Santiago Marco

List of Publications by Year
in descending order

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228 papers	5,533 citations	101543 36 h-index	102487 66 g-index
228 all docs	228 docs citations	228 times ranked	4854 citing authors

#	Article	IF	Citations
1	Global calibration models for temperature-modulated metal oxide gas sensors: A strategy to reduce calibration costs. Sensors and Actuators B: Chemical, 2022, 350, 130769.	7.8	19
2	Early fire detection based on gas sensor arrays: Multivariate calibration and validation. Sensors and Actuators B: Chemical, 2022, 352, 130961.	7.8	29
3	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.	1.1	6
4	Quantitative GCâ€“TCD Measurements of Major Flatus Components: A Preliminary Analysis of the Diet Effect. Sensors, 2022, 22, 838.	3.8	7
5	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.	5.6	6
6	Towards batch correction for GC-IMS data. , 2022, , .		0
7	Characterization of odour emissions in a wastewater treatment plant using a drone-based chemical sensor system. Science of the Total Environment, 2022, 846, 157290.	8.0	8
8	Aerial Mapping of Odorous Gases in a Wastewater Treatment Plant Using a Small Drone. Remote Sensing, 2021, 13, 1757.	4.0	18
9	Comprehensive Volatilome and Metabolome Signatures of Colorectal Cancer in Urine: A Systematic Review and Meta-Analysis. Cancers, 2021, 13, 2534.	3.7	19
10	Artificial Olfaction in the 21st Century. IEEE Sensors Journal, 2021, 21, 12969-12990.	4.7	46
11	Full Workflows for the Analysis of Gas Chromatographyâ€”Ion Mobility Spectrometry in Foodomics: Application to the Analysis of Iberian Ham Aroma. Sensors, 2021, 21, 6156.	3.8	18
12	RHINOS: A lightweight portable electronic nose for real-time odor quantification in wastewater treatment plants. IScience, 2021, 24, 103371.	4.1	27
13	MALDI imaging mass spectrometry and chemometric tools to discriminate highly similar colorectal cancer tissues. Talanta, 2020, 208, 120455.	5.5	14
14	Gas distribution mapping and source localization using a 3D grid of metal oxide semiconductor sensors. Sensors and Actuators B: Chemical, 2020, 304, 127309.	7.8	23
15	Sensor systems. , 2020, , 201-220.		2
16	Environmental chemical sensing using small drones: A review. Science of the Total Environment, 2020, 748, 141172.	8.0	109
17	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.	7.8	14
18	AlpsNMR: an R package for signal processing of fully untargeted NMR-based metabolomics. Bioinformatics, 2020, 36, 2943-2945.	4.1	19

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19	Prediction of Gas Concentration Using Gated Recurrent Neural Networks. , 2020, , .		10
20	Pulsed-Temperature Metal Oxide Gas Sensors for Microwatt Power Consumption. IEEE Access, 2020, 8, 70938-70946.	4.2	17
21	Wind-Independent Estimation of Gas Source Distance From Transient Features of Metal Oxide Sensor Signals. IEEE Access, 2019, 7, 140460-140469.	4.2	9
22	Feature extraction of gas sensor signals for gas source localization. , 2019, , .		1
23	High-bandwidth e-nose for rapid tracking of turbulent plumes. , 2019, , .		5
24	Fast Measurements with MOX Sensors: A Least-Squares Approach to Blind Deconvolution. Sensors, 2019, 19, 4029.	3.8	24
25	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.	5.4	5
26	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
27	Smelling Nano Aerial Vehicle for Gas Source Localization and Mapping. Sensors, 2019, 19, 478.	3.8	88
28	Multi-unit calibration rejects inherent device variability of chemical sensor arrays. Sensors and Actuators B: Chemical, 2018, 265, 142-154.	7.8	26
29	Estimation of the limit of detection in semiconductor gas sensors through linearized calibration models. Analytica Chimica Acta, 2018, 1013, 13-25.	5.4	92
30	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.	3.0	8
31	Multivariate estimation of the limit of detection by orthogonal partial least squares in temperature-modulated MOX sensors. Analytica Chimica Acta, 2018, 1019, 49-64.	5.4	58
32	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
33	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.	3.7	44
34	Low Power Operation of Temperature-Modulated Metal Oxide Semiconductor Gas Sensors. Sensors, 2018, 18, 339.	3.8	86
35	Chemical Sensor Systems and Associated Algorithms for Fire Detection: A Review. Sensors, 2018, 18, 553.	3.8	100
36	Classification of Bitter Orange Essential Oils According to Fruit Ripening Stage by Untargeted Chemical Profiling and Machine Learning. Sensors, 2018, 18, 1922.	3.8	17

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37	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.	7.8	17
38	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
39	The Need of External Validation for Metabolomics Predictive Models. , 2018, , 197-223.		0
40	Ham quality evaluation assisted by gas chromatography ion mobility spectrometry. , 2017, , .		1
41	Fire detection using a gas sensor array with sensor fusion algorithms. , 2017, , .		16
42	Discontinuously operated MOX sensors for low power applications. , 2017, , .		1
43	Evaluation of MOX Sensor Characteristics in Ultra-Low Power Operation Modes: Application to a Semi-Passive RFID Tag for Food Logistics. Proceedings (mdpi), 2017, 1, 459.	0.2	0
44	Chemical Source Localization Fusing Concentration Information in the Presence of Chemical Background Noise. Sensors, 2017, 17, 904.	3.8	9
45	Improving Calibration of Chemical Gas Sensors for Fire Detection Using Small Scale Setups. Proceedings (mdpi), 2017, 1, 453.	0.2	4
46	Measuring Gas Concentration and Wind Intensity in a Turbulent Wind Tunnel with a Mobile Robot. Journal of Sensors, 2016, 2016, 1-8.	1.1	409
47	Using Net Analyte Signal to Estimate the Limit of Detection in Temperature-modulated MOX Sensors. Procedia Engineering, 2016, 168, 436-439.	1.2	5
48	Gas Sensor Array for Reliable Fire Detection. Procedia Engineering, 2016, 168, 444-447.	1.2	15
49	Calibration transfer and drift counteraction in chemical sensor arrays using Direct Standardization. Sensors and Actuators B: Chemical, 2016, 236, 1044-1053.	7.8	147
50	Calibration transfer in temperature modulated gas sensor arrays. Sensors and Actuators B: Chemical, 2016, 231, 276-284.	7.8	55
51	Sequence information gain based motif analysis. BMC Bioinformatics, 2015, 16, 377.	2.6	1
52	Data set from gas sensor array under flow modulation. Data in Brief, 2015, 3, 131-136.	1.0	2
53	Sliding window multi-curve resolution: Application to gas chromatographyâ€“ion mobility spectrometry. Sensors and Actuators B: Chemical, 2015, 217, 13-21.	7.8	5
54	First characterization results obtained in a wind tunnel designed for indoor gas source detection. , 2015, , .		4

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55	Evaluation of calibration transfer strategies between Metal Oxide gas sensor arrays. Procedia Engineering, 2015, 120, 261-264.	1.2	9
56	Robustness to sensor damage of a highly redundant gas sensor array. Sensors and Actuators B: Chemical, 2015, 218, 296-302.	7.8	16
57	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
58	Bioinspired early detection through gas flow modulation in chemo-sensory systems. Sensors and Actuators B: Chemical, 2015, 206, 538-547.	7.8	33
59	Understanding Odor Information Segregation in the Olfactory Bulb by Means of Mitral and Tufted Cells. PLoS ONE, 2014, 9, e109716.	2.5	17
60	Ambient Intelligence Application Based on Environmental Measurements Performed with an Assistant Mobile Robot. Sensors, 2014, 14, 6045-6055.	3.8	20
61	Combining Non Selective Gas Sensors on a Mobile Robot for Identification and Mapping of Multiple Chemical Compounds. Sensors, 2014, 14, 17331-17352.	3.8	31
62	Preliminary results on measuring gas and wind intensity with a mobile robot in an indoor area. , 2014, , .		1
63	Calibration transfer between e-noses. , 2014, , .		0
64	Estimation of the limit of detection using information theory measures. Analytica Chimica Acta, 2014, 810, 1-9.	5.4	30
65	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.	2.0	36
66	Adaptive Asymmetric Least Squares baseline estimation for analytical instruments. , 2014, , .		8
67	The need for external validation in machine olfaction: emphasis on health-related applications. Analytical and Bioanalytical Chemistry, 2014, 406, 3941-3956.	3.7	53
68	Continuous Prediction in Chemoresistive Gas Sensors Using Reservoir Computing. Procedia Engineering, 2014, 87, 843-846.	1.2	5
69	Robustness to Sensor Damage of a Highly Redundant Gas Sensor Array. Procedia Engineering, 2014, 87, 851-854.	1.2	4
70	A Mobile Robot Agent for Gas Leak Source Detection. Advances in Intelligent Systems and Computing, 2014, , 19-25.	0.6	7
71	Corridor Gas-Leak Localization Using a Mobile Robot with a Photo Ionization Detector Sensor. Sensor Letters, 2014, 12, 974-977.	0.4	1
72	Temperature optimization of metal oxide sensor arrays using Mutual Information. Sensors and Actuators B: Chemical, 2013, 187, 331-339.	7.8	49

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73	A software tool for large-scale synthetic experiments based on polymeric sensor arrays. Sensors and Actuators B: Chemical, 2013, 177, 596-604.	7.8	8
74	Comparison of the performance of three ion mobility spectrometers for measurement of biogenic amines. Analytica Chimica Acta, 2013, 758, 122-129.	5.4	16
75	A novel differential mobility analyzer as a VOC detector and multivariate techniques for identification and quantification. Analyst, The, 2013, 138, 3512.	3.5	8
76	Biologically inspired large scale chemical sensor arrays and embedded data processing. Proceedings of SPIE, 2013, , .	0.8	1
77	Cluster Analysis of Rat Olfactory Bulb Responses to Diverse Odorants. Chemical Senses, 2012, 37, 639-653.	2.0	15
78	A subspace method for the detection of transcription factor binding sites. Bioinformatics, 2012, 28, 1328-1335.	4.1	6
79	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.	3.5	19
80	A feasability study of drowsiness detection using driving behaviour parameters. , 2012, , .		4
81	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.	5.5	28
82	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.	2.3	36
83	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
84	Signal and Data Processing for Machine Olfaction and Chemical Sensing: A Review. IEEE Sensors Journal, 2012, 12, 3189-3214.	4.7	272
85	A micromachined thermoelectric sensor for natural gas analysis: Multivariate calibration results. Sensors and Actuators B: Chemical, 2012, 166-167, 338-348.	7.8	21
86	P1.9.18 A MEMS based compact natural gas analyzer implementing IEEE-1451.2 and BS-7986 smart sensor standards. , 2012, , .		0
87	P2.0.11 Temperature optimization of MOX sensor arrays for odorant discrimination. , 2012, , .		1
88	P2.0.7 Multi-way analysis of diversity and redundancy factors in large MOX gas sensor data. , 2012, , .		0
89	Preliminary study for simultaneous detection and quantification of androgenic anabolic steroids using ELISA and pattern recognition techniques. Analyst, The, 2011, 136, 4045.	3.5	9
90	Direct coupling of a gasâ€“liquid separator to an ion mobility spectrometer for the classification of different white wines using chemometrics tools. Talanta, 2011, 84, 471-479.	5.5	50

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91	Statistical Analysis of Coding for Molecular Properties in the Olfactory Bulb. Frontiers in Systems Neuroscience, 2011, 5, 62.	2.5	7
92	Continuous spatial representations in the olfactory bulb may reflect perceptual categories. Frontiers in Systems Neuroscience, 2011, 5, 82.	2.5	8
93	Biologically Inspired Computation for Chemical Sensing. Procedia Computer Science, 2011, 7, 226-227.	2.0	7
94	Chemical Plume Source Localization with Multiple Mobile Sensors using Bayesian Inference under Background Signals. , 2011, , .		1
95	MEET: Motif elements estimation toolkit. , 2011, 2011, 6483-6.		1
96	Signal Processing For Chemical Sensing: Statistics or Biological Inspiration. , 2011, , .		0
97	Study of sensory diversity and redundancy to encode for chemical mixtures. , 2011, , .		0
98	A Large Scale Virtual Gas Sensor Array. , 2011, , .		1
99	Odour Mapping Under Strong Backgrounds With a Metal Oxide Sensor Array. , 2011, , .		0
100	Drift compensation of gas sensor array data by common principal component analysis. Sensors and Actuators B: Chemical, 2010, 146, 460-465.	7.8	167
101	Gas sensor array system inspired on the sensory diversity and redundancy of the olfactory epithelium. Procedia Engineering, 2010, 5, 25-28.	1.2	3
102	A stability based validity method for fuzzy clustering. Pattern Recognition, 2010, 43, 1292-1305.	8.1	33
103	Evaluation of fish spoilage by means of a single metal oxide sensor under temperature modulation. Sensors and Actuators B: Chemical, 2010, 146, 477-482.	7.8	23
104	Multivariate curve resolution applied to temperature-modulated metal oxide gas sensors. Sensors and Actuators B: Chemical, 2010, 145, 464-473.	7.8	24
105	Drift compensation of gas sensor array data by Orthogonal Signal Correction. Chemometrics and Intelligent Laboratory Systems, 2010, 100, 28-35.	3.5	189
106	Hard modeling Multivariate Curve Resolution using LASSO: Application to Ion Mobility Spectra. Chemometrics and Intelligent Laboratory Systems, 2010, 104, 318-332.	3.5	37
107	A biologically inspired associative memory for artificial olfaction. , 2010, , .		1
108	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.	1.6	6

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109	Fault detection, identification, and reconstruction of faulty chemical gas sensors under drift conditions, using Principal Component Analysis and Multiscale-PCA. , 2010, , .		10
110	Radio Frequency Identification Semi-Active Tag with Sensing Capabilities for the Food Logistic Chain. Sensor Letters, 2009, 7, 942-951.	0.4	3
111	Blind Source Separation For Ion Mobility Spectra. , 2009, , .		0
112	Resolution of Ion Mobility Spectra for the Detection of Hazardous Substances in Real Sampling Conditions. , 2009, , .		0
113	Improving Drift Correction by Double Projection Preprocessing in Gas Sensor Arrays. , 2009, , .		1
114	Recent Developments in the Application of Biologically Inspired Computation to Chemical Sensing. , 2009, , .		6
115	Cluster Analysis of the Rat Olfactory Bulb Activity in Response to Different Odorants. , 2009, , .		0
116	Multidetection Of Anabolic Androgenic Steroids Using Immunoarrays and Pattern Recognition Techniques. , 2009, , .		1
117	Total solvent amount and human panel test predictions using gas sensor fast chromatography and multivariate linear and non-linear processing. , 2009, , .		0
118	Qualitative and quantitative substance discrimination using a CMOS compatible non-specific NDIR microarray. Sensors and Actuators B: Chemical, 2009, 141, 396-403.	7.8	15
119	Ethylene optical spectrometer for apple ripening monitoring in controlled atmosphere store-houses. Sensors and Actuators B: Chemical, 2009, 136, 546-554.	7.8	36
120	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.	5.2	448
121	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
122	Multivariate Analysis of the Activity of the Olfactory Bulb. Studies in Computational Intelligence, 2009, , 53-72.	0.9	0
123	Ultra-low-power components for an RFID Tag with physical and chemical sensors. Microsystem Technologies, 2008, 14, 581-588.	2.0	42
124	Characterisation of humidity dependence of a metal oxide semiconductor sensor array using partial least squares. Sensors and Actuators B: Chemical, 2008, 131, 230-235.	7.8	92
125	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
126	A micromachined thermoelectric sensor for natural gas analysis: Thermal model and experimental results. Sensors and Actuators B: Chemical, 2008, 134, 551-558.	7.8	36

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127	Discontinuously Operated Metal Oxide Gas Sensors for Flexible Tag Microlab Applications. IEEE Sensors Journal, 2008, 8, 176-181.	4.7	29
128	Thermoelectric MEMS sensors for natural gas analysis. , 2008, , .		0
129	Thermal, Mechanical and MultiPhysics Simulation and Experiments in Microelectronics and Microsystems (EUROSIME'2006). Sensor Letters, 2008, 6, 1-2.	0.4	3
130	Design and Fabrication of Micromachined Silicon Based Mid Infrared Multilenses for Gas Sensing Applications. , 2007, , .		2
131	A micromachined thermoelectric sensor for natural gas analysis: Thermal model and experimental results. , 2007, , .		2
132	Non-linear optical properties of PECVD Si-nc under nanosecond excitation. , 2007, , .		0
133	Ultra-low-power electronics and devices for a multisensing RFID tag. , 2007, , .		2
134	Numerical Simulation of Ion Drift within Ion Mobility Spectrometers in High Peclet Conditions using FEM Techniques. , 2007, , .		0
135	Poisoning fault diagnosis in chemical gas sensor arrays using multivariate statistical signal processing and structured residuals generation. , 2007, , .		2
136	Flexible tag microlab development: Gas sensors integration in RFID flexible tags for food logistic. Sensors and Actuators B: Chemical, 2007, 127, 2-7.	7.8	147
137	Non-selective NDIR array for gas detection. Sensors and Actuators B: Chemical, 2007, 127, 69-73.	7.8	67
138	An RFID reader with onboard sensing capability for monitoring fruit quality. Sensors and Actuators B: Chemical, 2007, 127, 143-149.	7.8	81
139	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.	2.2	6
140	On-line novelty detection by recursive dynamic principal component analysis and gas sensor arrays under drift conditions. IEEE Sensors Journal, 2006, 6, 770-783.	4.7	46
141	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.	7.8	34
142	11th International Symposium on olfaction and electronic nose. Sensors and Actuators B: Chemical, 2006, 116, 1.	7.8	1
143	Feature extraction on three way enose signals. Sensors and Actuators B: Chemical, 2006, 116, 145-150.	7.8	21
144	Gas measurement systems based on IEEE1451.2 standard. Sensors and Actuators B: Chemical, 2006, 116, 11-16.	7.8	21

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145	Electrostatic shutter design for a miniaturized ion mobility spectrometer. Sensors and Actuators B: Chemical, 2006, 118, 338-342.	7.8	19
146	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
147	Fresnel lenses: study and fabrication in silicon technology for medium-IR applications. , 2006, 6186, 233.		5
148	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
149	<title>Development of a flexible tag microlab</title>. , 2005, , .		4
150	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.	4.1	10
151	Fuzzy k-NN applied to moulds detection. Sensors and Actuators B: Chemical, 2005, 106, 52-60.	7.8	16
152	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.	2.0	6
153	<title>Non-selective NDIR array for gas detection</title>. , 2005, , .		0
154	Dynamic compact thermal models with multiple power sources: application to an ultrathin chip stacking technology. IEEE Transactions on Advanced Packaging, 2005, 28, 694-703.	1.6	14
155	Evolutionary algorithms for compact thermal modelling of microsystems: application to a micro-pyrotechnic actuator. Journal of Micromechanics and Microengineering, 2004, 14, 1074-1082.	2.6	16
156	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.	2.0	13
157	Thermal AFM: a thermopile case study. Ultramicroscopy, 2004, 101, 153-159.	1.9	3
158	A surface micromachining process for the development of a medium-infrared tuneable Fabryâ€“Perot interferometer. Sensors and Actuators A: Physical, 2004, 113, 39-47.	4.1	22
159	AFM thermal imaging as an optimization tool for a bulk micromachined thermopile. Sensors and Actuators A: Physical, 2004, 115, 440-446.	4.1	14
160	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.	2.0	7
161	Extraction of a Dynamic Multiport Compact Thermal Model for a Silicon Microthruster. Journal of Microelectronics and Electronic Packaging, 2004, 1, 30-38.	0.7	0
162	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.	4.7	18

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163	Finite Element Modelling of Flip Chip Gold-Gold Thermocompression Bonding. Journal of Electronic Packaging, Transactions of the ASME, 2003, 125, 549-555.	1.8	6
164	Modeling the Thermal Actuation in a Thermo-Pneumatic Micropump. Journal of Electronic Packaging, Transactions of the ASME, 2003, 125, 527-530.	1.8	5
165	A portable electronic nose based on embedded PC technology and GNU/Linux: hardware, software and applications. IEEE Sensors Journal, 2002, 2, 235-246.	4.7	39
166	Thermal modeling and management in ultrathin chip stack technology. IEEE Transactions on Components and Packaging Technologies, 2002, 25, 244-253.	1.3	43
167	A portable forced oscillation device for respiratory home monitoring. European Respiratory Journal, 2002, 19, 146-150.	6.7	24
168	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.	3.5	20
169	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.	7.8	52
170	Suboptimal filtering and nonlinear time scale transformation for the analysis of multiexponential decays. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 135-140.	4.7	5
171	Improved multiexponential transient spectroscopy by iterative deconvolution. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 774-780.	4.7	13
172	<title>Test structures for CMOS-compatible silicon pressure sensor reliability characterization</title>. , 2000, , .		0
173	<title>New ultrathin 3D integration technique: technological and thermal investigations</title>. , 2000, , .		2
174	<title>Residual thermomechanical stresses in ultrathin chip stack technology</title>. , 2000, , .		1
175	New pattern recognition systems designed for electronic noses. Sensors and Actuators B: Chemical, 2000, 69, 302-307.	7.8	19
176	A bio-inspired nonlinear algorithm to integrate carbon monoxide concentration aiming to fulfil international standards. Sensors and Actuators B: Chemical, 2000, 69, 308-313.	7.8	2
177	Residual thermomechanical stresses in thinned-chip assemblies. IEEE Transactions on Components and Packaging Technologies, 2000, 23, 673-679.	1.3	3
178	Modelling of microsystems with analog hardware description languages. Sensors and Actuators A: Physical, 1999, 76, 32-42.	4.1	7
179	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.	1.3	31
180	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.	4.7	76

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181	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.	4.7	39
182	Design of a modular micropump based on anodic bonding. Journal of Micromechanics and Microengineering, 1997, 7, 179-182.	2.6	61
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	High-performance piezoresistive pressure sensors for biomedical applications using very thin structured membranes. Measurement Science and Technology, 1996, 7, 1195-1203.	2.6	62
185	Different strategies for the identification of gas sensing systems. Sensors and Actuators B: Chemical, 1996, 34, 213-223.	7.8	28
186	Dynamic simulations of micropumps. Journal of Micromechanics and Microengineering, 1996, 6, 128-130.	2.6	21
187	Electrostatically controlled multi-purpose torsional structures obtained on monocrystalline silicon. Journal of Micromechanics and Microengineering, 1996, 6, 103-104.	2.6	1
188	Annealing effects in undoped and phosphorus doped low temperature oxide layers. Materials Science and Technology, 1995, 11, 1219-1222.	1.6	0
189	A technology for the monolithic fabrication of a pressure sensor and related circuitry. Sensors and Actuators A: Physical, 1995, 46, 133-136.	4.1	9
190	Optimization of voltage-controlled thin-film microstructures. Sensors and Actuators A: Physical, 1995, 47, 613-617.	4.1	3
191	Dynamic calibration of QMB polymer-coated sensors by Wiener kernel estimation. Sensors and Actuators B: Chemical, 1995, 27, 275-285.	7.8	28
192	Sensor-array calibration time reduction by dynamic modelling. Sensors and Actuators B: Chemical, 1995, 25, 578-583.	7.8	38
193	A novel time-domain method to analyse multicomponent exponential transients. Measurement Science and Technology, 1995, 6, 135-142.	2.6	19
194	A new method to analyse signal transients in chemical sensors. Sensors and Actuators B: Chemical, 1994, 18, 308-312.	7.8	35
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