

Xavier Correig

List of Publications by Year in descending order

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212
papers

7,352
citations

43973

48
h-index

79541

73
g-index

214
all docs

214
docs citations

214
times ranked

8497
citing authors

#	ARTICLE	IF	CITATIONS
1	Au nanoparticle-functionalised WO ₃ nanoneedles and their application in high sensitivity gas sensor devices. <i>Chemical Communications</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 1997, 41, 13-21.	4.0	169
3	Oxygen functionalisation of MWNT and their use as gas sensitive thick-film layers. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Sensors</i> , 2008, 8, 142-156.	2.1	146
5	Fruit ripeness monitoring using an Electronic Nose. <i>Sensors and Actuators B: Chemical</i> , 2000, 69, 223-229.	4.0	143
6	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. <i>Advanced Functional Materials</i> , 2013, 23, 1313-1322.	7.8	143
7	Metabolomic Assessment of the Effect of Dietary Cholesterol in the Progressive Development of Fatty Liver Disease. <i>Journal of Proteome Research</i> , 2010, 9, 2527-2538.	1.8	141
8	Fabrication of Highly Selective Tungsten Oxide Ammonia Sensors. <i>Journal of the Electrochemical Society</i> , 2000, 147, 776.	1.3	140
9	Development of high sensitivity ethanol gas sensors based on Pt-doped SnO ₂ surfaces. <i>Sensors and Actuators B: Chemical</i> , 2004, 99, 201-206.	4.0	137
10	Influence of the annealing and operating temperatures on the gas-sensing properties of rf sputtered WO ₃ thin-film sensors. <i>Sensors and Actuators B: Chemical</i> , 2005, 105, 271-277.	4.0	135
11	Liposcale: a novel advanced lipoprotein test based on 2D diffusion-ordered 1H NMR spectroscopy. <i>Journal of Lipid Research</i> , 2015, 56, 737-746.	2.0	133
12	WO ₃ films modified with functionalised multi-wall carbon nanotubes: Morphological, compositional and gas response studies. <i>Sensors and Actuators B: Chemical</i> , 2006, 115, 33-41.	4.0	124
13	Correlation between electronic nose signals and fruit quality indicators on shelf-life measurements with pink lady apples. <i>Sensors and Actuators B: Chemical</i> , 2001, 80, 41-50.	4.0	123
14	Sensitivity and selectivity improvement of rf sputtered WO ₃ microhotplate gas sensors. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Analytical Chemistry</i> , 2016, 88, 9821-9829.	3.2	101
16	Hybrid metal oxide and multiwall carbon nanotube films for low temperature gas sensing. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2009, 141, 538-543.	4.0	97
18	Urine metabolome profiling of immune-mediated inflammatory diseases. <i>BMC Medicine</i> , 2016, 14, 133.	2.3	97

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19	Metabolic Heterogeneity in Polycystic Ovary Syndrome Is Determined by Obesity: Plasma Metabolomic Approach Using GC-MS. <i>Clinical Chemistry</i> , 2012, 58, 999-1009.	1.5	94
20	Evaluation of an electronic nose to assess fruit ripeness. <i>IEEE Sensors Journal</i> , 2005, 5, 97-108.	2.4	90
21	Biomarkers of Exposure to Secondhand and Thirdhand Tobacco Smoke: Recent Advances and Future Perspectives. <i>International Journal of Environmental Research and Public Health</i> , 2018, 15, 2693.	1.2	89
22	Assessment of Compatibility between Extraction Methods for NMR- and LC/MS-Based Metabolomics. <i>Analytical Chemistry</i> , 2012, 84, 5838-5844.	3.2	86
23	Gold clusters on WO ₃ nanoneedles grown via AACVD: XPS and TEM studies. <i>Materials Chemistry and Physics</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2007, 128, 235-244.	4.0	78
25	Micro-machined WO ₃ -based sensors selective to oxidizing gases. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2002, 83, 238-244.	4.0	75
27	Anodic formation of low-aspect-ratio porous alumina films for metal-oxide sensor application. <i>Electrochimica Acta</i> , 2006, 52, 1771-1780.	2.6	72
28	Application of a portable electronic nose system to assess the freshness of Moroccan sardines. <i>Materials Science and Engineering C</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 1002-1016.	4.0	68
30	Nanostructured Columnlike Tungsten Oxide Film by Anodizing Al/W/Ti Layers on Si. <i>Chemistry of Materials</i> , 2008, 20, 6482-6493.	3.2	67
31	Metabolomics Approach for Analyzing the Effects of Exercise in Subjects with Type 1 Diabetes Mellitus. <i>PLoS ONE</i> , 2012, 7, e40600.	1.1	66
32	Detection of SO ₂ and H ₂ S in CO ₂ stream by means of WO ₃ -based micro-hotplate sensors. <i>Sensors and Actuators B: Chemical</i> , 2004, 102, 219-225.	4.0	64
33	Analysis of the conductance transient in thick-film tin oxide gas sensors. <i>Sensors and Actuators B: Chemical</i> , 1996, 31, 175-180.	4.0	63
34	Pt-loaded Al ₂ O ₃ catalytic filters for screen-printed WO ₃ sensors highly selective to benzene. <i>Sensors and Actuators B: Chemical</i> , 2004, 101, 277-283.	4.0	59
35	Towards a micro-system for monitoring ethylene in warehouses. <i>Sensors and Actuators B: Chemical</i> , 2005, 111-112, 63-70.	4.0	59
36	Signal preprocessing, multivariate analysis and software tools for MA(LDI)-TOF mass spectrometry imaging for biological applications. <i>Mass Spectrometry Reviews</i> , 2018, 37, 281-306.	2.8	58

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37	HDL Triglycerides: A New Marker of Metabolic and Cardiovascular Risk. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3151.	1.8	58
38	The role of oxygen partial pressure and annealing temperature on the formation of W ^{5d} bonds in thin WO ₃ films. <i>Semiconductor Science and Technology</i> , 2002, 17, 522-525.	1.0	57
39	Title: Human Serum/Plasma Glycoprotein Analysis by 1H-NMR, an Emerging Method of Inflammatory Assessment. <i>Journal of Clinical Medicine</i> , 2020, 9, 354.	1.0	57
40	¹ H-NMR based metabolomic analysis of the effect of moderate wine consumption on subjects with cardiovascular risk factors. <i>Electrophoresis</i> , 2012, 33, 2345-2354.	1.3	56
41	Human serum/plasma lipoprotein analysis by NMR: Application to the study of diabetic dyslipidemia. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2013, 70, 1-24.	3.9	55
42	Dolphin: a tool for automatic targeted metabolite profiling using 1D and 2D 1H-NMR data. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 7967-7976.	1.9	55
43	Quantitative analysis of NO ₂ in the presence of CO using a single tungsten oxide semiconductor sensor and dynamic signal processing Electronic 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/suppldata/jl20050004 Analyst The 2003, 127, 1227-1246 .	1.7	54
44	Fast detection of rancidity in potato crisps using e-noses based on mass spectrometry or gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2005, 106, 67-75.	4.0	53
45	Ozone monitoring by micro-machined sensors with WO ₃ sensing films. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 573-578.	4.0	53
46	Micromachined gas sensors based on tungsten oxide nanoneedles directly integrated via aerosol assisted CVD. <i>Sensors and Actuators B: Chemical</i> , 2014, 198, 210-218.	4.0	53
47	Influence of the doping method on the sensitivity of Pt-doped screen-printed SnO ₂ sensors. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Metabolomics</i> , 2018, 14, 24.	1.4	52
49	Variable selection for support vector machine based multisensor systems. <i>Sensors and Actuators B: Chemical</i> , 2007, 122, 259-268.	4.0	50
50	Neural network based electronic nose for the classification of aromatic species. <i>Analytica Chimica Acta</i> , 1997, 348, 503-509.	2.6	49
51	Sub-ppm gas sensor detection via spiral 1/4-preconcentrator. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 149-154.	4.0	49
52	Gold Nanoparticle-Assisted Black Silicon Substrates for Mass Spectrometry Imaging Applications. <i>ACS Nano</i> , 2020, 14, 6785-6794.	7.3	49
53	Response model for thermally modulated tin oxide-based microhotplate gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2003, 95, 203-211.	4.0	48
54	Identification of endogenous metabolites in human sperm cells using proton nuclear magnetic resonance (¹ H-NMR) spectroscopy and gas chromatography-mass spectrometry (GC-MS). <i>Andrology</i> , 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. <i>Journal of Nutritional Biochemistry</i> , 2017, 45, 48-53.	1.9	48
56	A route toward more selective and less humidity sensitive screen-printed SnO ₂ and WO ₃ gas sensitive layers. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Journal of Agricultural and Food Chemistry</i> , 2004, 52, 6068-6074.	2.4	47
58	Gas sensing properties of nanoparticle indium-doped WO ₃ thick films. <i>Sensors and Actuators B: Chemical</i> , 2005, 111-112, 45-51.	4.0	47
59	Thick film titania sensors for detecting traces of oxygen. <i>Sensors and Actuators B: Chemical</i> , 2007, 127, 567-579.	4.0	46
60	AStream: an R package for annotating LC/MS metabolomic data. <i>Bioinformatics</i> , 2011, 27, 1339-1340.	1.8	46
61	Characterization of ¹ H NMR Plasma Glycoproteins as a New Strategy To Identify Inflammatory Patterns in Rheumatoid Arthritis. <i>Journal of Proteome Research</i> , 2018, 17, 3730-3739.	1.8	46
62	Screen-printed nanoparticle tin oxide films for high-yield sensor microsystems. <i>Sensors and Actuators B: Chemical</i> , 2003, 96, 94-104.	4.0	44
63	Efficient feature selection for mass spectrometry based electronic nose applications. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2007, 85, 253-261.	1.8	44
64	Effects of Oxygen Partial Pressure and Annealing Temperature on the Formation of Sputtered Tungsten Oxide Films. <i>Journal of the Electrochemical Society</i> , 2002, 149, H81.	1.3	43
65	Feature extraction of metal oxide gas sensors using dynamic moments. <i>Sensors and Actuators B: Chemical</i> , 2007, 122, 219-226.	4.0	43
66	On-line monitoring of CO ₂ quality using doped WO ₃ thin film sensors. <i>Thin Solid Films</i> , 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. <i>PLoS ONE</i> , 2011, 6, e29052.	1.1	41
68	Gas phase micro-preconcentrators for benzene monitoring: A review. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Scientific Reports</i> , 2016, 6, 24977.	1.6	40
70	Fabrication and characterisation of microporous activated carbon-based pre-concentrators for benzene vapours. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 90-98.	4.0	39
71	Important considerations for effective gas sensors based on metal oxide nanoneedles films. <i>Sensors and Actuators B: Chemical</i> , 2012, 161, 406-413.	4.0	39
72	Optimized temperature modulation of micro-hotplate gas sensors through pseudorandom binary sequences. <i>IEEE Sensors Journal</i> , 2005, 5, 1369-1378.	2.4	38

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73	LipSpin: A New Bioinformatics Tool for Quantitative ¹ H NMR Lipid Profiling. <i>Analytical Chemistry</i> , 2018, 90, 2031-2040.	3.2	38
74	Silicon-Based Laser Desorption Ionization Mass Spectrometry for the Analysis of Biomolecules: A Progress Report. <i>Advanced Functional Materials</i> , 2019, 29, 1903609.	7.8	37
75	Nanostructure Initiator Mass Spectrometry for tissue imaging in metabolomics: Future prospects and perspectives. <i>Journal of Proteomics</i> , 2012, 75, 5061-5068.	1.2	36
76	Focus: A Robust Workflow for One-Dimensional NMR Spectral Analysis. <i>Analytical Chemistry</i> , 2014, 86, 1160-1169.	3.2	36
77	rMSI: an R package for MS imaging data handling and visualization. <i>Bioinformatics</i> , 2017, 33, 2427-2428.	1.8	36
78	Analysis of conduction mechanisms in annealed n-Si _{1-x} C _x H/p-crystalline Si heterojunction diodes for different doping concentrations. <i>Journal of Applied Physics</i> , 1999, 85, 1216-1221.	1.1	35
79	Tungsten trioxide sensing layers on highly ordered nanoporous alumina template. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Metabolism: Clinical and Experimental</i> , 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. <i>World Journal of Gastroenterology</i> , 2015, 21, 7529.	1.4	35
82	Optimised temperature modulation of metal oxide micro-hotplate gas sensors through multilevel pseudo random sequences. <i>Sensors and Actuators B: Chemical</i> , 2005, 111-112, 271-280.	4.0	34
83	Monitoring the Freshness of Moroccan Sardines with a Neural-Network Based Electronic Nose. <i>Sensors</i> , 2006, 6, 1209-1223.	2.1	34
84	Ag induced modifications on WO ₃ films studied by AFM, Raman and x-ray photoelectron spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2004, 37, 3383-3391.	1.3	33
85	MEMS-microhotplate-based hydrogen gas sensor utilizing the nanostructured porous-anodic-alumina-supported WO ₃ active layer. <i>International Journal of Hydrogen Energy</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2004, 99, 267-272.	4.0	32
87	Use of a MS-electronic nose for prediction of early fungal spoilage of bakery products. <i>International Journal of Food Microbiology</i> , 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. <i>IEEE Sensors Journal</i> , 2005, 5, 463-470.	2.4	31
89	Gas sensing properties of WO ₃ thin films deposited by rf sputtering. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 400-405.	4.0	31
90	Metabolomics reveals novel blood plasma biomarkers associated to the BRCA1-mutated phenotype of human breast cancer. <i>Scientific Reports</i> , 2017, 7, 17831.	1.6	31

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91	Dealing with humidity in the qualitative analysis of CO and NO ₂ using a WO ₃ sensor and dynamic signal processing. <i>Sensors and Actuators B: Chemical</i> , 2003, 95, 177-182.	4.0	30
92	On the effects of the materials and the noble metal additives to NO ₂ detection. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 311-317.	4.0	30
93	Evolution of Surface Morphology, Crystallite Size, and Texture of WO ₃ Layers Sputtered onto Si-Supported Nanoporous Alumina Templates. <i>Journal of the Electrochemical Society</i> , 2008, 155, K116.	1.3	30
94	Obesity rather than regional fat depots marks the metabolomic pattern of adipose tissue: An untargeted metabolomic approach. <i>Obesity</i> , 2014, 22, 698-704.	1.5	28
95	Particle size measurement of lipoprotein fractions using diffusion-ordered NMR spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 2407-2415.	1.9	27
96	Effect of pistachio consumption on plasma lipoprotein subclasses in pre-diabetic subjects. <i>Nutrition, Metabolism and Cardiovascular Diseases</i> , 2015, 25, 396-402.	1.1	27
97	Templated growth of tungsten oxide micro/nanostructures using aerosol assisted chemical vapour deposition. <i>Materials Letters</i> , 2008, 62, 4582-4584.	1.3	26
98	Compound identification in gas chromatography/mass spectrometry-based metabolomics by blind source separation. <i>Journal of Chromatography A</i> , 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. <i>Aids</i> , 2018, 32, 565-573.	1.0	26
100	Electrical model for amorphous/crystalline heterojunction silicon diodes (n a-Si:H/p c-Si). <i>Semiconductor Science and Technology</i> , 1996, 11, 1209-1213.	1.0	25
101	Influence of the deposition method on the morphology and elemental composition of SnO ₂ films for gas sensing: atomic force and X-ray photoemission spectroscopy analysis. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Metabolomics</i> , 2011, 7, 572-582.	1.4	25
103	Aerosol-Assisted CVD of SnO ₂ Thin Films for Gas Sensor Applications. <i>Chemical Vapor Deposition</i> , 2011, 17, 247-252.	1.4	25
104	Lipoprotein hydrophobic core lipids are partially extruded to surface in smaller HDL: a herniated HDL, a common feature in diabetes. <i>Scientific Reports</i> , 2016, 6, 19249.	1.6	25
105	Assessing the potential of sputtered gold nanolayers in mass spectrometry imaging for metabolomics applications. <i>PLoS ONE</i> , 2018, 13, e0208908.	1.1	25
106	Electrical equivalent models of semiconductor gas sensors using PSpice. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2004, 103, 23-30.	4.0	24
108	Coupling fast variable selection methods to neural network-based classifiers: Application to multisensor systems. <i>Sensors and Actuators B: Chemical</i> , 2006, 114, 522-529.	4.0	23

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109	Improvement of the gas sensor response via silicon $\hat{1}/4$ -preconcentrator. <i>Sensors and Actuators B: Chemical</i> , 2007, 127, 288-294.	4.0	23
110	Metabolic phenotyping of genetically modified mice: An NMR metabonomic approach. <i>Biochimie</i> , 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. <i>Molecular BioSystems</i> , 2013, 9, 1411.	2.9	23
112	Remarkable quantitative and qualitative differences in HDL after niacin or fenofibrate therapy in type 2 diabetic patients. <i>Atherosclerosis</i> , 2015, 238, 213-219.	0.4	23
113	New technology of metal oxide thin film preparation for chemical sensor application. <i>Sensors and Actuators B: Chemical</i> , 2005, 109, 128-134.	4.0	22
114	Metabolomic Response to Acute Hypoxic Exercise and Recovery in Adult Males. <i>Frontiers in Physiology</i> , 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. <i>OMICS A Journal of Integrative Biology</i> , 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. <i>Analytica Chimica Acta</i> , 2018, 1022, 61-69.	2.6	21
117	rMSIproc: an R package for mass spectrometry imaging data processing. <i>Bioinformatics</i> , 2020, 36, 3618-3619.	1.8	21
118	Nanoparticle metal-oxide films for micro-hotplate-based gas sensor systems. <i>IEEE Sensors Journal</i> , 2005, 5, 798-809.	2.4	20
119	Micro-machined WO ₃ -based sensors with improved characteristics. <i>Sensors and Actuators B: Chemical</i> , 2009, 140, 356-362.	4.0	19
120	Towards a GC-based microsystem for benzene and 1,3 butadiene detection: Pre-concentrator characterization. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Analytical Chemistry</i> , 2021, 93, 6301-6310.	3.2	19
122	Steady-State and Transient Behavior of Thick-Film Tin Oxide Sensors in the Presence of Gas Mixtures. <i>Journal of the Electrochemical Society</i> , 1998, 145, 1772-1779.	1.3	18
123	Biological Response to Meal Ingestion: Gender Differences. <i>Nutrients</i> , 2019, 11, 702.	1.7	18
124	SALDI-MS and SERS Multimodal Imaging: One Nanostructured Substrate to Rule Them Both. <i>Analytical Chemistry</i> , 2022, 94, 2785-2793.	3.2	18
125	Highly Selective NO ₂ Gas Sensors Made of MWCNTs and WO ₃ Hybrid Layers. <i>Journal of the Electrochemical Society</i> , 2007, 154, J141.	1.3	16
126	Selective methane detection under varying moisture conditions using static and dynamic sensor signals. <i>Sensors and Actuators B: Chemical</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2005, 106, 677-686.	4.0	15
128	Metabolomics reveals impaired maturation of HDL particles in adolescents with hyperinsulinaemic androgen excess. <i>Scientific Reports</i> , 2015, 5, 11496.	1.6	15
129	SPICE model for quartz crystal microbalance gas sensors. <i>Electronics Letters</i> , 1999, 35, 772.	0.5	14
130	Thermal desorption pre-concentrator based system to assess carbon dioxide contamination by benzene. <i>Sensors and Actuators B: Chemical</i> , 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. <i>European Journal of Clinical Nutrition</i> , 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. <i>Antioxidants</i> , 2019, 8, 213.	2.2	14
133	Glycoprotein Profile Assessed by ¹ H-NMR as a Global Inflammation Marker in Patients with HIV Infection. A Prospective Study. <i>Journal of Clinical Medicine</i> , 2020, 9, 1344.	1.0	14
134	Habitual Fish Consumption, n-3 Fatty Acids, and Nuclear Magnetic Resonance Lipoprotein Subfractions in Women. <i>Journal of the American Heart Association</i> , 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. <i>Mass Spectrometry Reviews</i> , 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. <i>Metabolism: Clinical and Experimental</i> , 2017, 68, 11-19.	1.5	13
137	Meal Enjoyment and Tolerance in Women and Men. <i>Nutrients</i> , 2019, 11, 119.	1.7	13
138	Electronic nose simulation tool centred on PSpice. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 419-429.	4.0	12
139	SOI-CMOS compatible low-power gas sensor using sputtered and drop-coated metal-oxide active layers. <i>Microsystem Technologies</i> , 2005, 12, 160-168.	1.2	12
140	Unravelling and Quantifying the "NMR-Invisible" Metabolites Interacting with Human Serum Albumin by Binding Competition and T2 Relaxation-Based Decomposition Analysis. <i>Journal of Proteome Research</i> , 2017, 16, 1847-1856.	1.8	12
141	Raman2imzML converts Raman imaging data into the standard mass spectrometry imaging format. <i>BMC Bioinformatics</i> , 2020, 21, 448.	1.2	12
142	Conductance-transient analysis of thick-film tin oxide gas sensors under successive gas-injection steps. <i>Measurement Science and Technology</i> , 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. <i>Clinical Nutrition</i> , 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. <i>Analytica Chimica Acta</i> , 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. <i>Semiconductor Science and Technology</i> , 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. <i>Sensors and Actuators B: Chemical</i> , 2010, 143, 759-768.	4.0	10
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