

# Myung Sik Choi

## List of Publications by Year in descending order

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Version: 2024-02-01

37  
papers

1,311  
citations

331670

21  
h-index

345221

36  
g-index

37  
all docs

37  
docs citations

37  
times ranked

1339  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microwave-Assisted Synthesis of Graphene-SnO <sub>2</sub> Nanocomposites and Their Applications in Gas Sensors. ACS Applied Materials & Interfaces, 2017, 9, 31667-31682.	8.0	149
2	Synthesis of zinc oxide semiconductors-graphene nanocomposites by microwave irradiation for application to gas sensors. Sensors and Actuators B: Chemical, 2017, 249, 590-601.	7.8	142
3	Selective, sensitive, and stable NO <sub>2</sub> gas sensor based on porous ZnO nanosheets. Applied Surface Science, 2021, 568, 150910.	6.1	94
4	Synthesis, characterization and gas sensing properties of ZnO-decorated MWCNTs. Applied Surface Science, 2017, 413, 242-252.	6.1	86
5	Attachment of Co <sub>3</sub> O <sub>4</sub> layer to SnO <sub>2</sub> nanowires for enhanced gas sensing properties. Sensors and Actuators B: Chemical, 2017, 239, 180-192.	7.8	76
6	Selective NO <sub>2</sub> sensor based on Bi <sub>2</sub> O <sub>3</sub> branched SnO <sub>2</sub> nanowires. Sensors and Actuators B: Chemical, 2018, 274, 356-369.	7.8	75
7	Porous Si/SnO <sub>2</sub> nanowires heterostructures for H <sub>2</sub> S gas sensing. Ceramics International, 2020, 46, 604-611.	4.8	61
8	Enhancement of gas sensing properties by the functionalization of ZnO-branched SnO <sub>2</sub> nanowires with Cr <sub>2</sub> O <sub>3</sub> nanoparticles. Sensors and Actuators B: Chemical, 2017, 249, 656-666.	7.8	56
9	Promotional effects of ZnO-branching and Au-functionalization on the surface of SnO <sub>2</sub> nanowires for NO <sub>2</sub> sensing. Journal of Alloys and Compounds, 2019, 786, 27-39.	5.5	56
10	Fabrication and gas sensing properties of vertically aligned Si nanowires. Applied Surface Science, 2018, 427, 215-226.	6.1	41
11	Decoration of multi-walled carbon nanotubes with CuO/Cu <sub>2</sub> O nanoparticles for selective sensing of H <sub>2</sub> S gas. Sensors and Actuators B: Chemical, 2021, 344, 130176.	7.8	41
12	Enhancement of the benzene-sensing performance of Si nanowires through the incorporation of TeO <sub>2</sub> heterointerfaces and Pd-sensitization. Sensors and Actuators B: Chemical, 2017, 244, 1085-1097.	7.8	35
13	Selective H <sub>2</sub> S-sensing performance of Si nanowires through the formation of ZnO shells with Au functionalization. Sensors and Actuators B: Chemical, 2019, 289, 1-14.	7.8	35
14	Facile and fast decoration of SnO <sub>2</sub> nanowires with Pd embedded SnO <sub>2</sub> -x nanoparticles for selective NO <sub>2</sub> gas sensing. Sensors and Actuators B: Chemical, 2021, 340, 129984.	7.8	35
15	SnO <sub>2</sub> nanowires decorated by insulating amorphous carbon layers for improved room-temperature NO <sub>2</sub> sensing. Sensors and Actuators B: Chemical, 2021, 326, 128801.	7.8	32
16	Effect of microwave irradiation on the electrical and optical properties of SnO <sub>2</sub> thin films. Ceramics International, 2019, 45, 7723-7729.	4.8	27
17	Room-temperature NO <sub>2</sub> sensor based on electrochemically etched porous silicon. Journal of Alloys and Compounds, 2019, 811, 151975.	5.5	26
18	Exploration of the use of p-TeO <sub>2</sub> -branch/n-SnO <sub>2</sub> core nanowires nanocomposites for gas sensing. Applied Surface Science, 2019, 484, 1102-1110.	6.1	26

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19	Dual sensitization of MWCNTs by co-decoration with p- and n-type metal oxide nanoparticles. <i>Sensors and Actuators B: Chemical</i> , 2018, 264, 150-163.	7.8	23
20	Porous Si nanowires for highly selective room-temperature NO <sub>2</sub> gas sensing. <i>Nanotechnology</i> , 2018, 29, 294001.	2.6	23
21	Exploration of ZrO <sub>2</sub> -shelled nanowires for chemiresistive detection of NO <sub>2</sub> gas. <i>Sensors and Actuators B: Chemical</i> , 2020, 319, 128309.	7.8	23
22	Sonochemical synthesis of PEDOT:PSS intercalated ammonium vanadate nanofiber composite for room-temperature NH <sub>3</sub> sensing. <i>Sensors and Actuators B: Chemical</i> , 2021, 327, 128924.	7.8	22
23	Changes in characteristics of Pt-functionalized RGO nanocomposites by electron beam irradiation for room temperature NO <sub>2</sub> sensing. <i>Ceramics International</i> , 2020, 46, 21638-21646.	4.8	19
24	Improvement of NO <sub>2</sub> Sensing Properties in Pd Functionalized Reduced Graphene Oxides by Electron-Beam Irradiation. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	18
25	Changes in the crystal structure of SnO <sub>2</sub> nanoparticles and improved H <sub>2</sub> S gas-sensing characteristics by Al doping. <i>Applied Surface Science</i> , 2021, 565, 150493.	6.1	18
26	Synthesis, Characterization and Gas-Sensing Properties of Pristine and SnS <sub>2</sub> Functionalized TeO <sub>2</sub> Nanowires. <i>Metals and Materials International</i> , 2019, 25, 805-813.	3.4	15
27	SnS-functionalized SnO <sub>2</sub> nanowires for low-temperature detection of NO <sub>2</sub> gas. <i>Materials Characterization</i> , 2021, 175, 110986.	4.4	15
28	Hybridization of silicon nanowires with TeO <sub>2</sub> branch structures and Pt nanoparticles for highly sensitive and selective toluene sensing. <i>Applied Surface Science</i> , 2020, 525, 146620.	6.1	14
29	Low-Temperature H <sub>2</sub> S Sensors Based on Si-Coated SnO <sub>2</sub> Nanowires. <i>Journal of Korean Institute of Metals and Materials</i> , 2019, 57, 732-740.	1.0	6
30	Surprising synthesis of nanodiamond from single-walled carbon nanotubes by the spark plasma sintering process. <i>Electronic Materials Letters</i> , 2016, 12, 747-752.	2.2	4
31	Modification of SnO <sub>2</sub> Nanowires with TeO <sub>2</sub> Branches and Their Enhanced Gas Sensing. <i>Proceedings (mdpi)</i> , 2017, 1, 404.	0.2	3
32	Fast Semiconductor-Metal Bidirectional Transition by Flame Chemical Vapor Deposition. <i>ACS Omega</i> , 2019, 4, 11824-11831.	3.5	3
33	New type of doping effect via metallization of surface reduction in SnO <sub>2</sub> . <i>Scientific Reports</i> , 2019, 9, 8129.	3.3	3
34	Incorporation of Pt Nanoparticles on the Surface of TeO <sub>2</sub> -Branched Porous Si Nanowire Structures for Enhanced Room-Temperature Gas Sensing. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 6647-6655.	0.9	3
35	Interface treatment using amorphous-carbon and its applications. <i>Scientific Reports</i> , 2020, 10, 4093.	3.3	3
36	Synthesis of Au/SnO <sub>2</sub> nanostructures allowing process variable control. <i>Scientific Reports</i> , 2020, 10, 346.	3.3	2

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37	Molecular group system as one energy unit. <i>Ceramics International</i> , 2019, 45, 9858-9865.	4.8	1