MarÃ-a Castro Puyana

List of Publications by Year
in descending order

91	3,127	147801 31	182427 51
papers	citations	h-index	g-index

95	95	95	3446
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis and characterization of carnitine-based ionic liquids and their evaluation as additives in cyclodextrin-electrokinetic chromatography for the chiral separation of thiol amino acids. Journal of Chromatography A, 2022, 1670, 462955.	3.7	8
2	Chiral Capillary Electrophoresis in Food Analysis. Current and Future Developments in Food Science, 2022, , 291-320.	0.1	1
3	Amino Acid Analysis by Capillary Electromigration Methods. Current and Future Developments in Food Science, 2022, , 147-173.	0.1	0
4	Use of choline chloride-D-sorbitol deep eutectic solvent as additive in cyclodextrin-electrokinetic chromatography for the enantiomeric separation of lacosamide. Microchemical Journal, 2021, 160, 105669.	4.5	28
5	Advanced Analytical Tools to Reveal Food-Health Associations. , 2021, , 542-557.		0
6	Comprehensive metabolomic study of the response of HK-2 cells to hyperglycemic hypoxic diabetic-like milieu. Scientific Reports, 2021, 11, 5058.	3.3	24
7	Exploratory Metabolomic Analysis Based on Reversed-Phase Liquid Chromatographyâ€“Mass Spectrometry to Study an In Vitro Model of Hypoxia-Induced Metabolic Alterations in HK-2 Cells. International Journal of Molecular Sciences, 2021, 22, 7399.	4.1	3
8	Enantiomeric separation of prothioconazole and prothioconazole-desthio by Capillary Electrophoresis. Degradation studies in environmental samples. Journal of Chromatography A, 2021, 1651, 462255.	3.7	12
9	A rapid electrokinetic chromatography method using short-end injection for the enantioselective separation of tryptophan. Microchemical Journal, 2021, 168, 106508.	4.5	6
10	Use of single and dual systems of Î³-cyclodextrin or Î³ -cyclodextrin/L-Carnitine derived ionic liquid for the enantiomeric determination of cysteine by electrokinetic chromatography. A comparative study. Microchemical Journal, 2021, 169, 106596.	4.5	13
11	Chiral capillary electrophoresis. TrAC - Trends in Analytical Chemistry, 2020, 124, 115807.	11.4	147
12	Isolation of proteins from spent coffee grounds. Polyphenol removal and peptide identification in the protein hydrolysates by RP-HPLC-ESI-Q-TOF. Food Research International, 2020, 137, 109368.	6.2	22
13	Enantiomeric determination of econazole and sulconazole by electrokinetic chromatography using hydroxypropyl-Î²-cyclodextrin combined with ionic liquids based on L-lysine and L-glutamic acid. Journal of Chromatography A, 2020, 1621, 461085.	3.7	22
14	Enantiomeric separation of homocysteine and cysteine by electrokinetic chromatography using mixtures of Î³-cyclodextrin and carnitine-based ionic liquids. Microchemical Journal, 2020, 157, 105070.	4.5	21
15	Chiral Micellar Electrokinetic Chromatography. Journal of Chromatography A, 2020, 1626, 461383.	3.7	23
16	Time-series proteomic study of the response of HK-2 cells to hyperglycemic, hypoxic diabetic-like milieu. PLoS ONE, 2020, 15, e0235118.	2.5	4
17	Untargeted HILIC-MS-Based Metabolomics Approach to Evaluate Coffee Roasting Process: Contributing to an Integrated Metabolomics Multiplatform. Molecules, 2020, 25, 887.	3.8	16
18	A Non-Targeted Capillary Electrophoresis-Mass Spectrometry Strategy to Study Metabolic Differences in an In Vitro Model of High-Glucose Induced Changes in Human Proximal Tubular HK-2 Cells. Molecules, 2020, 25, 512.	3.8	11

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19	Chiral Analysis of Non-Protein Amino Acids by Capillary Electrophoresis. Methods in Molecular Biology, 2019, 2030, 277-291.	0.9	2
20	Capillary electrophoresis-mass spectrometry metabolic fingerprinting of green and roasted coffee. Journal of Chromatography A, 2019, 1605, 360353.	3.7	19
21	Amino acid chiral ionic liquids combined with hydroxypropyl-Î²-cyclodextrin for drug enantioseparation by capillary electrophoresis. Journal of Chromatography A, 2019, 1607, 460375.	3.7	46
22	Enantiomeric separation of ivabradine by cyclodextrin-electrokinetic chromatography. Effect of amino acid chiral ionic liquids. Journal of Chromatography A, 2019, 1608, 460407.	3.7	31
23	Chiral Discrimination of DL-Amino Acids by Trapped Ion Mobility Spectrometry after Derivatization with (+)-1-(9-Fluorenyl)ethyl Chloroformate. Analytical Chemistry, 2019, 91, 3277-3285.	6.5	46
24	High resolution liquid chromatography tandem mass spectrometry for the separation and identification of peptides in coffee silverskin protein hydrolysates. Microchemical Journal, 2019, 149, 103951.	4.5	10
25	A micellar electrokinetic chromatography approach using diastereomeric derivatization and a volatile surfactant for the enantioselective separation of selenomethionine. Electrophoresis, 2019, 40, 1951-1958.	2.4	8
26	Chiral Capillary Electrophoresis-Mass Spectrometry. Methods in Molecular Biology, 2019, 1985, 391-405.	0.9	6
27	Nuclear magnetic resonance to study the interactions acting in the enantiomeric separation of homocysteine by capillary electrophoresis with a dual system of Î³â€cyclodextrin and the chiral ionic liquid EtCholNTf₂. Electrophoresis, 2019, 40, 1913-1920.	2.4	21
28	An untargeted metabolomic strategy based on liquid chromatography-mass spectrometry to study high glucose-induced changes in HK-2 cells. Journal of Chromatography A, 2019, 1596, 124-133.	3.7	18
29	Separation and identification of peptides in hydrolysed protein extracts from edible macroalgae by HPLC-ESI-QTOF/MS. Algal Research, 2019, 39, 101465.	4.6	8
30	Advances in the Determination of Nonprotein Amino Acids in Foods and Biological Samples by Capillary Electrophoresis. Critical Reviews in Analytical Chemistry, 2019, 49, 459-475.	3.5	12
31	Pressure hot water processing of food and natural products. , 2019, , 193-220.		1
32	Enantioseparation by Capillary Electrophoresis Using Ionic Liquids as Chiral Selectors. Critical Reviews in Analytical Chemistry, 2018, 48, 429-446.	3.5	59
33	Recent advances in the application of capillary electromigration methods for food analysis and Foodomics. Electrophoresis, 2018, 39, 136-159.	2.4	65
34	Analysis of antibiotics by CE and CEC and their use as chiral selectors: An update. Electrophoresis, 2018, 39, 235-259.	2.4	25
35	A non-targeted metabolomic approach based on reversed-phase liquid chromatographyâ€“mass spectrometry to evaluate coffee roasting process. Analytical and Bioanalytical Chemistry, 2018, 410, 7859-7870.	3.7	25
36	Effect of the combined use of Î³-cyclodextrin and a chiral ionic liquid on the enantiomeric separation of homocysteine by capillary electrophoresis. Journal of Chromatography A, 2018, 1568, 222-228.	3.7	39

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37	Polyphenols analysis and related challenges. , 2018, , 177-232.		7
38	Electrophoretic Technique: Capillary Zone Electrophoresis. , 2018, , 659-685.		3
39	Capillary Electrophoresis: Chiral Separations. , 2018, , 334-334.		0
40	Pressurized liquid extraction of Neochloris oleoabundans for the recovery of bioactive carotenoids with anti-proliferative activity against human colon cancer cells. Food Research International, 2017, 99, 1048-1055.	6.2	61
41	Enantiomeric separation of the antiuremic drug colchicine by electrokinetic chromatography. Method development and quantitative analysis. Journal of Pharmaceutical and Biomedical Analysis, 2017, 138, 189-196.	2.8	22
42	A novel method for the quality control of saffron through the simultaneous analysis of authenticity and adulteration markers by liquid chromatography-(quadrupole-time of flight)-mass spectrometry. Food Chemistry, 2017, 228, 403-410.	8.2	25
43	A capillary micellar electrokinetic chromatography method for the stereoselective quantitation of bioallethrin in biotic and abiotic samples. Journal of Chromatography A, 2017, 1510, 108-116.	3.7	9
44	Application of mass spectrometry-based metabolomics approaches for food safety, quality and traceability. TrAC - Trends in Analytical Chemistry, 2017, 93, 102-118.	11.4	85
45	Water as green extraction solvent: Principles and reasons for its use. Current Opinion in Green and Sustainable Chemistry, 2017, 5, 31-36.	5.9	103
46	Reprint of: Application of mass spectrometry-based metabolomics approaches for food safety, quality and traceability. TrAC - Trends in Analytical Chemistry, 2017, 96, 62-78.	11.4	46
47	Detection of saffron adulteration with gardenia extracts through the determination of geniposide by liquid chromatographyâ€“mass spectrometry. Journal of Food Composition and Analysis, 2017, 55, 30-37.	3.9	35
48	Compositional analysis of foods. , 2017, , 359-380.		4
49	Derivatization in Capillary Electrophoresis. Methods in Molecular Biology, 2016, 1483, 37-52.	0.9	6
50	Enantiomeric separation of non-protein amino acids by electrokinetic chromatography. Journal of Chromatography A, 2016, 1467, 409-416.	3.7	14
51	Capillary electrophoresis determination of non-protein amino acids as quality markers in foods. Journal of Chromatography A, 2016, 1428, 97-114.	3.7	36
52	Supercritical antisolvent fractionation of rosemary extracts obtained by pressurized liquid extraction to enhance their antiproliferative activity. Journal of Supercritical Fluids, 2016, 107, 581-589.	3.2	45
53	Recent advances in the application of capillary electromigration methods for food analysis and Foodomics. Electrophoresis, 2014, 35, 147-169.	2.4	69
54	Potential of vancomycin for the enantiomeric resolution of FMOCâ€amino acids by capillary electrophoresisâ€ionâ€trapâ€mass spectrometry. Electrophoresis, 2014, 35, 1244-1250.	2.4	41

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55	Revalorization of Neochloris oleoabundans biomass as source of biodiesel by concurrent production of lipids and carotenoids. Algal Research, 2014, 5, 16-22.	4.6	32
56	Recovering Bioactive Compounds from Olive Oil Filter Cake by Advanced Extraction Techniques. International Journal of Molecular Sciences, 2014, 15, 16270-16283.	4.1	52
57	Optimization of clean extraction methods to isolate carotenoids from the microalga Neochloris oleoabundans and subsequent chemical characterization using liquid chromatography tandem mass spectrometry. Analytical and Bioanalytical Chemistry, 2013, 405, 4607-4616.	3.7	80
58	Metabolomics, peptidomics and proteomics applications of capillary electrophoresis-mass spectrometry in Foodomics: A review. Analytica Chimica Acta, 2013, 802, 1-13.	5.4	97
59	Rapid and simultaneous determination of polychlorinated biphenyls and their main metabolites (hydroxylated and methyl sulfonyl) by gas chromatography coupled to mass spectrometry: Comparison of different ionisation modes. Analytica Chimica Acta, 2013, 787, 148-154.	5.4	1
60	Strategies for a cleaner new scientific discipline of green foodomics. TrAC - Trends in Analytical Chemistry, 2013, 52, 23-35.	11.4	21
61	Metabolomics approaches based on mass spectrometry for food safety, quality and traceability. TrAC - Trends in Analytical Chemistry, 2013, 52, 74-87.	11.4	123
62	Compressed fluids for the extraction of bioactive compounds. TrAC - Trends in Analytical Chemistry, 2013, 43, 67-83.	11.4	267
63	Compositional Analysis of Foods. , 2013, , 295-317.		4
64	CHAPTER 6. Supercritical Fluid Extraction. RSC Green Chemistry, 2013, , 196-230.	0.1	16
65	Subcritical water extraction of bioactive components from algae. , 2013, , 534-560.		14
66	Extraction and Characterization of Bioactive Compounds with Health Benefits from Marine Resources: Macro and Micro Algae, Cyanobacteria, and Invertebrates. , 2012, , 55-98.		132
67	Global Foodomics strategy to investigate the health benefits of dietary constituents. Journal of Chromatography A, 2012, 1248, 139-153.	3.7	107
68	Formation and relevance of 5-hydroxymethylfurfural in bioactive subcritical water extracts from olive leaves. Food Research International, 2012, 47, 31-37.	6.2	34
69	Life cycle assessment of green pilot-scale extraction processes to obtain potent antioxidants from rosemary leaves. Journal of Supercritical Fluids, 2012, 72, 205-212.	3.2	51
70	Sensitive and fast determination of Sudan dyes in chilli powder by partialâ€filling micellar electrokinetic chromatographyâ€“tandem mass spectrometry. Electrophoresis, 2012, 33, 705-712.	2.4	18
71	Simultaneous enantioselective separation of polychlorinated biphenyls and their methyl sulfone metabolites by heartâ€cut MDGC: Determination of enantiomeric fractions in fish oils and cow liver samples. Chirality, 2012, 24, 577-583.	2.6	8
72	Recent advances in the application of capillary electromigration methods for food analysis and Foodomics. Electrophoresis, 2012, 33, 147-167.	2.4	80

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73	Recent approaches in sensitive enantioseparations by CE. Electrophoresis, 2012, 33, 228-242.	2.4	47
74	Fast Determination of Sudan Dyes in Chilli Tomato Sauces Using Partial Filling Micellar Electrokinetic Chromatography. Journal of Agricultural and Food Chemistry, 2011, 59, 11903-11909.	5.2	29
75	Quenched phosphorescence as alternative detection mode in the chiral separation of methotrexate by electrokinetic chromatography. Analytical and Bioanalytical Chemistry, 2011, 400, 2913-2919.	3.7	12
76	Determination of betaines in vegetable oils by capillary electrophoresis tandem mass spectrometry â€“ application to the detection of olive oil adulteration with seed oils. Electrophoresis, 2011, 32, 1394-1401.	2.4	22
77	Recent advances in the analysis of antibiotics by CE and CEC. Electrophoresis, 2010, 31, 229-250.	2.4	33
78	Sensitized phosphorescence as detection method for the enantioseparation of bupropion by capillary electrophoresis. Electrophoresis, 2010, 31, 3928-3936.	2.4	21
79	Determination of l- and d-carnitine in dietary food supplements using capillary electrophoresisâ€“tandem mass spectrometry. Food Chemistry, 2010, 120, 921-928.	8.2	48
80	Development of a CEâ€MS² method for the enantiomeric separation of <scp>L</scp>/<scp>D</scp>â€carnitine: Application to the analysis of infant formulas. Electrophoresis, 2009, 30, 337-348.	2.4	44
81	About the role of enantioselective selectorâ€“selectand interactions and the mobilities of diastereomeric associates in enantiomer separations using CE. Electrophoresis, 2009, 30, 2803-2811.	2.4	66
82	Simultaneous separation of epinephrine and norepinephrine enantiomers by EKC: Application to the analysis of pharmaceutical formulations. Electrophoresis, 2009, 30, 2947-2954.	2.4	14
83	Enantiomeric separation of bupropion enantiomers by electrokinetic chromatography: Quantitative analysis in pharmaceutical formulationsâ˜†. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2008, 875, 260-265.	2.3	25
84	Recent advances in the analysis of antibiotics by CE and CEC. Electrophoresis, 2008, 29, 274-293.	2.4	37
85	The first contribution of capillary electrophoresis to the study of abiotic origins of homochirality: Investigation of the enantioselective adsorption of 3â€carboxy adipic acid on minerals. Electrophoresis, 2008, 29, 1548-1555.	2.4	11
86	Separation of enantiomers of deprenyl with various CDs in CE and the effect of enantiomer migration order on enantiomeric impurity determination of selegiline in active ingredients and tablets. Electrophoresis, 2007, 28, 388-394.	2.4	24
87	Enantioselective separation of azole compounds by EKC. Reversal of migration order of enantiomers with CD concentration. Electrophoresis, 2007, 28, 2667-2674.	2.4	38
88	CE methods for the determination of nonâ€protein amino acids in foods. Electrophoresis, 2007, 28, 4031-4045.	2.4	24
89	Identification and quantitation of cis-ketoconazole impurity by capillary zone electrophoresisâ€“mass spectrometry. Journal of Chromatography A, 2006, 1114, 170-177.	3.7	25
90	Separation and quantitation of the four stereoisomers of itraconazole in pharmaceutical formulations by electrokinetic chromatography. Electrophoresis, 2006, 27, 887-895.	2.4	18

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91	Enantiomeric separation of ketoconazole and terconazole antifungals by electrokinetic chromatography: Rapid quantitative analysis of ketoconazole in pharmaceutical formulations. Electrophoresis, 2005, 26, 3960-3968.	2.4	30