

Andrea Gaiardo

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

745
citations

471509
17
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552781
26
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61
all docs

61
docs citations

61
times ranked

774
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal Sulfides as Sensing Materials for Chemoresistive Gas Sensors. <i>Sensors</i> , 2016, 16, 296.	3.8	76
2	ZnO and Au/ZnO thin films: Room-temperature chemoresistive properties for gas sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2016, 237, 1085-1094.	7.8	54
3	Tin(IV) sulfide nanorods as a new gas sensing material. <i>Sensors and Actuators B: Chemical</i> , 2016, 223, 827-833.	7.8	51
4	Electrical conductivity of CdS films for gas sensing: Selectivity properties to alcoholic chains. <i>Sensors and Actuators B: Chemical</i> , 2015, 207, 504-510.	7.8	42
5	Chemoresistive properties of photo-activated thin and thick ZnO films. <i>Sensors and Actuators B: Chemical</i> , 2016, 222, 1251-1256.	7.8	40
6	Development of MEMS MOS gas sensors with CMOS compatible PECVD inter-metal passivation. <i>Sensors and Actuators B: Chemical</i> , 2019, 292, 225-232.	7.8	31
7	Air Stable Nickel-Decorated Black Phosphorus and Its Room-Temperature Chemiresistive Gas Sensor Capabilities. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 44711-44722.	8.0	26
8	Development and characterization of WO ₃ nanoflakes for selective ethanol sensing. <i>Sensors and Actuators B: Chemical</i> , 2021, 347, 130593.	7.8	26
9	Metal Sulfides as a New Class of Sensing Materials. <i>Procedia Engineering</i> , 2015, 120, 138-141.	1.2	25
10	Tunable formation of nanostructured SiC/SiOC core-shell for selective detection of SO ₂ . <i>Sensors and Actuators B: Chemical</i> , 2020, 305, 127485.	7.8	25
11	Detection of colorectal cancer biomarkers in the presence of interfering gases. <i>Sensors and Actuators B: Chemical</i> , 2015, 218, 289-295.	7.8	24
12	Correlation of gaseous emissions to water stress in tomato and maize crops: From field to laboratory and back. <i>Sensors and Actuators B: Chemical</i> , 2020, 303, 127227.	7.8	24
13	Nanostructured SmFeO ₃ Gas Sensors: Investigation of the Gas Sensing Performance Reproducibility for Colorectal Cancer Screening. <i>Sensors</i> , 2020, 20, 5910.	3.8	24
14	Reproducibility tests with zinc oxide thick-film sensors. <i>Ceramics International</i> , 2020, 46, 6847-6855.	4.8	23
15	Optimization of a Low-Power Chemoresistive Gas Sensor: Predictive Thermal Modelling and Mechanical Failure Analysis. <i>Sensors</i> , 2021, 21, 783.	3.8	23
16	Resonant photoactivation of cadmium sulfide and its effect on the surface chemical activity. <i>Applied Physics Letters</i> , 2014, 104, 222102.	3.3	20
17	Use of gas sensors and FOBT for the early detection of colorectal cancer. <i>Sensors and Actuators B: Chemical</i> , 2018, 262, 884-891.	7.8	19
18	Chemoresistive sensors for colorectal cancer preventive screening through fecal odor: Double-blind approach. <i>Sensors and Actuators B: Chemical</i> , 2019, 301, 127062.	7.8	18

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19	Preventive screening of colorectal cancer with a device based on chemoresistive sensors. Sensors and Actuators B: Chemical, 2017, 238, 1098-1101.	7.8	17
20	Aza-crown-ether functionalized graphene oxide for gas sensing and cation trapping applications. Materials Research Express, 2019, 6, 075603.	1.6	17
21	Strengthening of Wood-like Materials via Densification and Nanoparticle Intercalation. Nanomaterials, 2020, 10, 478.	4.1	17
22	Chemoresistive Gas Sensor based on SiC Thick Film: Possible Distinctive Sensing Properties Between H ₂ S and SO ₂ . Procedia Engineering, 2016, 168, 276-279.	1.2	15
23	Design of a Metal-Oxide Solid Solution for Sub-ppm H ₂ Detection. ACS Sensors, 2022, 7, 573-583.	7.8	13
24	Investigation on Sensing Performance of Highly Doped Sb/SnO ₂ . Sensors, 2022, 22, 1233.	3.8	12
25	Photo-activation of Cadmium Sulfide Films for Gas Sensing. Procedia Engineering, 2014, 87, 140-143.	1.2	10
26	Design and validation of a novel operando spectroscopy reaction chamber for chemoresistive gas sensors. Sensors and Actuators B: Chemical, 2021, 341, 130012.	7.8	10
27	Electrical, Optical and Sensing Properties of Photo-activated ZnO Thin Films. Procedia Engineering, 2014, 87, 148-151.	1.2	8
28	Neoplasms and metastasis detection in human blood exhalations with a device composed by nanostructured sensors. Sensors and Actuators B: Chemical, 2018, 271, 203-214.	7.8	8
29	Elucidating the Ambient Stability and Gas Sensing Mechanism of Nickel-Decorated Phosphorene for NO ₂ Detection: A First-Principles Study. ACS Omega, 2022, 7, 9808-9817.	3.5	8
30	Use of Gas Sensors and FOBT for the Early Detection of Colorectal Cancer. Proceedings (mdpi), 2017, 1, .	0.2	6
31	Tin (IV) Sulfide chemoresistivity: A possible new gas sensing material. , 2015, , .		4
32	Development of a Sensor Array Based on Pt, Pd, Ag and Au Nanocluster Decorated SnO ₂ for Precision Agriculture. ECS Meeting Abstracts, 2021, MA2021-01, 1550-1550.	0.0	4
33	Semiconductor Gas Sensors to Analyze Fecal Exhalation as a Method for Colorectal Cancer Screening. Proceedings (mdpi), 2019, 14, .	0.2	3
34	MetaNChemo: A meta-heuristic neural-based framework for chemometric analysis. Applied Soft Computing Journal, 2020, 97, 106712.	7.2	3
35	Dataset of the Optimization of a Low Power Chemoresistive Gas Sensor: Predictive Thermal Modelling and Mechanical Failure Analysis. Data, 2021, 6, 30.	2.3	3
36	First-Principles Study of Electronic Conductivity, Structural and Electronic Properties of Oxygen-Vacancy-Defected SnO ₂ . Journal of Nanoscience and Nanotechnology, 2021, 21, 2633-2640.	0.9	3

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37	Influence of Oxygen Vacancies in Gas Sensors Based on Metal-Oxide Semiconductors: A First-Principles Study. Lecture Notes in Electrical Engineering, 2020, , 309-314.	0.4	3
38	Nanostructured Chemoresistive Sensors for Oncological Screening: Preliminary Study with Single Sensor Approach on Human Blood Samples. Proceedings (mdpi), 2019, 14, 34.	0.2	2
39	Gas Sensing Properties Comparison between SnO ₂ and Highly Antimony-Doped SnO ₂ materials. ECS Meeting Abstracts, 2021, MA2021-01, 1435-1435.	0.0	2
40	Glyphosate Detection: An Innovative Approach by Using Chemoresistive Gas Sensors. Proceedings (mdpi), 2018, 2, 910.	0.2	1
41	A New Method to Prepare Few-Layers of Nanoclusters Decorated Graphene: Nb ₂ O ₅ /Graphene and Its Gas Sensing Properties. Proceedings (mdpi), 2018, 2, .	0.2	1
42	The role of substrate materials on stabilization of CdO, 2CdO·CdSO ₄ and 2CdS·2CdO·CdSO ₄ from CdS powder film annealed in air. Materials Chemistry and Physics, 2021, 257, 123251.	4.0	1
43	New Chemoresistive Gas Sensor Arrays for Outdoor Air Quality Monitoring: A Combined R&D and Outreach Activities. ECS Meeting Abstracts, 2021, MA2021-01, 1556-1556.	0.0	1
44	Synthesis, Material and Electrical Characterization Combined with DFT Calculations of Reduced SnO _{2-x} . ECS Meeting Abstracts, 2021, MA2021-01, 1492-1492.	0.0	1
45	New Chemoresistive Gas Sensor Arrays for Outdoor Air Quality Monitoring: A Combined R&D and Outreach Activities. ECS Meeting Abstracts, 2020, MA2020-01, 2203-2203.	0.0	1
46	Mesoporous silicon gas sensors: design, fabrication and conduction model. , 2015, , .		0
47	Devices for Screening and Monitoring of Tumors Based on Chemoresistive Sensors. Procedia Engineering, 2016, 168, 113-116.	1.2	0
48	Silicon Carbide: A Gas Sensing Material for Selective Detection of SO ₂ . Proceedings (mdpi), 2017, 1, .	0.2	0
49	On the Optimization of a MEMS Device for Chemoresistive Gas Sensors. Proceedings (mdpi), 2017, 1, 746.	0.2	0
50	Sustainable Water Management: Sensors for Precision Farming. Proceedings (mdpi), 2017, 1, 780.	0.2	0
51	Influence of Oxygen Vacancies in Gas Sensors Based on Tin Dioxide Nanostructure: A First Principles Study. Proceedings (mdpi), 2019, 14, .	0.2	0
52	Elaboration and Characterization of SnO ₂ Doped TiO ₂ Gas Sensors Deposited through Dip and Spin Coating Methods. Proceedings (mdpi), 2019, 14, 23.	0.2	0
53	<i>A Special Section on</i> Advanced Nanomaterials and Devices: Environmental and Healthcare Applications. Journal of Nanoscience and Nanotechnology, 2021, 21, 2460-2461.	0.9	0
54	Water Stress Assessment through Gaseous Emissions Monitoring: A Case of Study in Tomato Fields. ECS Meeting Abstracts, 2021, MA2021-01, 1551-1551.	0.0	0

#	ARTICLE	IF	CITATIONS
55	(Sn,Ti,Nb) _x O ₂ Solid Solution: An Innovative Nanostructured Material and Its Chemoresistive Properties. ECS Meeting Abstracts, 2021, MA2021-01, 1432-1432.	0.0	0
56	Nickel-Decorated Black Phosphorus for Room Temperature NO ₂ Detection. ECS Meeting Abstracts, 2021, MA2021-01, 1704-1704.	0.0	0
57	WO ₃ Nanoparticles and Nanoflakes Based Sensors for Selective Detection of Alcohols. ECS Meeting Abstracts, 2021, MA2021-01, 1437-1437.	0.0	0
58	Detection of Tumor Markers and Cell Metabolites in Cell Cultures, Using Nanostructured Chemoresistive Sensors. Lecture Notes in Electrical Engineering, 2018, , 51-58.	0.4	0
59	Development of a Pt, Pd, Ag and Au Nanocluster Decorated SnO ₂ Sensor Array for Precision Agriculture. ECS Meeting Abstracts, 2020, MA2020-01, 2248-2248.	0.0	0
60	Nickel-Decorated Black Phosphorus for Room Temperature NO ₂ detection. ECS Meeting Abstracts, 2020, MA2020-01, 2439-2439.	0.0	0
61	Gas Sensing Properties Comparison between SnO ₂ and Highly Antimony-Doped SnO ₂ Materials. ECS Meeting Abstracts, 2020, MA2020-01, 2077-2077.	0.0	0