Xavier Correig

List of Publications by Year
in descending order

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212 papers	7,352 citations	50566 48 h-index	90395 73 g-index
214 all docs	214 docs citations	214 times ranked	9331 citing authors

#	Article	IF	Citations
1	Au nanoparticle-functionalised WO₃nanoneedles and their application in high sensitivity gas sensor devices. Chemical Communications, 2011, 47, 565-567.	2.2	204
2	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.	4.0	169
3	Oxygen functionalisation of MWNT and their use as gas sensitive thick-film layers. Sensors and Actuators B: Chemical, 2006, 113, 36-46.	4.0	155
4	Electronic Nose Based on Metal Oxide Semiconductor Sensors as an Alternative Technique for the Spoilage Classification of Red Meat. Sensors, 2008, 8, 142-156.	2.1	146
5	Fruit ripeness monitoring using an Electronic Nose. Sensors and Actuators B: Chemical, 2000, 69, 223-229.	4.0	143
6	Singleâ€Step Deposition of Auâ€•and Ptâ€Nanoparticleâ€Functionalized Tungsten Oxide Nanoneedles Synthesized Via Aerosolâ€Assisted CVD, and Used for Fabrication of Selective Gas Microsensor Arrays. Advanced Functional Materials, 2013, 23, 1313-1322.	7.8	143
7	Metabolomic Assessment of the Effect of Dietary Cholesterol in the Progressive Development of Fatty Liver Disease. Journal of Proteome Research, 2010, 9, 2527-2538.	1.8	141
8	Fabrication of Highly Selective Tungsten Oxide Ammonia Sensors. Journal of the Electrochemical Society, 2000, 147, 776.	1.3	140
9	Development of high sensitivity ethanol gas sensors based on Pt-doped SnO2 surfaces. Sensors and Actuators B: Chemical, 2004, 99, 201-206.	4.0	137
10	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.	4.0	135
11	Liposcale: a novel advanced lipoprotein test based on 2D diffusion-ordered 1H NMR spectroscopy. Journal of Lipid Research, 2015, 56, 737-746.	2.0	133
12	WO3 films modified with functionalised multi-wall carbon nanotubes: Morphological, compositional and gas response studies. Sensors and Actuators B: Chemical, 2006, 115, 33-41.	4.0	124
13	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.	4.0	123
14	Sensitivity and selectivity improvement of rf sputtered WO3 microhotplate gas sensors. Sensors and Actuators B: Chemical, 2006, 113, 241-248.	4.0	101
15	eRah: A Computational Tool Integrating Spectral Deconvolution and Alignment with Quantification and Identification of Metabolites in GC/MS-Based Metabolomics. Analytical Chemistry, 2016, 88, 9821-9829.	3.2	101
16	Hybrid metal oxide and multiwall carbon nanotube films for low temperature gas sensing. Sensors and Actuators B: Chemical, 2007, 127, 137-142.	4.0	100
17	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.	4.0	97
18	Urine metabolome profiling of immune-mediated inflammatory diseases. BMC Medicine, 2016, 14, 133.	2.3	97

#	Article	IF	Citations
19	Metabolic Heterogeneity in Polycystic Ovary Syndrome Is Determined by Obesity: Plasma Metabolomic Approach Using GC-MS. Clinical Chemistry, 2012, 58, 999-1009.	1.5	94
20	Evaluation of an electronic nose to assess fruit ripeness. IEEE Sensors Journal, 2005, 5, 97-108.	2.4	90
21	Biomarkers of Exposure to Secondhand and Thirdhand Tobacco Smoke: Recent Advances and Future Perspectives. International Journal of Environmental Research and Public Health, 2018, 15, 2693.	1.2	89
22	Assessment of Compatibility between Extraction Methods for NMR- and LC/MS-Based Metabolomics. Analytical Chemistry, 2012, 84, 5838-5844.	3.2	86
23	Gold clusters on WO3 nanoneedles grown via AACVD: XPS and TEM studies. Materials Chemistry and Physics, 2012, 134, 809-813.	2.0	83
24	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.	4.0	78
25	Micro-machined WO3-based sensors selective to oxidizing gases. Sensors and Actuators B: Chemical, 2008, 132, 209-215.	4.0	77
26	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.	4.0	75
27	Anodic formation of low-aspect-ratio porous alumina films for metal-oxide sensor application. Electrochimica Acta, 2006, 52, 1771-1780.	2.6	72
28	Application of a portable electronic nose system to assess the freshness of Moroccan sardines. Materials Science and Engineering C, 2008, 28, 666-670.	3.8	69
29	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.	4.0	68
30	Nanostructured Columnlike Tungsten Oxide Film by Anodizing Al/W/Ti Layers on Si. Chemistry of Materials, 2008, 20, 6482-6493.	3.2	67
31	Metabolomics Approach for Analyzing the Effects of Exercise in Subjects with Type 1 Diabetes Mellitus. PLoS ONE, 2012, 7, e40600.	1.1	66
32	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.	4.0	64
33	Analysis of the conductance transient in thick-film tin oxide gas sensors. Sensors and Actuators B: Chemical, 1996, 31, 175-180.	4.0	63
34	Pt-loaded Al2O3 catalytic filters for screen-printed WO3 sensors highly selective to benzene. Sensors and Actuators B: Chemical, 2004, 101, 277-283.	4.0	59
35	Towards a micro-system for monitoring ethylene in warehouses. Sensors and Actuators B: Chemical, 2005, 111-112, 63-70.	4.0	59
36	Signal preprocessing, multivariate analysis and software tools for MA(LDI)â€TOF mass spectrometry imaging for biological applications. Mass Spectrometry Reviews, 2018, 37, 281-306.	2.8	58

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37	HDL Triglycerides: A New Marker of Metabolic and Cardiovascular Risk. International Journal of Molecular Sciences, 2019, 20, 3151.	1.8	58
38	The role of oxygen partial pressure and annealing temperature on the formation of WÂO bonds in thin WO3films. Semiconductor Science and Technology, 2002, 17, 522-525.	1.0	57
39	Title: Human Serum/Plasma Glycoprotein Analysis by 1H-NMR, an Emerging Method of Inflammatory Assessment. Journal of Clinical Medicine, 2020, 9, 354.	1.0	57
40	¹Hâ€NMRâ€based metabolomic analysis of the effect of moderate wine consumption on subjects with cardiovascular risk factors. Electrophoresis, 2012, 33, 2345-2354.	1.3	56
41	Human serum/plasma lipoprotein analysis by NMR: Application to the study of diabetic dyslipidemia. Progress in Nuclear Magnetic Resonance Spectroscopy, 2013, 70, 1-24.	3.9	55
42	Dolphin: a tool for automatic targeted metabolite profiling using 1D and 2D 1H-NMR data. Analytical and Bioanalytical Chemistry, 2014, 406, 7967-7976.	1.9	55
43	Quantitative analysis of NO2 in the presence of CO using a single tungsten oxide semiconductor sensor and dynamic signal processingElectronic Supplementary Information (ESI) available: NIPALS algorithm, the PLS algorithm for one C variable, backpropagation learning algorithm, RBF network training algorithm, ART1 and Fuzzy ART mathematical models. See http://www.rsc.org/suppdata/an/b2/b205009a/. Analyst, The, 2002, 127, 1237-1246.	1.7	54
44	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.	4.0	53
45	Ozone monitoring by micro-machined sensors with WO3 sensing films. Sensors and Actuators B: Chemical, 2007, 126, 573-578.	4.0	53
46	Micromachined gas sensors based on tungsten oxide nanoneedles directly integrated via aerosol assisted CVD. Sensors and Actuators B: Chemical, 2014, 198, 210-218.	4.0	53
47	Influence of the doping method on the sensitivity of Pt-doped screen-printed SnO2 sensors. Sensors and Actuators B: Chemical, 2004, 97, 67-73.	4.0	52
48	rDolphin: a GUI R package for proficient automatic profiling of 1D 1H-NMR spectra of study datasets. Metabolomics, 2018, 14, 24.	1.4	52
49	Variable selection for support vector machine based multisensor systems. Sensors and Actuators B: Chemical, 2007, 122, 259-268.	4.0	50
50	Neural network based electronic nose for the classification of aromatic species. Analytica Chimica Acta, 1997, 348, 503-509.	2.6	49
51	Sub-ppm gas sensor detection via spiral Î¼-preconcentrator. Sensors and Actuators B: Chemical, 2008, 132, 149-154.	4.0	49
52	Gold Nanoparticle-Assisted Black Silicon Substrates for Mass Spectrometry Imaging Applications. ACS Nano, 2020, 14, 6785-6794.	7.3	49
53	Response model for thermally modulated tin oxide-based microhotplate gas sensors. Sensors and Actuators B: Chemical, 2003, 95, 203-211.	4.0	48
54	Identification of endogenous metabolites in human sperm cells using proton nuclear magnetic resonance (¹H-NMR) spectroscopy and gas chromatography-mass spectrometry (GC-MS). Andrology, 2015, 3, 496-505.	1.9	48

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55	Effect of pistachio consumption on the modulation of urinary gut microbiota-related metabolites in prediabetic subjects. Journal of Nutritional Biochemistry, 2017, 45, 48-53.	1.9	48
56	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.	4.0	47
57	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, 6068-6074.	2.4	47
58	Gas sensing properties of nanoparticle indium-doped WO3 thick films. Sensors and Actuators B: Chemical, 2005, 111-112, 45-51.	4.0	47
59	Thick film titania sensors for detecting traces of oxygen. Sensors and Actuators B: Chemical, 2007, 127, 567-579.	4.0	46
60	AStream: an R package for annotating LC/MS metabolomic data. Bioinformatics, 2011, 27, 1339-1340.	1.8	46
61	Characterization of ¹H NMR Plasma Glycoproteins as a New Strategy To Identify Inflammatory Patterns in Rheumatoid Arthritis. Journal of Proteome Research, 2018, 17, 3730-3739.	1.8	46
62	Screen-printed nanoparticle tin oxide films for high-yield sensor microsystems. Sensors and Actuators B: Chemical, 2003, 96, 94-104.	4.0	44
63	Efficient feature selection for mass spectrometry based electronic nose applications. Chemometrics and Intelligent Laboratory Systems, 2007, 85, 253-261.	1.8	44
64	Effects of Oxygen Partial Pressure and Annealing Temperature on the Formation of Sputtered Tungsten Oxide Films. Journal of the Electrochemical Society, 2002, 149, H81.	1.3	43
65	Feature extraction of metal oxide gas sensors using dynamic moments. Sensors and Actuators B: Chemical, 2007, 122, 219-226.	4.0	43
66	On-line monitoring of CO2 quality using doped WO3 thin film sensors. Thin Solid Films, 2006, 500, 302-308.	0.8	41
67	Metabolomics Reveals Reduction of Metabolic Oxidation in Women with Polycystic Ovary Syndrome after Pioglitazone-Flutamide-Metformin Polytherapy. PLoS ONE, 2011, 6, e29052.	1.1	41
68	Gas phase micro-preconcentrators for benzene monitoring: A review. Sensors and Actuators B: Chemical, 2013, 176, 198-210.	4.0	40
69	Dietary proanthocyanidins boost hepatic NAD+ metabolism and SIRT1 expression and activity in a dose-dependent manner in healthy rats. Scientific Reports, 2016, 6, 24977.	1.6	40
70	Fabrication and characterisation of microporous activated carbon-based pre-concentrators for benzene vapours. Sensors and Actuators B: Chemical, 2008, 132, 90-98.	4.0	39
71	Important considerations for effective gas sensors based on metal oxide nanoneedles films. Sensors and Actuators B: Chemical, 2012, 161, 406-413.	4.0	39
72	Optimized temperature modulation of micro-hotplate gas sensors through pseudorandom binary sequences. IEEE Sensors Journal, 2005, 5, 1369-1378.	2.4	38

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73	LipSpin: A New Bioinformatics Tool for Quantitative ¹H NMR Lipid Profiling. Analytical Chemistry, 2018, 90, 2031-2040.	3.2	38
74	Siliconâ€Based Laser Desorption Ionization Mass Spectrometry for the Analysis of Biomolecules: A Progress Report. Advanced Functional Materials, 2019, 29, 1903609.	7.8	37
75	Nanostructure Initiator Mass Spectrometry for tissue imaging in metabolomics: Future prospects and perspectives. Journal of Proteomics, 2012, 75, 5061-5068.	1.2	36
76	Focus: A Robust Workflow for One-Dimensional NMR Spectral Analysis. Analytical Chemistry, 2014, 86, 1160-1169.	3.2	36
77	rMSI: an R package for MS imaging data handling and visualization. Bioinformatics, 2017, 33, 2427-2428.	1.8	36
78	Analysis of conduction mechanisms in annealed n-Si1â^'xCx:H/p-crystalline Si heterojunction diodes for different doping concentrations. Journal of Applied Physics, 1999, 85, 1216-1221.	1.1	35
79	Tungsten trioxide sensing layers on highly ordered nanoporous alumina template. Sensors and Actuators B: Chemical, 2006, 118, 255-262.	4.0	35
80	Fatty acid binding protein 4 (FABP4) as a potential biomarker reflecting myocardial lipid storage in type 2 diabetes. Metabolism: Clinical and Experimental, 2019, 96, 12-21.	1.5	35
81	Liver fat deposition and mitochondrial dysfunction in morbid obesity: An approach combining metabolomics with liver imaging and histology. World Journal of Gastroenterology, 2015, 21, 7529.	1.4	35
82	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.	4.0	34
83	Monitoring the Freshness of Moroccan Sardines with a Neural-Network Based Electronic Nose. Sensors, 2006, 6, 1209-1223.	2.1	34
84	Ag induced modifications on WO3 films studied by AFM, Raman and x-ray photoelectron spectroscopy. Journal Physics D: Applied Physics, 2004, 37, 3383-3391.	1.3	33
85	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.	3.8	33
86	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.	4.0	32
87	Use of a MS-electronic nose for prediction of early fungal spoilage of bakery products. International Journal of Food Microbiology, 2007, 114, 10-16.	2.1	32
88	Discrimination between different samples of olive oil using variable selection techniques and modified fuzzy artmap neural networks. IEEE Sensors Journal, 2005, 5, 463-470.	2.4	31
89	Gas sensing properties of WO3 thin films deposited by rf sputtering. Sensors and Actuators B: Chemical, 2007, 126, 400-405.	4.0	31
90	Metabolomics reveals novel blood plasma biomarkers associated to the BRCA1-mutated phenotype of human breast cancer. Scientific Reports, 2017, 7, 17831.	1.6	31

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91	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.	4.0	30
92	On the effects of the materials and the noble metal additives to NO2 detection. Sensors and Actuators B: Chemical, 2006, 118, 311-317.	4.0	30
93	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.	1.3	30
94	Obesity rather than regional fat depots marks the metabolomic pattern of adipose tissue: An untargeted metabolomic approach. Obesity, 2014, 22, 698-704.	1.5	28
95	Particle size measurement of lipoprotein fractions using diffusion-ordered NMR spectroscopy. Analytical and Bioanalytical Chemistry, 2012, 402, 2407-2415.	1.9	27
96	Effect of pistachio consumption on plasma lipoprotein subclasses in pre-diabetic subjects. Nutrition, Metabolism and Cardiovascular Diseases, 2015, 25, 396-402.	1.1	27
97	Templated growth of tungsten oxide micro/nanostructures using aerosol assisted chemical vapour deposition. Materials Letters, 2008, 62, 4582-4584.	1.3	26
98	Compound identification in gas chromatography/mass spectrometry-based metabolomics by blind source separation. Journal of Chromatography A, 2015, 1409, 226-233.	1.8	26
99	A baseline metabolomic signature is associated with immunological CD4+ T-cell recovery after 36 months of antiretroviral therapy in HIV-infected patients. Aids, 2018, 32, 565-573.	1.0	26
100	Electrical model for amorphous/crystalline heterojunction silicon diodes (n a-Si:H/p c-Si). Semiconductor Science and Technology, 1996, 11, 1209-1213.	1.0	25
101	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.	4.0	25
102	Surface fitting of 2D diffusion-edited 1H NMR spectroscopy data for the characterisation of human plasma lipoproteins. Metabolomics, 2011, 7, 572-582.	1.4	25
103	Aerosolâ€Assisted CVD of SnO₂ Thin Films for Gasâ€Sensor Applications. Chemical Vapor Deposition, 2011, 17, 247-252.	1.4	25
104	Lipoprotein hydrophobic core lipids are partially extruded to surface in smaller HDL: â€œHerniatedâ€•HDL, a common feature in diabetes. Scientific Reports, 2016, 6, 19249.	1.6	25
105	Assessing the potential of sputtered gold nanolayers in mass spectrometry imaging for metabolomics applications. PLoS ONE, 2018, 13, e0208908.	1.1	25
106	Electrical equivalent models of semiconductor gas sensors using PSpice. Sensors and Actuators B: Chemical, 2001, 77, 275-280.	4.0	24
107	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.	4.0	24
108	Coupling fast variable selection methods to neural network-based classifiers: Application to multisensor systems. Sensors and Actuators B: Chemical, 2006, 114, 522-529.	4.0	23

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109	Improvement of the gas sensor response via silicon Î¼-preconcentrator. Sensors and Actuators B: Chemical, 2007, 127, 288-294.	4.0	23
110	Metabolic phenotyping of genetically modified mice: An NMR metabonomic approachâ˜†. Biochimie, 2009, 91, 1053-1057.	1.3	23
111	Biomarkers of food intake and metabolite differences between plasma and red blood cell matrices; a human metabolomic profile approach. Molecular BioSystems, 2013, 9, 1411.	2.9	23
112	Remarkable quantitative and qualitative differences in HDL after niacin or fenofibrate therapy in type 2 diabetic patients. Atherosclerosis, 2015, 238, 213-219.	0.4	23
113	New technology of metal oxide thin film preparation for chemical sensor application. Sensors and Actuators B: Chemical, 2005, 109, 128-134.	4.0	22
114	Metabolomic Response to Acute Hypoxic Exercise and Recovery in Adult Males. Frontiers in Physiology, 2018, 9, 1682.	1.3	22
115	Nutri-Metabolomics: Subtle Serum Metabolic Differences in Healthy Subjects by NMR-Based Metabolomics after a Short-Term Nutritional Intervention with Two Tomato Sauces. OMICS A Journal of Integrative Biology, 2013, 17, 611-618.	1.0	21
116	Novel automated workflow for spectral alignment and mass calibration in MS imaging using a sputtered Ag nanolayer. Analytica Chimica Acta, 2018, 1022, 61-69.	2.6	21
117	rMSIproc: an R package for mass spectrometry imaging data processing. Bioinformatics, 2020, 36, 3618-3619.	1.8	21
118	Nanoparticle metal-oxide films for micro-hotplate-based gas sensor systems. IEEE Sensors Journal, 2005, 5, 798-809.	2.4	20
119	Micro-machined WO3-based sensors with improved characteristics. Sensors and Actuators B: Chemical, 2009, 140, 356-362.	4.0	19
120	Towards a GC-based microsystem for benzene and 1,3 butadiene detection: Pre-concentrator characterization. Sensors and Actuators B: Chemical, 2011, 156, 680-688.	4.0	19
121	Perspective on Multimodal Imaging Techniques Coupling Mass Spectrometry and Vibrational Spectroscopy: Picturing the Best of Both Worlds. Analytical Chemistry, 2021, 93, 6301-6310.	3.2	19
122	Steadyâ€State and Transient Behavior of Thickâ€Film Tin Oxide Sensors in the Presence of Gas Mixtures. Journal of the Electrochemical Society, 1998, 145, 1772-1779.	1.3	18
123	Biological Response to Meal Ingestion: Gender Differences. Nutrients, 2019, 11, 702.	1.7	18
124	SALDI-MS and SERS Multimodal Imaging: One Nanostructured Substrate to Rule Them Both. Analytical Chemistry, 2022, 94, 2785-2793.	3.2	18
125	Highly Selective NO[sub 2] Gas Sensors Made of MWCNTs and WO[sub 3] Hybrid Layers. Journal of the Electrochemical Society, 2007, 154, J141.	1.3	16
126	Selective methane detection under varying moisture conditions using static and dynamic sensor signals. Sensors and Actuators B: Chemical, 1999, 60, 106-117.	4.0	15

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127	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.	4.0	15
128	Metabolomics reveals impaired maturation of HDL particles in adolescents with hyperinsulinaemic androgen excess. Scientific Reports, 2015, 5, 11496.	1.6	15
129	SPICE model for quartz crystal microbalance gas sensors. Electronics Letters, 1999, 35, 772.	0.5	14
130	Thermal desorption pre-concentrator based system to assess carbon dioxide contamination by benzene. Sensors and Actuators B: Chemical, 2008, 131, 85-92.	4.0	14
131	Effect of diets rich in either saturated fat or n-6 polyunsaturated fatty acids and supplemented with long-chain n-3 polyunsaturated fatty acids on plasma lipoprotein profiles. European Journal of Clinical Nutrition, 2017, 71, 1297-1302.	1.3	14
132	Serum Paraoxonase-1-Related Variables and Lipoprotein Profile in Patients with Lung or Head and Neck Cancer: Effect of Radiotherapy. Antioxidants, 2019, 8, 213.	2.2	14
133	Glycoprotein Profile Assessed by 1H-NMR as a Global Inflammation Marker in Patients with HIV Infection. A Prospective Study. Journal of Clinical Medicine, 2020, 9, 1344.	1.0	14
134	Habitual Fish Consumption, nâ€3 Fatty Acids, and Nuclear Magnetic Resonance Lipoprotein Subfractions in Women. Journal of the American Heart Association, 2020, 9, e014963.	1.6	14
135	What are we imaging? Software tools and experimental strategies for annotation and identification of small molecules in mass spectrometry imaging. Mass Spectrometry Reviews, 2023, 42, 1927-1964.	2.8	14
136	Improvement of the omega 3 index of healthy subjects does not alter the effects of dietary saturated fats or n-6PUFA on LDL profiles. Metabolism: Clinical and Experimental, 2017, 68, 11-19.	1.5	13
137	Meal Enjoyment and Tolerance in Women and Men. Nutrients, 2019, 11, 119.	1.7	13
138	Electronic nose simulation tool centred on PSpice. Sensors and Actuators B: Chemical, 2001, 76, 419-429.	4.0	12
139	SOI-CMOS compatible low-power gas sensor using sputtered and drop-coated metal-oxide active layers. Microsystem Technologies, 2005, 12, 160-168.	1.2	12
140	Unravelling and Quantifying the â€œNMR-Invisibleâ€•Metabolites Interacting with Human Serum Albumin by Binding Competition and T2 Relaxation-Based Decomposition Analysis. Journal of Proteome Research, 2017, 16, 1847-1856.	1.8	12
141	Raman2imzML converts Raman imaging data into the standard mass spectrometry imaging format. BMC Bioinformatics, 2020, 21, 448.	1.2	12
142	Conductance-transient analysis of thick-film tin oxide gas sensors under successive gas-injection steps. Measurement Science and Technology, 1997, 8, 1133-1138.	1.4	11
143	Acute-phase glycoprotein profile responses to different oral macronutrient challenges: Influence of sex, functional hyperandrogenism and obesity. Clinical Nutrition, 2021, 40, 1241-1246.	2.3	11
144	rMSIannotation: A peak annotation tool for mass spectrometry imaging based on the analysis of isotopic intensity ratios. Analytica Chimica Acta, 2021, 1171, 338669.	2.6	11

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145	Current transport mechanisms in n-type amorphous silicon-carbon on p-type crystalline silicon (a-:H/c-Si) heterojunction diodes. Semiconductor Science and Technology, 1998, 13, 1148-1153.	1.0	10
146	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.	4.0	10
147	A 1H NMR metabolic profiling to the assessment of protein tyrosine phosphatase 1B role in liver regeneration after partial hepatectomy. Biochimie, 2013, 95, 808-816.	1.3	10
148	Improving Assessment of Lipoprotein Profile in Type 1 Diabetes by 1H NMR Spectroscopy. PLoS ONE, 2015, 10, e0136348.	1.1	10
149	Mercury optical fibre probe based on a modified cladding of sensitised Al2O3 nano-particles. Sensors and Actuators B: Chemical, 2009, 143, 103-110.	4.0	9
150	Development of a gas pre-concentrator based on carbon nanotubes for benzene detection. Procedia Engineering, 2011, 25, 239-242.	1.2	9
151	Hepatic Lipidomics and Molecular Imaging in a Murine Non-Alcoholic Fatty Liver Disease Model: Insights into Molecular Mechanisms. Biomolecules, 2020, 10, 1275.	1.8	9
152	Unravelling the metabolic alterations of liver damage induced by thirdhand smoke. Environment International, 2021, 146, 106242.	4.8	9
153	Analysis of LDL and HDL size and number by nuclear magnetic resonance in a healthy working population: The LipoLab Study. International Journal of Clinical Practice, 2021, 75, e13610.	0.8	8
154	X-ray investigations of nanopowder WO3 thick films. Physica Status Solidi A, 2005, 202, 1973-1979.	1.7	7
155	Technology of metal oxide thin film deposition with interruptions. Surface and Coatings Technology, 2007, 202, 453-459.	2.2	7
156	Influence of the internal gas flow distribution on the efficiency of a Î¼-preconcentrator. Sensors and Actuators B: Chemical, 2008, 135, 52-56.	4.0	7
157	Characterization and gas sesing properties of intrinsic and Au-doped WO3 nanostuctures deposited by AACVD technique. Procedia Engineering, 2010, 5, 131-134.	1.2	7
158	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.	4.0	7
159	CO and H2 Sensing with CVD-Grown Tungsten Oxide Nanoneedles Decorated with Au, Pt or Cu Nanoparticles. Procedia Engineering, 2012, 47, 904-907.	1.2	7
160	Integrative analysis reveals novel pathways mediating the interaction between adipose tissue and pancreatic islets in obesity in rats. Diabetologia, 2014, 57, 1219-1231.	2.9	7
161	Metabolomic signature of the postprandial experience. Neurogastroenterology and Motility, 2018, 30, e13447.	1.6	7
162	Glycoprotein Profile Measured by a 1H-Nuclear Magnetic Resonance Based on Approach in Patients with Diabetes: A New Robust Method to Assess Inflammation. Life, 2021, 11, 1407.	1.1	7

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163	On-line drift counteraction for metal oxide gas sensor arrays. Electronics Letters, 2003, 39, 40.	0.5	6
164	rMSIcleanup: an open-source tool for matrix-related peak annotation in mass spectrometry imaging and its application to silver-assisted laser desorption/ionization. Journal of Cheminformatics, 2020, 12, 45.	2.8	6
165	Lipid Profiling Using 1H NMR Spectroscopy. Methods in Molecular Biology, 2019, 2037, 35-47.	0.4	6
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