Joaquim Jaumot

List of Publications by Year in Descending Order

69 papers	3,797 citations	29 h-index	61 g-index
70 ext. papers	4,291 ext. citations	5.5 avg, IF	5.86 L-index

#	Paper	IF	Citations
69	Lipidomic analysis of single and combined effects of polyethylene microplastics and polychlorinated biphenyls on human hepatoma cells. *Journal of Hazardous Materials*, **2022**, 421, 126777	12.8	8
68	Adverse Effects of Arsenic Uptake in Rice Metabolome and Lipidome Revealed by Untargeted Liquid Chromatography Coupled to Mass Spectrometry (LC-MS) and Regions of Interest Multivariate Curve Resolution. *Separations*, **2022**, 9, 79	3.1	0
67	Comparison of Multivariate ANOVA-Based Approaches for the Determination of Relevant Variables in Experimentally Designed Metabolomic Studies. *Molecules*, **2022**, 27, 3304	4.8	0
66	Quantification strategies for two-dimensional liquid chromatography datasets using regions of interest and multivariate curve resolution approaches. *Talanta*, **2022**, 247, 123586	6.2	
65	Two-Dimensional Liquid Chromatography in Metabolomics and Lipidomics. *Neuromethods*, **2021**, 25-47	0.4	3
64	Untangling comprehensive two-dimensional liquid chromatography data sets using regions of interest and multivariate curve resolution approaches. *TrAC - Trends in Analytical Chemistry*, **2021**, 137, 116207	14.6	6
63	MSroi: A pre-processing tool for mass spectrometry-based studies. *Chemometrics and Intelligent Laboratory Systems*, **2021**, 215, 104333	3.8	5
62	Mass Spectrometry Imaging: Chemometric Data Analysis **2020**, 381-394		
61	Interaction of Environmental Pollutants with Microplastics: A Critical Review of Sorption Factors, Bioaccumulation and Ecotoxicological Effects. *Toxics*, **2020**, 8,	4.7	45
60	Chemometrics in comprehensive two-dimensional liquid chromatography: A study of the data structure and its multilinear behavior. *Chemometrics and Intelligent Laboratory Systems*, **2020**, 201, 104009	3.8	6
59	Partial characterization of the lipidome of the cold-water scallop, Chlamys islandica. *Environmental Science and Pollution Research*, **2020**, 27, 1475-1484	5.1	2
58	ROIMCR: a powerful analysis strategy for LC-MS metabolomic datasets. *BMC Bioinformatics*, **2019**, 20, 256	3.6	31
57	Untargeted lipidomic evaluation of hydric and heat stresses on rice growth. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2019**, 1104, 148-156	3.2	7
56	Assessment of endocrine disruptors effects on zebrafish (Danio rerio) embryos by untargeted LC-HRMS metabolomic analysis. *Science of the Total Environment*, **2018**, 635, 156-166	10.2	55
55	Chemometric Strategies for Peak Detection and Profiling from Multidimensional Chromatography. *Proteomics*, **2018**, 18, e1700327	4.8	13
54	A chemometric approach for characterization of serum transthyretin in familial amyloidotic polyneuropathy type I (FAP-I) by electrospray ionization-ion mobility mass spectrometry. *Talanta*, **2018**, 181, 87-94	6.2	3
53	An untargeted lipidomic strategy combining comprehensive two-dimensional liquid chromatography and chemometric analysis. *Journal of Chromatography A*, **2018**, 1568, 80-90	4.5	25

52	Compression and Resolution Tools for the Analysis of Untargeted Metabolomic Data. *Comprehensive Analytical Chemistry*, **2018**, 82, 337-368	1.9	1
51	Identification of antihypertensive peptides in nutraceuticals by capillary electrophoresis-mass spectrometry. *Journal of Chromatography A*, **2018**, 1579, 129-137	4.5	10
50	Introduction to the Data Analysis Relevance in the Omic Era. *Comprehensive Analytical Chemistry*, **2018**, 1-12	1.9	1
49	Chemometric evaluation of hydrophilic interaction liquid chromatography stationary phases: resolving complex mixtures of metabolites. *Analytical Methods*, **2017**, 9, 774-785	3.2	8
48	The human mitochondrial transcription factor A is a versatile G-quadruplex binding protein. *Scientific Reports*, **2017**, 7, 43992	4.9	29
47	Metabolomic analysis of the effects of cadmium and copper treatment in Oryza sativa L. using untargeted liquid chromatography coupled to high resolution mass spectrometry and all-ion fragmentation. *Metallomics*, **2017**, 9, 660-675	4.5	29
46	Knowledge integration strategies for untargeted metabolomics based on MCR-ALS analysis of CE-MS and LC-MS data. *Analytica Chimica Acta*, **2017**, 978, 10-23	6.6	35
45	Untargeted Comprehensive Two-Dimensional Liquid Chromatography Coupled with High-Resolution Mass Spectrometry Analysis of Rice Metabolome Using Multivariate Curve Resolution. *Analytical Chemistry*, **2017**, 89, 7675-7683	7.8	62
44	Analysis of multiple mass spectrometry images from different Phaseolus vulgaris samples by multivariate curve resolution. *Talanta*, **2017**, 175, 557-565	6.2	14
43	Metabolic disruption of zebrafish (Danio rerio) embryos by bisphenol A. An integrated metabolomic and transcriptomic approach. *Environmental Pollution*, **2017**, 231, 22-36	9.3	47
42	Modelling of Hydrophilic Interaction Liquid Chromatography Stationary Phases Using Chemometric Approaches. *Metabolites*, **2017**, 7,	5.6	6
41	Data analysis strategies for targeted and untargeted LC-MS metabolomic studies: Overview and workflow. *TrAC - Trends in Analytical Chemistry*, **2016**, 82, 425-442	14.6	172
40	Metabolic profiling for the identification of Huntington biomarkers by on-line solid-phase extraction capillary electrophoresis mass spectrometry combined with advanced data analysis tools. *Electrophoresis*, **2016**, 37, 795-808	3.6	26
39	Chemometric analysis of comprehensive LC□C-MS data: Resolution of triacylglycerol structural isomers in corn oil. *Talanta*, **2016**, 160, 624-635	6.2	27
38	Compression strategies for the chemometric analysis of mass spectrometry imaging data. *Journal of Chemometrics*, **2016**, 30, 575-588	1.6	24
37	Lipidomic data analysis: tutorial, practical guidelines and applications. *Analytica Chimica Acta*, **2015**, 885, 1-16	6.6	72
36	qRT-PCR evaluation of the transcriptional response of zebra mussel to heavy metals. *BMC Genomics* , **2015**, 16, 354	4.5	6
35	Phenotypic malignant changes and untargeted lipidomic analysis of long-term exposed prostate cancer cells to endocrine disruptors. *Environmental Research*, **2015**, 140, 18-31	7.9	29

34	Evaluation of changes induced in rice metabolome by Cd and Cu exposure using LC-MS with XCMS and MCR-ALS data analysis strategies. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 8835-47	4.4	32
33	Epithelial-to-mesenchymal transition involves triacylglycerol accumulation in DU145 prostate cancer cells. *Molecular BioSystems*, **2015**, 11, 3397-406		31
32	Potential use of multivariate curve resolution for the analysis of mass spectrometry images. *Analyst, The*, **2015**, 140, 837-46	5	34
31	MCR-ALS GUI 2.0: New features and applications. *Chemometrics and Intelligent Laboratory Systems*, **2015**, 140, 1-12	3.8	466
30	Combination of CE-MS and advanced chemometric methods for high-throughput metabolic profiling. *Electrophoresis*, **2015**, 36, 2324-2335	3.6	22
29	Vibrational spectroscopic image analysis of biological material using multivariate curve resolution-alternating least squares (MCR-ALS). *Nature Protocols*, **2015**, 10, 217-40	18.8	190
28	Multivariate Curve Resolution (MCR). Solving the mixture analysis problem. *Analytical Methods*, **2014**, 6, 4964-4976	3.2	340
27	Modeling strategies for pharmaceutical blend monitoring and end-point determination by near-infrared spectroscopy. *International Journal of Pharmaceutics*, **2014**, 473, 219-31	6.5	26
26	Solution equilibria of cytosine- and guanine-rich sequences near the promoter region of the n-myc gene that contain stable hairpins within lateral loops. *Biochimica Et Biophysica Acta - General Subjects*, **2014**, 1840, 41-52	4	31
25	Blending process modeling and control by multivariate curve resolution. *Talanta*, **2013**, 117, 492-504	6.2	27
24	Combination of chromatographic and chemometric methods to study the interactions between DNA strands. *Analytica Chimica Acta*, **2012**, 722, 34-42	6.6	9
23	Porphyrin binding mechanism is altered by protonation at the loops in G-quadruplex DNA formed near the transcriptional activation site of the human c-kit gene. *Biochimica Et Biophysica Acta - General Subjects*, **2012**, 1820, 1987-96	4	19
22	Experimental methods for studying the interactions between G-quadruplex structures and ligands. *Current Pharmaceutical Design*, **2012**, 18, 1900-16	3.3	97
21	Influence of pH, temperature and the cationic porphyrin TMPyP4 on the stability of the i-motif formed by the 5V(C3TA2)4-3Vsequence of the human telomere. *International Journal of Biological Macromolecules*, **2011**, 49, 729-36	7.9	42
20	Chemical equilibria studies using multivariate analysis methods. *Analytical and Bioanalytical Chemistry*, **2011**, 399, 1983-97	4.4	23
19	Using principal component analysis to find correlations between loop-related and thermodynamic variables for G-quadruplex-forming sequences. *Biochimie*, **2010**, 92, 1016-23	4.6	6
18	Application of multivariate curve resolution to the analysis of yeast genome-wide screens. *Chemometrics and Intelligent Laboratory Systems*, **2010**, 104, 53-64	3.8	23
17	MCR-BANDS: A user friendly MATLAB program for the evaluation of rotation ambiguities in Multivariate Curve Resolution. *Chemometrics and Intelligent Laboratory Systems*, **2010**, 103, 96-107	3.8	157

16	MCRC software: A tool for chemometric analysis of two-way chromatographic data. *Chemometrics and Intelligent Laboratory Systems*, **2010**, 104, 155-171	3.8	52
15	pH-Modulated Watson-Crick duplex-quadruplex equilibria of guanine-rich and cytosine-rich DNA sequences 140 base pairs upstream of the c-kit transcription initiation site. *Chemistry - A European Journal*, **2009**, 15, 12663-71	4.8	37
14	Classification of nucleic acids structures by means of the chemometric analysis of circular dichroism spectra. *Analytica Chimica Acta*, **2009**, 642, 117-26	6.6	29
13	Targeting the G-quadruplex-forming region near the P1 promoter in the human BCL-2 gene with the cationic porphyrin TMPyP4 and with the complementary C-rich strand. *Biochimie*, **2009**, 91, 894-902	4.6	36
12	Study of the interaction between the G-quadruplex-forming thrombin-binding aptamer and the porphyrin 5,10,15,20-tetrakis-(N-methyl-4-pyridyl)-21,23H-porphyrin tetratosylate. *Analytical Biochemistry*, **2008**, 379, 8-15	3.1	42
11	Quality assessment of the results obtained by multivariate curve resolution analysis of multiple runs of gasoline blending processes. *Journal of Chemometrics*, **2006**, 20, 54-67	1.6	25
10	Resolution of a structural competition involving dimeric G-quadruplex and its C-rich complementary strand. *Nucleic Acids Research*, **2006**, 34, 206-16	20.1	34
9	Exploratory data analysis of DNA microarrays by multivariate curve resolution. *Analytical Biochemistry*, **2006**, 358, 76-89	3.1	28
8	A graphical user-friendly interface for MCR-ALS: a new tool for multivariate curve resolution in MATLAB. *Chemometrics and Intelligent Laboratory Systems*, **2005**, 76, 101-110	3.8	852
7	Non-negativity constraints for elimination of multiple solutions in fitting of multivariate kinetic models to spectroscopic data. *Journal of Chemometrics*, **2005**, 19, 97-106	1.6	26
6	Application of multivariate resolution methods to the study of biochemical and biophysical processes. *Analytical Biochemistry*, **2004**, 327, 1-13	3.1	46
5	Noise propagation and error estimations in multivariate curve resolution alternating least squares using resampling methods. *Journal of Chemometrics*, **2004**, 18, 327-340	1.6	47
4	Indications towards a stereoselectivity of the salt-induced peptide formation reaction. *Inorganica Chimica Acta*, **2004**, 357, 649-656	2.7	29
3	Multivariate curve resolution applied to the analysis and resolution of two-dimensional [1H,15N] NMR reaction spectra. *Analytical Chemistry*, **2004**, 76, 7094-101	7.8	51
2	Multivariate resolution of NMR labile signals by means of hard- and soft-modelling methods. *Analytica Chimica Acta*, **2003**, 490, 253-264	6.6	17
1	Multivariate curve resolution: a powerful tool for the analysis of conformational transitions in nucleic acids. *Nucleic Acids Research*, **2002**, 30, e92	20.1	61