

Olga Casals

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

1,291
citations

471509

17
h-index

414414

32
g-index

48
all docs

48
docs citations

48
times ranked

1571
citing authors

#	ARTICLE	IF	CITATIONS
1	High response and stability in CO and humidity measures using a single SnO ₂ nanowire. Sensors and Actuators B: Chemical, 2007, 121, 3-17.	7.8	165
2	Fabrication and electrical characterization of circuits based on individual tin oxide nanowires. Nanotechnology, 2006, 17, 5577-5583.	2.6	135
3	Electrical properties of individual tin oxide nanowires contacted to platinum electrodes. Physical Review B, 2007, 76, .	3.2	105
4	A Highly Selective and Self-Powered Gas Sensor Via Organic Surface Functionalization of p-Si/n-ZnO Diodes. Advanced Materials, 2014, 26, 8017-8022.	21.0	103
5	Insight into the Role of Oxygen Diffusion in the Sensing Mechanisms of SnO ₂ Nanowires. Advanced Functional Materials, 2008, 18, 2990-2994.	14.9	96
6	A Parts Per Billion (ppb) Sensor for NO ₂ with Microwatt (1/4W) Power Requirements Based on Micro Light Plates. ACS Sensors, 2019, 4, 822-826.	7.8	85
7	Portable microsensors based on individual SnO ₂ nanowires. Nanotechnology, 2007, 18, 495501.	2.6	68
8	Water vapor detection with individual tin oxide nanowires. Nanotechnology, 2007, 18, 424016.	2.6	59
9	A review on efficient self-heating in nanowire sensors: Prospects for very-low power devices. Sensors and Actuators B: Chemical, 2018, 256, 797-811.	7.8	59
10	Fabrication of metallic contacts to nanometre-sized materials using a focused ion beam (FIB). Materials Science and Engineering C, 2006, 26, 1063-1066.	7.3	57
11	Detection of amines with chromium-doped WO ₃ mesoporous material. Sensors and Actuators B: Chemical, 2009, 140, 557-562.	7.8	51
12	Characterization of metal-oxide nanosensors fabricated with focused ion beam (FIB). Sensors and Actuators B: Chemical, 2006, 118, 198-203.	7.8	42
13	Micro light plates for low-power photoactivated (gas) sensors. Applied Physics Letters, 2019, 114, .	3.3	42
14	Site-selectively grown SnO ₂ NWs networks on micromembranes for efficient ammonia sensing in humid conditions. Sensors and Actuators B: Chemical, 2016, 232, 402-409.	7.8	31
15	Integrated Strategy toward Self-Powering and Selectivity Tuning of Semiconductor Gas Sensors. ACS Sensors, 2016, 1, 1256-1264.	7.8	28
16	Facile integration of ordered nanowires in functional devices. Sensors and Actuators B: Chemical, 2015, 221, 104-112.	7.8	27
17	Self-heating in pulsed mode for signal quality improvement: Application to carbon nanostructures-based sensors. Sensors and Actuators B: Chemical, 2016, 226, 254-265.	7.8	20
18	SiC-based MIS gas sensor for high water vapor environments. Sensors and Actuators B: Chemical, 2012, 175, 60-66.	7.8	17

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19	Visible Light-Driven p-Type Semiconductor Gas Sensors Based on CaFe ₂ O ₄ Nanoparticles. Sensors, 2020, 20, 850.	3.8	16
20	Nanostructured oxides on porous silicon microhotplates for NH ₃ sensing. Microelectronic Engineering, 2008, 85, 1116-1119.	2.4	14
21	A Low-cost Approach to Low-power Gas Sensors Based on Self-Heating Effects in Large Arrays of Nanostructures. Procedia Engineering, 2015, 120, 787-790.	1.2	11
22	Highly Specific and Wide Range NO ₂ Sensor with Color Readout. ACS Sensors, 2017, 2, 1612-1618.	7.8	11
23	Characterisation and stabilisation of Pt/TaSi _x /SiO ₂ /SiC gas sensor. Sensors and Actuators B: Chemical, 2005, 109, 119-127.	7.8	10
24	Visible-Light-Driven Room Temperature NO ₂ Gas Sensor Based on Localized Surface Plasmon Resonance: The Case of Gold Nanoparticle Decorated Zinc Oxide Nanorods (ZnO NRs). Chemosensors, 2022, 10, 28.	3.6	8
25	Novel Approaches Towards Highly Selective Self-Powered Gas Sensors. Procedia Engineering, 2015, 120, 623-627.	1.2	5
26	Locally Grown SnO ₂ NWs as Low Power Ammonia Sensor. Procedia Engineering, 2015, 120, 215-219.	1.2	4
27	How to implement a selective colorimetric gas sensor with off the shelf components?. Sensors and Actuators B: Chemical, 2019, 293, 41-44.	7.8	4
28	Visible Light Activated Room Temperature Gas Sensors Based on CaFe ₂ O ₄ Nanopowders. Proceedings (mdpi), 2018, 2, 834.	0.2	3
29	Micro and nanotechnologies for the development of an integrated chromatographic system. , 2007, , .		2
30	Low-cost Fabrication of Zero-power Metal Oxide Nanowire Gas Sensors: Trends and Challenges. Procedia Engineering, 2015, 120, 488-491.	1.2	2
31	Charge Transfer Characteristics of n-type In _{0.1} Ga _{0.9} N Photoanode across Semiconductor-Liquid Interface. Journal of Physical Chemistry C, 2016, 120, 28917-28923.	3.1	2
32	Ultra Low Power Mass-Produced Gas Sensor Based on Efficient Self-Heated GaN Nanorods. , 2019, , .		2
33	Compact, versatile and cost-effective colorimetric gas sensors. , 2019, , .		2
34	Colorimetric sensor for bad odor detection using automated color correction. , 2017, , .		1
35	NO ₂ Measurements with RGB Sensors for Easy In-Field Test. Proceedings (mdpi), 2017, 1, .	0.2	1
36	Top-Down Fabrication of Arrays of Vertical GaN Nanorods with Freestanding Top Contacts for Environmental Exposure. Proceedings (mdpi), 2018, 2, .	0.2	1

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37	An LED Platform for Micropower Gas Sensors. Proceedings (mdpi), 2018, 2, .	0.2	1
38	A Microwatt Gas Sensor for No2 Detection in the Parts Per Billion Range. , 2019, , .		1
39	Electrical characterisation of nanowires and nanoparticles contacted using a FIB. , 0, , .		0
40	Electrical response of MOSiC gas sensors to CO, NO/sub 2/ and C/sub 3/H/sub 8/. , 0, , .		0
41	Bottom-up Fabrication of Individual SnO2 Nanowires-based Gas Sensors on Suspended Micromembranes. Materials Research Society Symposia Proceedings, 2007, 1052, 1.	0.1	0
42	<-Porous silicon (<-PS) gas sensor based on interdigitated <-electrodes (ID<-E's). , 2007, , .		0
43	Gas Sensing Devices Based on 1D Metal-Oxide Nanostructures: Fabrication, Testing and Device Integration. ECS Transactions, 2008, 13, 57-64.	0.5	0
44	SiC-Based MIS Gas Sensor for High Water Vapor Environments. Procedia Engineering, 2011, 25, 1321-1324.	1.2	0
45	Efficient Self-Heating in Nanowire Sensors: Prospects for Very-Low Power. Proceedings (mdpi), 2018, 2, .	0.2	0
46	Micro Light Plates for Photoactivated Micro-Power Gas Sensors. Proceedings (mdpi), 2019, 14, 8.	0.2	0
47	A Light-Activated Micropower Gas Sensor for the Detection of NO2 Down to the Parts Per Billion Range. , 2019, , .		0
48	Revisiting Colorimetric Gas Sensors: Compact, Versatile and Cost-Effective. Proceedings (mdpi), 2020, 56, .	0.2	0