Eduard Llobet

List of Publications by Year in Descending Order

291 papers	**9,121** citations	**54** h-index	**80** g-index
327 ext. papers	**10,267** ext. citations	**5.9** avg, IF	**6.26** L-index

#	Paper	IF	Citations
291	Nanosensors for food logistics **2022**, 657-683		
290	Chemical vapour deposited ZnO nanowires for detecting ethanol and NO2. *Journal of Alloys and Compounds*, **2022**, 890, 161923	5.7	2
289	PdO and PtO loaded WS2 boosts NO2 gas sensing characteristics at room temperature. *Sensors and Actuators B: Chemical*, **2022**, 364, 131905	8.5	2
288	Acceleration and drift reduction of MOX gas sensors using active sigma-delta controls based on dielectric excitation. *Sensors and Actuators B: Chemical*, **2022**, 365, 131940	8.5	0
287	Thiol-Amine Functionalized Decorated Carbon Nanotubes for Biomarker Gases Detection. *Chemosensors*, **2021**, 9, 87	4	1
286	Facile synthesis of Pd@ZnO core@shell nanoparticles for selective ethanol detection. *Materials Letters: X*, **2021**, 10, 100068	0.5	1
285	CVD growth of self-assembled 2D and 1D WS2 nanomaterials for the ultrasensitive detection of NO2. *Sensors and Actuators B: Chemical*, **2021**, 326, 128813	8.5	19
284	Zirconium oxide nanoarrays via the self-organized anodizing of Al/Zr bilayers on substrates. *Materials Chemistry Frontiers*, **2021**, 5, 1917-1931	7.8	4
283	Physical and photocatalytic properties of sprayed Dy doped ZnO thin films under sunlight irradiation for degrading methylene blue.. *RSC Advances*, **2021**, 11, 24917-24925	3.7	2
282	An Ultrasensitive Room-Temperature H2S Gas Sensor Based on 3D Assembly of CuO Decorated WS2 Nanomaterial. *IEEE Sensors Journal*, **2021**, 1-1	4	5
281	Graphene-based gas sensors, working principles and sensing parameters **2021**, 459-486		0
280	Perovskite@Graphene Nanohybrids for Breath Analysis: A Proof-of-Concept. *Chemosensors*, **2021**, 9, 215	4	1
279	Graphene Loading with Polypyrrole Nanoparticles for Trace-Level Detection of Ammonia at Room Temperature. *ACS Applied Materials & Interfaces*, **2021**, 13, 40909-40921	9.5	3
278	Comparative analysis of volatile organic compounds of breath and urine for distinguishing patients with liver cirrhosis from healthy controls by using electronic nose and voltammetric electronic tongue. *Analytica Chimica Acta*, **2021**, 1184, 339028	6.6	2
277	Metal Oxide Nanoparticle-Decorated Few Layer Graphene Nanoflake Chemoresistors for the Detection of Aromatic Volatile Organic Compounds. *Sensors*, **2020**, 20,	3.8	10
276	The role of anions and cations in the gas sensing mechanisms of graphene decorated with lead halide perovskite nanocrystals. *Chemical Communications*, **2020**, 56, 8956-8959	5.8	12
275	Synthesis and characterization of a highly sensitive and selective electrochemical sensor based on molecularly imprinted polymer with gold nanoparticles modified screen-printed electrode for glycerol determination in wastewater. *Talanta*, **2020**, 216, 120953	6.2	31

274	Fluctuation enhanced gas sensing using UV irradiated Au-nanoparticle-decorated WO3-nanowire films. *International Journal on Smart Sensing and Intelligent Systems*, **2020**, 7, 1-5	0.4	1
273	Tungsten trioxide nanowires decorated with iridium oxide nanoparticles as gas sensing material. *Journal of Alloys and Compounds*, **2020**, 812, 152156	5.7	7
272	Carbon nanomaterials functionalized with macrocyclic compounds for sensing vapors of aromatic VOCs **2020**, 223-237		3
271	A New Approach to NO2 Gas Sensing Based on Pulsed UV Light and FFT Analysis Using MOX Sensors. *IEEE Sensors Journal*, **2020**, 20, 397-404	4	3
270	Carbon nanomaterials **2020**, 55-84		4
269	Wafer-scale few-layer graphene growth on Cu/Ni films for gas sensing applications. *Sensors and Actuators B: Chemical*, **2020**, 305, 127458	8.5	20
268	LoRa Sensor Network Development for Air Quality Monitoring or Detecting Gas Leakage Events. *Sensors*, **2020**, 20,	3.8	12
267	Gas Sensing Properties of Perovskite Decorated Graphene at Room Temperature. *Sensors*, **2019**, 19,	3.8	21
266	Control of Surface Potential in WO3 Gas Sensors Using UV Light **2019**,		1
265	Carbon Nanomaterials Integrated in Rugged and Inexpensive Sensing Platforms for the In-Field Detection of Chemical Warfare Agents. *NATO Science for Peace and Security Series A: Chemistry and Biology*, **2019**, 13-32	0.1	1
264	Raman and XPS studies of ammonia sensitive polypyrrole nanorods and nanoparticles. *Scientific Reports*, **2019**, 9, 8465	4.9	71
263	Diamondoid Nanostructures as sp3-Carbon-Based Gas Sensors. *Angewandte Chemie*, **2019**, 131, 10038-10043	3.0	1
262	Diamondoid Nanostructures as sp -Carbon-Based Gas Sensors. *Angewandte Chemie - International Edition*, **2019**, 58, 9933-9938	16.4	15
261	A tungsten oxide‒lutetium bisphthalocyanine n‒p heterojunction: from nanomaterials to a new transducer for chemo-sensing. *Journal of Materials Chemistry C*, **2019**, 7, 6448-6455	7.1	13
260	Gas sensing properties of ZnO nanostructures (flowers/rods) synthesized by hydrothermal method. *Sensors and Actuators B: Chemical*, **2019**, 292, 24-31	8.5	113
259	Hydrophilicity and carbon chain length effects on the gas sensing properties of chemoresistive, self-assembled monolayer carbon nanotube sensors. *Beilstein Journal of Nanotechnology*, **2019**, 10, 565-577	3	6
258	Testing the Reliability of Flexible MOX Gas Sensors under Strain. *Proceedings (mdpi)*, **2019**, 14, 20	0.3	0
257	WO3 nanowires loaded with cobalt oxide nanoparticles, deposited by a two-step AACVD for gas sensing applications. *Sensors and Actuators B: Chemical*, **2019**, 298, 126868	8.5	15

256	Nanomaterials for the Selective Detection of Hydrogen at Trace Levels in the Ambient **2019**, 1223-1246		
255	The role of Al concentration on improving the photocatalytic performance of nanostructured ZnO/ZnO:Al/ZnO multilayer thin films. *Journal of Alloys and Compounds*, **2019**, 788, 289-301	5.7	36
254	Multiwalled carbon nanotube based aromatic volatile organic compound sensor: sensitivity enhancement through 1-hexadecanethiol functionalisation. *Beilstein Journal of Nanotechnology*, **2019**, 10, 2364-2373	3	7
253	Low Kinetic Energy Oxygen Ion Irradiation of Vertically Aligned Carbon Nanotubes. *Applied Sciences (Switzerland)*, **2019**, 9, 5342	2.6	3
252	Performance of Flexible Chemoresistive Gas Sensors after Having Undergone Automated Bending Tests. *Sensors*, **2019**, 19,	3.8	9
251	Exploiting sensor geometry for enhanced gas sensing properties of fluorinated carbon nanotubes under humid environment. *Sensors and Actuators B: Chemical*, **2019**, 281, 945-952	8.5	18
250	Wet chemistry route for the decoration of carbon nanotubes with iron oxide nanoparticles for gas sensing. *Beilstein Journal of Nanotechnology*, **2019**, 10, 105-118	3	6
249	AACVD and gas sensing properties of nickel oxide nanoparticle decorated tungsten oxide nanowires. *Journal of Materials Chemistry C*, **2018**, 6, 5181-5192	7.1	22
248	Hafnium-Oxide 3-D Nanofilms via the Anodizing of Al/Hf Metal Layers. *Chemistry of Materials*, **2018**, 30, 2694-2708	9.6	19
247	Nanomaterials for the Selective Detection of Hydrogen at Trace Levels in the Ambient **2018**, 1-24		1
246	Emerging approach for analytical characterization and geographical classification of Moroccan and French honeys by means of a voltammetric electronic tongue. *Food Chemistry*, **2018**, 243, 36-42	8.5	34
245	Using a Second Order Sigma-Delta Control to Improve the Performance of Metal-Oxide Gas Sensors. *Sensors*, **2018**, 18,	3.8	6
244	Flexible Gas Sensors Employing Octahedral Indium Oxide Films. *Sensors*, **2018**, 18,	3.8	12
243	Using the Transient Response of WONanoneedles under Pulsed UV Light in the Detection of NH and NO*Sensors*, **2018**, 18,	3.8	9
242	Development of a highly sensitive and selective molecularly imprinted electrochemical sensor for sulfaguanidine detection in honey samples. *Journal of Electroanalytical Chemistry*, **2018**, 823, 647-655	4.1	21
241	Gas Sensing Properties of Carbon Nanotubes Decorated with Iridium Oxide Nanoparticles. *Proceedings (mdpi)*, **2018**, 2, 874	0.3	4
240	Gas Sensing with Iridium Oxide Nanoparticle Decorated Carbon Nanotubes. *Sensors*, **2018**, 19,	3.8	15
239	Architecture for the efficient manufacturing by printing of heated, planar, resistive transducers on polymeric foil for gas sensing. *Sensors and Actuators B: Chemical*, **2018**, 258, 952-960	8.5	9

238	Gas Sensing Properties of WO3 Nanowires Decorated with Iridium Oxide Nanoparticles. *Proceedings (mdpi)*, **2018**, 2, 964	0.3	
237	Solar water splitting on porous-alumina-assisted TiO2-doped WOx nanorod photoanodes: Paradoxes and challenges. *Nano Energy*, **2017**, 33, 72-87	17.1	27
236	MoS2 Carbon Nanotube Hybrid Material Growth and Gas Sensing. *Advanced Materials Interfaces*, **2017**, 4, 1700801	4.6	48
235	Gas Sensing Approaches Based on WO3 Nanowire-Back Gated Devices. *Proceedings (mdpi)*, **2017**, 1, 437	0.3	1
234	Temperature-Dependent NO Sensing Mechanisms over Indium Oxide. *ACS Sensors*, **2017**, 2, 1272-1277	9.2	47
233	Immunosensing by luminescence reduction in surface-modified microstructured SU-8. *Applied Surface Science*, **2017**, 392, 883-888	6.7	3
232	Cobalt or Silver Doped WO3 Nanowires Deposited by a Two-Step AACVD for Gas Sensing Applications. *Proceedings (mdpi)*, **2017**, 1, 438	0.3	3
231	Nanomaterials for the Selective Detection of Hydrogen Sulfide in Air. *Sensors*, **2017**, 17,	3.8	40
230	Identification of Tequila with an Array of ZnO Thin Films: A Simple and Cost-Effective Method. *Sensors*, **2017**, 17,	3.8	5
229	MHDA-Functionalized Multiwall Carbon Nanotubes for detecting non-aromatic VOCs. *Scientific Reports*, **2016**, 6, 35130	4.9	30
228	Aerosol assisted chemical vapour deposition of gas sensitive SnO2 and Au-functionalised SnO2 nanorods via a non-catalysed vapour solid (VS) mechanism. *Scientific Reports*, **2016**, 6, 28464	4.9	27
227	. *IEEE Sensors Journal*, **2016**, 16, 5152-5159	4	14
226	Active Control of the Surface Potential of Nanostructured Layers. *IEEE Sensors Journal*, **2016**, 16, 2213-2214	4	2
225	Formation and gas-sensing properties of a porous-alumina-assisted 3-D niobium-oxide nanofilm. *Sensors and Actuators B: Chemical*, **2016**, 229, 587-598	8.5	25
224	Synthesis of ZnO nanowires and impacts of their orientation and defects on their gas sensing properties. *Sensors and Actuators B: Chemical*, **2016**, 230, 109-114	8.5	35
223	Smart control of chemical gas sensors for the reduction of their time response. *Sensors and Actuators B: Chemical*, **2016**, 229, 1-6	8.5	14
222	Enhanced detection of nitrogen dioxide via combined heating and pulsed UV operation of indium oxide nano-octahedra. *Beilstein Journal of Nanotechnology*, **2016**, 7, 1507-1518	3	7
221	Electronic Noses for Monitoring the Quality of Fruit **2016**, 49-58		3

220	Performance Comparison of Fuzzy ARTMAP and LDA in Qualitative Classification of Iranian Rosa damascena Essential Oils by an Electronic Nose. *Sensors*, **2016**, 16,	3.8	12
219	Gas Sensing Properties of In 2 O 3 Cubes Prepared by a Hydrothermal Method. *Procedia Engineering* , **2016**, 168, 247-250		1
218	Pulsed UV Light Activated Gas Sensing in Tungsten Oxide Nanowires. *Procedia Engineering*, **2016**, 168, 351-354		12
217	Nickel Doped WO3 Nanoneedles Deposited by a Single Step AACVD for Gas Sensing Applications. *Procedia Engineering*, **2016**, 168, 206-210		11
216	Micromachined Gas Sensors Based on Au-functionalized SnO 2 Nanorods Directly Integrated without Catalyst Seeds via AA-CVD. *Procedia Engineering*, **2016**, 168, 1078-1081		6
215	VOC Sensing Properties of MHDA-Functionalized Multiwall Carbon Nanotubes. *Procedia Engineering*, **2016**, 168, 268-271		2
214	Aerosol-Assisted CVD-Grown PdO Nanoparticle-Decorated Tungsten Oxide Nanoneedles Extremely Sensitive and Selective to Hydrogen. *ACS Applied Materials & Interfaces*, **2016**, 8, 10413-21	9.5	71
213	Metal-substrate-supported tungsten-oxide nanoarrays via porous-alumina-assisted anodization: from nanocolumns to nanocapsules and nanotubes. *Journal of Materials Chemistry A*, **2016**, 4, 8219-8232	13	27
212	Metal Decorated WO3 Nanoneedles Fabricated by Aerosol Assisted Chemical Vapor Deposition for Optical Gas Sensing. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 10125-10132	1.3	7
211	p-Type PdO nanoparticles supported on n-type WO3 nanoneedles for hydrogen sensing. *Thin Solid Films*, **2016**, 618, 238-245	2.2	13
210	Synthesis of single crystalline In2O3 octahedra for the selective detection of NO2 and H2 at trace levels. *Journal of Materials Chemistry C*, **2016**, 4, 9418-9427	7.1	44
209	Gas discrimination using screen-printed piezoelectric cantilevers coated with carbon nanotubes. *Sensors and Actuators B: Chemical*, **2016**, 237, 1056-1065	8.5	19
208	Localized aerosol-assisted CVD of nanomaterials for the fabrication of monolithic gas sensor microarrays. *Sensors and Actuators B: Chemical*, **2015**, 216, 374-383	8.5	19
207	One-step firing for electroded PZT thick films applied to MEMS. *Smart Materials and Structures*, **2015**, 24, 025020	3.4	13
206	Design and evaluation of standard lipid prediction models based on 1H-NMR spectroscopy of human serum/plasma samples. *Metabolomics*, **2015**, 11, 1394-1404	4.7	2
205	Pt- and Pd-decorated MWCNTs for vapour and gas detection at room temperature. *Beilstein Journal of Nanotechnology*, **2015**, 6, 919-27	3	25
204	Aerosol-assisted CVD-grown WO₃ nanoneedles decorated with copper oxide nanoparticles for the selective and humidity-resilient detection of H₂S. *ACS Applied Materials & Interfaces*, **2015**, 7, 6842-51	9.5	126
203	NO2 Sensing Properties of Thermally or UV Activated In2O3 Nano-octahedra. *Procedia Engineering*, **2015**, 120, 773-776		8

202	Single Layer Gold Hotplate, Printed on Polyimide, with Heater Used as Sensing Current Drain for Metal-oxide Gas Sensor. *Procedia Engineering*, **2015**, 120, 707-710		5
201	Gas Discrimination Using Screen-printed Piezoelectric Cantilevers Coated with Carbon Nanotubes. *Procedia Engineering*, **2015**, 120, 987-992		3
200	Porous-alumina-Assisted Formation of 3-D Nanostructured Niobium Oxide Films for Advanced Sensing Applications. *Procedia Engineering*, **2015**, 120, 435-438		0
199	Oxygen plasma treated carbon nanotubes for the wireless monitoring of nitrogen dioxide levels. *Sensors and Actuators B: Chemical*, **2015**, 208, 444-449	8.5	18
198	Deep Cavitand Self-Assembled on Au NPs-MWCNT as Highly Sensitive Benzene Sensing Interface. *Advanced Functional Materials*, **2015**, 25, 4011-4020	15.6	54
197	Instrumental assessment of red meat origins and their storage time using electronic sensing systems. *Analytical Methods*, **2015**, 7, 5193-5203	3.2	48
196	Rhodium-decorated MWCNTs for detecting organic vapours. *International Journal of Nanotechnology*, **2015**, 12, 562	1.5	6
195	New approaches for improving selectivity and sensitivity of resistive gas sensors: a review. *Sensor Review*, **2015**, 35, 340-347	1.4	51
194	Nitrogen Dioxide Wireless Sensor Based on Carbon Nanotubes and UWB RFID Technology. *IEEE Antennas and Wireless Propagation Letters*, **2015**, 14, 1145-1148	3.8	7
193	Micromachined gas sensors based on tungsten oxide nanoneedles directly integrated via aerosol assisted CVD. *Sensors and Actuators B: Chemical*, **2014**, 198, 210-218	8.5	47
192	Microsensors based on Pt-nanoparticle functionalised tungsten oxide nanoneedles for monitoring hydrogen sulfide. *RSC Advances*, **2014**, 4, 1489-1495	3.7	22
191	Boron- and nitrogen-doped multi-wall carbon nanotubes for gas detection. *Carbon*, **2014**, 66, 662-673	10.4	112
190	Gas sensing properties of the nanostructured anodic ZrW oxide film. *Sensors and Actuators B: Chemical*, **2014**, 204, 588-595	8.5	7
189	Iron oxide and oxygen plasma functionalized multi-walled carbon nanotubes for the discrimination of volatile organic compounds. *Carbon*, **2014**, 78, 510-520	10.4	29
188	Aging time and brand determination of pasteurized milk using a multisensor e-nose combined with a voltammetric e-tongue. *Materials Science and Engineering C*, **2014**, 45, 348-58	8.3	40
187	Formation, Structure, Properties of niobium-oxide nanocolumn arrays via self-organized anodization of sputter-deposited aluminum-on-niobium layers. *Journal of Materials Chemistry C*, **2014**, 2, 4847	7.1	59
186	Parametric line profile analysis for in situ XRD of SnO 2 materials: Separation of size and strain contributions. *Solid State Ionics*, **2014**, 255, 21-29	3.3	2
185	Humidity Sensing Properties of Screen-printed Carbon-black an Fe(II) Spin Crossover Compound Hybrid Films. *Procedia Engineering*, **2014**, 87, 132-135		5

184	Gas sensing with gold-decorated vertically aligned carbon nanotubes. *Beilstein Journal of Nanotechnology*, **2014**, 5, 910-8	3	31
183	Fast Response Hydrogen Microsensor Based on Semiconductor Niobium-oxide Nanostructures via Smart Anodizing of Al/Nb Metal Layers. *Procedia Engineering*, **2014**, 87, 811-814		6
182	Selective hydrogen detection with TiO2 nanofilm via the porous-alumina-assisted anodizing of titanium layers **2014**,		2
181	Effect of Pt nanoparticles on the optical gas sensing properties of WO3 thin films. *Sensors*, **2014**, 14, 11427-43	3.8	14
180	Gas Sensing Properties of Metal-decorated Tungsten Oxide Nanowires Directly Grown onto Flexible Polymeric Hotplates. *Procedia Engineering*, **2014**, 87, 700-703		6
179	Pt/WO3 microsensor grown by cold wall reactor Aerosol Assisted Chemical Vapor Deposition for C6H6 and NO2 detection **2014**,		1
178	Use of a CNT-coated Piezoelectric Cantilever with Double Transduction As a Gas Sensor for Benzene Detection at Room Temperature. *Procedia Engineering*, **2014**, 87, 708-711		6
177	Time-Resolved DRIFTS, MS, and Resistance Study of SnO2 Materials: The Role of Surface Hydroxyl Groups in Formation of Donor States. *Journal of Physical Chemistry C*, **2013**, 117, 4158-4167	3.8	14
176	AA-CVD growth and ethanol sensing properties of pure and metal decorated WO3 nanoneedles. *International Journal of Nanotechnology*, **2013**, 10, 455	1.5	2
175	Aerosol assisted chemical vapour deposition of gas-sensitive nanomaterials. *Thin Solid Films*, **2013**, 548, 703-709	2.2	21
174	Gas sensors using carbon nanomaterials: A review. *Sensors and Actuators B: Chemical*, **2013**, 179, 32-45	8.5	458
173	Multi-walled carbon nanotubes for volatile organic compound detection. *Sensors and Actuators B: Chemical*, **2013**, 182, 344-350	8.5	36
172	Single-Step Deposition of Au- and Pt-Nanoparticle-Functionalized Tungsten Oxide Nanoneedles Synthesized Via Aerosol-Assisted CVD, and Used for Fabrication of Selective Gas Microsensor Arrays. *Advanced Functional Materials*, **2013**, 23, 1313-1322	15.6	119
171	MEMS-microhotplate-based hydrogen gas sensor utilizing the nanostructured porous-anodic-alumina-supported WO3 active layer. *International Journal of Hydrogen Energy*, **2013**, 38, 8011-8021	6.7	28
170	Functionalised multi-walled carbon nanotubes for chemical vapour detection. *International Journal of Nanotechnology*, **2013**, 10, 485	1.5	11
169	Gold clusters on WO3 nanoneedles grown via AACVD: XPS and TEM studies. *Materials Chemistry and Physics*, **2012**, 134, 809-813	4.4	63
168	Hydrogen sensors on the basis of SnO2‐TiO2 systems. *Sensors and Actuators B: Chemical*, **2012**, 174, 527-534	8.5	26
167	CO and H2 Sensing with CVD-Grown Tungsten Oxide Nanoneedles Decorated with Au, Pt or Cu Nanoparticles. *Procedia Engineering*, **2012**, 47, 904-907		3

166	Selectivity problem of SnO2 based materials in the presence of water vapors. *Sensors and Actuators B: Chemical*, **2012**, 170, 51-59	8.5	15
165	The Growth and Gas Sensing Properties of Mixed Oxide Nanocomposite Thin Film Derived from Anodically Oxidized Al/Ti Metal Layers. *Procedia Engineering*, **2012**, 47, 833-836		6
164	Geographical classification of Virgin Olive Oils by combining the electronic nose and tongue **2012**,		4
163	Characterization of structural changes in aptamer films for controlled release nanodevices. *Chemical Communications*, **2012**, 48, 10087-9	5.8	23
162	Feature selection versus feature compression in the building of calibration models from FTIR-spectrophotometry datasets. *Talanta*, **2012**, 88, 95-103	6.2	5
161	Multifrequency interrogation of nanostructured gas sensor arrays: a tool for analyzing response kinetics. *Analytical Chemistry*, **2012**, 84, 7502-10	7.8	30
160	Effect of the thickness of reactively sputtered WO3 submicron thin films used for NO2 detection. *Sensors and Actuators B: Chemical*, **2012**, 171-172, 18-24	8.5	27
159	A planar micro-concentrator/injector for low power consumption microchromatographic analysis of benzene and 1,3 butadiene. *Microsystem Technologies*, **2012**, 18, 489-495	1.7	1
158	Sensor selection and chemo-sensory optimization: toward an adaptable chemo-sensory system. *Frontiers in Neuroengineering*, **2011**, 4, 19		14
157	Au nanoparticle-functionalised WO3 nanoneedles and their application in high sensitivity gas sensor devices. *Chemical Communications*, **2011**, 47, 565-7	5.8	183
156	Gas sensing with Au-decorated carbon nanotubes. *ACS Nano*, **2011**, 5, 4592-9	16.7	212
155	RF sputtering as a tool for plasma treating and metal decoration. *Procedia Engineering*, **2011**, 25, 223-226		1
154	Development of a gas pre-concentrator based on carbon nanotubes for benzene detection. *Procedia Engineering*, **2011**, 25, 239-242		9
153	WO3 thin films for optical gas sensing. *Procedia Engineering*, **2011**, 25, 260-263		14
152	WO3 nano-needles by Aerosol Assisted CVD for optical sensing. *Procedia Engineering*, **2011**, 25, 761-764		1
151	Functionalized screen-printed PZT cantilevers for room temperature benzene detection. *Procedia Engineering*, **2011**, 25, 1077-1080		2
150	Hydrogen sensors on the basis of SnO2-TiO2 systems. *Procedia Engineering*, **2011**, 25, 1133-1136		32
149	Quartz crystal microbalance with dissipation measurement for proving the potential of ionic liquids as selective sensing Materials. *Procedia Engineering*, **2011**, 25, 1169-1172		7

148	Quantitative trace analysis of benzene using an array of plasma-treated metal-decorated carbon nanotubes and fuzzy adaptive resonant theory techniques. *Analytica Chimica Acta*, **2011**, 708, 19-27	6.6	18
147	A portable electronic nose system for the identification of cannabis-based drugs. *Sensors and Actuators B: Chemical*, **2011**, 155, 456-463	8.5	67
146	Gas sensors based on doped-CNT/SnO2 composites for NO2 detection at room temperature. *Thin Solid Films*, **2011**, 520, 966-970	2.2	61
145	A novel humid electronic nose combined with an electronic tongue for assessing deterioration of wine. *Sensors and Actuators A: Physical*, **2011**, 171, 152-158	3.9	62
144	Gas sensing properties of multiwall carbon nanotubes decorated with rhodium nanoparticles. *Sensors and Actuators B: Chemical*, **2011**, 160, 974-980	8.5	56
143	Monitoring of physical chemical and microbiological changes in fresh pork meat under cold storage by means of a potentiometric electronic tongue. *Food Chemistry*, **2011**, 126, 1261-1268	8.5	68
142	Preparation and characterisation of a planar pre-concentrator for benzene based on different activated carbon materials deposited by air-brushing. *Sensors and Actuators B: Chemical*, **2011**, 154, 213-219	8.5	6
141	On the use of a self organising map as feature compressor in the building of calibration models: Application to FTIR-spectrophotometry. *Sensors and Actuators B: Chemical*, **2011**, 158, 252-258	8.5	4
140	A potentiometric electronic tongue to monitor meat freshness **2010**,		3
139	Interaction of water, hydrogen and their mixtures with SnO2 based materials: the role of surface hydroxyl groups in detection mechanisms. *Physical Chemistry Chemical Physics*, **2010**, 12, 2639-47	3.6	61
138	Selectivity problem of metal oxide based sensors in the presence of water vapors. *Procedia Engineering*, **2010**, 5, 111-114		9
137	Drop-coated sensing layers on ultra low power hotplates for an RFID flexible tag microlab. *Sensors and Actuators B: Chemical*, **2010**, 144, 462-466	8.5	20
136	MS-electronic nose performance improvement using the retention time dimension and two-way and three-way data processing methods. *Sensors and Actuators B: Chemical*, **2010**, 143, 759-768	8.5	10
135	Crystallite growth kinetics of highly pure nanocrystalline tin dioxide: The effect of palladium doping. *Materials Chemistry and Physics*, **2010**, 121, 267-273	4.4	14
134	Selective detection of benzene traces at room temperature using metal decorated carbon nanotubes. *Procedia Engineering*, **2010**, 5, 385-388		5
133	Gas sensors based on multiwall carbon nanotubes decorated with tin oxide nanoclusters. *Sensors and Actuators B: Chemical*, **2010**, 145, 411-416	8.5	69
132	Fabrication of WO3 nanodot-based microsensors highly sensitive to hydrogen. *Sensors and Actuators B: Chemical*, **2010**, 149, 352-361	8.5	64
131	Room-temperature, selective detection of benzene at trace levels using plasma-treated metal-decorated multiwalled carbon nanotubes. *Carbon*, **2010**, 48, 3477-3484	10.4	84

#	Reference	IF	Cit.
130	Optimized Feature Extraction for Temperature-Modulated Gas Sensors. *Journal of Sensors*, **2009**, 2009, 1-10	2	15
129	The Influence of Wide Range Humidity on Hydrogen Detection with Sensors Based on Nano-SnO2 Materials **2009**,		2
128	Potential application of the electronic nose for shelf-life determination of raw milk and red meat **2009**,		4
127	Gas sensing properties of MWCNTs decorated with gold or tin oxide nanoparticles. *Procedia Chemistry*, **2009**, 1, 168-171		10
126	An electronic nose system based on a micro-machined gas sensor array to assess the freshness of sardines. *Sensors and Actuators B: Chemical*, **2009**, 141, 538-543	8.5	79
125	Gas sensing response of NiO nanoparticle films made by reactive gas deposition. *Sensors and Actuators B: Chemical*, **2009**, 138, 14-20	8.5	71
124	Comparative study of nanocrystalline SnO2 materials for gas sensor application: Thermal stability and catalytic activity. *Sensors and Actuators B: Chemical*, **2009**, 137, 637-643	8.5	52
123	Micro-machined WO3-based sensors with improved characteristics. *Sensors and Actuators B: Chemical*, **2009**, 140, 356-362	8.5	15
122	Mercury optical fibre probe based on a modified cladding of sensitised Al2O3 nano-particles. *Sensors and Actuators B: Chemical*, **2009**, 143, 103-110	8.5	9
121	NO2 and CO interaction with plasma treated Au-decorated MWCNTs: Detection pathways. *Procedia Chemistry*, **2009**, 1, 931-934		
120	Fabrication and mass spectrometry characterization of a planar pre-concentrator for benzene based on different airbrushed activated carbon materials. *Procedia Chemistry*, **2009**, 1, 987-990		
119	Multivariate calibration analysis of colorimetric mercury sensing using a molecular probe. *Analytica Chimica Acta*, **2009**, 633, 173-80	6.6	4
118	Carbon nanotubes randomly decorated with gold clusters: from nano2hybrid atomic structures to gas sensing prototypes. *Nanotechnology*, **2009**, 20, 375501	3.4	93
117	Carbon nanotube-TiO(2) hybrid films for detecting traces of O(2). *Nanotechnology*, **2008**, 19, 375501	3.4	53
116	Nanostructured Columnlike Tungsten Oxide Film by Anodizing Al/W/Ti Layers on Si. *Chemistry of Materials*, **2008**, 20, 6482-6493	9.6	58
115	Evolution of Surface Morphology, Crystallite Size, and Texture of WO[sub 3] Layers Sputtered onto Si-Supported Nanoporous Alumina Templates. *Journal of the Electrochemical Society*, **2008**, 155, K116	3.9	24
114	Selectivity Enhancement in Multisensor Systems Using Flow Modulation Techniques. *Sensors*, **2008**, 8, 7369-7379	3.8	13
113	Electronic Nose Based on Metal Oxide Semiconductor Sensors as an Alternative Technique for the Spoilage Classification of Red Meat. *Sensors*, **2008**, 8, 142-156	3.8	120

112	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	8.5	16
111	Novel hybrid materials for gas sensing applications made of metal-decorated MWCNTs dispersed on nano-particle metal oxides. *Sensors and Actuators B: Chemical*, **2008**, 131, 174-182	8.5	50
110	Fish freshness analysis using metallic potentiometric electrodes. *Sensors and Actuators B: Chemical*, **2008**, 131, 362-370	8.5	68
109	Thermal desorption pre-concentrator based system to assess carbon dioxide contamination by benzene. *Sensors and Actuators B: Chemical*, **2008**, 131, 85-92	8.5	12
108	Fabrication and characterisation of microporous activated carbon-based pre-concentrators for benzene vapours. *Sensors and Actuators B: Chemical*, **2008**, 132, 90-98	8.5	32
107	Micro-machined WO3-based sensors selective to oxidizing gases. *Sensors and Actuators B: Chemical*, **2008**, 132, 209-215	8.5	68
106	Novel hexagonal WO3 nanopowder with metal decorated carbon nanotubes as NO2 gas sensor. *Sensors and Actuators B: Chemical*, **2008**, 133, 151-155	8.5	75
105	Application of a portable electronic nose system to assess the freshness of Moroccan sardines. *Materials Science and Engineering C*, **2008**, 28, 666-670	8.3	61
104	Technology of metal oxide thin film deposition with interruptions. *Surface and Coatings Technology*, **2007**, 202, 453-459	4.4	6
103	Metal-decorated multi-wall carbon nanotubes for low temperature gas sensing. *Thin Solid Films*, **2007**, 515, 8322-8327	2.2	112
102	Efficient feature selection for mass spectrometry based electronic nose applications. *Chemometrics and Intelligent Laboratory Systems*, **2007**, 85, 253-261	3.8	35
101	Feature extraction of metal oxide gas sensors using dynamic moments. *Sensors and Actuators B: Chemical*, **2007**, 122, 219-226	8.5	33
100	Quantitative gas mixture analysis using temperature-modulated micro-hotplate gas sensors: Selection and validation of the optimal modulating frequencies. *Sensors and Actuators B: Chemical*, **2007**, 123, 1002-1016	8.5	54
99	An alternative global feature extraction of temperature modulated micro-hotplate gas sensors array using an energy vector approach?. *Sensors and Actuators B: Chemical*, **2007**, 124, 352-359	8.5	16
98	Gas sensing properties of WO3 thin films deposited by rf sputtering. *Sensors and Actuators B: Chemical*, **2007**, 126, 400-405	8.5	29
97	Ozone monitoring by micro-machined sensors with WO3 sensing films. *Sensors and Actuators B: Chemical*, **2007**, 126, 573-578	8.5	44
96	Thick film titania sensors for detecting traces of oxygen. *Sensors and Actuators B: Chemical*, **2007**, 127, 567-579	8.5	40
95	Building of a metal oxide gas sensor-based electronic nose to assess the freshness of sardines under cold storage. *Sensors and Actuators B: Chemical*, **2007**, 128, 235-244	8.5	63

94	Hybrid metal oxide and multiwall carbon nanotube films for low temperature gas sensing. *Sensors and Actuators B: Chemical*, **2007**, 127, 137-142	8.5	94
93	On the selectivity of nanostructured semiconductor gas sensors. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 4331-4335	1.3	26
92	Use of a MS-electronic nose for prediction of early fungal spoilage of bakery products. *International Journal of Food Microbiology*, **2007**, 114, 10-6	5.8	28
91	Variable selection for support vector machine based multisensor systems. *Sensors and Actuators B: Chemical*, **2007**, 122, 259-268	8.5	46
90	An RFID reader with onboard sensing capability for monitoring fruit quality. *Sensors and Actuators B: Chemical*, **2007**, 127, 143-149	8.5	66
89	Highly Selective NO[sub 2] Gas Sensors Made of MWCNTs and WO[sub 3] Hybrid Layers. *Journal of the Electrochemical Society*, **2007**, 154, J141	3.9	14
88	Analysis of Fish Freshness by Using Metallic Potentiometric Electrodes **2007**,		4
87	RFID reader with gas sensing capability for monitoring fruit along the logistic chain: array development and signal processing **2007**, 6589, 226		
86	Coupling fast variable selection methods to neural network-based classifiers: Application to multisensor systems. *Sensors and Actuators B: Chemical*, **2006**, 114, 522-529	8.5	17
85	Regression using fuzzy adaptive resonant theory neural network. *Electronics Letters*, **2006**, 42, 1415	1.1	1
84	Evaporation of WO3on carbon nanotube films: a new hybrid film. *Smart Materials and Structures*, **2006**, 15, 1555-1560	3.4	6
83	Electronic Tongue for Qualitative Analysis of Aqueous Solutions of Salts Using Thick-film Technology and Metal Electrodes. *Sensors*, **2006**, 6, 1128-1138	3.8	14
82	Monitoring the Freshness of Moroccan Sardines with a Neural-Network Based Electronic Nose. *Sensors*, **2006**, 6, 1209-1223	3.8	28
81	Anodic formation of low-aspect-ratio porous alumina films for metal-oxide sensor application. *Electrochimica Acta*, **2006**, 52, 1771-1780	6.7	61
80	Oxygen functionalisation of MWNT and their use as gas sensitive thick-film layers. *Sensors and Actuators B: Chemical*, **2006**, 113, 36-46	8.5	139
79	Sensitivity and selectivity improvement of rf sputtered WO3 microhotplate gas sensors. *Sensors and Actuators B: Chemical*, **2006**, 113, 241-248	8.5	84
78	WO3 films modified with functionalised multi-wall carbon nanotubes: Morphological, compositional and gas response studies. *Sensors and Actuators B: Chemical*, **2006**, 115, 33-41	8.5	109
77	Tungsten trioxide sensing layers on highly ordered nanoporous alumina template. *Sensors and Actuators B: Chemical*, **2006**, 118, 255-262	8.5	34

76	On the effects of the materials and the noble metal additives to NO2 detection. *Sensors and Actuators B: Chemical*, **2006**, 118, 311-317	8.5	24
75	On-line monitoring of CO2 quality using doped WO3 thin film sensors. *Thin Solid Films*, **2006**, 500, 302-308	1.2	38
74	Optimized temperature modulation of micro-hotplate gas sensors through pseudorandom binary sequences. *IEEE Sensors Journal*, **2005**, 5, 1369-1378	4	30
73	Nanoparticle metal-oxide films for micro-hotplate-based gas sensor systems. *IEEE Sensors Journal*, **2005**, 5, 798-809	4	13
72	Discrimination between different samples of olive oil using variable selection techniques and modified fuzzy artmap neural networks. *IEEE Sensors Journal*, **2005**, 5, 463-470	4	26
71	Gas Sensing Using Support Vector Machines. *Studies in Fuzziness and Soft Computing*, **2005**, 365-386	0.7	
70	High-resolution photoelectron spectroscopy studies on WO3films modified by Ag addition. *Journal of Physics Condensed Matter*, **2005**, 17, 6813-6822	1.8	22
69	Characterization of WO 3 :Ag films: ToF-SIMS studies of ammonia adsorption. *Applied Surface Science*, **2005**, 250, 21-28	6.7	7
68	Ethanol and H2S gas detection in air and in reducing and oxidising ambience: application of pattern recognition to analyse the output from temperature-modulated nanoparticulate WO3 gas sensors. *Sensors and Actuators B: Chemical*, **2005**, 104, 124-131	8.5	32
67	Low-level detection of ethanol and H2S with temperature-modulated WO3 nanoparticle gas sensors. *Sensors and Actuators B: Chemical*, **2005**, 104, 132-139	8.5	123
66	An ?Electronic tongue? design for the qualitative analysis of natural waters. *Sensors and Actuators B: Chemical*, **2005**, 104, 302-307	8.5	109
65	Influence of the annealing and operating temperatures on the gas-sensing properties of rf sputtered WO3 thin-film sensors. *Sensors and Actuators B: Chemical*, **2005**, 105, 271-277	8.5	122
64	A fuzzy ARTMAP- and PLS-based MS e-nose for the qualitative and quantitative assessment of rancidity in crisps. *Sensors and Actuators B: Chemical*, **2005**, 106, 677-686	8.5	11
63	New technology of metal oxide thin film preparation for chemical sensor application. *Sensors and Actuators B: Chemical*, **2005**, 109, 128-134	8.5	16
62	Optimised temperature modulation of metal oxide micro-hotplate gas sensors through multilevel pseudo random sequences. *Sensors and Actuators B: Chemical*, **2005**, 111-112, 271-280	8.5	30
61	Gas sensing properties of nanoparticle indium-doped WO3 thick films. *Sensors and Actuators B: Chemical*, **2005**, 111-112, 45-51	8.5	41
60	Towards a micro-system for monitoring ethylene in warehouses. *Sensors and Actuators B: Chemical*, **2005**, 111-112, 63-70	8.5	38
59	Fast detection of rancidity in potato crisps using e-noses based on mass spectrometry or gas sensors. *Sensors and Actuators B: Chemical*, **2005**, 106, 67-75	8.5	42

58	SOI-CMOS compatible low-power gas sensor using sputtered and drop-coated metal-oxide active layers. *Microsystem Technologies*, **2005**, 12, 160-168	1.7	11
57	X-ray investigations of nanopowder WO3 thick films. *Physica Status Solidi A*, **2005**, 202, 1973-1979		6
56	Evaluation of an electronic nose to assess fruit ripeness. *IEEE Sensors Journal*, **2005**, 5, 97-108	4	66
55	An unsupervised dimensionality-reduction technique **2005**,		1
54	Influence of the doping method on the sensitivity of Pt-doped screen-printed SnO2 sensors. *Sensors and Actuators B: Chemical*, **2004**, 97, 67-73	8.5	51
53	Building parsimonious fuzzy ARTMAP models by variable selection with a cascaded genetic algorithm: application to multisensor systems for gas analysis. *Sensors and Actuators B: Chemical*, **2004**, 99, 267-272	8.5	30
52	Detection of SO2 and H2S in CO2 stream by means of WO3-based micro-hotplate sensors. *Sensors and Actuators B: Chemical*, **2004**, 102, 219-225	8.5	55
51	Development of high sensitivity ethanol gas sensors based on Pt-doped SnO2 surfaces. *Sensors and Actuators B: Chemical*, **2004**, 99, 201-206	8.5	117
50	A route toward more selective and less humidity sensitive screen-printed SnO2 and WO3 gas sensitive layers. *Sensors and Actuators B: Chemical*, **2004**, 100, 221-227	8.5	41
49	Pt-loaded Al2O3 catalytic filters for screen-printed WO3 sensors highly selective to benzene. *Sensors and Actuators B: Chemical*, **2004**, 101, 277-283	8.5	51
48	Sputtered and screen-printed metal oxide-based integrated micro-sensor arrays for the quantitative analysis of gas mixtures. *Sensors and Actuators B: Chemical*, **2004**, 103, 23-30	8.5	24
47	Early detection of fungal growth in bakery products by use of an electronic nose based on mass spectrometry. *Journal of Agricultural and Food Chemistry*, **2004**, 52, 6068-74	5.7	44
46	Ag induced modifications on WO3 films studied by AFM, Raman and x-ray photoelectron spectroscopy. *Journal Physics D: Applied Physics*, **2004**, 37, 3383-3391	3	28
45	On-line drift counteraction for metal oxide gas sensor arrays. *Electronics Letters*, **2003**, 39, 40	1.1	5
44	Dealing with humidity in the qualitative analysis of CO and NO2 using a WO3 sensor and dynamic signal processing. *Sensors and Actuators B: Chemical*, **2003**, 95, 177-182	8.5	23
43	Screen-printed nanoparticle tin oxide films for high-yield sensor microsystems. *Sensors and Actuators B: Chemical*, **2003**, 96, 94-104	8.5	36
42	Influence of the deposition method on the morphology and elemental composition of SnO2 films for gas sensing: atomic force and X-ray photoemission spectroscopy analysis. *Sensors and Actuators B: Chemical*, **2003**, 92, 67-72	8.5	21
41	Response model for thermally modulated tin oxide-based microhotplate gas sensors. *Sensors and Actuators B: Chemical*, **2003**, 95, 203-211	8.5	43

40	Wavelet transform-based fast feature extraction from temperature modulated semiconductor gas sensors. *Sensors and Actuators B: Chemical*, **2002**, 81, 289-295	8.5	49
39	Wavelet transform and fuzzy ARTMAP-based pattern recognition for fast gas identification using a micro-hotplate gas sensor. *Sensors and Actuators B: Chemical*, **2002**, 83, 238-244	8.5	59
38	Effects of Oxygen Partial Pressure and Annealing Temperature on the Formation of Sputtered Tungsten Oxide Films. *Journal of the Electrochemical Society*, **2002**, 149, H81	3.9	41
37	The role of oxygen partial pressure and annealing temperature on the formation of W⬚O bonds in thin WO3films. *Semiconductor Science and Technology*, **2002**, 17, 522-525	1.8	53
36	Quantitative analysis of NO2 in the presence of CO using a single tungsten oxide semiconductor sensor and dynamic signal processing. *Analyst, The*, **2002**, 127, 1237-46	5	47
35	Electronic nose simulation tool centred on PSpice. *Sensors and Actuators B: Chemical*, **2001**, 76, 419-429	8.5	9
34	Electrical equivalent models of semiconductor gas sensors using PSpice. *Sensors and Actuators B: Chemical*, **2001**, 77, 275-280	8.5	19
33	Correlation between electronic nose signals and fruit quality indicators on shelf-life measurements with pinklady apples. *Sensors and Actuators B: Chemical*, **2001**, 80, 41-50	8.5	109
32	Multicomponent gas mixture analysis using a single tin oxide sensor and dynamic pattern recognition. *IEEE Sensors Journal*, **2001**, 1, 207-213	4	76
31	Wavelet Transform and Fuzzy ARTMAP Based Pattern Recognition for Fast Gas Identification Using a Micro-Hotplate Gas Sensor **2001**, 1644-1647		2
30	Synthesis and characterisation of metal suboxides for gas sensors. *Microelectronics Reliability*, **2000**, 40, 807-810	1.2	34
29	Fruit ripeness monitoring using an Electronic Nose. *Sensors and Actuators B: Chemical*, **2000**, 69, 223-229	8.5	120
28	Classification of the strain and growth phase of cyanobacteria in potable water using an electronic nose system. *IET Science, Measurement and Technology*, **2000**, 147, 158-164		28
27	Fabrication of Highly Selective Tungsten Oxide Ammonia Sensors. *Journal of the Electrochemical Society*, **2000**, 147, 776	3.9	126
26	SPICE model for quartz crystal microbalance gas sensors. *Electronics Letters*, **1999**, 35, 772	1.1	11
25	Non-destructive banana ripeness determination using a neural network-based electronic nose. *Measurement Science and Technology*, **1999**, 10, 538-548	2	113
24	Neural network based electronic nose for apple ripeness determination. *Electronics Letters*, **1999**, 35, 821	1.1	45
23	Selective methane detection under varying moisture conditions using static and dynamic sensor signals. *Sensors and Actuators B: Chemical*, **1999**, 60, 106-117	8.5	12

22	Fuzzy ARTMAP based electronic nose data analysis. *Sensors and Actuators B: Chemical*, **1999**, 61, 183-190	8.5	85
21	SPICE model for resistive gas and odour sensors. *IET Circuits, Devices and Systems*, **1999**, 146, 101		10
20	Electronic noses: a review of signal processing techniques. *IET Circuits, Devices and Systems*, **1999**, 146, 297		142
19	Transient response of thick-film tin oxide gas-sensors to multicomponent gas mixtures. *Sensors and Actuators B: Chemical*, **1998**, 47, 104-112	8.5	15
18	Numerical simulation of the electrode geometry and position effects on semiconductor gas sensor response. *Sensors and Actuators B: Chemical*, **1998**, 48, 425-431	8.5	30
17	Steady-State and Transient Behavior of Thick-Film Tin Oxide Sensors in the Presence of Gas Mixtures. *Journal of the Electrochemical Society*, **1998**, 145, 1772-1779	3.9	15
16	Application of artificial neural networks to the design and implementation of electronic olfactory systems. *Lecture Notes in Computer Science*, **1997**, 1183-1192	0.9	1
15	Conductance-transient analysis of thick-film tin oxide gas sensors under successive gas-injection steps. *Measurement Science and Technology*, **1997**, 8, 1133-1138	2	10
14	Qualitative and quantitative analysis of volatile organic compounds using transient and steady-state responses of a thick-film tin oxide gas sensor array. *Sensors and Actuators B: Chemical*, **1997**, 41, 13-21	8.5	145
13	Neural network based electronic nose for the classification of aromatic species. *Analytica Chimica Acta*, **1997**, 348, 503-509	6.6	38
12	Diameter-vulnerability of large bipartite digraphs. *Discrete Applied Mathematics*, **1996**, 64, 239-248	1	6
11	Analysis of the conductance transient in thick-film tin oxide gas sensors. *Sensors and Actuators B: Chemical*, **1996**, 31, 175-180	8.5	58
10	Novel technique to identify hazardous gases/vapors based on transient response measurements of tin oxide gas sensors conductance **1995**,		3
9	Quantitative vapor analysis using the transient response of non-selective thick-film tin oxide gas sensors		2
8	Improvement of the gas sensing properties of RF sputtered WO/sub 3/ thin films using different dopants		1
7	Optimized multi-frequency temperature modulation of microhotplate gas sensors		1
6	MLS based temperature modulation of micro-hotplates		1
5	A multisensor system for monitoring the quality of carbon dioxide in the beverage industry		1