Jordi Fonollosa

List of Publications by Year
in descending order

55 papers	1,542 citations	394421 19 h-index	315739 38 g-index
55 all docs	55 docs citations	55 times ranked	1423 citing authors

#	Article	IF	Citations
1	Early fire detection based on gas sensor arrays: Multivariate calibration and validation. Sensors and Actuators B: Chemical, 2022, 352, 130961.	7.8	29
2	COVID-19 impact on maritime traffic and corresponding pollutant emissions. The case of the Port of Barcelona. Journal of Environmental Management, 2022, 310, 114787.	7.8	10
3	Drift in a popular metal oxide sensor dataset reveals limitations for gas classification benchmarks. Sensors and Actuators B: Chemical, 2022, 361, 131668.	7.8	18
4	Mapping layperson medical terminology into the Human Phenotype Ontology using neural machine translation models. Expert Systems With Applications, 2022, 204, 117446.	7.6	3
5	Estimation of vessel emissions and contribution to overall pollution in port-cities. , 2022, , .		0
6	Sniffing speeds up chemical detection by controlling air-flows near sensors. Nature Communications, 2021, 12, 1232.	12.8	13
7	(Invited) Strategies for Calibration Cost Reduction in Heterogeneous Chemical Sensor Arrays. ECS Meeting Abstracts, 2021, MA2021-01, 1308-1308.	0.0	0
8	mWISE: An Algorithm for Context-Based Annotation of Liquid Chromatography–Mass Spectrometry Features through Diffusion in Graphs. Analytical Chemistry, 2021, 93, 10772-10778.	6.5	5
9	How Did the COVID-19 Lockdown Affect Children and Adolescent's Well-Being: Spanish Parents, Children, and Adolescents Respond. Frontiers in Public Health, 2021, 9, 746052.	2.7	7
10	Pulsed-Temperature Metal Oxide Gas Sensors for Microwatt Power Consumption. IEEE Access, 2020, 8, 70938-70946.	4.2	17
11	(Invited) Strategies for Calibration Cost Reduction in Heterogeneous Chemical Sensor Arrays. ECS Meeting Abstracts, 2020, MA2020-01, 1845-1845.	0.0	0
12	Application of an Array of Metal-Oxide Semiconductor Gas Sensors in an Assistant Personal Robot for Early Gas Leak Detection. Sensors, 2019, 19, 1957.	3.8	51
13	Smart Sensors. , 2019, , 193-214.		0
14	Multi-unit calibration rejects inherent device variability of chemical sensor arrays. Sensors and Actuators B: Chemical, 2018, 265, 142-154.	7.8	26
15	Inkjet-printed, functional heterolayers of ZnO@CuO for stoma pouch monitoring. Applied Nanoscience (Switzerland), 2018, 8, 1907-1914.	3.1	3
16	Chemical Sensor Systems and Associated Algorithms for Fire Detection: A Review. Sensors, 2018, 18, 553.	3.8	100
17	A Practical Method to Estimate the Resolving Power of a Chemical Sensor Array: Application to Feature Selection. Frontiers in Chemistry, 2018, 6, 209.	3.6	6
18	Fire detection using a gas sensor array with sensor fusion algorithms. , 2017, , .		16

#	Article	IF	Citations
19	Discontinuously operated MOX sensors for low power applications. , 2017, , .		1
20	Improving Calibration of Chemical Gas Sensors for Fire Detection Using Small Scale Setups. Proceedings (mdpi), 2017, 1, 453.	0.2	4
21	Gas Sensor Array for Reliable Fire Detection. Procedia Engineering, 2016, 168, 444-447.	1.2	15
22	Calibration transfer and drift counteraction in chemical sensor arrays using Direct Standardization. Sensors and Actuators B: Chemical, 2016, 236, 1044-1053.	7.8	147
23	Online decorrelation of humidity and temperature in chemical sensors for continuous monitoring. Chemometrics and Intelligent Laboratory Systems, 2016, 157, 169-176.	3.5	87
24	Learning of Chunking Sequences in Cognition and Behavior. PLoS Computational Biology, 2015, 11, e1004592.	3.2	36
25	Data set from gas sensor array under flow modulation. Data in Brief, 2015, 3, 131-136.	1.0	2
26	Evaluation of calibration transfer strategies between Metal Oxide gas sensor arrays. Procedia Engineering, 2015, 120, 261-264.	1.2	9
27	Reservoir computing compensates slow response of chemosensor arrays exposed to fast varying gas concentrations in continuous monitoring. Sensors and Actuators B: Chemical, 2015, 215, 618-629.	7.8	170
28	Chemical gas sensor array dataset. Data in Brief, 2015, 3, 85-89.	1.0	22
29	Dataset from chemical gas sensor array in turbulent wind tunnel. Data in Brief, 2015, 3, 169-174.	1.0	6
30	Data set from chemical sensor array exposed to turbulent gas mixtures. Data in Brief, 2015, 3, 216-220.	1.0	4
31	Bioinspired early detection through gas flow modulation in chemo-sensory systems. Sensors and Actuators B: Chemical, 2015, 206, 538-547.	7.8	33
32	Chemical Discrimination in Turbulent Gas Mixtures with MOX Sensors Validated by Gas Chromatography-Mass Spectrometry. Sensors, 2014, 14, 19336-19353.	3.8	67
33	Human activity monitoring using gas sensor arrays. Sensors and Actuators B: Chemical, 2014, 199, 398-402.	7.8	28
34	On the calibration of sensor arrays for pattern recognition using the minimal number of experiments. Chemometrics and Intelligent Laboratory Systems, 2014, 130, 123-134.	3.5	145
35	Estimation of the limit of detection using information theory measures. Analytica Chimica Acta, 2014, 810, 1-9.	5.4	30
36	Continuous Prediction in Chemoresistive Gas Sensors Using Reservoir Computing. Procedia Engineering, 2014, 87, 843-846.	1.2	5

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37	Temperature optimization of metal oxide sensor arrays using Mutual Information. Sensors and Actuators B: Chemical, 2013, 187, 331-339.	7.8	49
38	On the performance of gas sensor arrays in open sampling systems using Inhibitory Support Vector Machines. Sensors and Actuators B: Chemical, 2013, 185, 462-477.	7.8	128
39	Two-dimensional wavelet transform feature extraction for porous silicon chemical sensors. Analytica Chimica Acta, 2013, 785, 1-15.	5.4	18
40	Algorithmic mitigation of sensor failure: Is sensor replacement really necessary?. Sensors and Actuators B: Chemical, 2013, 183, 211-221.	7.8	59
41	Sensor failure mitigation based on multiple kernels. , 2012, , .		1
42	Quality Coding by Neural Populations in the Early Olfactory Pathway: Analysis Using Information Theory and Lessons for Artificial Olfactory Systems. PLoS ONE, 2012, 7, e37809.	2.5	20
43	Biologically Inspired Computation for Chemical Sensing. Procedia Computer Science, 2011, 7, 226-227.	2.0	7
44	Optical Label-Free Nanoplasmonic Biosensing Using a Vertical-Cavity Surface-Emitting Laser and Charge-Coupled Device. Analytical Chemistry, 2010, 82, 1535-1539.	6.5	11
45	Ethylene optical spectrometer for apple ripening monitoring in controlled atmosphere store-houses. Sensors and Actuators B: Chemical, 2009, 136, 546-554.	7.8	36
46	Limits to the integration of filters and lenses on thermoelectric IR detectors by flip-chip techniques. Sensors and Actuators A: Physical, 2009, 149, 65-73.	4.1	18
47	A compact optical multichannel system for ethylene monitoring. Microsystem Technologies, 2008, 14, 637-644.	2.0	19
48	Design and fabrication of silicon-based mid infrared multi-lenses for gas sensing applications. Sensors and Actuators B: Chemical, 2008, 132, 498-507.	7.8	19
49	Design and Fabrication of Micromachined Silicon Based Mid Infrared Multilenses for Gas Sensing Applications. , 2007, , .		2
50	A compact optical ethylene monitoring system. , 2007, , .		3
51	Exploration of the metrological performance of a gas detector based on an array of unspecific infrared filters. Sensors and Actuators B: Chemical, 2006, 116, 183-191.	7.8	18
52	Fresnel lenses: study and fabrication in silicon technology for medium-IR applications. , 2006, 6186, 233.		5
53	<title>A highly sensitive IR-optical sensor for ethylene-monitoring</title>. , 2005, 5836, 452.		9
54	<title>Non-selective NDIR array for gas detection</title>. , 2005, , .		0

#	ARTICLE	IF	CITATIONS
55	Improving the Robustness of Odor Sensing Systems by Multivariate Signal Processing. , 0, , 296-316.		5