MarÃa Celia GarcÃa-Alvarez-Coque

List of Publications by Year
in descending order

275 papers	6,238 citations	71102 41 h-index	133252 59 g-index
275 all docs	275 docs citations	275 times ranked	2489 citing authors

#	ARTICLE	IF	CITATIONS
1	A Model for the Description, Simulation, and Deconvolution of Skewed Chromatographic Peaks. Analytical Chemistry, 1997, 69, 3822-3831.	6.5	147
2	Formation and instability of o-phthalaldehyde derivatives of amino acids. Analytical Biochemistry, 1989, 178, 1-7.	2.4	145
3	Retention mechanisms in micellar liquid chromatography. Journal of Chromatography A, 2009, 1216, 1798-1814.	3.7	139
4	On the use of ionic liquids as mobile phase additives in high-performance liquid chromatography. A review. Analytica Chimica Acta, 2015, 883, 1-21.	5.4	109
5	Models and objective functions for the optimisation of selectivity in reversed-phase liquid chromatography. Analytica Chimica Acta, 2006, 579, 125-145.	5.4	106
6	Solute–mobile phase and solute–stationary phase interactions in micellar liquid chromatography. A review. Analyst, The, 1992, 117, 831-837.	3.5	103
7	Modelling of retention behaviour of solutes in micellar liquid chromatography. Journal of Chromatography A, 1997, 780, 129-148.	3.7	96
8	New Insights and Recent Developments in Micellar Liquid Chromatography. Separation and Purification Reviews, 2009, 38, 45-96.	5.5	89
9	Hydrophobicity of Ionizable Compounds. A Theoretical Study and Measurements of Diuretic Octanol–Water Partition Coefficients by Countercurrent Chromatography. Analytical Chemistry, 1999, 71, 879-888.	6.5	86
10	Direct injection of physiological fluids in micellar liquid chromatography. Biomedical Applications, 1999, 736, 1-18.	1.7	71
11	Influence of the addition of modifiers on solute-micelle interaction in hybrid micellar liquid chromatography. Chromatographia, 1998, 48, 655-663.	1.3	67
12	Quantitative structure–retention and retention–activity relationships of Î²-blocking agents by micellar liquid chromatography. Journal of Chromatography A, 2001, 912, 211-221.	3.7	67
13	Interpretive strategy for optimization of surfactant and alcohol concentration in micellar liquid chromatography. Journal of Chromatography A, 1994, 677, 239-253.	3.7	66
14	Prediction of the retention in reversed-phase liquid chromatography using solute–mobile phase–stationary phase polarity parameters. Journal of Chromatography A, 2002, 955, 19-34.	3.7	66
15	Studies on the formation and stability of isoindoles derived from amino acids, o-phthalaldehyde and N-acetyl-l-cysteine. Analytical Biochemistry, 1989, 180, 172-176.	2.4	64
16	Modelling of the retention behaviour of solutes in micellar liquid chromatography with organic modifiers. Journal of Chromatography A, 1993, 639, 87-96.	3.7	63
17	Liquid chromatographic procedure for the evaluation of Î²-blockers in pharmaceuticals using hybrid micellar mobile phases. Journal of Chromatography A, 1997, 765, 221-231.	3.7	63
18	The role of the dual nature of ionic liquids in the reversed-phase liquid chromatographic separation of basic drugs. Journal of Chromatography A, 2011, 1218, 398-407.	3.7	63

#	ARTICLE	IF	CITATIONS
19	Chromatographic monitoring of diuretics in urine samples using a sodium dodecyl sulphate–propanol micellar eluent. Analytica Chimica Acta, 1994, 287, 201-210.	5.4	62
20	Micellar liquid chromatography: suitable technique for screening analysis. Journal of Chromatography A, 2002, 947, 31-45.	3.7	62
21	Micellar Liquid Chromatography: A Worthy Technique for the Determination of β-Antagonists in Urine Samples. Analytical Chemistry, 1999, 71, 319-326.	6.5	58
22	Levels in the interpretive optimisation of selectivity in high-performance liquid chromatography: A magical mystery tour. Journal of Chromatography A, 2006, 1120, 308-321.	3.7	58
23	Analysis of a solute polarity parameter in reversed-phase liquid chromatography on a linear solvation relationship basis. Analytica Chimica Acta, 2004, 515, 209-227.	5.4	56
24	Stationary phase modulation in liquid chromatography through the serial coupling of columns: A review. Analytica Chimica Acta, 2016, 923, 1-23.	5.4	55
25	Determination of anabolic steroids in pharmaceuticals by liquid chromatography with a microemulsion of sodium dodecyl sulfate and pentanol as mobile phase. Analytica Chimica Acta, 1995, 302, 163-172.	5.4	54
26	Description of the partitioning behaviour of solutes and data treatment in micellar liquid chromatography with modifiers. Analytica Chimica Acta, 1996, 324, 163-173.	5.4	54
27	Error analysis and performance of different retention models in the transference of data from/to isocratic/gradient elution. Journal of Chromatography A, 2003, 1018, 169-181.	3.7	54
28	Effect of a Variety of Organic Additives on Retention and Efficiency in Micellar Liquid Chromatography. Analytical Chemistry, 2000, 72, 4826-4835.	6.5	52
29	Global treatment of chromatographic data with MICHROM. Analytica Chimica Acta, 1997, 348, 187-196.	5.4	49
30	Retention Mechanisms for Basic Drugs in the Submicellar and Micellar Reversed-Phase Liquid Chromatographic Modes. Analytical Chemistry, 2008, 80, 9705-9713.	6.5	49
31	Peak half-width plots to study the effect of organic solvents on the peak performance of basic drugs in micellar liquid chromatography. Journal of Chromatography A, 2010, 1217, 1786-1798.	3.7	49
32	Gaining insight in the behaviour of imidazolium-based ionic liquids as additives in reversed-phase liquid chromatography for the analysis of basic compounds. Journal of Chromatography A, 2015, 1380, 96-103.	3.7	47
33	Interpretive optimisation strategy applied to the isocratic separation of phenols by reversed-phase liquid chromatography with acetonitrile–water and methanol–water mobile phases. Journal of Chromatography A, 2000, 886, 31-46.	3.7	46
34	Optimised procedures for the reversed-phase liquid chromatographic analysis of formulations containing tricyclic antidepressants. Journal of Pharmaceutical and Biomedical Analysis, 2003, 32, 71-84.	2.8	45
35	Effects of pH and the presence of micelles on the resolution of diuretics by reversed-phase liquid chromatography. Journal of Chromatography A, 2004, 1022, 51-65.	3.7	45
36	Evaluation of several global resolution functions for liquid chromatography. Analytica Chimica Acta, 1999, 396, 61-74.	5.4	44

#	ARTICLE	IF	CITATIONS
37	Furosemide assay in pharmaceuticals by Micellar liquid chromatography: study of the stability of the drug. Journal of Pharmaceutical and Biomedical Analysis, 2000, 23, 803-817.	2.8	43
38	Limits of multi-linear gradient optimisation in reversed-phase liquid chromatography. Journal of Chromatography A, 2005, 1063, 79-88.	3.7	43
39	Submicellar and micellar reversed-phase liquid chromatographic modes applied to the separation of β-blockers. Journal of Chromatography A, 2009, 1216, 3199-3209.	3.7	43
40	Room-temperature phosphorimetry of polyaromatic hydrocarbons with organized media and paper substrate: A comparative study. Talanta, 1988, 35, 41-46.	5.5	42
41	Evaluation of diuretics in pharmaceuticals by high-performance liquid chromatography with a 0.05 mol dm−3 sodium dodecyl sulfate−3% propanol mobile phase. Analyst, The, 1992, 117, 843-847.	3.5	42
42	Available Lysine in Protein, Assay Using o-Phthalaldehyde/ N-Acetyl-L-cysteine Spectrophotometric Method. Journal of Food Science, 1992, 57, 503-505.	3.1	42
43	Resolution assessment and performance of several organic modifiers in hybrid micellar liquid chromatography. Analytica Chimica Acta, 2001, 433, 187-198.	5.4	42
44	Parabolic-Lorentzian modified Gaussian model for describing and deconvolving chromatographic peaks. Journal of Chromatography A, 2002, 954, 59-76.	3.7	42
45	Half-width plots, a simple tool to predict peak shape, reveal column kinetics and characterise chromatographic columns in liquid chromatography: State of the art and new results. Journal of Chromatography A, 2013, 1314, 142-153.	3.7	42
46	Description of the retention behaviour in micellar liquid chromatography as a function of pH, surfactant and modifier concentration. Journal of Chromatography A, 1997, 769, 155-168.	3.7	41
47	Determination of active ingredients in cough−cold preparations by micellar liquid chromatography. Talanta, 2001, 54, 621-630.	5.5	41
48	Considerations on the modelling and optimisation of resolution of ionisable compounds in extended pH-range columns. Journal of Chromatography A, 2005, 1089, 170-186.	3.7	41
49	Paper substrate room-temperature phosphorimetry of polyaromatic hydrocarbons enhanced by surface-active agents. Analytical Chemistry, 1988, 60, 416-420.	6.5	40
50	Chromatographic determination of diuretics in urine samples using hybrid micellar mobile phases with fluorimetric detection. Analytica Chimica Acta, 1998, 375, 143-154.	5.4	40
51	Comparison of the performance of butanol and pentanol as modifiers in the micellar chromatographic determination of some phenethylamines. Journal of Chromatography A, 2000, 866, 35-49.	3.7	40
52	Reversed-phase liquid chromatography with mixed micellar mobile phases of Brij-35 and sodium dodecyl sulphate: a method for the analysis of basic compounds. Green Chemistry, 2015, 17, 3561-3570.	9.0	40
53	Fluorescence in microemulsions and reversed micelles. Analytica Chimica Acta, 1988, 208, 1-19.	5.4	39
54	High-performance liquid chromatographic determination of diuretics in urine by micellar liquid chromatography. Biomedical Applications, 1992, 582, 189-194.	1.7	39

#	Article	IF	Citations
55	Spectrophotometric Determination of Carbamate Pesticides With Diazotized Trimethylaniline in a Micellar Medium of Sodium Dodecyl Sulfate. Analyst, The, 1997, 122, 459-463.	3.5	38
56	Complementary mobile-phase optimisation for resolution enhancement in high-performance liquid chromatography. Journal of Chromatography A, 2000, 876, 17-35.	3.7	38
57	A QSPR Study of thepSolute Polarity Parameter to Estimate Retention in HPLC. Journal of Chemical Information and Computer Sciences, 2003, 43, 1240-1247.	2.8	38
58	High-performance micellar liquid chromatography determination of sulphonamides in pharmaceuticals after azodye precolumn derivatization. Journal of Pharmaceutical and Biomedical Analysis, 1995, 13, 237-245.	2.8	37
59	Reduction of Convective Low-Frequency Noise in Thermal Lens Spectrometry. Applied Spectroscopy, 1990, 44, 1501-1507.	2.2	36
60	Micellar-organic versus aqueous-organic mobile phases for the screening of Î²-blockers. Analytica Chimica Acta, 2002, 454, 109-123.	5.4	36
61	Chromatographic Determination of Thiols After Pre–column Derivatization with o–Phthalaldehyde and Isoleucine. Journal of Liquid Chromatography and Related Technologies, 2004, 27, 1593-1609.	1.0	36
62	Use of a three-factor interpretive optimisation strategy in the development of an isocratic chromatographic procedure for the screening of diuretics in urine samples using micellar mobile phases. Journal of Chromatography A, 2000, 893, 321-337.	3.7	34
63	Combined effect of solvent content, temperature and pH on the chromatographic behaviour of ionisable compounds. Journal of Chromatography A, 2007, 1163, 49-62.	3.7	34
64	Quantitation of hydrophobicity in micellar liquid chromatography. TrAC - Trends in Analytical Chemistry, 1999, 18, 533-543.	11.4	33
65	Micelle-stabilized room-temperature phosphorimetric procedure for the determination of naproxen and propranolol in pharmaceutical preparations. Analyst, The, 1994, 119, 1093-1097.	3.5	32
66	Reversed–phase liquid chromatography without organic solvent for determination of tricyclic antidepressants. Journal of Separation Science, 2012, 35, 1303-1309.	2.5	32
67	A micellar liquid chromatographic procedure for the determination of amiloride, bendroflumethiazide, chlorthalidone, spironolactone and triamterene in pharmaceuticals. Journal of Pharmaceutical and Biomedical Analysis, 1993, 11, 711-716.	2.8	31
68	Micellar versus hydro-organic mobile phases for retention-hydrophobicity relationship studies with ionizable diuretics and an anionic surfactant. Journal of Chromatography A, 2004, 1030, 279-288.	3.7	31
69	Spectrophotometric determination of N-acetylcysteine in drug formulations with o-phthalaldehyde and isoleucine. Analyst, The, 1989, 114, 975-977.	3.5	30
70	Chromatographic analysis of phenethylamine–antihistamine combinations using C8, C18 or cyano columns and micellar sodium dodecyl sulfate–pentanol mixtures. Analyst, The, 2001, 126, 457-464.	3.5	30
71	RAPID LIQUID CHROMATOGRAPHIC DETERMINATION OF TETRACYCLINES IN ANIMAL FEEDS USING A SURFACTANT SOLUTION AS MOBILE PHASE. Analytical Letters, 2002, 35, 687-705.	1.8	30
72	Improvement of Peak Shape and Separation Performance of Â-Blockers in Conventional Reversed-Phase Columns Using Solvent Modifiers. Journal of Chromatographic Science, 2003, 41, 350-358.	1.4	30

#	Article	IF	Citations
73	Determination of Amino Acids by Micellar High-Performance Liquid Chromatography and Pre-column Derivatization withO-Phthalaldehyde and N-Acetyl-L-cysteine. Journal of Liquid Chromatography and Related Technologies, 1995, 18, 2827-2841.	1.0	29
74	A three-factor optimisation strategy for micellar liquid chromatography. Chromatographia, 2000, 51, 101-110.	1.3	29
75	MICELLAR CHROMATOGRAPHIC PROCEDURE WITH DIRECT INJECTION FOR THE DETERMINATION OF SULFONAMIDES IN MILK AND HONEY SAMPLES. Journal of Liquid Chromatography and Related Technologies, 2001, 24, 117-131.	1.0	29
76	Comparative study of solvation parameter models accounting the effects of mobile phase composition in reversed-phase liquid chromatography. Journal of Chromatography A, 2007, 1166, 85-96.	3.7	29
77	Colorimetric determination of arylamines and sulphonamides by diazotization and coupling in a micellar solution. Analytica Chimica Acta, 1989, 223, 327-337.	5.4	28
78	Micellar enhanced spectrophotometric determination of organic species. TrAC - Trends in Analytical Chemistry, 1995, 14, 29-37.	11.4	28
79	Prediction of peak shape as a function of retention in reversed-phase liquid chromatography. Journal of Chromatography A, 2004, 1022, 17-24.	3.7	28
80	Approaches to model the retention and peak profile in linear gradient reversed-phase liquid chromatography. Journal of Chromatography A, 2013, 1284, 28-35.	3.7	28
81	Comparison of two serially coupled column systems and optimization software in isocratic liquid chromatography for resolving complex mixtures. Journal of Chromatography A, 2013, 1281, 94-105.	3.7	28
82	Characterization of Chemical Composition along the Molar Mass Distribution in Polyolefin Copolymers by <scp>GPC</scp> Using a Modern Filterâ€‹<scp>B</scp>ased <scp>IR</scp> Detector. Macromolecular Symposia, 2013, 330, 63-80.	0.7	27
83	Performance of micellar mobile phases in reversed-phase chromatography for the analysis of pharmaceuticals containing Î²-blockers and other antihypertensive drugs. Analyst, The, 1996, 121, 1677-1682.	3.5	26
84	Analysis of Urine Samples Containing Cardiovascular Drugs by Micellar Liquid Chromatography with Fluorimetric Detection. Journal of Chromatographic Science, 1999, 37, 93-102.	1.4	26
85	Performance of amines as silanol suppressors in reversed-phase liquid chromatography. Journal of Chromatography A, 2016, 1465, 98-106.	3.7	26
86	Modelling of the elution behaviour in hybrid micellar eluents with different organic modifiers. Analytica Chimica Acta, 1999, 381, 275-285.	5.4	25
87	A hybrid genetic algorithm with local search: I. Discrete variables: optimisation of complementary mobile phases. Chemometrics and Intelligent Laboratory Systems, 2001, 59, 89-106.	3.5	25
88	Micellar versus hydro-organic reversed-phase liquid chromatography: A solvation parameter-based perspective. Journal of Chromatography A, 2008, 1182, 176-196.	3.7	25
89	Spectrophotometric determination of phenols by coupling with diazotized 2,4,6-trimethylaniline in a micellar medium. Analyst, The, 1994, 119, 1381-1386.	3.5	24
90	Determination of sulphonamides in human urine by azo dye precolumn derivatization and micellar liquid chromatography. Biomedical Applications, 1995, 670, 183-187.	1.7	24

#	Article	IF	Citations
91	Liquid chromatographic determination of some thiazide diuretics in pharmaceuticals with a sodium dodecyl sulfate mobile phase. Analyst, The, 1998, 123, 301-306.	3.5	24
92	Measurement of the elution strength and peak shape enhancement at increasing modifier concentration and temperature in RPLC. Analytical and Bioanalytical Chemistry, 2012, 404, 2973-2984.	3.7	24
93	Optimisation of gradient elution with serially-coupled columns. Part I: Single linear gradients. Journal of Chromatography A, 2014, 1350, 51-60.	3.7	24
94	Micellar liquid chromatographic separation of amino acids using pre- and post-column o-phthalaldehyde/ N -acetylcysteine derivatization. Analytica Chimica Acta, 2000, 418, 153-165.	5.4	23
95	Effect of ionization and the nature of the mobile phase in quantitative structure-retention relationship studies. Journal of Chromatography A, 2005, 1063, 25-34.	3.7	23
96	Filter-based infrared detectors for high temperature size exclusion chromatography analysis of polyolefins: Calibration with a small number of standards and error analysis. Journal of Chromatography A, 2012, 1257, 66-73.	3.7	23
97	Paper-substrate room-temperature phosphorescence of phenothiazine derivatives enhanced by thallium(I) nitrate and surface-active agents. Analytica Chimica Acta, 1988, 204, 247-258.	5.4	22
98	Determination of the protein and free amino acid content in a sample using o-phthalaldehyde and N-acetyl-L-cysteine. Analyst, The, 1990, 115, 1125-1128.	3.5	22
99	Net analyte signal as a deconvolution-oriented resolution criterion in the optimisation of chromatographic techniques. Journal of Chromatography A, 2003, 991, 47-59.	3.7	22
100	Approaches to characterise chromatographic column performance based on global parameters accounting for peak broadening and skewness. Journal of Chromatography A, 2010, 1217, 2147-2157.	3.7	22
101	Performance of different C18 columns in reversed-phase liquid chromatography with hydro-organic and micellar-organic mobile phases. Journal of Chromatography A, 2014, 1344, 76-82.	3.7	22
102	On the Measurement of Dead Time in Micellar Liquid Chromatography. Journal of Liquid Chromatography and Related Technologies, 1996, 19, 1205-1228.	1.0	21
103	Use of Micellar Mobile Phases for the Chromatographic Determination of Clorazepate, Diazepam, and Diltiazem in Pharmaceuticals. Journal of Chromatographic Science, 2000, 38, 521-527.	1.4	21
104	Effect of short-chain alcohols on surfactant-mediated reversed-phase liquid chromatographic systems. Journal of Chromatography A, 2010, 1217, 7082-7089.	3.7	21
105	Silanol suppressing potency of alkyl-imidazolium ionic liquids on C18 stationary phases. Journal of Chromatography A, 2012, 1232, 166-175.	3.7	21
106	Implementation of gradients of organic solvent in micellar liquid chromatography using DryLab®: Separation of basic compounds in urine samples. Journal of Chromatography A, 2014, 1344, 31-41.	3.7	21
107	Extraction of β-blockers from urine with a polymeric monolith modified with 1-allyl-3-methylimidazolium chloride in spin column format. Talanta, 2020, 214, 120860.	5.5	21
108	Solute–Solvent Interactions in Micellar Electrokinetic Chromatography. 6. Optimization of the Selectivity of Lithium Dodecyl Sulfate–Lithium Perfluorooctanesulfonate Mixed Micellar Buffers. Analytical Chemistry, 2002, 74, 4447-4455.	6.5	20

#	Article	IF	Citations
109	Determination of furosemide in urine samples by direct injection in a micellar liquid chromatographic system. Analyst, The, 2002, 127, 29-34.	3.5	20
110	Enhanced calculation of optimal gradient programs in reversed-phase liquid chromatography. Journal of Chromatography A, 2003, 1018, 183-196.	3.7	20
111	Systematic Approach To Calculate the Concentration of Chemical Species in Multi-Equilibrium Problems. Journal of Chemical Education, 2011, 88, 169-173.	2.3	20
112	Formation rates and protonation constants of azo dyes in a sodium dodecylsulphate micellar solution. Talanta, 1991, 38, 1285-1289.	5.5	19
113	Chromatographic Efficiency in Micellar Liquid Chromatography: Should it Be Still a Topic of Concern?. Separation and Purification Reviews, 2013, 42, 1-27.	5.5	19
114	Are analysts doing method validation in liquid chromatography?. Journal of Chromatography A, 2014, 1353, 2-9.	3.7	19
115	Determination of Pyrrole Derivatives and Hydroxyproline with 4-(Dimethylamino)benzaldehyde in a Micellar Medium. Analytical Letters, 1994, 27, 1557-1567.	1.8	18
116	Correlation between hydrophobicity of amino acids and retention data in reversed-phase liquid chromatography with micellar eluents. Chromatographia, 1995, 41, 455-461.	1.3	18
117	MICELLAR LIQUID CHROMATOGRAPHIC DETERMINATION OF ANTI-CONVULSANT DRUGS IN PILLS AND CAPSULES. Journal of Liquid Chromatography and Related Technologies, 2000, 23, 1387-1401.	1.0	18
118	Flow-injection spectrophotometric determination of nicotinic acid in micellar medium of N-cetylpyridinium chloride. Analytica Chimica Acta, 2001, 427, 93-100.	5.4	18
119	Peak deconvolution in one-dimensional chromatography using a two-way data approach. Journal of Chromatography A, 2002, 958, 35-49.	3.7	18
120	Prediction of peak shape in hydro-organic and micellar-organic liquid chromatography as a function of mobile phase composition. Journal of Chromatography A, 2007, 1163, 119-127.	3.7	18
121	High Submicellar Liquid Chromatography. Separation and Purification Reviews, 2014, 43, 124-154.	5.5	18
122	Serial versus parallel columns using isocratic elution: A comparison of multi-column approaches in mono-dimensional liquid chromatography. Journal of Chromatography A, 2015, 1390, 95-102.	3.7	18
123	Ultratrace Determination of Metals with Dithizone by Thermal Lens Spectrophotometry. Applied Spectroscopy, 1988, 42, 341-346.	2.2	17
124	Conventional and thermal lens spectrophotometric determination of p-aminobenzoic acid and arylamine diuretics previous azodye formation in a micellar medium. Talanta, 1993, 40, 1711-1718.	5.5	17
125	A hybrid genetic algorithm with local search. Chemometrics and Intelligent Laboratory Systems, 2001, 59, 107-120.	3.5	17
126	Estimation of significant solvent concentration ranges and its application to the enhancement of the accuracy of gradient predictions. Journal of Chromatography A, 2004, 1057, 31-39.	3.7	17

#	ARTICLE	IF	CITATIONS
127	Combined effect of solvent content, temperature and pH on the chromatographic behaviour of ionisable compounds. Journal of Chromatography A, 2008, 1193, 117-128.	3.7	17
128	Performance of short-chain alcohols versus acetonitrile in the surfactant-mediated reversed-phase liquid chromatographic separation of β-blockers. Journal of Chromatography A, 2010, 1217, 7090-7099.	3.7	17
129	Spectrophotometric determination of mercury(II) and silver(I) with copper(II) and diethyldithiocarbamate in the presence of triton X-100. Talanta, 1986, 33, 697-699.	5.5	16
130	Micellar modified spectrophotometric determination of nitrobenzenes based upon reduction with tin(II), diazotisation and coupling with the Bratton–Marshall reagent. Talanta, 1998, 47, 43-52.	5.5	16
131	Correlation between hydrophobicity and retention data of several antihistamines in reversed-phase liquid chromatography with aqueous-organic and micellar-organic mobile phases. Analytica Chimica Acta, 2000, 421, 45-55.	5.4	16
132	Retention-structure relationship studies for some steroidal hormones in micellar liquid chromatography. Chromatographia, 2000, 51, 577-585.	1.3	16
133	Performance of a Chromolith RP‐18e column for the screening of β‐blockers. Journal of Separation Science, 2009, 32, 2841-2853.	2.5	16
134	Some insights on the description of gradient elution in reversed‐phase liquid chromatography. Journal of Separation Science, 2014, 37, 2269-2277.	2.5	16
135	1-Hexyl-3-methyl imidazolium tetrafluoroborate: An efficient column enhancer for the separation of basic drugs by reversed-phase liquid chromatography. Journal of Chromatography A, 2012, 1258, 168-174.	3.7	15
136	Optimisation of gradient elution with serially-coupled columns Part II: Multi-linear gradients. Journal of Chromatography A, 2014, 1373, 51-60.	3.7	15
137	Assisted baseline subtraction in complex chromatograms using the BEADS algorithm. Journal of Chromatography A, 2017, 1507, 1-10.	3.7	15
138	Study of the column efficiency using gradient elution based on Van Deemter plots. Journal of Chromatography A, 2019, 1584, 126-134.	3.7	15
139	Oil-In-Water Microemulsion Liquid Chromatography. Separation and Purification Reviews, 2020, 49, 89-111.	5.5	15
140	Extension of the linear solvent strength retention model including a parameter that describes the elution strength changes in liquid chromatography. Journal of Chromatography A, 2020, 1615, 460757.	3.7	15
141	Determination of total free amino acids with o-phthalaldehyde and N-acetyl-l-cysteine. Microchemical Journal, 1990, 42, 288-293.	4.5	14
142	An Automatic System for Thermal Lens Spectrometry and Flowing Samples. Analytical Letters, 1992, 25, 573-592.	1.8	14
143	Spectrophotometric Determination of the Antihistamines, Carbinoxamine Maleate and Doxylamine Succinate, in anN-Cetylpyridinium Chloride Micellar Medium. Analytical Letters, 1996, 29, 1399-1413.	1.8	14
144	Micellar liquid Chromatographic determination of diuretics by diazotization and coupling with the Bratton-Marshall reagent. Analytica Chimica Acta, 1997, 353, 215-226.	5.4	14

#	Article	IF	Citations
145	HYDRO-ORGANIC AND MICELLAR-ORGANIC REVERSED-PHASE LIQUID CHROMATOGRAPHIC PROCEDURES FOR THE EVALUATION OF SULPHONAMIDES IN PHARMACEUTICALS. Analytical Letters, 2001, 34, 1189-1203.	1.8	14
146	Robust interpretive optimisation in high-performance liquid chromatography considering uncertainties in peak position. Journal of Chromatography A, 2005, 1096, 123-132.	3.7	14
147	A comparative study of the performance of acetonitrile and methanol in the multi-linear gradient separation of proteic primary amino acids. Analytica Chimica Acta, 2007, 582, 250-258.	5.4	14
148	Interpretive optimisation of organic solvent content and flow‐rate in the separation of β‐blockers with a Chromolith RP‐18e column. Journal of Separation Science, 2009, 32, 2793-2803.	2.5	14
149	Origin and correction of the deviations in retention times at increasing flow rate with Chromolith columns. Journal of Chromatography A, 2010, 1217, 5440-5443.	3.7	14
150	Description of the Retention and Peak Profile for Chromolith Columns in Isocratic and Gradient Elution Using Mobile Phase Composition and Flow Rate as Factors. Chromatography (Basel), 2014, 1, 194-210.	1.2	14
151	Enhanced spectrophotometric determination of nicotinic acid in a sodium dodecyl sulphate micellar medium. Talanta, 1995, 42, 737-745.	5.5	13
152	Determination of inorganic species by thermal lens spectrometry. TrAC - Trends in Analytical Chemistry, 1997, 16, 342-351.	11.4	13
153	Hydrophobic and cation exchange mechanisms in the retention of basic compounds in a polymeric column. Journal of Chromatography A, 2004, 1028, 139-148.	3.7	13
154	Systematic Approach for Calculating the Concentrations of Chemical Species in Multiequilibrium Problems: Inclusion of the Ionic Strength Effects. Journal of Chemical Education, 2012, 89, 900-904.	2.3	13
155	Simultaneous optimization of mobile phase composition, column nature and length to analyse complex samples using serially coupled columns. Journal of Chromatography A, 2013, 1317, 39-48.	3.7	13
156	Adsorption of the anionic surfactant sodium dodecyl sulfate on a C18 column under micellar and high submicellar conditions in reversed‐phase liquid chromatography. Journal of Separation Science, 2015, 38, 550-555.	2.5	13
157	Extent of the influence of phosphate buffer and ionic liquids on the reduction of the silanol effect in a C18 stationary phase. Journal of Chromatography A, 2018, 1559, 112-117.	3.7	13
158	Determination of aniline in vegetable oils by diazotization and coupling in a microemulsion medium. Analytica Chimica Acta, 1990, 235, 317-322.	5.4	12
159	Use of the o-Phthalaldehyde and N-Acetyl-L-Cysteine the Evaluation of Milk Proteins. Journal of Dairy Science, 1991, 74, 1779-1785.	3.4	12
160	Acid—base properties of azo dyes in the presence of surfactants. Journal of Colloid and Interface Science, 1991, 141, 44-49.	9.4	12
161	Modelling and prediction of retention in high-performance liquid chromatography by using neural networks. Chromatographia, 1995, 41, 435-444.	1.3	12
162	Description of the retention behaviour of solutes in micellar liquid chromatography with organic modifiers: Comparison of two methods. Chromatographia, 1995, 40, 279-286.	1.3	12

#	Article	IF	Citations
163	Modelling and optimization of the separation of steroids eluted with a micellar mobile phase of sodium dodecyl sulphate containing acetonitrile. Analytica Chimica Acta, 1996, 333, 31-40.	5.4	12
164	A theoretical plate model accounting for slow kinetics in chromatographic elution. Journal of Chromatography A, 2011, 1218, 5166-5174.	3.7	12
165	New approaches based on modified Gaussian models for the prediction of chromatographic peaks. Analytica Chimica Acta, 2013, 758, 36-44.	5.4	12
166	Enhancement in the computation of gradient retention times in liquid chromatography using root-finding methods. Journal of Chromatography A, 2019, 1600, 137-147.	3.7	12
167	Classification of olive leaves and pulp extracts by comprehensive two-dimensional liquid chromatography of polyphenolic fingerprints. Food Chemistry, 2020, 320, 126630.	8.2	12
168	Examination of the least-squares method applied to the evaluation of physicochemical parameters with linearized equations. Analytica Chimica Acta, 1989, 220, 145-153.	5.4	11
169	Evaluation of the proteolysis degree with the o-phthalaldehyde/N-acetyl-L-cysteine reagent. Fresenius' Journal of Analytical Chemistry, 1990, 338, 62-65.	1.5	11
170	SENSITIZED LANTHANIDE FLUORESCENCE DETECTION OF STEROIDAL HORMONES. Journal of Liquid Chromatography and Related Technologies, 2000, 23, 1171-1186.	1.0	11
171	Peak capacity estimation in isocratic elution. Journal of Chromatography A, 2008, 1205, 78-89.	3.7	11
172	Performance of Markers and the Homologous Series Method for Dead Time Estimation in Reversed-Phase Liquid Chromatography. Journal of Liquid Chromatography and Related Technologies, 2009, 32, 1065-1083.	1.0	11
173	Global retention models and their application to the prediction of chromatographic fingerprints. Journal of Chromatography A, 2021, 1637, 461845.	3.7	11
174	Towards unsupervised analysis of second-order chromatographic data: Automated selection of number of components in multivariate curve-resolution methods. Journal of Chromatography A, 2007, 1158, 258-272.	3.7	10
175	Isocratic and gradient elution in micellar liquid chromatography with Brij-35. Journal of Separation Science, 2015, 38, 2059-2067.	2.5	10
176	A chromatographic objective function to characterise chromatograms with unknown compounds or without standards available. Journal of Chromatography A, 2015, 1409, 79-88.	3.7	10
177	Gradient design for liquid chromatography using multi-scale optimization. Journal of Chromatography A, 2018, 1534, 32-42.	3.7	10
178	A comparative study of the application of the method of least-squares in the potentiometric determination of protonation constants. Talanta, 1982, 29, 435-439.	5.5	9
179	Analytical applications of the catalysed iodine-azide reaction. A review. Analyst, The, 1986, 111, 1001-1012.	3.5	9
180	Resolution of mixtures of steroidal hormones with micellar eluents of sodium dodecyl sulphate and acetonitrile or pentanol. Chromatographia, 2000, 52, 185-189.	1.3	9

#	Article	IF	Citations
181	Control of propranolol intake by direct chromatographic detection of α-naphthoxylactic acid in urine. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2002, 767, 277-283.	2.3	9
182	Some observations on the prediction of retention in reversed-phase liquid chromatography using the pH as main factor. Analytica Chimica Acta, 2004, 521, 61-68.	5.4	9
183	Optimal experimental designs in RPLC at variable solvent content and pH based on prediction error surfaces. Analytical and Bioanalytical Chemistry, 2011, 400, 1217-1230.	3.7	9
184	Approaches to find complementary separation conditions for resolving complex mixtures by high-performance liquid chromatography. Journal of Chromatography A, 2012, 1229, 180-189.	3.7	9
185	An approach to evaluate the information in chromatographic fingerprints: Application to the optimisation of the extraction and conservation conditions of medicinal herbs. Journal of Chromatography A, 2015, 1422, 178-185.	3.7	9
186	Effect of sodium dodecyl sulphate and Brij-35 on the analysis of sulphonamides in physiological samples using direct injection and acetonitrile gradients. Analytical Methods, 2016, 8, 3941-3952.	2.7	9
187	Analysis of basic drugs by liquid chromatography with environmentally friendly mobile phases in pharmaceutical formulations. Microchemical Journal, 2017, 134, 202-210.	4.5	9
188	Suitability of 1-hexyl-3-methylimidazolium ionic liquids for the analysis of pharmaceutical formulations containing tricyclic antidepressants. Journal of Chromatography A, 2018, 1559, 118-127.	3.7	9
189	Effect of buffer nature and concentration on the chromatographic performance of basic compounds in the absence and presence of 1-hexyl-3-methylimidazolium chloride. Journal of Chromatography A, 2019, 1602, 397-408.	3.7	9
190	Protocol to compare column performance applied to hydrophilic interaction liquid chromatography. Microchemical Journal, 2019, 149, 103973.	4.5	9
191	Testing experimental designs in liquid chromatography (I): Development and validation of a method for the comprehensive inspection of experimental designs. Journal of Chromatography A, 2020, 1624, 461180.	3.7	9
192	On the Retention of Diuretics in Micellar Liquid Chromatography and Their Site of Action Within the Nephron. Analytical Letters, 1993, 26, 1881-1889.	1.8	8
193	Effect of the nature of the solvent on the limit of detection in thermal lens spectrometry. Analytica Chimica Acta, 1994, 296, 285-294.	5.4	8
194	Thermal lens spectrometry in biochemical analysis. Journal of Proteomics, 1994, 29, 1-21.	2.4	8
195	Modelling and prediction of retention in high-performance liquid chromatography by using neural networks. Chromatographia, 1995, 41, 435-444.	1.3	8
196	Quantitation of Antihistamines in Pharmaceutical Preparations by Liquid Chromatography with a Micellar Mobile Phase of Sodium Dodecyl Sulfate and Pentanol. Journal of AOAC INTERNATIONAL, 2001, 84, 1687-1694.	1.5	8
197	Towards the optimization of complementary systems in reversed-phase liquid chromatography. Chromatographia, 2002, 56, 699-707.	1.3	8
198	Comparison of the performance of non-ionic and anionic surfactants as mobile phase additives in the RPLC analysis of basic drugs. Journal of Separation Science, 2011, 34, 623-630.	2.5	8

#	Article	IF	Citations
199	Low- and room-temperature phosphorescence characteristics of some pharmaceutical compounds. Journal of Pharmaceutical and Biomedical Analysis, 1989, 7, 29-38.	2.8	7
200	A new mathematical function for describing electrophoretic peaks. Electrophoresis, 2005, 26, 2076-2085.	2.4	7
201	Finding the best separation in situations of extremely low chromatographic resolution. Journal of Chromatography A, 2011, 1218, 2240-2251.	3.7	7
202	Modulation of retention and selectivity in oil-in-water microemulsion liquid chromatography: A review. Journal of Chromatography A, 2019, 1592, 91-100.	3.7	7
203	Benefits of solvent concentration pulses in retention time modelling of liquid chromatography. Journal of Chromatography A, 2019, 1597, 76-88.	3.7	7
204	Multi-scale optimisation vs. genetic algorithms in the gradient separation of diuretics by reversed-phase liquid chromatography. Journal of Chromatography A, 2020, 1609, 460427.	3.7	7
205	Comparison of surfactant-mediated liquid chromatographic modes with sodium dodecyl sulphate for the analysis of basic drugs. Analytical Methods, 2020, 12, 2443-2452.	2.7	7
206	Graphical representation of polynuclear acid-base and complex equilibria. Talanta, 1983, 30, 777-781.	5.5	6
207	On the use of mixing reactors in flow injection analysis with thermal lens calorimetric detection. Thermochimica Acta, 1993, 219, 53-64.	2.7	6
208	Enhancement of retention predictions in reversed-phase liquid chromatography using reference compounds. Analytica Chimica Acta, 2004, 518, 191-197.	5.4	6
209	Separation of Proteic Primary Amino Acids under Several Reversed€Phase Liquid Chromatographic Conditions. Journal of Liquid Chromatography and Related Technologies, 2006, 29, 2521-2536.	1.0	6
210	Combined effect of solvent content, temperature and pH on the chromatographic behaviour of ionisable compounds. III: Considerations about robustness. Journal of Chromatography A, 2009, 1216, 8891-8903.	3.7	6
211	Correction of the deviations in the retention times with Chromolith columns associated to the flow rate: Implications in the modelling of the retention behaviour. Journal of Separation Science, 2011, 34, 931-938.	2.5	6
212	Approaches to estimate the time and height at the peak maximum in liquid chromatography based on a modified Gaussian model. Journal of Chromatography A, 2011, 1218, 1385-1392.	3.7	6
213	Study of the performance of a resolution criterion to characterise complex chromatograms with unknowns or without standards. Analytical Methods, 2017, 9, 4293-4303.	2.7	6
214	Search of non-ionic surfactants suitable for micellar liquid chromatography. Analytical and Bioanalytical Chemistry, 2018, 410, 5043-5057.	3.7	6
215	Modelling retention and peak shape of small polar solutes analysed by nano-HPLC using methacrylate-based monolithic columns. Analytica Chimica Acta, 2019, 1086, 142-155.	5.4	6
216	Testing experimental designs in liquid chromatography (II): Influence of the design geometry on the prediction performance of retention models. Journal of Chromatography A, 2021, 1654, 462458.	3.7	6

#	Article	IF	Citations
217	Some observations on the automation by flow injection analysis of the spectrophotometric determination of amino acids and proteins witho-phthalaldehyde. Mikrochimica Acta, 1992, 108, 293-298.	5.0	5
218	Correlation between hydrophobicity of amino acids and retention data in reversed-phase liquid chromatography with micellar eluents. Chromatographia, 1995, 41, 455-461.	1.3	5
219	DETERMINATION OF STEROIDAL HORMONES IN URINE SAMPLES BY MICELLAR LIQUID CHROMATOGRAPHY FOLLOWING SOLID-PHASE EXTRACTION. Journal of Liquid Chromatography and Related Technologies, 2001, 24, 1089-1103.	1.0	5
220	Analytical Techniques for Furosemide Determination. Separation and Purification Reviews, 2006, 35, 39-58.	5.5	5
221	Micellar liquid chromatography in doping control. Bioanalysis, 2009, 1, 1225-1241.	1.5	5
222	Alternating iterative regression method for dead time estimation from experimental designs. Analytical and Bioanalytical Chemistry, 2009, 394, 625-636.	3.7	5
223	A New Calibration Method for the Accurate Determination of Ethylene Content in Ethyleneâ€Propylene Copolymers by CRYSTEXâ€R. Macromolecular Symposia, 2012, 312, 157-166.	0.7	5
224	Comparison of the performance of Chromolith Performance RP-18e, 1.8-Î¼m Zorbax Eclipse XDB-C18 and XTerra MS C18, based on modelling approaches. Analytical and Bioanalytical Chemistry, 2013, 405, 2219-2231.	3.7	5
225	Estimation of peak capacity based on peak simulation. Journal of Chromatography A, 2018, 1574, 101-113.	3.7	5
226	Interpretive Approaches to Optimize Serially-Coupled Columns in Reversed-Phase Liquid Chromatography. Current Chromatography, 2015, 2, 110-121.	0.3	5
227	Calculation of neutralization enthalpies from thermometric titrations of diprotic and triprotic acids using a linear least-squares method. Thermochimica Acta, 1982, 56, 307-323.	2.7	4
228	On the preparation of simple and universal buffers including polynuclear species. Mikrochimica Acta, 1986, 88, 115-121.	5.0	4
229	Spectrophotometric determination of cystine by formation of an o-phthalaldehyde/N-acetyl-l-cysteine derivative. Microchemical Journal, 1989, 40, 292-296.	4.5	4
230	Disproportionation and thermal lens effects produced by Ar+ laser radiation on silver halide suspensions. Analytica Chimica Acta, 1994, 292, 113-120.	5.4	4
231	SINGLE-PEAK RESOLUTION CRITERIA FOR OPTIMIZATION OF MOBILE PHASE COMPOSITION IN LIQUID CHROMATOGRAPHY. Journal of Liquid Chromatography and Related Technologies, 2001, 24, 1895-1919.	1.0	4
232	A complementary mobile phase approach based on the peak count concept oriented to the full resolution of complex mixtures. Journal of Chromatography A, 2011, 1218, 5829-5836.	3.7	4
233	Characterization of chromatographic peaks using the linearly modified Gaussian model. Comparison with the bi-Gaussian and the Foley and Dorsey approaches. Journal of Chromatography A, 2017, 1515, 129-137.	3.7	4
234	Solvent selection in liquid chromatography. , 2017, , 343-373.		4

#	Article	IF	Citations
235	Hydrophilic Liquid Chromatography versus Reversed-Phase Liquid Chromatography in the Absence and the Presence of 1-Hexyl-3-methylimidazolium Chloride for the Analysis of Basic Compounds. Separations, 2020, 7, 30.	2.4	4
236	Comparison of the Fitting Performance of Retention Models and Elution Strength Behaviour in Hydrophilic-Interaction and Reversed-Phase Liquid Chromatography. Separations, 2021, 8, 54.	2.4	4
237	New Approaches to Evaluate the Dispersion Parameters in Liquid Chromatography Based on the Information Obtained from a Set of Compounds. Current Chromatography, 2017, 4, .	0.3	4
238	A compound of iron(II), phenylbiguanide and cyanide. Talanta, 1982, 29, 139-141.	5.5	3
239	Catalytic–enthalpimetric determination of diethyldithiocarbamate (DDTC) and nickel(II) using the iodine–azide reaction. Thermochimica Acta, 1985, 90, 277-285.	2.7	3
240	Thermometric determination of reaction enthalpies using a polypropylene cell in an isothermic air bath. Thermochimica Acta, 1986, 98, 213-219.	2.7	3
241	Spectrophotometric Determination of Cystine with O-Phthalaldehyde in the Absence of Thiol. Analytical Letters, 1988, 21, 1545-1559.	1.8	3
242	On the Derivatization of Drugs Using 1-Nitroso-2-naphthol, 4-aminoantipyrine and 2,6-Dihaloquinone Chlorimides. Analytical Letters, 1992, 25, 2059-2071.	1.8	3
243	EVALUATION OF THE ELUTION STRENGTH OF THE SURFACTANT AND ORGANIC SOLVENT IN HYBRID MICELLAR MOBILE PHASES. Journal of Liquid Chromatography and Related Technologies, 2001, 24, 2765-2783.	1.0	3
244	Interpretive search of optimal isocratic and gradient separations in micellar liquid chromatography in extended organic solvent domains. Journal of Chromatography A, 2020, 1616, 460784.	3.7	3
245	Chromatographic fingerprint-based analysis of extracts of green tea, lemon balm and linden: I. Development of global retention models without the use of standards. Journal of Chromatography A, 2022, 1672, 463060.	3.7	3
246	Spectrophotometric determination of binary mixtures of compounds with very close absorption maxima. Spectrochimica Acta Part A: Molecular Spectroscopy, 1986, 42, 771-774.	0.1	2
247	Determination of tyrosine and phenylalanine by derivatization with nitric acid and differential pulse polarography. Microchemical Journal, 1987, 36, 113-117.	4.5	2
248	Some observations on the reaction of cysteine with o-phthalaldehyde. Spectrochimica Acta Part A: Molecular Spectroscopy, 1988, 44, 1461-1464.	0.1	2
249	Thermal lens spectrometric determination of cerium with oxine. Microchemical Journal, 1991, 44, 222-227.	4.5	2
250	CHROMATOGRAPHIC DETECTION OF SESQUITERPENE LACTONES IN PARTHENIUM PLANTS FROM NORTHWEST ARGENTINA. Journal of Liquid Chromatography and Related Technologies, 1999, 22, 909-921.	1.0	2
251	Secondary Chemical Equilibria in Reversed-Phase Liquid Chromatography. , 2013, , 87-104.		2
252	Prediction of Peak Shape and Characterization of Column Performance in Liquid Chromatography as a Function of Flow Rate. Chromatography (Basel), 2015, 2, 625-641.	1.2	2

#	Article	IF	Citations
253	Optimisation of chromatographic resolution using objective functions including both time and spectral information. Journal of Chromatography A, 2015, 1377, 75-84.	3.7	2
254	Liquid Chromatography/Ion Pairâ˜†. , 2015, , .		2
255	Optimisation of Chromatographic Resolution Using Objective Functions Including Both Time and Spectral Information. Part 2: Compounds Exhibiting Small Spectral Differences. Current Chromatography, 2016, 3, 34-43.	0.3	2
256	General Solution of the Extended Plate Model Including Diffusion, Slow Transfer Kinetics and Extra-Column Effects for Isocratic Chromatographic Elution. Separations, 2016, 3, 11.	2.4	2
257	Performance and modelling of retention in microemulsion liquid chromatography. Journal of Chromatography A, 2020, 1634, 461651.	3.7	2
258	Analysis of tricyclic antidepressants in pharmaceuticals by microemulsion liquid chromatography. Microchemical Journal, 2021, 160, 105659.	4.5	2
259	LIQUID CHROMATOGRAPHY	Micellar. , 2005, , 164-172.		2
260	Ionic liquids as mobile phase additives and immobilized on stationary phases in liquid chromatography. , 2022, , 203-234.		2
261	Interactions of basic compounds with ionic liquids used as oils in microemulsion liquid chromatography. Journal of Chromatography A, 2022, 1674, 463142.	3.7	2
262	Enthalpimetric determination of sulphide and thiosulphate by the catalysis of the iodine-azide reaction. Thermochimica Acta, 1987, 112, 171-177.	2.7	1
263	A kinetic-catalytic method for iodide based on the simultaneous addition of inhibitor and substrate. Microchemical Journal, 1987, 36, 222-227.	4.5	1
264	Solvent Selection in Liquid Chromatography. , 2013, , 225-249.		1
265	Secondary chemical equilibria in reversed-phase liquid chromatography. , 2017, , 125-146.		1
266	Micellar Liquid Chromatography â˜†. , 2018, , 133-133.		1
267	Updating chromatographic predictions by accounting ageing for single and tandem columns. Journal of Separation Science, 2018, 41, 2719-2730.	2.5	1
268	Peak dispersion in gradient elution: An insight based on the plate model. Journal of Chromatography A, 2020, 1613, 460670.	3.7	1
269	Catalytic-thermometric determination of stability constants of complexes using the iodine-azide reaction. Thermochimica Acta, 1986, 103, 325-332.	2.7	0
270	Some observations on the determination of sulfite by reduction to sulfide with sodium borohydride. Microchemical Journal, 1987, 35, 168-171.	4.5	0

#	ARTICLE	IF	CITATIONS
271	The catalytic-thermometric determination of molybdenum in steels based on the hydrogen peroxide-iodide indicator reaction. Thermochimica Acta, 1990, 158, 215-224.	2.7	0
272	A QSPR Study of the p Solute Polarity Parameter to Estimate Retention of HPLC.. ChemInform, 2003, 34, no.	0.0	0
273	LC of high to moderately polar basic drugs in urine with water and detergent, and direct injection. Bioanalysis, 2016, 8, 1225-1235.	1.5	0
274	Liquid Chromatography: Strategies for Optimization. , 2018, , 252-252.		0
275	Modified Gaussian models applied to the description and deconvolution of peaks in chiral liquid chromatography. Journal of Chromatography A, 2020, 1625, 461273.	3.7	0