JosÃ© RamÃ³n Torres-LapasiÃ³

List of Publications by Year
in descending order

118 papers	3,137 citations	126907 33 h-index	197818 49 g-index
118 all docs	118 docs citations	118 times ranked	1444 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	Retention mechanisms in micellar liquid chromatography. Journal of Chromatography A, 2009, 1216, 1798-1814.	3.7	139
3	Automatic program for peak detection and deconvolution of multi-overlapped chromatographic signals. Journal of Chromatography A, 2005, 1096, 133-145.	3.7	117
4	Models and objective functions for the optimisation of selectivity in reversed-phase liquid chromatography. Analytica Chimica Acta, 2006, 579, 125-145.	5.4	106
5	Modelling of retention behaviour of solutes in micellar liquid chromatography. Journal of Chromatography A, 1997, 780, 129-148.	3.7	96
6	Automatic program for peak detection and deconvolution of multi-overlapped chromatographic signals. Journal of Chromatography A, 2005, 1096, 146-155.	3.7	83
7	Interpretive strategy for optimization of surfactant and alcohol concentration in micellar liquid chromatography. Journal of Chromatography A, 1994, 677, 239-253.	3.7	66
8	Prediction of the retention in reversed-phase liquid chromatography using soluteâ€“mobile phaseâ€“stationary phase polarity parameters. Journal of Chromatography A, 2002, 955, 19-34.	3.7	66
9	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
10	Chromatographic monitoring of diuretics in urine samples using a sodium dodecyl sulphateâ€”propanol micellar eluent. Analytica Chimica Acta, 1994, 287, 201-210.	5.4	62
11	Analysis of pharmaceutical preparations containing catecholamines by micellar liquid chromatography with spectrophotometric detection. Analyst, The, 1995, 120, 1767-1772.	3.5	59
12	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
13	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
14	Stationary phase modulation in liquid chromatography through the serial coupling of columns: A review. Analytica Chimica Acta, 2016, 923, 1-23.	5.4	55
15	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
16	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
17	Global treatment of chromatographic data with MICHROM. Analytica Chimica Acta, 1997, 348, 187-196.	5.4	49
18	Retention Mechanisms for Basic Drugs in the Submicellar and Micellar Reversed-Phase Liquid Chromatographic Modes. Analytical Chemistry, 2008, 80, 9705-9713.	6.5	49

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19	Interpretive optimisation strategy applied to the isocratic separation of phenols by reversed-phase liquid chromatography with acetonitrileâ€“water and methanolâ€“water mobile phases. Journal of Chromatography A, 2000, 886, 31-46.	3.7	46
20	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
21	Evaluation of several global resolution functions for liquid chromatography. Analytica Chimica Acta, 1999, 396, 61-74.	5.4	44
22	Resolution of multicomponent peaks by orthogonal projection approach, positive matrix factorization and alternating least squares. Analytica Chimica Acta, 2000, 411, 145-155.	5.4	44
23	Limits of multi-linear gradient optimisation in reversed-phase liquid chromatography. Journal of Chromatography A, 2005, 1063, 79-88.	3.7	43
24	Submicellar and micellar reversed-phase liquid chromatographic modes applied to the separation of Î²-blockers. Journal of Chromatography A, 2009, 1216, 3199-3209.	3.7	43
25	Resolution assessment and performance of several organic modifiers in hybrid micellar liquid chromatography. Analytica Chimica Acta, 2001, 433, 187-198.	5.4	42
26	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
27	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
28	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
29	Complementary mobile-phase optimisation for resolution enhancement in high-performance liquid chromatography. Journal of Chromatography A, 2000, 876, 17-35.	3.7	38
30	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
31	Micellar-organic versus aqueous-organic mobile phases for the screening of Î²-blockers. Analytica Chimica Acta, 2002, 454, 109-123.	5.4	36
32	Chromatographic Determination of Thiols After Preâ€column Derivatization with oâ€Phthalaldehyde and Isoleucine. Journal of Liquid Chromatography and Related Technologies, 2004, 27, 1593-1609.	1.0	36
33	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
34	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
35	Quantitation of hydrophobicity in micellar liquid chromatography. TrAC - Trends in Analytical Chemistry, 1999, 18, 533-543.	11.4	33
36	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

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37	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
38	A three-factor optimisation strategy for micellar liquid chromatography. Chromatographia, 2000, 51, 101-110.	1.3	29
39	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
40	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
41	Application of several modified peak purity assays to real complex multicomponent mixtures by high-performance liquid chromatography with diode-array detection. Journal of Chromatography A, 1999, 855, 487-499.	3.7	28
42	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
43	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
44	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
45	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
46	Determination of fatty alcohol ethoxylates by derivatisation with maleic anhydride followed by liquid chromatography with UVâ€“vis detection. Journal of Chromatography A, 2008, 1180, 32-41.	3.7	25
47	Micellar versus hydro-organic reversed-phase liquid chromatography: A solvation parameter-based perspective. Journal of Chromatography A, 2008, 1182, 176-196.	3.7	25
48	Optimisation of gradient elution with serially-coupled columns. Part I: Single linear gradients. Journal of Chromatography A, 2014, 1350, 51-60.	3.7	24
49	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
50	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
51	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
52	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
53	On the Measurement of Dead Time in Micellar Liquid Chromatography. Journal of Liquid Chromatography and Related Technologies, 1996, 19, 1205-1228.	1.0	21
54	Silanol suppressing potency of alkyl-imidazolium ionic liquids on C18 stationary phases. Journal of Chromatography A, 2012, 1232, 166-175.	3.7	21

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55	Soluteâ^'Solvent Interactions in Micellar Electrokinetic Chromatography. 6. Optimization of the Selectivity of Lithium Dodecyl Sulfateâ^'Lithium Perfluorooctanesulfonate Mixed Micellar Buffers. Analytical Chemistry, 2002, 74, 4447-4455.	6.5	20
56	Enhanced calculation of optimal gradient programs in reversed-phase liquid chromatography. Journal of Chromatography A, 2003, 1018, 183-196.	3.7	20
57	Peak deconvolution in one-dimensional chromatography using a two-way data approach. Journal of Chromatography A, 2002, 958, 35-49.	3.7	18
58	Capillary electrophoresis enhanced by automatic two-way background correction using cubic smoothing splines and multivariate data analysis applied to the characterisation of mixtures of surfactants. Journal of Chromatography A, 2005, 1065, 301-313.	3.7	18
59	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
60	A hybrid genetic algorithm with local search. Chemometrics and Intelligent Laboratory Systems, 2001, 59, 107-120.	3.5	17
61	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
62	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
63	Performance of short-chain alcohols versus acetonitrile in the surfactant-mediated reversed-phase liquid chromatographic separation of Î²-blockers. Journal of Chromatography A, 2010, 1217, 7090-7099.	3.7	17
64	Performance of a Chromolith RPâ€18e column for the screening of Î²â€blockers. Journal of Separation Science, 2009, 32, 2841-2853.	2.5	16
65	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
66	Optimisation of gradient elution with serially-coupled columns Part II: Multi-linear gradients. Journal of Chromatography A, 2014, 1373, 51-60.	3.7	15
67	Assisted baseline subtraction in complex chromatograms using the BEADS algorithm. Journal of Chromatography A, 2017, 1507, 1-10.	3.7	15
68	Robust interpretive optimisation in high-performance liquid chromatography considering uncertainties in peak position. Journal of Chromatography A, 2005, 1096, 123-132.	3.7	14
69	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
70	Interpretive optimisation of organic solvent content and flowâ€rate in the separation of Î²â€blockers with a Chromolith RPâ€18e column. Journal of Separation Science, 2009, 32, 2793-2803.	2.5	14
71	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
72	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

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73	Modelling and prediction of retention in high-performance liquid chromatography by using neural networks. Chromatographia, 1995, 41, 435-444.	1.3	12
74	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
75	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
76	Peak capacity estimation in isocratic elution. Journal of Chromatography A, 2008, 1205, 78-89.	3.7	11
77	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
78	Analysis of amino acids using serially coupled columns. Journal of Separation Science, 2017, 40, 2741-2751.	2.5	11
79	Global retention models and their application to the prediction of chromatographic fingerprints. Journal of Chromatography A, 2021, 1637, 461845.	3.7	11
80	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
81	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
82	Gradient design for liquid chromatography using multi-scale optimization. Journal of Chromatography A, 2018, 1534, 32-42.	3.7	10
83	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
84	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
85	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
86	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
87	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
88	Towards the optimization of complementary systems in reversed-phase liquid chromatography. Chromatographia, 2002, 56, 699-707.	1.3	8
89	Improved purity assessment of high-performance liquid chromatography diode array detection data for overcoming the presence of the non-linearity artefact. Chemometrics and Intelligent Laboratory Systems, 2000, 52, 45-59.	3.5	7
90	Title is missing!. Water, Air, and Soil Pollution, 2000, 117, 105-122.	2.4	7

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91	Finding the best separation in situations of extremely low chromatographic resolution. Journal of Chromatography A, 2011, 1218, 2240-2251.	3.7	7
92	Benefits of solvent concentration pulses in retention time modelling of liquid chromatography. Journal of Chromatography A, 2019, 1597, 76-88.	3.7	7
93	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
94	Enhancement of retention predictions in reversed-phase liquid chromatography using reference compounds. Analytica Chimica Acta, 2004, 518, 191-197.	5.4	6
95	Separation of Proteic Primary Amino Acids under Several Reversedâ€Phase Liquid Chromatographic Conditions. Journal of Liquid Chromatography and Related Technologies, 2006, 29, 2521-2536.	1.0	6
96	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
97	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
98	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
99	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
100	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
101	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
102	Resolution of overlapped non-absorbing and absorbing solutes using either an absorption null-balance detection window or multivariate deconvolution applied to capillary electrophoresis of anionic surfactants. Journal of Chromatography A, 2004, 1036, 205-216.	3.7	5
103	Alternating iterative regression method for dead time estimation from experimental designs. Analytical and Bioanalytical Chemistry, 2009, 394, 625-636.	3.7	5
104	A New Calibration Method for the Accurate Determination of Ethylene Content in Ethyleneâ€Propylene Copolymers by CRYSTEXâ€IR. Macromolecular Symposia, 2012, 312, 157-166.	0.7	5
105	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
106	Estimation of peak capacity based on peak simulation. Journal of Chromatography A, 2018, 1574, 101-113.	3.7	5
107	Interpretive Approaches to Optimize Serially-Coupled Columns in Reversed-Phase Liquid Chromatography. Current Chromatography, 2015, 2, 110-121.	0.3	5
108	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

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109	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
110	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
111	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
112	Thermal lens spectrometric determination of cerium with oxine. Microchemical Journal, 1991, 44, 222-227.	4.5	2
113	Secondary Chemical Equilibria in Reversed-Phase Liquid Chromatography. , 2013, , 87-104.		2
114	Optimisation of chromatographic resolution using objective functions including both time and spectral information. Journal of Chromatography A, 2015, 1377, 75-84.	3.7	2
115	LIQUID CHROMATOGRAPHY | Micellar. , 2005, , 164-172.		2
116	Updating chromatographic predictions by accounting ageing for single and tandem columns. Journal of Separation Science, 2018, 41, 2719-2730.	2.5	1
117	A QSPR Study of the p Solute Polarity Parameter to Estimate Retention of HPLC.. ChemInform, 2003, 34, no.	0.0	0
118	Liquid Chromatography: Strategies for Optimization. , 2018, , 252-252.		0