Barbara Fabbri

List of Publications by Year in Descending Order

45 papers	502 citations	14 h-index	21 g-index
62 ext. papers	626 ext. citations	4.2 avg, IF	3.34 L-index

#	Paper	IF	Citations
45	Elucidating the Ambient Stability and Gas Sensing Mechanism of Nickel-Decorated Phosphorene for NO Detection: A First-Principles Study.. *ACS Omega*, **2022**, 7, 9808-9817	3.9	1
44	First-Principles Study of Electronic Conductivity, Structural and Electronic Properties of Oxygen-Vacancy-Defected SnO. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 2633-2640	1.3	1
43	Synthesis, Material and Electrical Characterization Combined with DFT Calculations of Reduced SnO2-x. *ECS Meeting Abstracts*, **2021**, MA2021-01, 1492-1492	0	1
42	The role of substrate materials on stabilization of CdO, 2CdO.CdSO4 and 2CdS.2CdO.CdSO4 from CdS powder film annealed in air. *Materials Chemistry and Physics*, **2021**, 257, 123251	4.4	0
41	Development of a dedicated instrumentation for electrical and thermal characterization of chemiresistive gas sensors. *Review of Scientific Instruments*, **2021**, 92, 074702	1.7	1
40	Design and validation of a novel operando spectroscopy reaction chamber for chemoresistive gas sensors. *Sensors and Actuators B: Chemical*, **2021**, 341, 130012	8.5	3
39	Air Stable Nickel-Decorated Black Phosphorus and Its Room-Temperature Chemiresistive Gas Sensor Capabilities. *ACS Applied Materials & Interfaces*, **2021**, 13, 44711-44722	9.5	10
38	Development and characterization of WO3 nanoflakes for selective ethanol sensing. *Sensors and Actuators B: Chemical*, **2021**, 347, 130593	8.5	6
37	Nanostructured Chemoresistive Sensors for Oncological Screening and Tumor Markers Tracking: Single Sensor Approach Applications on Human Blood and Cell Samples. *Sensors*, **2020**, 20,	3.8	4
36	Influence of Oxygen Vacancies in Gas Sensors Based on Metal-Oxide Semiconductors: A First-Principles Study. *Lecture Notes in Electrical Engineering*, **2020**, 309-314	0.2	1
35	Tunable formation of nanostructured SiC/SiOC core-shell for selective detection of SO2. *Sensors and Actuators B: Chemical*, **2020**, 305, 127485	8.5	16
34	Reproducibility tests with zinc oxide thick-film sensors. *Ceramics International*, **2020**, 46, 6847-6855	5.1	16
33	Nanostructured SmFeO Gas Sensors: Investigation of the Gas Sensing Performance Reproducibility for Colorectal Cancer Screening. *Sensors*, **2020**, 20,	3.8	10
32	Correlation of gaseous emissions to water stress in tomato and maize crops: From field to laboratory and back. *Sensors and Actuators B: Chemical*, **2020**, 303, 127227	8.5	13
31	Elaboration and Characterization of SnO2 Doped TiO2 Gas Sensors Deposited through Dip and Spin Coating Methods. *Proceedings (mdpi)*, **2019**, 14, 23	0.3	
30	Aza-crown-ether functionalized graphene oxide for gas sensing and cation trapping applications. *Materials Research Express*, **2019**, 6, 075603	1.7	12
29	Nanostructured Chemoresistive Sensors for Oncological Screening: Preliminary Study with Single Sensor Approach on Human Blood Samples. *Proceedings (mdpi)*, **2019**, 14, 34	0.3	1

28	Influence of Oxygen Vacancies in Gas Sensors Based on Tin Dioxide Nanostructure: A First Principles Study. *Proceedings (mdpi)*, **2019**, 14, 14	0.3	
27	Modelling Soil Water Content in a Tomato Field: Proximal Gamma Ray Spectroscopy and Soil–Crop System Models. *Agriculture (Switzerland)*, **2018**, 8, 60	3	18
26	Glyphosate Detection: An Innovative Approach by Using Chemoresistive Gas Sensors. *Proceedings (mdpi)*, **2018**, 2, 910	0.3	
25	A New Method to Prepare Few-Layers of Nanoclusters Decorated Graphene: Nb2O5/Graphene and Its Gas Sensing Properties. *Proceedings (mdpi)*, **2018**, 2, 1047	0.3	1
24	Neoplasms and metastasis detection in human blood exhalations with a device composed by nanostructured sensors. *Sensors and Actuators B: Chemical*, **2018**, 271, 203-214	8.5	4
23	Crystalline Microporous Organosilicates with Reversed Functionalities of Organic and Inorganic Components for Room-Temperature Gas Sensing. *ACS Applied Materials & Interfaces*, **2017**, 9, 24812-24820	9.5	8
22	Preventive screening of colorectal cancer with a device based on chemoresistive sensors. *Sensors and Actuators B: Chemical*, **2017**, 238, 1098-1101	8.5	14
21	Silicon Carbide: A Gas Sensing Material for Selective Detection of SO2. *Proceedings (mdpi)*, **2017**, 1, 745	0.3	
20	On the Optimization of a MEMS Device for Chemoresistive Gas Sensors. *Proceedings (mdpi)*, **2017**, 1, 746	0.3	
19	Sustainable Water Management: Sensors for Precision Farming. *Proceedings (mdpi)*, **2017**, 1, 780	0.3	
18	Tin(IV) sulfide nanorods as a new gas sensing material. *Sensors and Actuators B: Chemical*, **2016**, 223, 827-833	8.5	42
17	ZnO and Au/ZnO thin films: Room-temperature chemoresistive properties for gas sensing applications. *Sensors and Actuators B: Chemical*, **2016**, 237, 1085-1094	8.5	39
16	Chemoresistive properties of photo-activated thin and thick ZnO films. *Sensors and Actuators B: Chemical*, **2016**, 222, 1251-1256	8.5	37
15	Metal Sulfides as Sensing Materials for Chemoresistive Gas Sensors. *Sensors*, **2016**, 16, 296	3.8	57
14	Chemoresistive Gas Sensor based on SiC Thick Film: Possible Distinctive Sensing Properties Between H2S and SO2. *Procedia Engineering*, **2016**, 168, 276-279		9
13	Devices for Screening and Monitoring of Tumors Based on Chemoresistive Sensors. *Procedia Engineering*, **2016**, 168, 113-116		
12	Detection of colorectal cancer biomarkers in the presence of interfering gases. *Sensors and Actuators B: Chemical*, **2015**, 218, 289-295	8.5	19
11	Tin (IV) Sulfide chemoresistivity: A possible new gas sensing material **2015**,		3

10	Metal Sulfides as a New Class of Sensing Materials. *Procedia Engineering*, **2015**, 120, 138-141		21
9	Electrical conductivity of CdS films for gas sensing: Selectivity properties to alcoholic chains. *Sensors and Actuators B: Chemical*, **2015**, 207, 504-510	8.5	33
8	Photo-activation of Cadmium Sulfide Films for Gas Sensing. *Procedia Engineering*, **2014**, 87, 140-143		6
7	Detection of Colorectal Cancer Biomarkers in the Presence of Interfering Gases. *Procedia Engineering*, **2014**, 87, 596-599		2
6	Chemoresistive gas sensors for the detection of colorectal cancer biomarkers. *Sensors*, **2014**, 14, 18982-92	3.8	28
5	Resonant photoactivation of cadmium sulfide and its effect on the surface chemical activity. *Applied Physics Letters*, **2014**, 104, 222102	3.4	17
4	Electrical, Optical and Sensing Properties of Photo-activated ZnO Thin Films. *Procedia Engineering*, **2014**, 87, 148-151		4
3	Sensing of gaseous malodors characteristic of landfills and waste treatment plants. *Journal of Sensors and Sensor Systems*, **2014**, 3, 61-67	1.6	1
2	High-sensitivity detection of acetaldehyde. *Sensors and Actuators B: Chemical*, **2012**, 174, 402-405	8.5	31
1	Array of sensors for detection of gaseous malodors in organic decomposition products. *Sensors and Actuators B: Chemical*, **2012**, 174, 349-354	8.5	10