

# Alexander Vergara

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10715953/publications.pdf>

Version: 2024-02-01

27  
papers

1,364  
citations

430874

18  
h-index

713466

21  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1214  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical Discrimination in Turbulent Gas Mixtures with MOX Sensors Validated by Gas Chromatography-Mass Spectrometry. <i>Sensors</i> , 2014, 14, 19336-19353.	3.8	67
2	Cooperative classifiers for reconfigurable sensor arrays. <i>Sensors and Actuators B: Chemical</i> , 2014, 199, 83-92.	7.8	37
3	On the calibration of sensor arrays for pattern recognition using the minimal number of experiments. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2014, 130, 123-134.	3.5	145
4	Estimation of the limit of detection using information theory measures. <i>Analytica Chimica Acta</i> , 2014, 810, 1-9.	5.4	30
5	Demonstration of Fast and Accurate Discrimination and Quantification of Chemically Similar Species Utilizing a Single Cross-Selective Chemiresistor. <i>Analytical Chemistry</i> , 2014, 86, 6753-6757.	6.5	23
6	Automatic Fault Identification and On-line Unsupervised Calibration of Replaced Sensors by Means of Cooperative Classifiers. <i>Procedia Engineering</i> , 2014, 87, 855-858.	1.2	2
7	An adaptive classification model based on the Artificial Immune System for chemical sensor drift mitigation. <i>Sensors and Actuators B: Chemical</i> , 2013, 177, 1017-1026.	7.8	53
8	Thermally-assisted transient analysis for reducing the response time of microhotplate gas sensors. , 2013, , .		2
9	On the performance of gas sensor arrays in open sampling systems using Inhibitory Support Vector Machines. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 462-477.	7.8	128
10	Two-dimensional wavelet transform feature extraction for porous silicon chemical sensors. <i>Analytica Chimica Acta</i> , 2013, 785, 1-15.	5.4	18
11	Algorithmic mitigation of sensor failure: Is sensor replacement really necessary?. <i>Sensors and Actuators B: Chemical</i> , 2013, 183, 211-221.	7.8	59
12	On time series features and kernels for machine olfaction. <i>Sensors and Actuators B: Chemical</i> , 2012, 174, 535-546.	7.8	26
13	Multifrequency Interrogation of Nanostructured Gas Sensor Arrays: A Tool for Analyzing Response Kinetics. <i>Analytical Chemistry</i> , 2012, 84, 7502-7510.	6.5	34
14	Rapid Analysis, Self-Calibrating Array for Air Monitoring. , 2012, , .		3
15	Chemical gas sensor drift compensation using classifier ensembles. <i>Sensors and Actuators B: Chemical</i> , 2012, 166-167, 320-329.	7.8	463
16	Orthogonal decomposition of chemo-sensory cues. <i>Sensors and Actuators B: Chemical</i> , 2011, 159, 126-134.	7.8	11
17	Gas sensor drift mitigation using classifier ensembles. , 2011, , .		5
18	Sensor Selection and Chemo-Sensory Optimization: Toward an Adaptable Chemo-Sensory System. <i>Frontiers in Neuroengineering</i> , 2011, 4, 19.	4.8	19

#	ARTICLE	IF	CITATIONS
19	A sensor conditioning principle for odor identification. Sensors and Actuators B: Chemical, 2010, 146, 472-476.	7.8	15
20	Information-theoretic optimization of chemical sensors. Sensors and Actuators B: Chemical, 2010, 148, 298-306.	7.8	30
21	A unified framework for Volatile Organic Compound classification and regression. , 2010, , .		7
22	Optimized Feature Extraction for Temperature-Modulated Gas Sensors. Journal of Sensors, 2009, 2009, 1-10.	1.1	22
23	Kullback-Leibler distance optimization for artificial chemo-sensors. , 2009, , .		4
24	Acceleration of chemo-sensory information processing using transient features. Sensors and Actuators B: Chemical, 2009, 137, 507-512.	7.8	97
25	Reducing power consumption via a discontinuous operation of temperature-modulated micro-hotplate gas sensors: Application to the logistics chain of fruit. Sensors and Actuators B: Chemical, 2008, 129, 311-318.	7.8	20
26	Feature extraction of metal oxide gas sensors using dynamic moments. Sensors and Actuators B: Chemical, 2007, 122, 219-226.	7.8	43
27	Feature Selection and Sensor Array Optimization in Machine Olfaction. , 0, , 1-61.		1