Sun-Woo Choi

List of Publications by Year
in descending order

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55 papers	2,223 citations	201674 27 h-index	214800 47 g-index
55 all docs	55 docs citations	55 times ranked	2227 citing authors

#	Article	IF	Citations
1	Two-Dimensional calcium silicate nanosheets for trapping atmospheric water molecules in humidity-immune gas sensors. Journal of Hazardous Materials, 2022, 432, 128671.	12.4	7
2	Realisation of highly sensitive and selective NO2 detection at room temperature utilizing defect-induced single-walled carbon nanotubes combined with Pt functionalisation. Applied Surface Science, 2022, 590, 153068.	6.1	6
3	Facile and fast decoration of SnO2 nanowires with Pd embedded SnO2-x nanoparticles for selective NO2 gas sensing. Sensors and Actuators B: Chemical, 2021, 340, 129984.	7.8	35
4	Gas sensing behavior of p-NiO/n-ZnO composite nanofibers depending on varying p-NiO content: Selectivity and humidity-independence for oxidizing and reducing gas molecules. Sensors and Actuators B: Chemical, 2021, 349, 130813.	7.8	15
5	Strategy for sensitive and selective NO2 detection at low temperatures utilizing p-type TeO2 nanowire-based sensors by formation of discrete n-type ZnO nanoclusters. Ceramics International, 2020, 46, 19365-19374.	4.8	14
6	Interface treatment using amorphous-carbon and its applications. Scientific Reports, 2020, 10, 4093.	3.3	3
7	Fabrication and Characterization of MWCNTs by Syngas and Temperature Conditions. Bulletin of the Korean Chemical Society, 2020, 41, 279-283.	1.9	0
8	Synthesis of Au/SnO2 nanostructures allowing process variable control. Scientific Reports, 2020, 10, 346.	3.3	2
9	Fast Semiconductorâ€“Metal Bidirectional Transition by Flame Chemical Vapor Deposition. ACS Omega, 2019, 4, 11824-11831.	3.5	3
10	ZnO Nanocluster-Functionalized Single-Walled Carbon Nanotubes Synthesized by Microwave Irradiation for Highly Sensitive NO₂ Detection at Room Temperature. ACS Omega, 2019, 4, 10677-10686.	3.5	30
11	New type of doping effect via metallization of surface reduction in SnO2. Scientific Reports, 2019, 9, 8129.	3.3	3
12	Dispersion of multi-walled carbon nanotubes mechanically milled under different process conditions. Materials Chemistry and Physics, 2019, 236, 121798.	4.0	5
13	Morphological and Electrical Characteristics of Multiâ€walled Carbon Nanotubes and their Composites Depending on Catalyst Calcination Temperature. Bulletin of the Korean Chemical Society, 2019, 40, 1020-1024.	1.9	0
14	Room-temperature NO2 sensor based on electrochemically etched porous silicon. Journal of Alloys and Compounds, 2019, 811, 151975.	5.5	26
15	Characterization of luminescence properties of exfoliated mica via sonication technique. Chemical Physics, 2019, 522, 238-241.	1.9	8
16	Selective H2S-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
17	Highly sensitive and selective ethanol detection at room temperature utilizing holey SWCNT-Sn/SnO2 nanocomposites synthesized by microwave irradiation. Sensors and Actuators B: Chemical, 2019, 290, 467-476.	7.8	13
18	Dual sensitization of MWCNTs by co-decoration with p- and n-type metal oxide nanoparticles. Sensors and Actuators B: Chemical, 2018, 264, 150-163.	7.8	23

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19	The effect of platinum precursor concentrations on chlorine sensing characteristics of platinum nanoparticlesâˆ’loaded single walled carbon nanotubes. Applied Surface Science, 2018, 433, 480-486.	6.1	12
20	Room temperature monitoring of hydrogen peroxide vapor using platinum nanoparticles-decorated single-walled carbon nanotube networks. Sensors and Actuators B: Chemical, 2018, 256, 744-750.	7.8	32
21	Enhancement of the benzene-sensing performance of Si nanowires through the incorporation of TeO2 heterointerfaces and Pd-sensitization. Sensors and Actuators B: Chemical, 2017, 244, 1085-1097.	7.8	35
22	Selective detection of chlorine at room temperature utilizing single-walled carbon nanotubes functionalized with platinum nanoparticles synthesized via ultraviolet irradiation. Sensors and Actuators B: Chemical, 2017, 249, 414-422.	7.8	21
23	Highly sensitive and selective NO2 detection by Pt nanoparticles-decorated single-walled carbon nanotubes and the underlying sensing mechanism. Sensors and Actuators B: Chemical, 2017, 238, 1032-1042.	7.8	83
24	Remarkable improvement of CO-sensing performances in single-walled carbon nanotubes due to modification of the conducting channel by functionalization of Au nanoparticles. Sensors and Actuators B: Chemical, 2016, 232, 625-632.	7.8	34
25	Gas sensing properties of defect-induced single-walled carbon nanotubes. Sensors and Actuators B: Chemical, 2016, 228, 688-692.	7.8	48
26	Remarkable Improvement of Gas-Sensing Abilities in p-type Oxide Nanowires by Local Modification of the Hole-Accumulation Layer. ACS Applied Materials & Interfaces, 2015, 7, 647-652.	8.0	67
27	Highly sensitive and selective H2 sensing by ZnO nanofibers and the underlying sensing mechanism. Journal of Hazardous Materials, 2015, 286, 229-235.	12.4	104
28	Striking sensing improvement of n-type oxide nanowires by electronic sensitization based on work function difference. Journal of Materials Chemistry C, 2015, 3, 1521-1527.	5.5	57
29	Nanograins in electrospun oxide nanofibers. Metals and Materials International, 2015, 21, 213-221.	3.4	15
30	Dual Functional Sensing Mechanism in SnO₂â€“ZnO Coreâ€“Shell Nanowires. ACS Applied Materials & Interfaces, 2014, 6, 8281-8287.	8.0	125
31	Prominent Reducing Gas-Sensing Performances of <i>n</i>-SnO₂ Nanowires by Local Creation of <i>p</i>â€“<i>n</i> Heterojunctions by Functionalization with <i>p</i>-Cr₂O₃ Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 17723-17729.	8.0	101
32	A novel approach to improving oxidizing-gas sensing ability of p-CuO nanowires using biased radial modulation of a hole-accumulation layer. Journal of Materials Chemistry C, 2014, 2, 8911-8917.	5.5	35
33	Acceptor-Compensated Charge Transport and Surface Chemical Reactions in Au-Implanted SnO2 Nanowires. Scientific Reports, 2014, 4, 4622.	3.3	29
34	Bi-functional mechanism of H2S detection using CuOâ€“SnO2 nanowires. Journal of Materials Chemistry C, 2013, 1, 5454.	5.5	65
35	Enhanced sensing performances of networked SnO2 nanowires by surface modification with atmospheric pressure Arâ€“O2 plasma. Sensors and Actuators B: Chemical, 2013, 177, 654-658.	7.8	26
36	Synthesis and gas sensing performance of ZnOâ€“SnO2 nanofiberâ€“nanowire stem-branch heterostructure. Sensors and Actuators B: Chemical, 2013, 181, 787-794.	7.8	83

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37	NO2-sensing performance of SnO2 microrods by functionalization of Ag nanoparticles. Journal of Materials Chemistry C, 2013, 1, 2834.	5.5	73
38	An approach to detecting a reducing gas by radial modulation of electron-depleted shells in coreâ€“shell nanofibers. Journal of Materials Chemistry A, 2013, 1, 13588.	10.3	87
39	Improvement in Sensing Properties of SnO₂ Nanowires by Functionalizing with Pt Nanodots Synthesized by <i>&Î³</i>-Ray Radiolysis. Journal of Nanoscience and Nanotechnology, 2012, 12, 1526-1529.	0.9	20
40	Platinum nanoparticle-functionalized tin dioxide nanowires via radiolysis and their sensing capability. Journal of Materials Research, 2012, 27, 1688-1694.	2.6	7
41	H2S sensing performance of electrospun CuO-loaded SnO2 nanofibers. Sensors and Actuators B: Chemical, 2012, 169, 54-60.	7.8	77
42	NO₂ gas sensing properties of ZnO sheathed CuO nanorods. Surface and Interface Analysis, 2012, 44, 1534-1537.	1.8	11
43	Dependence of gas sensing properties in ZnO nanofibers on size and crystallinity of nanograins. Journal of Materials Research, 2011, 26, 1662-1665.	2.6	28
44	Functionalization of selectively grown networked SnO₂nanowires with Pd nanodots by Î³-ray radiolysis. Nanotechnology, 2011, 22, 225501.	2.6	51
45	Junction-Tuned SnO₂ Nanowires and Their Sensing Properties. Journal of Physical Chemistry C, 2011, 115, 12774-12781.	3.1	72
46	Epitaxial Growth of ZnO Films on ZnO-Buffered Al2O3 (0001) in Water at 95Â°C. Journal of the American Ceramic Society, 2011, 94, 978-981.	3.8	8
47	Tailoring the Number of Junctions per Electrode Pair in Networked <scp>ZnO</scp> Nanowire Sensors. Journal of the American Ceramic Society, 2011, 94, 3922-3926.	3.8	13
48	Synthesis of Highly Crystalline Hollow <scp>TiO</scp>₂ Fibers Using Atomic Layer Deposition on Polymer Templates. Journal of the American Ceramic Society, 2011, 94, 1974-1977.	3.8	26
49	Significant enhancement of the NO2 sensing capability in networked SnO2 nanowires by Au nanoparticles synthesized via Î³-ray radiolysis. Journal of Hazardous Materials, 2011, 193, 243-248.	12.4	62
50	A model for the enhancement of gas sensing properties in SnO₂â€“ZnO coreâ€“shell nanofibres. Journal Physics D: Applied Physics, 2011, 44, 205403.	2.8	47
51	Controlling the size of nanograins in TiO2 nanofibers. Metals and Materials International, 2010, 16, 785-788.	3.4	9
52	Growth of ZnO Nanobrushes Using a Twoâ€Step Aqueous Solution Method. Journal of the American Ceramic Society, 2010, 93, 3190-3194.	3.8	8
53	Synthesis and Gas Sensing Properties of TiO₂â€“ZnO Coreâ€Shell Nanofibers. Journal of the American Ceramic Society, 2009, 92, 2551-2554.	3.8	177
54	The Effects of Growth Temperature on the Fieldâ€Emission Properties of ZnO Nanoneedle Arrays. Journal of the American Ceramic Society, 2009, 92, 2982-2986.	3.8	6

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55	Synthesis of SnO₂â€“ZnO coreâ€“shell nanofibers via a novel two-step process and their gas sensing properties. Nanotechnology, 2009, 20, 465603.	2.6	241