Maria Vinaixa

List of Publications by Year
in descending order

63 papers	2,919 citations	185998 28 h-index	174990 52 g-index
69 all docs	69 docs citations	69 times ranked	5371 citing authors

#	Article	IF	Citations
1	Mass spectral databases for LC/MS- and GC/MS-based metabolomics: State of the field and future prospects. TrAC - Trends in Analytical Chemistry, 2016, 78, 23-35.	5.8	404
2	A Guideline to Univariate Statistical Analysis for LC/MS-Based Untargeted Metabolomics-Derived Data. Metabolites, 2012, 2, 775-795.	1.3	224
3	An automated Design-Build-Test-Learn pipeline for enhanced microbial production of fine chemicals. Communications Biology, 2018, 1, 66.	2.0	159
4	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
5	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
6	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
7	Urine metabolome profiling of immune-mediated inflammatory diseases. BMC Medicine, 2016, 14, 133.	2.3	97
8	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
9	Machine Learning of Designed Translational Control Allows Predictive Pathway Optimization in Escherichia coli. ACS Synthetic Biology, 2019, 8, 127-136.	1.9	88
10	Assessment of Compatibility between Extraction Methods for NMR- and LC/MS-Based Metabolomics. Analytical Chemistry, 2012, 84, 5838-5844.	3.2	86
11	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
12	geoRge: A Computational Tool To Detect the Presence of Stable Isotope Labeling in LC/MS-Based Untargeted Metabolomics. Analytical Chemistry, 2016, 88, 621-628.	3.2	67
13	Metabolomics Approach for Analyzing the Effects of Exercise in Subjects with Type 1 Diabetes Mellitus. PLoS ONE, 2012, 7, e40600.	1.1	66
14	FELLA: an R package to enrich metabolomics data. BMC Bioinformatics, 2018, 19, 538.	1.2	61
15	¹HâNMRâbased metabolomic analysis of the effect of moderate wine consumption on subjects with cardiovascular risk factors. Electrophoresis, 2012, 33, 2345-2354.	1.3	56
16	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
17	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
18	FoxA and LIPG endothelial lipase control the uptake of extracellular lipids for breast cancer growth. Nature Communications, 2016, 7, 11199.	5.8	50

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19	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
20	AStream: an R package for annotating LC/MS metabolomic data. Bioinformatics, 2011, 27, 1339-1340.	1.8	46
21	Efficient feature selection for mass spectrometry based electronic nose applications. Chemometrics and Intelligent Laboratory Systems, 2007, 85, 253-261.	1.8	44
22	On-line monitoring of CO2 quality using doped WO3 thin film sensors. Thin Solid Films, 2006, 500, 302-308.	0.8	41
23	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
24	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
25	LipSpin: A New Bioinformatics Tool for Quantitative ¹H NMR Lipid Profiling. Analytical Chemistry, 2018, 90, 2031-2040.	3.2	38
26	Focus: A Robust Workflow for One-Dimensional NMR Spectral Analysis. Analytical Chemistry, 2014, 86, 1160-1169.	3.2	36
27	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
28	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
29	biochem4j: Integrated and extensible biochemical knowledge through graph databases. PLoS ONE, 2017, 12, e0179130.	1.1	31
30	EXD2 governs germ stem cell homeostasis and lifespan by promoting mitoribosome integrity and translation. Nature Cell Biology, 2018, 20, 162-174.	4.6	31
31	Untargeted lipidomics uncovers lipid signatures that distinguish severe from moderate forms of acutely decompensated cirrhosis. Journal of Hepatology, 2021, 75, 1116-1127.	1.8	31
32	Null diffusion-based enrichment for metabolomics data. PLoS ONE, 2017, 12, e0189012.	1.1	29
33	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
34	Particle size measurement of lipoprotein fractions using diffusion-ordered NMR spectroscopy. Analytical and Bioanalytical Chemistry, 2012, 402, 2407-2415.	1.9	27
35	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
36	A Toolbox for Diverse Oxyfunctionalisation of Monoterpenes. Scientific Reports, 2018, 8, 14396.	1.6	25

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37	Metabolic phenotyping of genetically modified mice: An NMR metabonomic approachâˆ†. Biochimie, 2009, 91, 1053-1057.	1.3	23
38	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
39	Metabolomic Response to Acute Hypoxic Exercise and Recovery in Adult Males. Frontiers in Physiology, 2018, 9, 1682.	1.3	22
40	Engineering the â€œMissing Linkâ€•in Biosynthetic (âˆ’)-Menthol Production: Bacterial Isopulegone Isomerase. ACS Catalysis, 2018, 8, 2012-2020.	5.5	20
41	Glucose metabolism during fasting is altered in experimental porphobilinogen deaminase deficiency. Human Molecular Genetics, 2016, 25, 1318-1327.	1.4	19
42	Integrated Probabilistic Annotation: A Bayesian-Based Annotation Method for Metabolomic Profiles Integrating Biochemical Connections, Isotope Patterns, and Adduct Relationships. Analytical Chemistry, 2019, 91, 12799-12807.	3.2	17
43	Exploring the Use of Gas Chromatography Coupled to Chemical Ionization Mass Spectrometry (GC-CI-MS) for Stable Isotope Labeling in Metabolomics. Analytical Chemistry, 2021, 93, 1242-1248.	3.2	16
44	HERMES: a molecular-formula-oriented method to target the metabolome. Nature Methods, 2021, 18, 1370-1376.	9.0	16
45	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
46	Metabolomics reveals impaired maturation of HDL particles in adolescents with hyperinsulinaemic androgen excess. Scientific Reports, 2015, 5, 11496.	1.6	15
47	Positional Enrichment by Proton Analysis (PEPA): A Oneâ€Ðimensional ¹Hâ€NMR Approach for ¹³C Stable Isotope Tracer Studies in Metabolomics. Angewandte Chemie - International Edition, 2017, 56, 3531-3535.	7.2	15
48	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
49	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
50	Improving Assessment of Lipoprotein Profile in Type 1 Diabetes by 1H NMR Spectroscopy. PLoS ONE, 2015, 10, e0136348.	1.1	10
51	Toxicity of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) in early development: A wide-scope metabolomics assay in zebrafish embryos. Journal of Hazardous Materials, 2022, 429, 127746.	6.5	10
52	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
53	SYNBIOCHEMâ€“a SynBio foundry for the biosynthesis and sustainable production of fine and speciality chemicals. Biochemical Society Transactions, 2016, 44, 675-677.	1.6	7
54	Baitmet, a computational approach for GCâ€“MS library-driven metabolite profiling. Metabolomics, 2017, 13, 1.	1.4	7

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55	SYNBIOCHEM Synthetic Biology Research Centre, Manchester â€“ A UK foundry for fine and speciality chemicals production. Synthetic and Systems Biotechnology, 2016, 1, 271-275.	1.8	6
56	Use of multivariate chemometric algorithms on 1H NMR data to assess a soluble fiber (Plantago ovata) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.8	5
57	Dolphin 1D: Improving Automation of Targeted Metabolomics in Multi-matrix Datasets of ^{1}H-NMR Spectra. Advances in Intelligent Systems and Computing, 2015, , 59-67.	0.5	3
58	Innentitelbild: Positional Enrichment by Proton Analysis (PEPA): A Oneâ€Dimensional ¹Hâ€NMR Approach for ¹³C Stable Isotope Tracer Studies in Metabolomics (Angew. Chem. 13/2017). Angewandte Chemie, 2017, 129, 3446-3446.	1.6	1
59	Positional Enrichment by Proton Analysis (PEPA): A One-Dimensional 1 H-NMR Approach for 13 C Stable Isotope Tracer Studies in Metabolomics. Angewandte Chemie, 2017, 129, 3585-3589.	1.6	1
60	Increased Hypothalamic Anti-Inflammatory Mediators in Non-Diabetic Insulin Receptor Substrate 2-Deficient Mice. Cells, 2021, 10, 2085.	1.8	1
61	MS-Electronic Nose Performance Improvement Using GC Retention Times And 2-Way And 3-Way Data Processing Methods. , 2009, , .		0
62	A Fuzzy ARTMAP Approach To The Incorporation Of Chromatographic Retention Time Information To An MS Based E-Nose. , 2009, , .		0
63	Muscular carnosine is a marker for cardiorespiratory fitness and cardiometabolic risk factors in men with type 1 diabetes. European Journal of Applied Physiology, 2022, , 1.	1.2	0