Santiago Marco

List of Publications by Year
in descending order

228 papers	5,533 citations	101496 36 h-index	102432 66 g-index
228 all docs	228 docs citations	228 times ranked	4854 citing authors

#	Article	IF	Citations
1	RFID smart tag for traceability and cold chain monitoring of foods: Demonstration in an intercontinental fresh fish logistic chain. Journal of Food Engineering, 2009, 93, 394-399.	2.7	448
2	Measuring Gas Concentration and Wind Intensity in a Turbulent Wind Tunnel with a Mobile Robot. Journal of Sensors, 2016, 2016, 1-8.	0.6	409
3	Signal and Data Processing for Machine Olfaction and Chemical Sensing: A Review. IEEE Sensors Journal, 2012, 12, 3189-3214.	2.4	272
4	Drift compensation of gas sensor array data by Orthogonal Signal Correction. Chemometrics and Intelligent Laboratory Systems, 2010, 100, 28-35.	1.8	189
5	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.	4.0	170
6	Drift compensation of gas sensor array data by common principal component analysis. Sensors and Actuators B: Chemical, 2010, 146, 460-465.	4.0	167
7	Flexible tag microlab development: Gas sensors integration in RFID flexible tags for food logistic. Sensors and Actuators B: Chemical, 2007, 127, 2-7.	4.0	147
8	Calibration transfer and drift counteraction in chemical sensor arrays using Direct Standardization. Sensors and Actuators B: Chemical, 2016, 236, 1044-1053.	4.0	147
9	Environmental chemical sensing using small drones: A review. Science of the Total Environment, 2020, 748, 141172.	3.9	109
10	Chemical Sensor Systems and Associated Algorithms for Fire Detection: A Review. Sensors, 2018, 18, 553.	2.1	100
11	Characterisation of humidity dependence of a metal oxide semiconductor sensor array using partial least squares. Sensors and Actuators B: Chemical, 2008, 131, 230-235.	4.0	92
12	Estimation of the limit of detection in semiconductor gas sensors through linearized calibration models. Analytica Chimica Acta, 2018, 1013, 13-25.	2.6	92
13	Smelling Nano Aerial Vehicle for Gas Source Localization and Mapping. Sensors, 2019, 19, 478.	2.1	88
14	Low Power Operation of Temperature-Modulated Metal Oxide Semiconductor Gas Sensors. Sensors, 2018, 18, 339.	2.1	86
15	An RFID reader with onboard sensing capability for monitoring fruit quality. Sensors and Actuators B: Chemical, 2007, 127, 143-149.	4.0	81
16	Gas identification with tin oxide sensor array and self-organizing maps: adaptive correction of sensor drifts. IEEE Transactions on Instrumentation and Measurement, 1998, 47, 316-321.	2.4	76
17	Non-selective NDIR array for gas detection. Sensors and Actuators B: Chemical, 2007, 127, 69-73.	4.0	67
18	High-performance piezoresistive pressure sensors for biomedical applications using very thin structured membranes. Measurement Science and Technology, 1996, 7, 1195-1203.	1.4	62

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19	Design of a modular micropump based on anodic bonding. Journal of Micromechanics and Microengineering, 1997, 7, 179-182.	1.5	61
20	Multivariate estimation of the limit of detection by orthogonal partial least squares in temperature-modulated MOX sensors. Analytica Chimica Acta, 2018, 1019, 49-64.	2.6	58
21	Etching front control of ‹110 › strips for corner compensation. Sensors and Actuators A: Physical, 1993, 37-38, 727-732.	2.0	56
22	Calibration transfer in temperature modulated gas sensor arrays. Sensors and Actuators B: Chemical, 2016, 231, 276-284.	4.0	55
23	The need for external validation in machine olfaction: emphasis on health-related applications. Analytical and Bioanalytical Chemistry, 2014, 406, 3941-3956.	1.9	53
24	An intelligent detector based on temperature modulation of a gas sensor with a digital signal processor. Sensors and Actuators B: Chemical, 2001, 78, 32-39.	4.0	52
25	Application of an Array of Metal-Oxide Semiconductor Gas Sensors in an Assistant Personal Robot for Early Gas Leak Detection. Sensors, 2019, 19, 1957.	2.1	51
26	Direct coupling of a gas–liquid separator to an ion mobility spectrometer for the classification of different white wines using chemometrics tools. Talanta, 2011, 84, 471-479.	2.9	50
27	Temperature optimization of metal oxide sensor arrays using Mutual Information. Sensors and Actuators B: Chemical, 2013, 187, 331-339.	4.0	49
28	On-line novelty detection by recursive dynamic principal component analysis and gas sensor arrays under drift conditions. IEEE Sensors Journal, 2006, 6, 770-783.	2.4	46
29	Artificial Olfaction in the 21st Century. IEEE Sensors Journal, 2021, 21, 12969-12990.	2.4	46
30	Overoptimism in cross-validation when using partial least squares-discriminant analysis for omics data: a systematic study. Analytical and Bioanalytical Chemistry, 2018, 410, 5981-5992.	1.9	44
31	Thermal modeling and management in ultrathin chip stack technology. IEEE Transactions on Components and Packaging Technologies, 2002, 25, 244-253.	1.4	43
32	Ultra-low-power components for an RFID Tag with physical and chemical sensors. Microsystem Technologies, 2008, 14, 581-588.	1.2	42
33	Nonlinear inverse dynamic models of gas sensing systems based on chemical sensor arrays for quantitative measurements. IEEE Transactions on Instrumentation and Measurement, 1998, 47, 644-651.	2.4	39
34	A portable electronic nose based on embedded PC technology and GNU/Linux: hardware, software and applications. IEEE Sensors Journal, 2002, 2, 235-246.	2.4	39
35	Sensor-array calibration time reduction by dynamic modelling. Sensors and Actuators B: Chemical, 1995, 25, 578-583.	4.0	38
36	Gas identification with tin oxide sensor array and self organizing maps: adaptive correction of sensor drifts. , 0, , .		37

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37	Hard modeling Multivariate Curve Resolution using LASSO: Application to Ion Mobility Spectra. Chemometrics and Intelligent Laboratory Systems, 2010, 104, 318-332.	1.8	37
38	A micromachined thermoelectric sensor for natural gas analysis: Thermal model and experimental results. Sensors and Actuators B: Chemical, 2008, 134, 551-558.	4.0	36
39	Ethylene optical spectrometer for apple ripening monitoring in controlled atmosphere store-houses. Sensors and Actuators B: Chemical, 2009, 136, 546-554.	4.0	36
40	Rapid detection of sepsis in rats through volatile organic compounds in breath. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2012, 881-882, 76-82.	1.2	36
41	A biomimetic approach to machine olfaction, featuring a very large-scale chemical sensor array and embedded neuro-bio-inspired computation. Microsystem Technologies, 2014, 20, 729-742.	1.2	36
42	A new method to analyse signal transients in chemical sensors. Sensors and Actuators B: Chemical, 1994, 18, 308-312.	4.0	35
43	Detection of diverse mould species growing on building materials by gas sensor arrays and pattern recognition. Sensors and Actuators B: Chemical, 2006, 119, 33-40.	4.0	34
44	A stability based validity method for fuzzy clustering. Pattern Recognition, 2010, 43, 1292-1305.	5.1	33
45	Bioinspired early detection through gas flow modulation in chemo-sensory systems. Sensors and Actuators B: Chemical, 2015, 206, 538-547.	4.0	33
46	A time-domain method for the analysis of thermal impedance response preserving the convolution form. IEEE Transactions on Components and Packaging Technologies, 1999, 22, 238-244.	1.4	31
47	Combining Non Selective Gas Sensors on a Mobile Robot for Identification and Mapping of Multiple Chemical Compounds. Sensors, 2014, 14, 17331-17352.	2.1	31
48	Estimation of the limit of detection using information theory measures. Analytica Chimica Acta, 2014, 810, 1-9.	2.6	30
49	Discontinuously Operated Metal Oxide Gas Sensors for Flexible Tag Microlab Applications. IEEE Sensors Journal, 2008, 8, 176-181.	2.4	29
50	Early fire detection based on gas sensor arrays: Multivariate calibration and validation. Sensors and Actuators B: Chemical, 2022, 352, 130961.	4.0	29
51	Dynamic calibration of QMB polymer-coated sensors by Wiener kernel estimation. Sensors and Actuators B: Chemical, 1995, 27, 275-285.	4.0	28
52	Different strategies for the identification of gas sensing systems. Sensors and Actuators B: Chemical, 1996, 34, 213-223.	4.0	28
53	The potential of ion mobility spectrometry (IMS) for detection of 2,4,6-trichloroanisole (2,4,6-TCA) in wine. Talanta, 2012, 93, 200-205.	2.9	28
54	RHINOS: A lightweight portable electronic nose for real-time odor quantification in wastewater treatment plants. IScience, 2021, 24, 103371.	1.9	27

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55	Multi-unit calibration rejects inherent device variability of chemical sensor arrays. Sensors and Actuators B: Chemical, 2018, 265, 142-154.	4.0	26
56	A portable forced oscillation device for respiratory home monitoring. European Respiratory Journal, 2002, 19, 146-150.	3.1	24
57	Multivariate curve resolution applied to temperature-modulated metal oxide gas sensors. Sensors and Actuators B: Chemical, 2010, 145, 464-473.	4.0	24
58	Fast Measurements with MOX Sensors: A Least-Squares Approach to Blind Deconvolution. Sensors, 2019, 19, 4029.	2.1	24
59	Evaluation of fish spoilage by means of a single metal oxide sensor under temperature modulation. Sensors and Actuators B: Chemical, 2010, 146, 477-482.	4.0	23
60	Gas distribution mapping and source localization using a 3D grid of metal oxide semiconductor sensors. Sensors and Actuators B: Chemical, 2020, 304, 127309.	4.0	23
61	A surface micromachining process for the development of a medium-infrared tuneable Fabry–Perot interferometer. Sensors and Actuators A: Physical, 2004, 113, 39-47.	2.0	22
62	Dynamic simulations of micropumps. Journal of Micromechanics and Microengineering, 1996, 6, 128-130.	1.5	21
63	Feature extraction on three way enose signals. Sensors and Actuators B: Chemical, 2006, 116, 145-150.	4.0	21
64	Gas measurement systems based on IEEE1451.2 standard. Sensors and Actuators B: Chemical, 2006, 116, 11-16.	4.0	21
65	A micromachined thermoelectric sensor for natural gas analysis: Multivariate calibration results. Sensors and Actuators B: Chemical, 2012, 166-167, 338-348.	4.0	21
66	Fuzzy inference system for sensor array calibration: prediction of CO and CH4 levels in variable humidity conditions. Chemometrics and Intelligent Laboratory Systems, 2002, 64, 103-122.	1.8	20
67	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.	1.1	20
68	Ambient Intelligence Application Based on Environmental Measurements Performed with an Assistant Mobile Robot. Sensors, 2014, 14, 6045-6055.	2.1	20
69	A novel time-domain method to analyse multicomponent exponential transients. Measurement Science and Technology, 1995, 6, 135-142.	1.4	19
70	New pattern recognition systems designed for electronic noses. Sensors and Actuators B: Chemical, 2000, 69, 302-307.	4.0	19
71	Electrostatic shutter design for a miniaturized ion mobility spectrometer. Sensors and Actuators B: Chemical, 2006, 118, 338-342.	4.0	19
72	Design and fabrication of silicon-based mid infrared multi-lenses for gas sensing applications. Sensors and Actuators B: Chemical, 2008, 132, 498-507.	4.0	19

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73	Multivariate curve resolution of nonlinear ion mobility spectra followed by multivariate nonlinear calibration for quantitative prediction. Chemometrics and Intelligent Laboratory Systems, 2012, 118, 219-229.	1.8	19
74	AlpsNMR: an R package for signal processing of fully untargeted NMR-based metabolomics. Bioinformatics, 2020, 36, 2943-2945.	1.8	19
75	Comprehensive Volatilome and Metabolome Signatures of Colorectal Cancer in Urine: A Systematic Review and Meta-Analysis. Cancers, 2021, 13, 2534.	1.7	19
76	Global calibration models for temperature-modulated metal oxide gas sensors: A strategy to reduce calibration costs. Sensors and Actuators B: Chemical, 2022, 350, 130769.	4.0	19
77	Passivation analysis of micromechanical silicon structures obtained by electrochemical etch stop. Sensors and Actuators A: Physical, 1993, 37-38, 744-750.	2.0	18
78	Assessment of the final metrological characteristics of a MOEMS-based NDIR spectrometer through system modeling and data processing. IEEE Sensors Journal, 2003, 3, 587-594.	2.4	18
79	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.	4.0	18
80	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.	2.0	18
81	Aerial Mapping of Odorous Gases in a Wastewater Treatment Plant Using a Small Drone. Remote Sensing, 2021, 13, 1757.	1.8	18
82	Full Workflows for the Analysis of Gas Chromatography—Ion Mobility Spectrometry in Foodomics: Application to the Analysis of Iberian Ham Aroma. Sensors, 2021, 21, 6156.	2.1	18
83	Understanding Odor Information Segregation in the Olfactory Bulb by Means of Mitral and Tufted Cells. PLoS ONE, 2014, 9, e109716.	1.1	17
84	Classification of Bitter Orange Essential Oils According to Fruit Ripening Stage by Untargeted Chemical Profiling and Machine Learning. Sensors, 2018, 18, 1922.	2.1	17
85	Thermal desorption-ion mobility spectrometry: A rapid sensor for the detection of cannabinoids and discrimination of Cannabis sativa L. chemotypes. Sensors and Actuators B: Chemical, 2018, 273, 1413-1424.	4.0	17
86	Pulsed-Temperature Metal Oxide Gas Sensors for Microwatt Power Consumption. IEEE Access, 2020, 8, 70938-70946.	2.6	17
87	Evolutionary algorithms for compact thermal modelling of microsystems: application to a micro-pyrotechnic actuator. Journal of Micromechanics and Microengineering, 2004, 14, 1074-1082.	1.5	16
88	Fuzzy k-NN applied to moulds detection. Sensors and Actuators B: Chemical, 2005, 106, 52-60.	4.0	16
89	Comparison of the performance of three ion mobility spectrometers for measurement of biogenic amines. Analytica Chimica Acta, 2013, 758, 122-129.	2.6	16
90	Robustness to sensor damage of a highly redundant gas sensor array. Sensors and Actuators B: Chemical, 2015, 218, 296-302.	4.0	16

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91	Fire detection using a gas sensor array with sensor fusion algorithms. , 2017, , .		16
92	Qualitative and quantitative substance discrimination using a CMOS compatible non-specific NDIR microarray. Sensors and Actuators B: Chemical, 2009, 141, 396-403.	4.0	15
93	Cluster Analysis of Rat Olfactory Bulb Responses to Diverse Odorants. Chemical Senses, 2012, 37, 639-653.	1.1	15
94	Gas Sensor Array for Reliable Fire Detection. Procedia Engineering, 2016, 168, 444-447.	1.2	15
95	AFM thermal imaging as an optimization tool for a bulk micromachined thermopile. Sensors and Actuators A: Physical, 2004, 115, 440-446.	2.0	14
96	Dynamic compact thermal models with multiple power sources: application to an ultrathin chip stacking technology. IEEE Transactions on Advanced Packaging, 2005, 28, 694-703.	1.7	14
97	MALDI imaging mass spectrometry and chemometric tools to discriminate highly similar colorectal cancer tissues. Talanta, 2020, 208, 120455.	2.9	14
98	Feature Extraction for Transient Chemical Sensor Signals in Response to Turbulent Plumes: Application to Chemical Source Distance Prediction. Sensors and Actuators B: Chemical, 2020, 320, 128235.	4.0	14
99	Improved multiexponential transient spectroscopy by iterative deconvolution. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 774-780.	2.4	13
100	Feasibility of a flip-chip approach to integrate an IR filter and an IR detector in a future gas detection cell. Microsystem Technologies, 2004, 10, 382-386.	1.2	13
101	Analysis of nonlinearity in high sensitivity piezoresistive pressure sensors. Sensors and Actuators A: Physical, 1993, 37-38, 790-795.	2.0	12
102	Analysis by FT-IR spectroscopy of SiO2-polycrystalline structures used in micromechanics: Stress measurements. Sensors and Actuators A: Physical, 1992, 32, 347-353.	2.0	11
103	Analysis of electrostatic-damped piezoresistive silicon accelerometers. Sensors and Actuators A: Physical, 1993, 37-38, 317-322.	2.0	10
104	Mirror electrostatic actuation of a medium-infrared tuneable Fabry-Perot interferometer based on a surface micromachining process. Sensors and Actuators A: Physical, 2005, 123-124, 584-589.	2.0	10
105	Fault detection, identification, and reconstruction of faulty chemical gas sensors under drift conditions, using Principal Component Analysis and Multiscale-PCA. , 2010, , .		10
106	Prediction of Gas Concentration Using Gated Recurrent Neural Networks. , 2020, , .		10
107	A technology for the monolithic fabrication of a pressure sensor and related circuitry. Sensors and Actuators A: Physical, 1995, 46, 133-136.	2.0	9
108	Straight-line path following in cleaning robots using lateral ultrasonic sensors. , 0, , .		9

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109	Difficulties on the estimation of the thermal structure function from noisy thermal impedance transients. , 0, , .		9
110	Preliminary study for simultaneous detection and quantification of androgenic anabolic steroids using ELISA and pattern recognition techniques. Analyst, The, 2011, 136, 4045.	1.7	9
111	Evaluation of calibration transfer strategies between Metal Oxide gas sensor arrays. Procedia Engineering, 2015, 120, 261-264.	1.2	9
112	Chemical Source Localization Fusing Concentration Information in the Presence of Chemical Background Noise. Sensors, 2017, 17, 904.	2.1	9
113	Wind-Independent Estimation of Gas Source Distance From Transient Features of Metal Oxide Sensor Signals. IEEE Access, 2019, 7, 140460-140469.	2.6	9
114	Continuous spatial representations in the olfactory bulb may reflect perceptual categories. Frontiers in Systems Neuroscience, 2011, 5, 82.	1.2	8
115	A software tool for large-scale synthetic experiments based on polymeric sensor arrays. Sensors and Actuators B: Chemical, 2013, 177, 596-604.	4.0	8
116	A novel differential mobility analyzer as a VOC detector and multivariate techniques for identification and quantification. Analyst, The, 2013, 138, 3512.	1.7	8
117	Adaptive Asymmetric Least Squares baseline estimation for analytical instruments. , 2014, , .		8
118	Instrumental drift removal in GC-MS data for breath analysis: the short-term and long-term temporal validation of putative biomarkers for COPD. Journal of Breath Research, 2018, 12, 036007.	1.5	8
119	Characterization of odour emissions in a wastewater treatment plant using a drone-based chemical sensor system. Science of the Total Environment, 2022, 846, 157290.	3.9	8
120	Three-dimensional structures obtained by double diffusion and electrochemical etch stop. Journal of Micromechanics and Microengineering, 1993, 3, 141-142.	1.5	7
121	Modelling of microsystems with analog hardware description languages. Sensors and Actuators A: Physical, 1999, 76, 32-42.	2.0	7
122	Statistical Analysis of Coding for Molecular Properties in the Olfactory Bulb. Frontiers in Systems Neuroscience, 2011, 5, 62.	1.2	7
123	Biologically Inspired Computation for Chemical Sensing. Procedia Computer Science, 2011, 7, 226-227.	1.2	7
124	Feasibility of a flip-chip approach to integrate an IR filter and an IR detector in a future gas detection cell. Microsystem Technologies, 2004, 10, 382-386.	1.2	7
125	A Mobile Robot Agent for Gas Leak Source Detection. Advances in Intelligent Systems and Computing, 2014, , 19-25.	0.5	7
126	Quantitative GCâ€"TCD Measurements of Major Flatus Components: A Preliminary Analysis of the Diet Effect. Sensors, 2022, 22, 838.	2.1	7

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127	Finite Element Modelling of Flip Chip Gold-Gold Thermocompression Bonding. Journal of Electronic Packaging, Transactions of the ASME, 2003, 125, 549-555.	1.2	6
128	A methodology to extract dynamic compact thermal models under time-varying boundary conditions: application to a thermopile based IR sensor. Microsystem Technologies, 2005, 12, 21-29.	1.2	6
129	Force-balance interface circuit based on floating MOSFET capacitors for micro-machined capacitive accelerometers. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 546-552.	2.3	6
130	Recent Developments in the Application of Biologically Inspired Computation to Chemical Sensing. , 2009, , .		6
131	Issues in the Use of Thermal Transients to Achieve Accurate Time-Constant Spectrums and Differential Structure Functions. IEEE Transactions on Advanced Packaging, 2010, 33, 918-923.	1.7	6
132	A subspace method for the detection of transcription factor binding sites. Bioinformatics, 2012, 28, 1328-1335.	1.8	6
133	A Practical Method to Estimate the Resolving Power of a Chemical Sensor Array: Application to Feature Selection. Frontiers in Chemistry, 2018, 6, 209.	1.8	6
134	Breath analysis using electronic nose and gas chromatography-mass spectrometry: A pilot study on bronchial infections in bronchiectasis. Clinica Chimica Acta, 2022, 526, 6-13.	0.5	6
135	Metabolomics and integrated network analysis reveal roles of endocannabinoids and large neutral amino acid balance in the ayahuasca experience. Biomedicine and Pharmacotherapy, 2022, 149, 112845.	2.5	6
136	Effect of boron implantation on the structure and residual stress of LPCVD polysilicon films. Journal of Micromechanics and Microengineering, 1992, 2, 170-172.	1.5	5
137	Electronic tongue and electronic nose data fusion in classification with neural networks and fuzzy logic based models. , 0, , .		5
138	Suboptimal filtering and nonlinear time scale transformation for the analysis of multiexponential decays. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 135-140.	2.4	5
139	Ultra thin electronics for space applications. , 0, , .		5
140	On-line event detection by recursive Dynamic Principal Component Analysis and gas sensor arrays under drift conditions. , 0, , .		5
141	Modeling the Thermal Actuation in a Thermo-Pneumatic Micropump. Journal of Electronic Packaging, Transactions of the ASME, 2003, 125, 527-530.	1.2	5
142	Fresnel lenses: study and fabrication in silicon technology for medium-IR applications. , 2006, 6186, 233.		5
143	Continuous Prediction in Chemoresistive Gas Sensors Using Reservoir Computing. Procedia Engineering, 2014, 87, 843-846.	1.2	5
144	Sliding window multi-curve resolution: Application to gas chromatography–ion mobility spectrometry. Sensors and Actuators B: Chemical, 2015, 217, 13-21.	4.0	5

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145	Using Net Analyte Signal to Estimate the Limit of Detection in Temperature-modulated MOX Sensors. Procedia Engineering, 2016, 168, 436-439.	1.2	5
146	High-bandwidth e-nose for rapid tracking of turbulent plumes. , 2019, , .		5
147	Use of physiological information based on grayscale images to improve mass spectrometry imaging data analysis from biological tissues. Analytica Chimica Acta, 2019, 1074, 69-79.	2.6	5
148	Improving the Robustness of Odor Sensing Systems by Multivariate Signal Processing. , 0, , 296-316.		5
149	Anomalous optical and electrical recovery processes of the photoquenched EL2 defect produced by oxygen and boron ion implantation in gallium arsenide. Journal of Applied Physics, 1992, 71, 252-259.	1.1	4
150	Finding the best calibration points for a gas sensor array with support vector regression. , 0, , .		4
151	<title>Development of a flexible tag microlab</title>. , 2005, , .		4
152	A feasability study of drowsiness detection using driving behaviour parameters. , 2012, , .		4
153	Robustness to Sensor Damage of a Highly Redundant Gas Sensor Array. Procedia Engineering, 2014, 87, 851-854.	1.2	4
154	First characterization results obtained in a wind tunnel designed for indoor gas source detection. , 2015, , .		4
155	Improving Calibration of Chemical Gas Sensors for Fire Detection Using Small Scale Setups. Proceedings (mdpi), 2017, 1, 453.	0.2	4
156	Optimization of voltage-controlled thin-film microstructures. Sensors and Actuators A: Physical, 1995, 47, 613-617.	2.0	3
157	Improved multi-exponential transient spectroscopy by iterative deconvolution. , 0, , .		3
158	Quantitative signal processing algorithms for low cost methane and carbon monoxide detectors. , 0, , .		3
159	Residual thermomechanical stresses in thinned-chip assemblies. IEEE Transactions on Components and Packaging Technologies, 2000, 23, 673-679.	1.4	3
160	Thermal AFM: a thermopile case study. Ultramicroscopy, 2004, 101, 153-159.	0.8	3
161	Thermopile sensor array for an electronic nose integrated non-selective NDIR gas detection system. , 0, , .		3
162	Radio Frequency Identification Semi-Active Tag with Sensing Capabilities for the Food Logistic Chain. Sensor Letters, 2009, 7, 942-951.	0.4	3

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163	Gas sensor array system inspired on the sensory diversity and redundancy of the olfactory epithelium. Procedia Engineering, 2010, 5, 25-28.	1.2	3
164	3D Gas Distribution with and without Artificial Airflow: An Experimental Study with a Grid of Metal Oxide Semiconductor Gas Sensors. Proceedings (mdpi), 2018, 2, 911.	0.2	3
165	Thermal, Mechanical and MultiPhysics Simulation and Experiments in Microelectronics and Microsystems (EUROSIME'2006). Sensor Letters, 2008, 6, 1-2.	0.4	3
166	Different Strategies For The Dynamical Calibration Of Gas Sensors. , 0, , .		2
167	<title>New ultrathin 3D integration technique: technological and thermal investigations</title>. , 2000, , .		2
168	A bio-inspired nonlinear algorithm to integrate carbon monoxide concentration aiming to fulfil international standards. Sensors and Actuators B: Chemical, 2000, 69, 308-313.	4.0	2
169	Machine olfaction: pattern recognition for the identification of aromas. , 0, , .		2
170	Assessment of the final metrological characteristics of a MOEMS based NDIR spectrometer through system modelling and data processing. , 0, , .		2
171	Comparison of model order reduction methodologies for thermal problems. , 0, , .		2
172	Design and Fabrication of Micromachined Silicon Based Mid Infrared Multilenses for Gas Sensing Applications. , 2007, , .		2
173	A micromachined thermoelectric sensor for natural gas analysis: Thermal model and experimental results. , 2007, , .		2
174	Ultra-low-power electronics and devices for a multisensing RFID tag. , 2007, , .		2
175	Poisoning fault diagnosis in chemical gas sensor arrays using multivariate statistical signal processing and structured residuals generation. , 2007, , .		2
176	Data set from gas sensor array under flow modulation. Data in Brief, 2015, 3, 131-136.	0.5	2
177	Sensor systems. , 2020, , 201-220.		2
178	Selected Peer-Reviewed Papers from International Conference of Thermal, Mechanical, and Multiphysics Simulation and Experiments in Microelectronics and Microsystems (EUROSIME'2005). Sensor Letters, 2006, 4, 1-1.	0.4	2
179	On the capacitance control in deep level spectroscopy. Measurement Science and Technology, 1991, 2, 899-906.	1.4	1
180	Passivation analysis of (100) surfaces by anodic oxidation in aqueous KOH. Journal of Micromechanics and Microengineering, 1993, 3, 138-140.	1.5	1

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181	Dynamic measurements with chemical sensor arrays based on inverse modelling. , 0, , .		1
182	Electrostatically controlled multi-purpose torsional structures obtained on monocrystalline silicon. Journal of Micromechanics and Microengineering, 1996, 6, 103-104.	1.5	1
183	Simulation and Modelling of Thermo-Pneumatic Micropumps with HDLA. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 171-176.	0.4	1
184	Non-linear time scale transformation for the analysis of multiexponential decays. , 0, , .		1
185	<title>Residual thermomechanical stresses in ultrathin chip stack technology</title>. , 2000, , .		1
186	Empirical validation of thermal dynamics in a silicon microthruster: influence of boundary conditions. , 0, , .		1
187	Optical simulation of a MOEMS based tuneable Fabry-Perot interferometer. , 0, , .		1
188	11th International Symposium on olfaction and electronic nose. Sensors and Actuators B: Chemical, 2006, 116, 1.	4.0	1
189	Improving Drift Correction by Double Projection Preprocessing in Gas Sensor Arrays. , 2009, , .		1
190	Multidetection Of Anabolic Androgenic Steroids Using Immunoarrays and Pattern Recognition Techniques. , 2009, , .		1
191	A biologically inspired associative memory for artificial olfaction. , 2010, , .		1
192	Chemical Plume Source Localization with Multiple Mobile Sensors using Bayesian Inference under Background Signals. , 2011, , .		1
193	MEET: Motif elements estimation toolkit. , 2011, 2011, 6483-6.		1
194	A Large Scale Virtual Gas Sensor Array. , 2011, , .		1
195	Biologically inspired large scale chemical sensor arrays and embedded data processing. Proceedings of SPIE, 2013, , .	0.8	1
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