# Olga Casals

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 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 | Visible-Light-Driven Room Temperature NO2 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 |
| 2 | Revisiting Colorimetric Gas Sensors: Compact, Versatile and Cost-Effective. Proceedings (mdpi), 2020, 56, . | 0.2 | 0 |
| 3 | Visible Light-Driven p-Type Semiconductor Gas Sensors Based on CaFe2O4 Nanoparticles. Sensors, 2020, 20, 850. | 3.8 | 16 |
| 4 | Micro Light Plates for Photoactivated Micro-Power Gas Sensors. Proceedings (mdpi), 2019, 14, 8. | 0.2 | 0 |
| 5 | Ultra Low Power Mass-Producible Gas Sensor Based on Efficient Self-Heated GaN Nanorods. , 2019, , . | | 2 |
| 6 | A Light-Activated Micropower Gas Sensor for the Detection of NO2 Down to the Parts Per Billion Range. , 2019, , . | | 0 |
| 7 | A Microwatt Gas Sensor for No2 Detection in the Parts Per Billion Range. , 2019, , . | | 1 |
| 8 | 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 |
| 9 | Micro light plates for low-power photoactivated (gas) sensors. Applied Physics Letters, 2019, 114, . | 3.3 | 42 |
| 10 | A Parts Per Billion (ppb) Sensor for NO<sub>2</sub> with Microwatt (Î¼W) Power Requirements Based on Micro Light Plates. ACS Sensors, 2019, 4, 822-826. | 7.8 | 85 |
| 11 | Compact, versatile and cost-effective colorimetric gas sensors. , 2019, , . | | 2 |
| 12 | 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 |
| 13 | Top-Down Fabrication of Arrays of Vertical GaN Nanorods with Freestanding Top Contacts for Environmental Exposure. Proceedings (mdpi), 2018, 2, . | 0.2 | 1 |
| 14 | Efficient Self-Heating in Nanowire Sensors: Prospects for Very-Low Power. Proceedings (mdpi), 2018, 2, . | 0.2 | 0 |
| 15 | Visible Light Activated Room Temperature Gas Sensors Based on CaFe2O4 Nanopowders. Proceedings (mdpi), 2018, 2, 834. | 0.2 | 3 |
| 16 | An LED Platform for Micropower Gas Sensors. Proceedings (mdpi), 2018, 2, . | 0.2 | 1 |
| 17 | Colorimetric sensor for bad odor detection using automated color correction. , 2017, , . | | 1 |
| 18 | Highly Specific and Wide Range NO<sub>2</sub> Sensor with Color Readout. ACS Sensors, 2017, 2, 1612-1618. | 7.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | NO2 Measurements with RGB Sensors for Easy In-Field Test. Proceedings (mdpi), 2017, 1, . | 0.2 | 1 |
| 20 | Charge Transfer Characteristics of n-type In<sub>0.1</sub>Ga<sub>0.9</sub>N Photoanode across Semiconductorâ€“Liquid Interface. Journal of Physical Chemistry C, 2016, 120, 28917-28923. | 3.1 | 2 |
| 21 | Integrated Strategy toward Self-Powering and Selectivity Tuning of Semiconductor Gas Sensors. ACS Sensors, 2016, 1, 1256-1264. | 7.8 | 28 |
| 22 | 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 |
| 23 | Site-selectively grown SnO2 NWs networks on micromembranes for efficient ammonia sensing in humid conditions. Sensors and Actuators B: Chemical, 2016, 232, 402-409. | 7.8 | 31 |
| 24 | 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 |
| 25 | Locally Grown SnO 2 NWs as Low Power Ammonia Sensor. Procedia Engineering, 2015, 120, 215-219. | 1.2 | 4 |
| 26 | Low-cost Fabrication of Zero-power Metal Oxide Nanowire Gas Sensors: Trends and Challenges. Procedia Engineering, 2015, 120, 488-491. | 1.2 | 2 |
| 27 | Facile integration of ordered nanowires in functional devices. Sensors and Actuators B: Chemical, 2015, 221, 104-112. | 7.8 | 27 |
| 28 | Novel Approaches Towards Highly Selective Self-Powered Gas Sensors. Procedia Engineering, 2015, 120, 623-627. | 1.2 | 5 |
| 29 | A Highly Selective and Selfâ€Powered Gas Sensor Via Organic Surface Functionalization of pâ€Si/nâ€ZnO Diodes. Advanced Materials, 2014, 26, 8017-8022. | 21.0 | 103 |
| 30 | SiC-based MIS gas sensor for high water vapor environments. Sensors and Actuators B: Chemical, 2012, 175, 60-66. | 7.8 | 17 |
| 31 | SiC-Based MIS Gas Sensor for High Water Vapor Environments. Procedia Engineering, 2011, 25, 1321-1324. | 1.2 | 0 |
| 32 | Detection of amines with chromium-doped WO3 mesoporous material. Sensors and Actuators B: Chemical, 2009, 140, 557-562. | 7.8 | 51 |
| 33 | Insight into the Role of Oxygen Diffusion in the Sensing Mechanisms of SnO<sub>2</sub> Nanowires. Advanced Functional Materials, 2008, 18, 2990-2994. | 14.9 | 96 |
| 34 | Nanostructured oxides on porous silicon microhotplates for NH3 sensing. Microelectronic Engineering, 2008, 85, 1116-1119. | 2.4 | 14 |
| 35 | Gas Sensing Devices Based on 1D Metal-Oxide Nanostructures: Fabrication, Testing and Device Integration. ECS Transactions, 2008, 13, 57-64. | 0.5 | 0 |
| 36 | Bottom-up Fabrication of Individual SnO2 Nanowires-based Gas Sensors on Suspended Micromembranes. Materials Research Society Symposia Proceedings, 2007, 1052, 1. | 0.1 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Micro and nanotechnologies for the development of an integrated chromatographic system. , 2007, , . | | 2 |
| 38 | Electrical properties of individual tin oxide nanowires contacted to platinum electrodes. Physical Review B, 2007, 76, . | 3.2 | 105 |
| 39 | Water vapor detection with individual tin oxide nanowires. Nanotechnology, 2007, 18, 424016. | 2.6 | 59 |
| 40 | μ-Porous silicon (μPS) gas sensor based on interdigitated μ-electrodes (IDμE's). , 2007, , . | | 0 |
| 41 | Portable microsensors based on individual SnO<sub>2</sub>nanowires. Nanotechnology, 2007, 18, 495501. | 2.6 | 68 |
| 42 | High response and stability in CO and humidity measures using a single SnO2 nanowire. Sensors and Actuators B: Chemical, 2007, 121, 3-17. | 7.8 | 165 |
| 43 | Fabrication and electrical characterization of circuits based on individual tin oxide nanowires. Nanotechnology, 2006, 17, 5577-5583. | 2.6 | 135 |
| 44 | Characterization of metal-oxide nanosensors fabricated with focused ion beam (FIB). Sensors and Actuators B: Chemical, 2006, 118, 198-203. | 7.8 | 42 |
| 45 | 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 |
| 46 | Characterisation and stabilisation of Pt/TaSix/SiO2/SiC gas sensor. Sensors and Actuators B: Chemical, 2005, 109, 119-127. | 7.8 | 10 |
| 47 | Electrical characterisation of nanowires and nanoparticles contacted using a FIB. , 0, , . | | 0 |
| 48 | Electrical response of MOSiC gas sensors to CO, NO/sub 2/ and C/sub 3/H/sub 8/. , 0, , . | | 0 |