Roman Szucs

List of Publications by Year
in descending order

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Version: 2024-02-01

67	2,364	186265	214800
papers	citations	28 h-index	47 g-index

67	67	67	1801
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of ultra performance liquid chromatography. Journal of Chromatography A, 2006, 1127, 60-69.	3.7	263
2	Universal Response in Liquid Chromatography Using Charged Aerosol Detection. Analytical Chemistry, 2006, 78, 3186-3192.	6.5	200
3	Influence of frictional heating on temperature gradients in ultra-high-pressure liquid chromatography on 2.1mm I.D. columns. Journal of Chromatography A, 2006, 1113, 84-91.	3.7	183
4	Chemometric-assisted method development in hydrophilic interaction liquid chromatography: A review. Analytica Chimica Acta, 2018, 1000, 20-40.	5.4	81
5	Prediction of Analyte Retention Time in Liquid Chromatography. Analytical Chemistry, 2021, 93, 228-256.	6.5	73
6	A generic approach for the determination of residues of alkylating agents in active pharmaceutical ingredients by in situ derivatizationâ€“headspaceâ€“gas chromatographyâ€“mass spectrometry. Journal of Pharmaceutical and Biomedical Analysis, 2007, 45, 472-479.	2.8	71
7	Universal response model for a corona charged aerosol detector. Journal of Chromatography A, 2010, 1217, 7418-7427.	3.7	70
8	High-efficiency liquid chromatography on conventional columns and instrumentation by using temperature as a variable. Journal of Chromatography A, 2006, 1109, 191-196.	3.7	65
9	High efficiency liquid chromatography on conventional columns and instrumentation by using temperature as a variable. Journal of Chromatography A, 2007, 1138, 120-131.	3.7	61
10	Comparison of the response of four aerosol detectors used with ultra high pressure liquid chromatography. Journal of Chromatography A, 2011, 1218, 1646-1655.	3.7	57
11	Improving the universal response of evaporative light scattering detection by mobile phase compensation. Journal of Chromatography A, 2007, 1161, 183-191.	3.7	53
12	Analysis of phospholipids in lecithins comparison between micellar electrokinetic chromatography and high-performance liquid chromatography. Journal of Chromatography A, 1996, 738, 25-29.	3.7	52
13	Investigation of polar organic solvents compatible with Corona Charged Aerosol Detection and their use for the determination of sugars by hydrophilic interaction liquid chromatography. Analytica Chimica Acta, 2012, 750, 199-206.	5.4	49
14	Prediction of retention in hydrophilic interaction liquid chromatography using solute molecular descriptors based on chemical structures. Journal of Chromatography A, 2017, 1486, 59-67.	3.7	47
15	Retention prediction in reversed phase high performance liquid chromatography using quantitative structure-retention relationships applied to the Hydrophobic Subtraction Model. Journal of Chromatography A, 2018, 1541, 1-11.	3.7	45
16	Sample stacking effects and large injection volumes in micellar electrokinetic chromatography of ionic compounds: Direct determination of iso-Î±-acids in beer. Chromatographia, 1993, 36, 323-329.	1.3	44
17	Molecular modeling and prediction accuracy in Quantitative Structure-Retention Relationship calculations for chromatography. TrAC - Trends in Analytical Chemistry, 2018, 105, 352-359.	11.4	42
18	Micellar and microemulsion electrokinetic chromatography of hop bitter acids. Journal of High Resolution Chromatography, 1996, 19, 189-192.	1.4	41

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19	Performance comparison of partial least squares-related variable selection methods for quantitative structure retention relationships modelling of retention times in reversed-phase liquid chromatography. Journal of Chromatography A, 2015, 1424, 69-76.	3.7	41
20	Rapid Method Development in Hydrophilic Interaction Liquid Chromatography for Pharmaceutical Analysis Using a Combination of Quantitative Structureâ€“Retention Relationships and Design of Experiments. Analytical Chemistry, 2017, 89, 1870-1878.	6.5	41
21	Evaluation of 1.0mm i.d. column performances on ultra high pressure liquid chromatography instrumentation. Journal of Chromatography A, 2010, 1217, 4925-4933.	3.7	36
22	Method to predict and compare the influence of the particle size on the isocratic peak capacity of high-performance liquid chromatography columns. Journal of Chromatography A, 2007, 1147, 183-191.	3.7	34
23	Error measures in quantitative structure-retention relationships studies. Journal of Chromatography A, 2017, 1524, 298-302.	3.7	34
24	Retention Index Prediction Using Quantitative Structureâ€“Retention Relationships for Improving Structure Identification in Nontargeted Metabolomics. Analytical Chemistry, 2018, 90, 9434-9440.	6.5	34
25	The history and analytical chemistry of beer bitter acids. TrAC - Trends in Analytical Chemistry, 1992, 11, 275-280.	11.4	32
26	Towards a chromatographic similarity index to establish localized quantitative structure-retention models for retention prediction: Use of retention factor ratio. Journal of Chromatography A, 2017, 1486, 50-58.	3.7	31
27	Predicting drug penetration across the bloodâ€“brain barrier: comparison of micellar liquid chromatography and immobilized artificial membrane liquid chromatography. Analytical and Bioanalytical Chemistry, 2013, 405, 6029-6041.	3.7	30
28	Alcohol modifiers in MEKC with SDS as surfactant. Study on the influence of the alcohol chain length (C1ï£¿C12). Journal of High Resolution Chromatography, 1996, 19, 674-678.	1.4	28
29	Evaluation of the Temperature Responsive Stationary Phase Poly(N-isopropylacrylamide) in Aqueous LC for the Analysis of Small Molecules. Chromatographia, 2007, 66, 143-150.	1.3	28
30	Solid-phase extraction based on hydrophilic interaction liquid chromatography with acetone as eluent for eliminating matrix effects in the analysis of biological fluids by LC-MS. Analytical and Bioanalytical Chemistry, 2014, 406, 401-407.	3.7	28
31	Determination of in Vitro and in Silico Indexes for the Modeling of Bloodâ€“Brain Barrier Partitioning of Drugs via Micellar and Immobilized Artificial Membrane Liquid Chromatography. Journal of Medicinal Chemistry, 2017, 60, 3739-3754.	6.4	27
32	A generic approach to the impurity profiling of drugs using standardised and independent capillary zone electrophoresis methods coupled to electrospray ionisation mass spectrometry. Electrophoresis, 2005, 26, 1712-1723.	2.4	26
33	Use of dual-filtering to create training sets leading to improved accuracy in quantitative structure-retention relationships modelling for hydrophilic interaction liquid chromatographic systems. Journal of Chromatography A, 2017, 1507, 53-62.	3.7	26
34	Retention prediction of low molecular weight anions in ion chromatography based on quantitative structure-retention relationships applied to the linear solvent strength model. Journal of Chromatography A, 2017, 1486, 68-75.	3.7	25
35	Gradient stationary phase optimized selectivity liquid chromatography with conventional columns. Analyst, The, 2013, 138, 2914.	3.5	23
36	SEPARATION AND QUANTIFICATION OF ALL MAIN HOP ACIDS IN DIFFERENT HOP CULTIVARS BY MICROEMULSION ELECTROKINETIC CHROMATOGRAPHY. Journal of the Institute of Brewing, 1994, 100, 293-296.	2.3	19

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37	In vitro prediction of human intestinal absorption and bloodâ€“brain barrier partitioning: development of a lipid analog for micellar liquid chromatography. Analytical and Bioanalytical Chemistry, 2015, 407, 7453-7466.	3.7	19
38	Exploration of the Selectivity and Retention Behavior of Alternative Polyacrylamides in Temperature Responsive Liquid Chromatography. Analytical Chemistry, 2020, 92, 9815-9822.	6.5	19
39	Comparison of CZE, openâ€tubular CEC and nonâ€aqueous CE coupled to electrospray MS for impurity profiling of drugs. Electrophoresis, 2008, 29, 3563-3574.	2.4	18
40	Analysis of beeriso-Î±-acids by micellar electrokinetic chromatography and multi-wavelength UV detection. Journal of High Resolution Chromatography, 1991, 14, 584-586.	1.4	17
41	Micellar electrokinetic chromatography of aliphatic compounds with indirect UV detection. Journal of High Resolution Chromatography, 1991, 14, 692-693.	1.4	17
42	Evaluation of sphingomyelin, cholester, and phosphatidylcholine-based immobilized artificial membrane liquid chromatography to predict drug penetration across the blood-brain barrier. Analytical and Bioanalytical Chemistry, 2014, 406, 6179-6188.	3.7	17
43	Screening therapeutics according to their uptake across the blood-brain barrier: A high throughput method based on immobilized artificial membrane liquid chromatography-diode-array-detection coupled to electrospray-time-of-flight mass spectrometry. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 127, 72-84.	4.3	16
44	Towards a chromatographic similarity index to establish localised Quantitative Structure-Retention Relationships for retention prediction. III Combination of Tanimoto similarity index, log P , and retention factor ratio to identify optimal analyte training sets for ion chromatography. Journal of Chromatography A, 2017, 1520, 107-116.	3.7	15
45	Advantages and Pitfalls of Capillary Electrophoresis of Pharmaceutical Compounds and Their Enantiomers in Complex Samples: Comparison of Hydrodynamically Opened and Closed Systems. International Journal of Molecular Sciences, 2020, 21, 6852.	4.1	14
46	Rapid Synthesis of Pharmaceutical Oxidation Products Using Electrochemistry: A Systematic Study of N-Dealkylation Reactions of Fesoterodine Using a Commercially Available Synthesis Cell. Organic Process Research and Development, 2015, 19, 1596-1603.	2.7	13
47	Generic approach to chiral separations: Chiral capillary electrophoresis with ternary cyclodextrin mixtures. Journal of Separation Science, 2000, 12, 568-576.	1.0	12
48	Fast capillary GC using a low thermal mass column oven for the determination of residual solvents in pharmaceuticals. Journal of Separation Science, 2006, 29, 695-698.	2.5	12
49	Structure Driven Prediction of Chromatographic Retention Times: Applications to Pharmaceutical Analysis. International Journal of Molecular Sciences, 2021, 22, 3848.	4.1	12
50	Some applications of state-of-the-art capillary gas chromatography in the pharmaceutical industry. TrAC - Trends in Analytical Chemistry, 2002, 21, 662-671.	11.4	11
51	The application of electrochemistry to pharmaceutical stability testing â€" Comparison with in silico prediction and chemical forced degradation approaches. Journal of Pharmaceutical and Biomedical Analysis, 2015, 115, 487-501.	2.8	11
52	Towards a chromatographic similarity index to establish localised quantitative structure-retention relationships for retention prediction. II Use of Tanimoto similarity index in ion chromatography. Journal of Chromatography A, 2017, 1523, 173-182.	3.7	11
53	A Variable Column Length Strategy To Expedite Method Development. Analytical Chemistry, 2011, 83, 966-975.	6.5	10
54	Benchmarking of Computational Methods for Creation of Retention Models in Quantitative Structureâ€"Retention Relationships Studies. Journal of Chemical Information and Modeling, 2017, 57, 2754-2762.	5.4	10

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55	Determination of Carminic Acid in Foodstuffs and Pharmaceuticals by Microchip Electrophoresis with Photometric Detection. Separations, 2020, 7, 72.	2.4	9
56	Enhanced methodology for porting ion chromatography retention data. Journal of Chromatography A, 2016, 1436, 59-63.	3.7	8
57	Potential of microchip electrophoresis in pharmaceutical analysis: Development of a universal method for frequently prescribed nonsteroidal anti-inflammatory drugs. Journal of Chromatography A, 2021, 1654, 462453.	3.7	8
58	Retention prediction using quantitative structureâ€retention relationships combined with the hydrophobic subtraction model in reversedâ€phase liquid chromatography. Electrophoresis, 2019, 40, 2415-2419.	2.4	7
59	Online coupling of microchip electrophoresis with ion mobility spectrometry for direct analysis of complex liquid samples. Sensors and Actuators B: Chemical, 2020, 302, 127183.	7.8	7
60	Separation of Regioisomers of Substituted Bromoindoles of Pharmaceutical Interest by RP-HPLC and Capillary Electrophoresis Based on Interaction with Sulfobutyl Ether-Î²-cyclodextrin. Journal of High Resolution Chromatography, 1999, 22, 59-62.	1.4	6
61	Electrochemical oxidation coupled with liquid chromatography and mass spectrometry to study the oxidative stability of active pharmaceutical ingredients in solution: A comparison of off-line and on-line approaches. Journal of Pharmaceutical and Biomedical Analysis, 2016, 131, 71-79.	2.8	6
62	Comparative effects of sodium dodecyl sulfate and sulfobutyl ether-Î²-cyclodextrin as pseudostationary phases in the electrokinetic chromatographic separation of hydrophobic compounds. Journal of Chromatography A, 1999, 836, 53-58.	3.7	5
63	A New Strategy for Fast Chiral Screening by Combining HPLC-DAD with a Multivariate Curve Resolutionâ€“Alternating Least Squares Algorithm. Chromatographia, 2013, 76, 1055-1066.	1.3	4
64	Reproducibility of migration times and propagation of error in micellar electrokinetic chromatography. Journal of Separation Science, 1992, 4, 399-404.	1.0	3
65	Liquid chromatography in the pharmaceutical industry. , 2017, , 515-537.		3
66	Evaluation of electron capture detection in reversedâ€phase HPLC for pharmaceutical analysis. Journal of Separation Science, 2009, 32, 29-33.	2.5	2
67	Development of Microchip Isotachophoresis Coupled with Ion Mobility Spectrometry and Evaluation of Its Potential for the Analysis of Food, Biological and Pharmaceutical Samples. Molecules, 2021, 26, 6094.	3.8	2