃O₄nanoparticle loaded ZnO hierarchical structures. RSC Advances, 2014, 4, 35375.	1.7	14
21	Enhanced response characteristics of p-porous silicon (substrate)/p-TeO2 (nanowires) sensor for NO2 detection. Sensors and Actuators B: Chemical, 2014, 195, 181-188.	4.0	39
22	In2O3 nanoplates: preparation, characterization and gas sensing properties. RSC Advances, 2014, 4, 4831.	1.7	48
23	Formation of High-Purity Indium Oxide Nanoparticles and Their Application to Sensitive Detection of Ammonia. Sensors, 2015, 15, 31930-31938.	2.1	12
24	Recent Progress on the Development of Chemosensors for Gases. Chemical Reviews, 2015, 115, 7944-8000.	23.0	661
25	Morphology-inspired low-temperature liquefied petroleum gas sensors of indium oxide. Scripta Materialia, 2015, 107, 54-58.	2.6	9
26	Synthesis, characterization and gas sensing properties of porous flower-like indium oxide nanostructures. RSC Advances, 2015, 5, 30297-30302.	1.7	21
27	Fabrication of monodispersed hollow flower-like porous In₂O₃nanostructures and their application as gas sensors. RSC Advances, 2015, 5, 81407-81414.	1.7	13
28	Synthesis and NO₂ sensing properties of indium oxide nanorod clusters via a simple solvothermal route. RSC Advances, 2016, 6, 47083-47088.	1.7	9
29	Microstructure and gas sensing property of porous spherical In2O3 particles prepared by hydrothermal method. Powder Technology, 2016, 303, 138-146.	2.1	17
30	Trimodally porous SnO2 nanospheres with three-dimensional interconnectivity and size tunability: a one-pot synthetic route and potential application as an extremely sensitive ethanol detector. NPG Asia Materials, 2016, 8, e244-e244.	3.8	77
31	Synthesis of SnO₂/In₂O₃ hetero-nanotubes by coaxial-electrospinning method for enhanced formaldehyde response. New Journal of Chemistry, 2016, 40, 1756-1764.	1.4	21
32	Microstructural control of porous In2O3 powders prepared by ultrasonic-spray pyrolysis employing self-synthesized polymethylmethacrylate microspheres as a template and their NO2-sensing properties. Sensors and Actuators B: Chemical, 2017, 244, 992-1003.	4.0	30
33	Enhanced NO2 gas sensing properties by Ag-doped hollow urchin-like In2O3 hierarchical nanostructures. Sensors and Actuators B: Chemical, 2017, 252, 418-427.	4.0	65
34	Semiconductor-type SnO2-based NO2 sensors operated at room temperature under UV-light irradiation. Sensors and Actuators B: Chemical, 2017, 253, 630-640.	4.0	88
35	Enhanced ethyl acetate sensing performance of Al-doped In2O3 microcubes. Sensors and Actuators B: Chemical, 2017, 253, 461-469.	4.0	45
36	Macroporous microbeads containing apatite-modified mesoporous bioactive glass nanofibres for bone tissue engineering applications. Materials Science and Engineering C, 2018, 89, 346-354.	3.8	16

#	Article	IF	Citations
37	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.	4.0	67
38	Rational design of 3D inverse opal heterogeneous composite microspheres as excellent visible-light-induced NO₂ sensors at room temperature. Nanoscale, 2018, 10, 4841-4851.	2.8	63
39	Hydrothermal synthesis of Ce-doped hierarchical flower-like In2O3 microspheres and their excellent gas-sensing properties. Sensors and Actuators B: Chemical, 2018, 255, 1211-1219.	4.0	103
40	Inhibited concentration quench effect in upconversion luminescence of In2O3:Yb3+, Er3+ inverse opals. Journal of Luminescence, 2018, 194, 292-296.	1.5	4
41	Greenhouse Gas Sensors Fabricated with New Materials for Climatic Usage: A Review. ChemEngineering, 2018, 2, 38.	1.0	25
42	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.	4.0	40
43	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.	4.0	30
44	Ultrasonic spray pyrolysis synthesis of three-dimensional ZnFe2O4-based macroporous spheres for excellent sensitive acetone gas sensor. Sensors and Actuators B: Chemical, 2019, 297, 126755.	4.0	60
45	Improvement in NO2 Sensing Properties of Semiconductor-Type Gas Sensors by Loading of Au Into Porous In2O3 Powders. Frontiers in Materials, 2019, 6, .	1.2	9
46	Single-step controllable preparation and gas sensing performance application of claw-like indium oxide. Materials Research Express, 2019, 6, 1250k5.	0.8	5
47	Technological realization of semiconducting metal oxideâ€“based gas sensors. , 2019, , 167-216.		8
48	Exposed crystal facets of WO3 nanosheets by phase control on NO2-sensing performance. Journal of Materials Science: Materials in Electronics, 2020, 31, 610-620.	1.1	34
49	Rational Design of Semiconductorâ€Based Chemiresistors and their Libraries for Nextâ€Generation Artificial Olfaction. Advanced Materials, 2020, 32, e2002075.	11.1	215
50	Advanced aerosol technologies towards structure and morphologically controlled next-generation catalytic materials. Journal of Aerosol Science, 2020, 149, 105608.	1.8	30
51	Enhanced NO2-Sensing Properties of Au-Loaded Porous In2O3 Gas Sensors at Low Operating Temperatures. Chemosensors, 2020, 8, 72.	1.8	19
52	Efficient NH₃ Detection Based on MOS Sensors Coupled with Catalytic Conversion. ACS Sensors, 2020, 5, 1838-1848.	4.0	42
53	Facile Design and Hydrothermal Synthesis of In₂O₃ Nanocube Polycrystals with Superior Triethylamine Sensing Properties. ACS Omega, 2020, 5, 11466-11472.	1.6	39
54	Gas sensor based on cobalt-doped 3D inverse opal SnO2 for air quality monitoring. Sensors and Actuators B: Chemical, 2022, 350, 130807.	4.0	40

#	Article	IF	Citations
55	THE REVIEW OF SEMICONDUCTOR GAS SENSOR FOR NOX DETCTING. The Turkish Online Journal of Design Art and Communication, 2016, 6, 898-937.	0.1	6
56	Generation of Size, Structure, and Shape-Controlled Metal Nanoparticles Using Cavitation. , 2014, , 49-74.		0
57	2ï¼ŽåŠå°Žä½“ã,¬ã,¹ã,»ã ƒ³ã,µã€€âˆ¼å¾®ç´°æ§‹é€ å¶¡å¾¡ã•é–¢ã™ã,‹æœ€è¿‘ã®ç”©é–‹ç™ºå••å‘â€¼. Electrochemistry, 2015, 83, 2	0.6	0
58	Effects of noble-metal loading and ultraviolet-light irradiation on gas-sensing properties of porous indium oxide films at room temperature. Journal of the Ceramic Society of Japan, 2021, 129, 676-682.	0.5	5
59	Metal oxide nanomaterial-based sensors for monitoring environmental NO₂and its impact on the plant ecosystem: a review. Sensors & Diagnostics, 2022, 1, 106-129.	1.9	34
61	Research progress of poly(methyl methacrylate) microspheres: Preparation, functionalization and application. European Polymer Journal, 2022, 175, 111379.	2.6	18
62	Development of advanced gas-sensing devices based on the microstructural and compositional controls of various promising materials and their different operating mechanism. Journal of the Ceramic Society of Japan, 2022, 130, 739-751.	0.5	1
63	Effects of Addition of CuxO to Porous SnO2 Microspheres Prepared by Ultrasonic Spray Pyrolysis on Sensing Properties to Volatile Organic Compounds. Chemosensors, 2023, 11, 59.	1.8	6