Lourdes Arce

List of Publications by Year
in descending order

108 papers	3,199 citations	136885 32 h-index	182361 51 g-index
111 all docs	111 docs citations	111 times ranked	2565 citing authors

#	Article	IF	Citations
1	Target vs spectral fingerprint data analysis of Iberian ham samples for avoiding labelling fraud using headspace â€“ gas chromatographyâ€“ion mobility spectrometry. Food Chemistry, 2018, 246, 65-73.	4.2	150
2	Determination of volatile compounds by GCâ€“IMS to assign the quality of virgin olive oil. Food Chemistry, 2015, 187, 572-579.	4.2	124
3	Determination of anti-carcinogenic polyphenols present in green tea using capillary electrophoresis coupled to a flow injection system. Journal of Chromatography A, 1998, 827, 113-120.	1.8	116
4	Quality assessment of olive oils based on temperature-ramped HS-GC-IMS and sensory evaluation: Comparison of different processing approaches by LDA, kNN, and SVM. Food Chemistry, 2019, 278, 720-728.	4.2	113
5	Direct determination of biogenic amines in wine by integrating continuous flow clean-up and capillary electrophoresis with indirect UV detection. Journal of Chromatography A, 1998, 803, 249-260.	1.8	91
6	Determination of trans-resveratrol and other polyphenols in wines by a continuous flow sample clean-up system followed by capillary electrophoresis separation. Analytica Chimica Acta, 1998, 359, 27-38.	2.6	82
7	Selective extraction of astaxanthin from crustaceans by use of supercritical carbon dioxide. Talanta, 2004, 64, 726-731.	2.9	80
8	Target identification of volatile metabolites to allow the differentiation of lactic acid bacteria by gas chromatography-ion mobility spectrometry. Food Chemistry, 2017, 220, 362-370.	4.2	79
9	Flow injectionâ€“capillary electrophoresis coupling to automate on-line sample treatment for the determination of inorganic ions in waters. Journal of Chromatography A, 1997, 791, 279-287.	1.8	73
10	A robustness study of calibration models for olive oil classification: Targeted and non-targeted fingerprint approaches based on GC-IMS. Food Chemistry, 2019, 288, 315-324.	4.2	72
11	Rapid determination of trace levels of tetracyclines in surface water using a continuous flow manifold coupled to a capillary electrophoresis system. Analytica Chimica Acta, 2004, 517, 89-94.	2.6	71
12	Direct classification of olive oils by using two types of ion mobility spectrometers. Analytica Chimica Acta, 2011, 696, 108-115.	2.6	70
13	Multi-capillary column-ion mobility spectrometry: a potential screening system to differentiate virgin olive oils. Analytical and Bioanalytical Chemistry, 2012, 402, 489-498.	1.9	65
14	Screening of aflatoxins in feed samples using a flow system coupled to capillary electrophoresis. Journal of Chromatography A, 2002, 967, 303-314.	1.8	64
15	Detection of adulteration in extra virgin olive oils by using UV-IMS and chemometric analysis. Food Control, 2018, 85, 292-299.	2.8	64
16	HS-GC-IMS and chemometric data treatment for food authenticity assessment: Olive oil mapping and classification through two different devices as an example. Food Control, 2019, 98, 82-93.	2.8	63
17	Use of a non-destructive sampling method for characterization of Iberian cured ham breed and feeding regime using GC-IMS. Meat Science, 2019, 152, 146-154.	2.7	58
18	Direct determination of chlorophenols present in liquid samples by using a supported liquid membrane coupled in-line with capillary electrophoresis equipment. Analytica Chimica Acta, 2007, 587, 97-103.	2.6	56

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19	Determination of pesticides in waters by automatic on-line solid-phase extractionâ€“capillary electrophoresis. Journal of Chromatography A, 2000, 866, 137-146.	1.8	55
20	Coupling continuous separation techniques to capillary electrophoresis. Journal of Chromatography A, 2001, 924, 3-30.	1.8	55
21	Sample-introduction systems coupled to ion-mobility spectrometry equipment for determining compounds present in gaseous, liquid and solid samples. TrAC - Trends in Analytical Chemistry, 2008, 27, 139-150.	5.8	53
22	Destruxin A production byMetarhizium brunneumstrains during transient endophytic colonisation ofSolanum tuberosum. Biocontrol Science and Technology, 2016, 26, 1574-1585.	0.5	53
23	On-line ion-exchange preconcentration in a flow injection system coupled to capillary electrophoresis for the direct determination of UV absorbing anions. Analytica Chimica Acta, 1999, 390, 39-44.	2.6	51
24	Ion mobility spectrometry of volatile compounds from Iberian pig fat for fast feeding regime authentication. Talanta, 2008, 76, 591-596.	2.9	50
25	Liquid-phase microextraction techniques for simplifying sample treatment in capillary electrophoresis. TrAC - Trends in Analytical Chemistry, 2009, 28, 842-853.	5.8	50
26	Direct coupling of a gasâ€“liquid separator to an ion mobility spectrometer for the classification of different white wines using chemometrics tools. Talanta, 2011, 84, 471-479.	2.9	50
27	Inâ€line liquidâ€phase microextraction for selective enrichment and direct electrophoretic analysis of acidic drugs. Electrophoresis, 2007, 28, 3284-3289.	1.3	46
28	Ion Mobility Spectrometry versus Classical Physico-chemical Analysis for Assessing the Shelf Life of Extra Virgin Olive Oil According to Container Type and Storage Conditions. Journal of Agricultural and Food Chemistry, 2015, 63, 2179-2188.	2.4	39
29	New supported liquid membrane-capillary electrophoresis in-line arrangement for direct selective analysis of complex samples. Electrophoresis, 2006, 27, 3075-3085.	1.3	38
30	Combined use of supported liquid membrane and solidâ€phase extraction to enhance selectivity and sensitivity in capillary electrophoresis for the determination of ochratoxin A in wine. Electrophoresis, 2008, 29, 1573-1581.	1.3	38
31	Easy sample treatment for the determination of enrofloxacin and ciprofloxacin residues in raw bovine milk by capillary electrophoresis. Electrophoresis, 2012, 33, 2978-2986.	1.3	34
32	Volatile Metabolites of Goat Cheeses Determined by Ion Mobility Spectrometry. Potential Applications in Quality Control. Food Analytical Methods, 2015, 8, 1699-1709.	1.3	34
33	Coupling Continuous Sample Treatment Systems to Capillary Electophoresis. Critical Reviews in Analytical Chemistry, 1998, 28, 63-81.	1.8	33
34	Determination of penicillins in milk of animal origin by capillary electrophoresis: Is sample treatment the bottleneck for routine laboratories?. Talanta, 2014, 119, 75-82.	2.9	33
35	Feasibility study on the use of infrared spectroscopy for the direct authentication of Iberian pig fattening diet. Analytica Chimica Acta, 2009, 636, 183-189.	2.6	30
36	The More and Less Common Approaches to Enhancing Sensitivity in Capillary Electrophoresis. Current Analytical Chemistry, 2010, 6, 126-143.	0.6	30

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37	Selective and rapid determination of biogenic amines by capillary zone electrophoresis. Chromatographia, 1997, 46, 170-176.	0.7	29
38	Thirty years of capillary electrophoresis in food analysis laboratories: Potential applications. Electrophoresis, 2011, 32, 1379-1393.	1.3	29
39	Use of calixarene compounds as selectivity modifiers in capillary electrophoresis separations. Journal of Chromatography A, 1998, 816, 243-249.	1.8	28
40	Analysis of solid samples by capillary electrophoresis using a gas extraction sampling device in a flow system. Analytica Chimica Acta, 2001, 438, 315-322.	2.6	28
41	Bioguided extraction of polyphenols from grape marc by using an alternative supercritical-fluid extraction method based on a liquid solvent trap. Analytical and Bioanalytical Chemistry, 2004, 378, 2021-2027.	1.9	28
42	Self-assembled monolayer-based piezoelectric flow immunosensor for the determination of canine immunoglobulin. Biosensors and Bioelectronics, 2007, 22, 3217-3223.	5.3	26
43	Comparison of off- and in-line solid-phase extraction for enhancing sensitivity in capillary electrophoresis using ochratoxin as a model compound. Analytical and Bioanalytical Chemistry, 2009, 394, 609-615.	1.9	26
44	Determination of heterocyclic aromatic amines in fried beefsteak, meat extract, and fish by capillary zone electrophoresis. Chromatographia, 1998, 48, 700-706.	0.7	24
45	Determination of phenolic constituents in citrus samples by on-line coupling of a flow system with capillary electrophoresis. Electrophoresis, 2001, 22, 1553-1560.	1.3	24
46	Use of ion mobility spectroscopy with an ultraviolet ionization source as a vanguard screening system for the detection and determination of acetone in urine as a biomarker for cow and human diseases. Talanta, 2009, 78, 863-868.	2.9	24
47	Combination of solidâ€phase extraction and largeâ€volume stacking with polarity switching in micellar electrokinetic capillary chromatography for the determination of traces of nonsteroidal antiâ€inflammatory drugs in saliva. Electrophoresis, 2008, 29, 3074-3080.	1.3	23
48	Stability of proton-bound clusters of alkyl alcohols, aldehydes and ketones in Ion Mobility Spectrometry. Talanta, 2018, 185, 299-308.	2.9	23
49	Development of a screening method for analytical control of antibiotic residues by micellar electrokinetic capillary chromatography. Analytica Chimica Acta, 2004, 523, 21-28.	2.6	22
50	Direct determination of volatile analytes from solid samples by UV-ion mobility spectrometry. Journal of Chromatography A, 2008, 1215, 8-14.	1.8	22
51	Differentiation and identification of white wine varieties by using electropherogram fingerprints obtained with CE. Journal of Separation Science, 2009, 32, 3809-3816.	1.3	22
52	Evaluation of phenylene-bridged periodic mesoporous organosilica as a stationary phase for solid phase extraction. Journal of Chromatography A, 2014, 1370, 25-32.	1.8	22
53	Direct multiparametric determination of anions in soil samples by integrating on-line automated extraction/filtering with capillary electrophoresis. Fresenius' Journal of Analytical Chemistry, 1998, 360, 697-701.	1.5	21
54	Piezoelectric screening coupled on line to capillary electrophoresis for detection and speciation of mercury. Journal of Separation Science, 2002, 25, 319-327.	1.3	20

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55	Enhancing sensitivity and selectivity in the determination of aldehydes in olive oil by use of a Tenax TA trap coupled to a UV-ion mobility spectrometer. Journal of Chromatography A, 2011, 1218, 7543-7549.	1.8	20
56	Differentiation of organic goat's milk based on its hippuric acid content as determined by capillary electrophoresis. Electrophoresis, 2010, 31, 2211-2217.	1.3	19
57	Evaluation of hippuric acid content in goat milk as a marker of feeding regimen. Journal of Dairy Science, 2013, 96, 5426-5434.	1.4	19
58	Headspace Gas Chromatography Coupled to Mass Spectrometry and Ion Mobility Spectrometry: Classification of Virgin Olive Oils as a Study Case. Foods, 2020, 9, 1288.	1.9	19
59	A simple sample treatment for the determination of enrofloxacin and ciprofloxacin in raw goat milk. Microchemical Journal, 2013, 110, 533-537.	2.3	18
60	Full Workflows for the Analysis of Gas Chromatographyâ€"Ion Mobility Spectrometry in Foodomics: Application to the Analysis of Iberian Ham Aroma. Sensors, 2021, 21, 6156.	2.1	18
61	Automatic calibration in capillary electrophoresis. Electrophoresis, 2000, 21, 556-562.	1.3	17
62	Thermal desorption-ion mobility spectrometry: A rapid sensor for the detection of cannabinoids and discrimination of Cannabis sativa L. chemotypes. Sensors and Actuators B: Chemical, 2018, 273, 1413-1424.	4.0	17
63	Usefulness of GC-IMS for rapid quantitative analysis without sample treatment: Focus on ethanol, one of the potential classification markers of olive oils. LWT - Food Science and Technology, 2020, 120, 108897.	2.5	17
64	Development of a QuEChERS-based extraction method for the determination of destruxins in potato plants by UHPLCâ€"MS/MS. Talanta, 2016, 146, 815-822.	2.9	15
65	Chemical Fingerprinting of Olive Oils by Electrospray Ionization-Differential Mobility Analysis-Mass Spectrometry: A New Alternative to Food Authenticity Testing. Journal of the American Society for Mass Spectrometry, 2020, 31, 527-537.	1.2	15
66	SCREENING OF POLYPHENOLS IN GRAPE MARC BY ON-LINE SUPERCRITICAL FLUID EXTRACTIONâ€"FLOW THROUGH SENSOR. Analytical Letters, 2001, 34, 1461-1476.	1.0	14
67	Separation and On-Line Distinction of Enantiomers: A Non-Aqueous Capillary Electrophoresis Fourier Transform Infrared Spectroscopy Study. Applied Spectroscopy, 2004, 58, 662-666.	1.2	14
68	The Application of GCâ€"MS and Chemometrics to Categorize the Feeding Regime of Iberian Pigs in Spain. Chromatographia, 2008, 68, 593-601.	0.7	14
69	Use of carboxylic group functionalized magnetic nanoparticles for the preconcentration of metals in juice samples prior to the determination by capillary electrophoresis. Electrophoresis, 2012, 33, 2446-2453.	1.3	14
70	Usage considerations for headspace-gas chromatography-ion mobility spectrometry as a suitable technique for qualitative analysis in a routine lab. Journal of Chromatography A, 2021, 1640, 461937.	1.8	13
71	Exploration of the potential of different analytical techniques to authenticate organic vs. conventional olives and olive oils from two varieties using untargeted fingerprinting approaches. Food Control, 2021, 124, 107828.	2.8	13
72	Analytical strategy for determination of known and unknown destruxins using hybrid quadrupole-Orbitrap high-resolution mass spectrometry. Analytical and Bioanalytical Chemistry, 2017, 409, 3347-3357.	1.9	12

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73	Optimisation of a Headspace Solid-Phase Micro- Extraction Procedure for the Determination of 2,4,6-Trichloroanisole and Various Related Compounds in Cork Washing Waste Water by Use of Gas Chromatography-Mass Spectrometry. Chromatographia, 2005, 62, 527-531.	0.7	11
74	Use of whole electrophoretic profile and chemometric tools for the differentiation of three olive oil qualities. Talanta, 2019, 197, 175-180.	2.9	11
75	Microemulsion electrokinetic chromatography separation by using hexane-in-water microemulsions without cosurfactant: Comparison with MEKC. Electrophoresis, 2006, 27, 4439-4445.	1.3	10
76	Quality authentication of virgin olive oils using orthogonal techniques and chemometrics based on individual and high-level data fusion information. Talanta, 2020, 219, 121260.	2.9	10
77	Use of eosin as a fluorophore in capillary electrophoresis with laser detection. Journal of Chromatography A, 2001, 919, 407-415.	1.8	9
78	DeterminaÃ§Ã£o simultÃ¢nea de resÃduos de cloranfenicol, tianfenicol e florfenicol em leite bovino por cromatografia eletrocinÃ©tica micelar. Quimica Nova, 2006, 29, 926-931.	0.3	9
79	Analytical Tools for Disease Diagnosis in Animals via Fecal Volatilome. Critical Reviews in Analytical Chemistry, 2022, 52, 917-932.	1.8	9
80	Potential of porphyrins as chromogenic reagents for determining metals in capillary electrophoresis. Journal of Chromatography A, 2009, 1216, 6256-6258.	1.8	8
81	Innovative coupling of supercritical fluid extraction with ion mobility spectrometry. Talanta, 2018, 188, 637-643.	2.9	8
82	Determination of Monoterpene Hydrocarbons and Alcohols inMajorana hortensisMoench by Micellar Electrokinetic Capillary Chromatographic. Journal of Agricultural and Food Chemistry, 2002, 50, 4215-4220.	2.4	7
83	Determination of mandelic acid enantiomers in urine by derivatization in supercritical carbon dioxide prior to their determination by gas chromatography. Journal of Chromatography A, 2006, 1104, 331-336.	1.8	7
84	Use of multiple sequential injections of equal volumes to determine the apparent binding constant for antibody-antigen complexes by capillary electrophoresis. Talanta, 2009, 78, 1446-1451.	2.9	7
85	A comparative study between different alternatives to prepare gaseous standards for calibrating UV-Ion Mobility Spectrometers. Talanta, 2013, 111, 111-118.	2.9	7
86	Extraction of toxic compounds from saliva by magnetic-stirring-assisted micro-solid-phase extraction step followed by headspace-gas chromatography-ion mobility spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 6813-6822.	1.9	7
87	Production of destruxins by Metarhizium strains under different stress conditions and their detection by using UHPLC-MS/MS. Biocontrol Science and Technology, 2016, 26, 1298-1311.	0.5	7
88	Discrimination of defective dry-cured Iberian ham determining volatile compounds by non-destructive sampling and gas chromatography. LWT - Food Science and Technology, 2022, 154, 112785.	2.5	7
89	Use of basic amphiprotic organic solvents containing neutral-surfactant aggregates as pseudostationary phase in non-aqueous capillary electrophoresis. Analytica Chimica Acta, 2006, 560, 69-76.	2.6	6
90	The Role of Ion Mobility Spectrometry to Support the Food Protected Designation of Origin. Comprehensive Analytical Chemistry, 2013, 60, 221-249.	0.7	6

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91	Simultaneous determination of benzene and phenol in heat transfer fluid by head-space gas chromatography hyphenated with ion mobility spectrometry. Talanta, 2015, 144, 944-952.	2.9	6
92	Sliding window multi-curve resolution: Application to gas chromatographyâ€“ion mobility spectrometry. Sensors and Actuators B: Chemical, 2015, 217, 13-21.	4.0	5
93	Potential of ion mobility spectrometry versus FT-MIR and GC-MS to study the evolution of a heat transfer fluid after its heating process in a thermosolar plant. Microchemical Journal, 2015, 121, 163-171.	2.3	5
94	Solid phase extraction to enhance sensitivity when headspace-gas chromatography-ion mobility spectrometer is used: determination of phenol in environmental samples. Analytical Methods, 2016, 8, 5388-5397.	1.3	5
95	Photoionization-ion mobility spectrometer for non-targeted screening analysis or for targeted analysis coupling a Tenax TA column. Sensors and Actuators B: Chemical, 2016, 235, 370-377.	4.0	5
96	Membrane set up combined with photoionization-ion mobility spectrometer to improve analytical performance and avoid humidity interference on the determination of aromatics in gaseous samples. Journal of Chromatography A, 2016, 1431, 55-63.	1.8	5
97	Portable Raman Spectrometer as a Screening Tool for Characterization of Iberian Dry-Cured Ham. Foods, 2021, 10, 1177.	1.9	5
98	A non-destructive sampling method for food authentication using gas chromatography coupled to mass spectrometry or ion mobility spectrometry. Food Chemistry, 2022, 373, 131540.	4.2	4
99	Use of cyclodextrins for the separation of monoterpene isomers by micellar electrokinetic capillary chromatography. Journal of Separation Science, 2001, 13, 293-299.	1.0	2
100	CE method for analyzing Salmonella typhimurium in water samples. Journal of Separation Science, 2018, 41, 534-539.	1.3	2
101	Authentication of the Montanera Period on Carcasses of Iberian Pigs by Using Analytical Techniques and Chemometric Analyses. Animals, 2021, 11, 2671.	1.0	2
102	In vivo authentication of Iberian pig feeding regime using faecal volatilome information. Livestock Science, 2022, 260, 104913.	0.6	2
103	Innovations in analytical methods for food authenticity. , 2021, , 181-248.		1
104	Ion mobility detectors for gas chromatography. , 2021, , 425-447.		1
105	Review of the Methodologies for Measurement of Greenhouse Gas Emissions in Livestock Farming: Pig Farms as a Case of Study. Critical Reviews in Analytical Chemistry, 2020, , 1-19.	1.8	1
106	The ETACS European Project for testing the comparability of sensors and analysers: Part II. Field tests. Accreditation and Quality Assurance, 2000, 5, 293-299.	0.4	0
107	Capillary Electrophoresis as a Promising Technique to Evaluate Metabolites Secreted by Fungal Biocontrol Agents. Chromatographia, 2016, 79, 481-489.	0.7	0
108	Instrumental Techniques to Classify Olive Oils according to Their Quality. Critical Reviews in Analytical Chemistry, 2021, , 1-22.	1.8	0