

Gert Desmet

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1812003/publications.pdf>

Version: 2024-02-01

286
papers

7,105
citations

61857

43
h-index

118652

62
g-index

293
all docs

293
docs citations

293
times ranked

2585
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometry-Independent Plate Height Representation Methods for the Direct Comparison of the Kinetic Performance of LC Supports with a Different Size or Morphology. <i>Analytical Chemistry</i> , 2005, 77, 4058-4070.	3.2	247
2	Performance of Monolithic Silica Capillary Columns with Increased Phase Ratios and Small-Sized Domains. <i>Analytical Chemistry</i> , 2006, 78, 7632-7642.	3.2	150
3	Pressure-Driven Reverse-Phase Liquid Chromatography Separations in Ordered Nonporous Pillar Array Columns. <i>Analytical Chemistry</i> , 2007, 79, 5915-5926.	3.2	149
4	Fundamentals for LC Miniaturization. <i>Analytical Chemistry</i> , 2013, 85, 543-556.	3.2	132
5	Silica-MOF Composites as a Stationary Phase in Liquid Chromatography. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 3735-3738.	1.0	120
6	The kinetic plot method applied to gradient chromatography: Theoretical framework and experimental validation. <i>Journal of Chromatography A</i> , 2010, 1217, 2787-2795.	1.8	90
7	A Correlation for the Pressure Drop in Monolithic Silica Columns. <i>Analytical Chemistry</i> , 2003, 75, 843-850.	3.2	82
8	Practical Constraints in the Kinetic Plot Representation of Chromatographic Performance Data: Theory and Application to Experimental Data. <i>Analytical Chemistry</i> , 2006, 78, 2150-2162.	3.2	81
9	Measurements of diffusion coefficients in 1-D micro- and nanochannels using shear-driven flows. <i>Lab on A Chip</i> , 2005, 5, 1104.	3.1	80
10	Realization of 10^6 Theoretical Plates in Liquid Chromatography Using Very Long Pillar Array Columns. <i>Analytical Chemistry</i> , 2012, 84, 1214-1219.	3.2	79
11	The performance of hybrid monolithic silica capillary columns prepared by changing feed ratios of tetramethoxysilane and methyltrimethoxysilane. <i>Journal of Chromatography A</i> , 2010, 1217, 89-98.	1.8	77
12	Experimental Study of Porous Silicon Shell Pillars under Retentive Conditions. <i>Analytical Chemistry</i> , 2008, 80, 5391-5400.	3.2	76
13	Effective medium theory expressions for the effective diffusion in chromatographic beds filled with porous, non-porous and porous-shell particles and cylinders. Part I: Theory. <i>Journal of Chromatography A</i> , 2011, 1218, 32-45.	1.8	69
14	Errors involved in the existing B-term expressions for the longitudinal diffusion in fully porous chromatographic media. <i>Journal of Chromatography A</i> , 2008, 1188, 171-188.	1.8	67
15	Performance limits of monolithic and packed capillary columns in high-performance liquid chromatography and capillary electrochromatography. <i>Journal of Chromatography A</i> , 2006, 1104, 256-262.	1.8	66
16	Model column structure for the analysis of the flow and band-broadening characteristics of silica monoliths. <i>Journal of Chromatography A</i> , 2004, 1030, 177-186.	1.8	64
17	Experimental investigation of the difference in B-term dominated band broadening between fully porous and porous-shell particles for liquid chromatography using the Effective Medium Theory. <i>Journal of Chromatography A</i> , 2011, 1218, 4406-4416.	1.8	63
18	Retention modeling and method development in hydrophilic interaction chromatography. <i>Journal of Chromatography A</i> , 2014, 1337, 116-127.	1.8	63

#	ARTICLE	IF	CITATIONS
19	General Rules for the Optimal External Porosity of LC Supports. <i>Analytical Chemistry</i> , 2004, 76, 6707-6718.	3.2	62
20	Very High Efficiency Porous Silica Layer Open-Tubular Capillary Columns Produced via in-Column Sol-Gel Processing. <i>Analytical Chemistry</i> , 2016, 88, 10158-10166.	3.2	62
21	Total pore blocking as an alternative method for the on-column determination of the external porosity of packed and monolithic reversed-phase columns. <i>Journal of Chromatography A</i> , 2007, 1157, 131-141.	1.8	61
22	Integration of porous layers in ordered pillar arrays for liquid chromatography. <i>Lab on A Chip</i> , 2007, 7, 1705.	3.1	60
23	Kinetic plot method as a tool to design coupled column systems producing 100,000 theoretical plates in the shortest possible time. <i>Journal of Chromatography A</i> , 2008, 1212, 23-34.	1.8	60
24	Tryptic digest analysis by comprehensive reversed phase—two reversed phase liquid chromatography (RP-LC—2RP-LC) at different pH's. <i>Journal of Separation Science</i> , 2009, 32, 1137-1144.	1.3	57
25	Improved Sensitivity in Low-Input Proteomics Using Micropillar Array-Based Chromatography. <i>Analytical Chemistry</i> , 2019, 91, 14203-14207.	3.2	57
26	On the possibility of shear-driven chromatography. <i>Journal of Chromatography A</i> , 1999, 855, 57-70.	1.8	56
27	Detailed characterisation of the flow resistance of commercial sub-2 $\frac{1}{4}$ m reversed-phase columns. <i>Journal of Chromatography A</i> , 2008, 1178, 108-117.	1.8	56
28	Equivalence of the Different C_m - and C_s -Term Expressions Used in Liquid Chromatography and a Geometrical Model Uniting Them. <i>Analytical Chemistry</i> , 2008, 80, 8076-8088.	3.2	56
29	Kinetic plot equations for evaluating the real performance of the combined use of high temperature and ultra-high pressure in liquid chromatography. <i>Journal of Chromatography A</i> , 2008, 1203, 124-136.	1.8	55
30	Influence of pressure and temperature on the physico-chemical properties of mobile phase mixtures commonly used in high-performance liquid chromatography. <i>Journal of Chromatography A</i> , 2008, 1210, 30-44.	1.8	55
31	Importance and Reduction of the Sidewall-Induced Band-Broadening Effect in Pressure-Driven Microfabricated Columns. <i>Analytical Chemistry</i> , 2004, 76, 4501-4507.	3.2	53
32	Morphological analysis of physically reconstructed capillary hybrid silica monoliths and correlation with separation efficiency. <i>Journal of Chromatography A</i> , 2011, 1218, 5187-5194.	1.8	53
33	Investigation of the validity of the kinetic plot method to predict the performance of coupled column systems operated at very high pressures under different thermal conditions. <i>Journal of Chromatography A</i> , 2009, 1216, 3895-3903.	1.8	52
34	The future of UHPLC: Towards higher pressure and/or smaller particles?. <i>TrAC - Trends in Analytical Chemistry</i> , 2014, 63, 65-75.	5.8	52
35	Future of high pressure liquid chromatography: Do we need porosity or do we need pressure?. <i>Journal of Chromatography A</i> , 2006, 1130, 158-166.	1.8	50
36	Kinetic plot based comparison of the efficiency and peak capacity of high-performance liquid chromatography columns: Theoretical background and selected examples. <i>Journal of Chromatography A</i> , 2012, 1228, 20-30.	1.8	49

#	ARTICLE	IF	CITATIONS
37	Rationale behind the optimum efficiency of columns packed with new 1.9 μ m fully porous particles of narrow particle size distribution. <i>Journal of Chromatography A</i> , 2016, 1454, 78-85.	1.8	49
38	Relation between the particle size distribution and the kinetic performance of packed columns. <i>Journal of Chromatography A</i> , 2007, 1161, 224-233.	1.8	48
39	Effective medium theory expressions for the effective diffusion in chromatographic beds filled with porous, non-porous and porous-shell particles and cylinders. Part II: Numerical verification and quantitative effect of solid core on expected B-term band broadening. <i>Journal of Chromatography A</i> , 2011, 1218, 46-56.	1.8	48
40	Effect of pre- and post-column band broadening on the performance of high-speed chromatography columns under isocratic and gradient conditions. <i>Journal of Chromatography A</i> , 2016, 1442, 73-82.	1.8	48
41	The Possibility of Generating High-Speed Shear-Driven Flows and Their Potential Application in Liquid Chromatography. <i>Analytical Chemistry</i> , 2000, 72, 2160-2165.	3.2	47
42	Kinetic optimisation of open-tubular liquid-chromatography capillaries coated with thick porous layers for increased loadability. <i>Journal of Chromatography A</i> , 2011, 1218, 8388-8393.	1.8	45
43	Theoretical calculation of the retention enthalpy effect on the viscous heat dissipation band broadening in high performance liquid chromatography columns with a fixed wall temperature. <i>Journal of Chromatography A</i> , 2006, 1116, 89-96.	1.8	44
44	Thermal Modulation for Multidimensional Liquid Chromatography Separations Using Low-Thermal-Mass Liquid Chromatography (LC). <i>Analytical Chemistry</i> , 2011, 83, 7053-7060.	3.2	43
45	Design and evaluation of flow distributors for microfabricated pillar array columns. <i>Lab on A Chip</i> , 2010, 10, 349-356.	3.1	42
46	Fabrication and Chromatographic Performance of Porous-Shell Pillar-Array Columns. <i>Analytical Chemistry</i> , 2010, 82, 7208-7217.	3.2	41
47	High-resolution separations of protein isoforms with liquid chromatography time-of-flight mass spectrometry using polymer monolithic capillary columns. <i>Journal of Chromatography A</i> , 2011, 1218, 5504-5511.	1.8	41
48	Comparison of the gradient kinetic performance of silica monolithic capillary columns with columns packed with 3 μ m porous and 2.7 μ m fused-core silica particles. <i>Journal of Chromatography A</i> , 2012, 1228, 270-275.	1.8	41
49	Towards a solution for viscous heating in ultra-high pressure liquid chromatography using intermediate cooling. <i>Journal of Chromatography A</i> , 2010, 1217, 2022-2031.	1.8	40
50	Parameters affecting the separation of intact proteins in gradient-elution reversed-phase chromatography using poly(styrene-co-divinylbenzene) monolithic capillary columns. <i>Journal of Chromatography A</i> , 2010, 1217, 3085-3090.	1.8	40
51	Extra-column band broadening effects in contemporary liquid chromatography: Causes and solutions. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 119, 115619.	5.8	40
52	Selection of comparison criteria and experimental conditions to evaluate the kinetic performance of monolithic and packed-bed columns. <i>Journal of Chromatography A</i> , 2006, 1130, 108-114.	1.8	39
53	Graphical Data Representation Methods To Assess the Quality of LC Columns. <i>Analytical Chemistry</i> , 2015, 87, 8593-8602.	3.2	39
54	Merging Open-Tubular and Packed Bed Liquid Chromatography. <i>Analytical Chemistry</i> , 2015, 87, 7382-7388.	3.2	39

#	ARTICLE	IF	CITATIONS
55	Isocratic and gradient impedance plot analysis and comparison of some recently introduced large size core-shell and fully porous particles. <i>Journal of Chromatography A</i> , 2013, 1312, 80-86.	1.8	38
56	Methods for the experimental characterization and analysis of the efficiency and speed of chromatographic columns: A step-by-step tutorial. <i>Analytica Chimica Acta</i> , 2015, 894, 20-34.	2.6	38
57	Pillar-structured microchannels for on-chip liquid chromatography: Evaluation of the permeability and separation performance. <i>Journal of Separation Science</i> , 2007, 30, 1453-1460.	1.3	37
58	Numerical and analytical solutions for the column length-dependent band broadening originating from axisymmetrical trans-column velocity gradients. <i>Journal of Chromatography A</i> , 2009, 1216, 1325-1337.	1.8	37
59	Detailed characterization of the kinetic performance of first and second generation silica monolithic columns for reversed-phase chromatography separations. <i>Journal of Chromatography A</i> , 2014, 1325, 72-82.	1.8	37
60	Kinetic plot and particle size distribution analysis to discuss the performance limits of sub-2 μ m and supra-2 μ m particle columns. <i>Journal of Chromatography A</i> , 2008, 1204, 1-10.	1.8	36
61	Errors involved in the existing B-term expressions for the longitudinal diffusion in fully porous chromatographic media. <i>Journal of Chromatography A</i> , 2008, 1188, 189-198.	1.8	35
62	Extensive database of liquid phase diffusion coefficients of some frequently used test molecules in reversed-phase liquid chromatography and hydrophilic interaction liquid chromatography. <i>Journal of Chromatography A</i> , 2016, 1455, 102-112.	1.8	35
63	Ultra-rapid separation of an angiotensin mixture in nanochannels using shear-driven chromatography. <i>Journal of Chromatography A</i> , 2006, 1102, 96-103.	1.8	34
64	Method to predict and compare the influence of the particle size on the isocratic peak capacity of high-performance liquid chromatography columns. <i>Journal of Chromatography A</i> , 2007, 1147, 183-191.	1.8	34
65	Comparison of performance of high-performance liquid chromatography columns packed with superficially and fully porous 2.5 μ m particles using kinetic plots. <i>Journal of Separation Science</i> , 2010, 33, 3655-3665.	1.3	34
66	Integration of uniform porous shell layers in very long pillar array columns using electrochemical anodization for liquid chromatography. <i>Analyst</i> , 2014, 139, 618-625.	1.7	34
67	Gradient-elution parameters in capillary liquid chromatography for high-speed separations of peptides and intact proteins. <i>Journal of Chromatography A</i> , 2014, 1355, 149-157.	1.8	34
68	High-efficiency high performance liquid chromatographic analysis of red wine anthocyanins. <i>Journal of Chromatography A</i> , 2011, 1218, 4660-4670.	1.8	33
69	High-speed isocratic and gradient liquid-chromatography separations at 1500bar. <i>Journal of Chromatography A</i> , 2015, 1409, 138-145.	1.8	33
70	The effect of hydrothermal treatment on column performance for monolithic silica capillary columns. <i>Journal of Chromatography A</i> , 2011, 1218, 3624-3635.	1.8	32
71	Possibilities of retention modeling and computer assisted method development in supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2015, 1381, 219-228.	1.8	32
72	A computational study of the porosity effects in silica monolithic columns. <i>Journal of Separation Science</i> , 2004, 27, 887-896.	1.3	31

#	ARTICLE	IF	CITATIONS
73	Domain Size-Induced Heterogeneity as Performance Limitation of Small-Domain Monolithic Columns and Other LC Support Types. <i>Analytical Chemistry</i> , 2006, 78, 6191-6201.	3.2	31
74	A discussion of the possible ways to improve the performance of silica monoliths using a kinetic plot analysis of experimental and computational plate height data. <i>Journal of Separation Science</i> , 2006, 29, 1675-1685.	1.3	31
75	Effect of polyethylene glycol on pore structure and separation efficiency of silica-based monolithic capillary columns. <i>Journal of Chromatography A</i> , 2016, 1442, 42-52.	1.8	31
76	Chromatographic explanation for the side-wall induced band broadening in pressure-driven and shear-driven flows through channels with a high aspect-ratio rectangular cross-section. <i>Journal of Chromatography A</i> , 2002, 946, 51-58.	1.8	30
77	DNA Microarray Enhancement Using a Continuously and Discontinuously Rotating Microchamber. <i>Analytical Chemistry</i> , 2005, 77, 4474-4480.	3.2	30
78	Performance evaluation of long monolithic silica capillary columns in gradient liquid chromatography using peptide mixtures. <i>Journal of Chromatography A</i> , 2011, 1218, 3360-3366.	1.8	30
79	On the Advantages of Radially Elongated Structures in Microchip-Based Liquid Chromatography. <i>Analytical Chemistry</i> , 2013, 85, 5207-5212.	3.2	30
80	Occurrence of turbulent flow conditions in supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2014, 1361, 277-285.	1.8	30
81	Approximate transient and long time limit solutions for the band broadening induced by the thin sidewall-layer in liquid chromatography columns. <i>Journal of Chromatography A</i> , 2007, 1172, 25-39.	1.8	29
82	Impact of the limitations of state-of-the-art micro-fabrication processes on the performance of pillar array columns for liquid chromatography. <i>Journal of Chromatography A</i> , 2012, 1239, 35-48.	1.8	29
83	Experimental demonstration of the possibility to perform shear-driven chromatographic separations in micro-channels. <i>Journal of Chromatography A</i> , 2001, 924, 111-122.	1.8	28
84	Selection of Column Dimensions and Gradient Conditions to Maximize the Peak-Production Rate in Comprehensive Off-Line Two-Dimensional Liquid Chromatography Using Monolithic Columns. <i>Analytical Chemistry</i> , 2010, 82, 7015-7020.	3.2	28
85	Design and evaluation of various methods for the construction of kinetic performance limit plots for supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2012, 1258, 152-160.	1.8	28
86	Exploring the Possibilities of Cryogenic Cooling in Liquid Chromatography for Biological Applications: A Proof of Principle. <i>Analytical Chemistry</i> , 2012, 84, 2031-2037.	3.2	28
87	High-speed gradient separations of peptides and proteins using polymer-monolithic poly(styrene-co-divinylbenzene) capillary columns at ultra-high pressure. <i>Journal of Chromatography A</i> , 2013, 1304, 177-182.	1.8	28
88	Evaluation and comparison of the kinetic performance of ultra-high performance liquid chromatography and high-performance liquid chromatography columns in hydrophilic interaction and reversed-phase liquid chromatography conditions. <i>Journal of Chromatography A</i> , 2014, 1369, 83-91.	1.8	28
89	Effect of the presence of an ordered micro-pillar array on the formation of silica monoliths. <i>Journal of Chromatography A</i> , 2009, 1216, 7360-7367.	1.8	27
90	Kinetic performance optimisation for liquid chromatography: Principles and practice. <i>Journal of Separation Science</i> , 2011, 34, 877-887.	1.3	27

#	ARTICLE	IF	CITATIONS
91	Capillary liquid chromatography separations using non-porous pillar array columns. Journal of Chromatography A, 2012, 1230, 41-47.	1.8	27
92	Experimental investigation of the band broadening originating from the top and bottom walls in micromachined nonporous pillar array columns. Journal of Separation Science, 2007, 30, 2605-2613.	1.3	26
93	High-resolution separations of tryptic digest mixtures using core-shell particulate columns operated at 1200bar. Journal of Chromatography A, 2012, 1264, 57-62.	1.8	26
94	Predictive Elution Window Stretching and Shifting as a Generic Search Strategy for Automated Method Development for Liquid Chromatography. Analytical Chemistry, 2012, 84, 7823-7830.	3.2	26
95	Assessment and numerical search for minimal Taylor-Aris dispersion in micro-machined channels of nearly rectangular cross-section. Journal of Chromatography A, 2014, 1368, 70-81.	1.8	26
96	Understanding and diminishing the extra-column band broadening effects in supercritical fluid chromatography. Journal of Chromatography A, 2015, 1403, 132-137.	1.8	26
97	A theoretical study on the advantage of core-shell particles with radially-oriented mesopores. Journal of Chromatography A, 2016, 1456, 137-144.	1.8	26
98	A finite parallel zone model to interpret and extend Giddings's coupling theory for the eddy-dispersion in porous chromatographic media. Journal of Chromatography A, 2013, 1314, 124-137.	1.8	25
99	A generic approach to post-column refocusing in liquid chromatography. Journal of Chromatography A, 2014, 1360, 164-171.	1.8	25
100	Peak deconvolution to correctly assess the band broadening of chromatographic columns. Journal of Chromatography A, 2016, 1465, 126-142.	1.8	25
101	Prototyping of thermoplastic microfluidic chips and their application in high-performance liquid chromatography separations of small molecules. Journal of Chromatography A, 2017, 1523, 224-233.	1.8	25
102	Chromatographic Properties of Minimal Aspect Ratio Monolithic Silica Columns. Analytical Chemistry, 2017, 89, 10948-10956.	3.2	25
103	Silica-based hybrid porous layers to enhance the retention and efficiency of open tubular capillary columns with a 5 μ m inner diameter. Journal of Chromatography A, 2018, 1580, 63-71.	1.8	25
104	Kinetic performance factor - A measurable metric of separation-time-pressure tradeoff in liquid and gas chromatography. Journal of Chromatography A, 2018, 1567, 26-36.	1.8	25
105	Evaluation of the Kinetic Performance Differences between Hydrophilic-Interaction Liquid Chromatography and Reversed-Phase Liquid Chromatography under Conditions of Identical Packing Structure. Analytical Chemistry, 2015, 87, 12331-12339.	3.2	24
106	Peer Reviewed: Shear-Driven Flow Approaches to LC and Macromolecular Separations. Analytical Chemistry, 2004, 76, 430 A-438 A.	3.2	23
107	Kinetic performance limits of constant pressure versus constant flow rate gradient elution separations. Part I: Theory. Journal of Chromatography A, 2011, 1218, 1153-1169.	1.8	23
108	Maximizing the peak capacity using coupled columns packed with 2.6 μ m core-shell particles operated at 1200bar. Journal of Chromatography A, 2012, 1256, 72-79.	1.8	23

#	ARTICLE	IF	CITATIONS
109	Capillary Ion Chromatography at High Pressure and Temperature. <i>Analytical Chemistry</i> , 2012, 84, 7212-7217.	3.2	23
110	Application of the isopycnic kinetic plot method for elucidating the potential of sub-2- μm and core-shell particles in SFC. <i>Talanta</i> , 2013, 116, 1105-1112.	2.9	23
111	A high aspect ratio membrane reactor for liquid-liquid extraction. <i>Journal of Membrane Science</i> , 2013, 436, 154-162.	4.1	23
112	Use of individual retention modeling for gradient optimization in hydrophilic interaction chromatography: Separation of nucleobases and nucleosides. <i>Journal of Chromatography A</i> , 2014, 1368, 125-131.	1.8	23
113	Applicability of linear and nonlinear retention-time models for reversed-phase liquid chromatography separations of small molecules, peptides, and intact proteins. <i>Journal of Separation Science</i> , 2016, 39, 1249-1257.	1.3	23
114	Achieving a Peak Capacity of 1800 Using an 8 m Long Pillar Array Column. <i>Analytical Chemistry</i> , 2019, 91, 10932-10936.	3.2	23
115	Advances and Challenges in Extremely High-Pressure Liquid Chromatography in Current and Future Analytical Scale Column Formats. <i>Analytical Chemistry</i> , 2020, 92, 554-560.	3.2	23
116	Enhancing the Possibilities of Comprehensive Two-Dimensional Liquid Chromatography through Hyphenation of Purely Aqueous Temperature-Responsive and Reversed-Phase Liquid Chromatography. <i>Analytical Chemistry</i> , 2018, 90, 4961-4967.	3.2	22
117	Measurement and modelling of the intra-particle diffusion and b-term in reversed-phase liquid chromatography. <i>Journal of Chromatography A</i> , 2021, 1637, 461852.	1.8	22
118	Simultaneous optimization of the analysis time and the concentration detectability in open-tubular liquid chromatography. <i>Journal of Chromatography A</i> , 2000, 867, 23-43.	1.8	20
119	Use of kinetic plots for the optimization of the separation time in ultra-high-pressure LC. <i>Journal of Separation Science</i> , 2010, 33, 2629-2635.	1.3	20
120	Computer aided design optimisation of microfluidic flow distributors. <i>Journal of Chromatography A</i> , 2010, 1217, 6724-6732.	1.8	20
121	Kinetic performance limits of constant pressure versus constant flow rate gradient elution separations. Part II: Experimental. <i>Journal of Chromatography A</i> , 2011, 1218, 1170-1184.	1.8	20
122	New insights in the velocity dependency of the external mass transfer coefficient in 2D and 3D porous media for liquid chromatography. <i>Journal of Chromatography A</i> , 2012, 1227, 194-202.	1.8	20
123	Kinetic performance comparison of fully and superficially porous particles with a particle size of 5 μm : Intrinsic evaluation and application to the impurity analysis of griseofulvin. <i>Talanta</i> , 2014, 122, 122-129.	2.9	20
124	Peak refocusing using subsequent retentive trapping and strong eluent remobilization in liquid chromatography: A theoretical optimization study. <i>Journal of Chromatography A</i> , 2015, 1381, 74-86.	1.8	20
125	Design and evaluation of microfluidic devices for two-dimensional spatial separations. <i>Journal of Chromatography A</i> , 2016, 1434, 127-135.	1.8	20
126	Guidelines for tuning the macropore structure of monolithic columns for high-performance liquid chromatography. <i>Journal of Separation Science</i> , 2019, 42, 522-533.	1.3	20

#	ARTICLE	IF	CITATIONS
127	Use of 120-nm deep channels for liquid chromatographic separations. <i>Journal of Chromatography A</i> , 2008, 1189, 2-9.	1.8	19
128	Experimental Investigation of the Band Broadening Arising from Short-Range Interchannel Heterogeneities in Chromatographic Beds under the Condition of Identical External Porosity. <i>Analytical Chemistry</i> , 2009, 81, 705-715.	3.2	19
129	Experimental Optimization of Flow Distributors for Pressure-Driven Separations and Reactions in Flat-Rectangular Microchannels. <i>Analytical Chemistry</i> , 2011, 83, 467-477.	3.2	19
130	Extending the limits of operating pressure of narrow-bore column liquid chromatography instrumentation. <i>Journal of Chromatography A</i> , 2014, 1347, 56-62.	1.8	19
131	Temperature effects in supercritical fluid chromatography: A trade-off between viscous heating and decompression cooling. <i>Journal of Chromatography A</i> , 2014, 1365, 212-218.	1.8	19
132	Comparison and optimization of different peak integration methods to determine the variance of unretained and extra-column peaks. <i>Journal of Chromatography A</i> , 2014, 1364, 140-150.	1.8	19
133	A comprehensive study on the phenomenon of total breakthrough in liquid chromatography. <i>Journal of Chromatography A</i> , 2021, 1653, 462399.	1.8	19
134	A first principles explanation for the experimentally observed increase in A-term band broadening in small domain silica monoliths and other chromatographic supports. <i>Journal of Chromatography A</i> , 2005, 1077, 28-36.	1.8	18
135	State of the art of shear driven chromatography. <i>Journal of Chromatography A</i> , 2007, 1149, 2-11.	1.8	18
136	A study of the parameters affecting the accuracy of the total pore blocking method. <i>Journal of Chromatography A</i> , 2010, 1217, 6754-6761.	1.8	18
137	High performance liquid chromatography column packings with deliberately broadened particle size distribution: Relation between column performance and packing structure. <i>Journal of Chromatography A</i> , 2011, 1218, 6654-6662.	1.8	18
138	Modelling the thermal behaviour of the Low-Thermal Mass Liquid Chromatography system. <i>Journal of Chromatography A</i> , 2011, 1218, 2252-2263.	1.8	18
139	Comparison of the quantitative performance of constant pressure versus constant flow rate gradient elution separations using concentration-sensitive detectors. <i>Journal of Chromatography A</i> , 2012, 1232, 65-76.	1.8	18
140	Kinetic optimisation of the reversed phase liquid chromatographic separation of proanthocyanidins on sub-2µm and superficially porous phases. <i>Journal of Chromatography A</i> , 2012, 1236, 63-76.	1.8	18
141	Detailed kinetic performance analysis of micromachined radially elongated pillar array columns for liquid chromatography. <i>Journal of Chromatography A</i> , 2016, 1433, 75-84.	1.8	18
142	Methodologies to determine b-term coefficients revisited. <i>Journal of Chromatography A</i> , 2018, 1532, 124-135.	1.8	18
143	Two-dimensional insertable separation tool (TWIST) for flow confinement in spatial separations. <i>Journal of Chromatography A</i> , 2018, 1577, 120-123.	1.8	18
144	Pharmaceutical impurity analysis by comprehensive two-dimensional temperature responsive—reversed phase liquid chromatography. <i>Journal of Chromatography A</i> , 2020, 1630, 461561.	1.8	18

#	ARTICLE	IF	CITATIONS
145	Deep convolutional autoencoder for the simultaneous removal of baseline noise and baseline drift in chromatograms. <i>Journal of Chromatography A</i> , 2021, 1646, 462093.	1.8	18
146	Graph Convolutional Networks for Improved Prediction and Interpretability of Chromatographic Retention Data. <i>Analytical Chemistry</i> , 2021, 93, 15633-15641.	3.2	18
147	Suppression of the sidewall effect in pillar array columns with radially elongated pillars. <i>Journal of Chromatography A</i> , 2014, 1367, 118-122.	1.8	17
148	Metrics of separation performance in chromatography. <i>Journal of Chromatography A</i> , 2015, 1413, 9-21.	1.8	17
149	Comprehensive two-dimensional temperature-responsive \tilde{A} - reversed phase liquid chromatography for the analysis of wine phenolics. <i>Talanta</i> , 2022, 236, 122889.	2.9	17
150	High-Velocity Transport of Nanoparticles through 1-D Nanochannels at Very Large Particle to Channel Diameter Ratios. <i>Analytical Chemistry</i> , 2004, 76, 3005-3011.	3.2	16
151	Calculation of the geometrical three-point parameter constant appearing in the second order accurate effective medium theory expression for the B-term diffusion coefficient in fully porous and porous-shell random sphere packings. <i>Journal of Chromatography A</i> , 2012, 1223, 35-40.	1.8	16
152	Strategies to integrate porous layers in microfluidic devices. <i>Microelectronic Engineering</i> , 2015, 132, 1-13.	1.1	16
153	Comprehensive study of the macropore and mesopore size distributions in polymer monoliths using complementary physical characterization techniques and liquid chromatography. <i>Journal of Separation Science</i> , 2016, 39, 4492-4501.	1.3	16
154	Optimal Mixing Rate in Linear Solvent Strength Gradient Liquid Chromatography. <i>Analytical Chemistry</i> , 2016, 88, 2281-2288.	3.2	16
155	Optimum kinetic performance of open-tubular separations in microfluidic devices. <i>Journal of Separation Science</i> , 2007, 30, 1377-1397.	1.3	15
156	Miniaturized Detection System for Fluorescence and Absorbance Measurements in Chromatographic Applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2008, 14, 140-150.	1.9	15
157	Visualization and quantification of the onset and the extent of viscous fingering in micro-pillar array columns. <i>Journal of Chromatography A</i> , 2009, 1216, 5511-5517.	1.8	15
158	Experimental study of the depth influence on the band broadening effect in a cyclo-olefin polymer column containing an array of ordered pillars. <i>Journal of Chromatography A</i> , 2010, 1217, 5817-5821.	1.8	15
159	Hydrodynamic chromatography separations in micro- and nanopillar arrays produced using deep-UV lithography. <i>Journal of Separation Science</i> , 2012, 35, 1877-1883.	1.3	15
160	The impact of flow distribution on column performance: A computational fluid dynamics study. <i>Journal of Chromatography A</i> , 2014, 1369, 125-130.	1.8	15
161	Kinetic plots for gas chromatography: Theory and experimental verification. <i>Journal of Chromatography A</i> , 2015, 1386, 81-88.	1.8	15
162	Problems involving the determination of the column-only band broadening in columns producing narrow and tailed peaks. <i>Journal of Chromatography A</i> , 2016, 1440, 74-84.	1.8	15

#	ARTICLE	IF	CITATIONS
163	Performance of small-domain monolithic silica columns in nano-liquid chromatography and comparison with commercial packed bed columns with 2 Åµm particles. <i>Journal of Chromatography A</i> , 2020, 1616, 460804.	1.8	15
164	A novel microstep device for the size separation of cells. <i>Electrophoresis</i> , 2004, 25, 1714-1722.	1.3	14
165	Theoretical optimisation of the side-wall of micropillar array columns using computational fluid dynamics. <i>Journal of Chromatography A</i> , 2010, 1217, 8121-8126.	1.8	14
166	Separations using a porous shell pillar array column on a capillary <sc>LC</sc> instrument. <i>Journal of Separation Science</i> , 2012, 35, 2010-2017.	1.3	14
167	Accurate determination of extra column band broadening using peak summation. <i>Journal of Separation Science</i> , 2012, 35, 519-529.	1.3	14
168	Design and performance evaluation of a microfluidic ion-suppression module for anion-exchange chromatography. <i>Journal of Chromatography A</i> , 2014, 1355, 253-260.	1.8	14
169	On the inherent data fitting problems encountered in modeling retention behavior of analytes with dual retention mechanism. <i>Journal of Chromatography A</i> , 2015, 1403, 81-95.	1.8	14
170	Maximizing two-dimensional liquid chromatography peak capacity for the separation of complex industrial samples. <i>Journal of Chromatography A</i> , 2020, 1609, 460457.	1.8	14
171	Separation efficiency kinetics of capillary flow micro-pillar array columns for liquid chromatography. <i>Journal of Chromatography A</i> , 2020, 1626, 461279.	1.8	14
172	Exploiting the benefits of miniaturization for the enhancement of DNA microarrays. <i>Electrophoresis</i> , 2004, 25, 3677-3686.	1.3	13
173	An automated injection system for sub-micron sized channels used in shear-driven-chromatography. <i>Lab on A Chip</i> , 2006, 6, 1322.	3.1	13
174	Automatic Column Coupling System To Operate Chromatographic Supports Closer To Their Kinetic Performance Limit and To Enhance Method Development. <i>Analytical Chemistry</i> , 2010, 82, 1054-1065.	3.2	13
175	Performance Evaluation of Different Design Alternatives for Microfabricated Nonporous Fused Silica Pillar Columns for Capillary Electrochromatography. <i>Analytical Chemistry</i> , 2012, 84, 9996-10004.	3.2	13
176	Possibilities and limitations of the kinetic plot method in supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2013, 1305, 300-309.	1.8	13
177	Exploring the speed limits of liquid chromatography using shear-driven flows through 45 and 85 nm deep nano-channels. <i>Analyst, The</i> , 2013, 138, 6127.	1.7	13
178	Enhanced selectivity and search speed for method development using one-segment-per-component optimization strategies. <i>Journal of Chromatography A</i> , 2014, 1358, 145-154.	1.8	13
179	Chip-Based Multicapillary Column with Maximal Interconnectivity to Combine Maximum Efficiency and Maximum Loadability. <i>Analytical Chemistry</i> , 2017, 89, 11605-11613.	3.2	13
180	Development of capillary electrophoresis methods for quantitative determination of taurine in vehicle system and biological media. <i>Electrophoresis</i> , 2006, 27, 2330-2337.	1.3	12

#	ARTICLE	IF	CITATIONS
181	In Situ Measurement of the Transversal Dispersion in Ordered and Disordered Two-Dimensional Pillar Beds for Liquid Chromatography. <i>Analytical Chemistry</i> , 2014, 86, 2947-2954.	3.2	12
182	Experimental and numerical study of band-broadening effects associated with analyte transfer in microfluidic devices for spatial two-dimensional liquid chromatography created by additive manufacturing. <i>Journal of Chromatography A</i> , 2019, 1598, 77-84.	1.8	12
183	Numerical and experimental investigation of analyte breakthrough from sampling loops used for multi-dimensional liquid chromatography. <i>Journal of Chromatography A</i> , 2020, 1626, 461283.	1.8	12
184	Methods to determine the kinetic performance limit of contemporary chromatographic techniques. <i>Journal of Separation Science</i> , 2021, 44, 323-339.	1.3	12
185	Use of non-porous pillar array columns for the separation of <i>Pseudomonas pyoverdine</i> siderophores as an example of a real-world biological sample. <i>Journal of Chromatography A</i> , 2009, 1216, 8603-8611.	1.8	11
186	Towards a generic variable column length method development strategy for samples with a large variety in polarity. <i>Journal of Chromatography A</i> , 2014, 1372, 174-186.	1.8	11
187	Experimental and numerical validation of the effective medium theory for the B-term band broadening in 1st and 2nd generation monolithic silica columns. <i>Journal of Chromatography A</i> , 2014, 1351, 46-55.	1.8	11
188	Optimal mixing rate in linear solvent strength gradient liquid chromatography. Balanced mixing program. <i>Journal of Chromatography A</i> , 2016, 1476, 35-45.	1.8	11
189	Effect of reference conditions on flow rate, modifier fraction and retention in supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2016, 1459, 129-135.	1.8	11
190	Exploring the effect of mesopore size reduction on the column performance of silica-based open tubular capillary columns. <i>Journal of Chromatography A</i> , 2018, 1552, 87-91.	1.8	11
191	Numerical investigation of band spreading generated by flow-through needle and fixed loop sample injectors. <i>Journal of Chromatography A</i> , 2018, 1552, 29-42.	1.8	11
192	On-tubing fluorescence measurements of the band broadening of contemporary injectors in ultra-high performance liquid chromatography. <i>Journal of Chromatography A</i> , 2018, 1535, 44-54.	1.8	11
193	A microfluidic distributor combining minimal volume, minimal dispersion and minimal sensitivity to clogging. <i>Journal of Chromatography A</i> , 2018, 1537, 75-82.	1.8	11
194	Experimental investigation of the retention factor dependency of eddy dispersion in packed bed columns and relation to Knox's empirical model parameters. <i>Journal of Chromatography A</i> , 2020, 1626, 461339.	1.8	11
195	A numerical study of the assumptions underlying the calculation of the stationary zone mass transfer coefficient in the general plate height model of chromatography in two-dimensional pillar arrays. <i>Journal of Chromatography A</i> , 2010, 1217, 1942-1949.	1.8	10
196	A Variable Column Length Strategy To Expedite Method Development. <i>Analytical Chemistry</i> , 2011, 83, 966-975.	3.2	10
197	Fast method development of rooibos tea phenolics using a variable column length strategy. <i>Journal of Chromatography A</i> , 2011, 1218, 7347-7357.	1.8	10
198	Theoretical evaluation of the advantages and limitations of constant pressure versus constant flow rate gradient elution separation in supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2013, 1312, 134-142.	1.8	10

#	ARTICLE	IF	CITATIONS
199	Exploring the speed-resolution limits of supercritical fluid chromatography at ultra-high pressures. <i>Journal of Chromatography A</i> , 2014, 1374, 247-253.	1.8	10
200	A universal comparison study of chromatographic response functions. <i>Journal of Chromatography A</i> , 2014, 1361, 178-190.	1.8	10
201	Characterization of polymer monolithic columns for small-molecule separations using total-pore-blocking conditions. <i>Journal of Chromatography A</i> , 2014, 1325, 115-120.	1.8	10
202	Plastic light coupler for absorbance detection in silicon microfluidic channels. <i>Microfluidics and Nanofluidics</i> , 2015, 18, 559-568.	1.0	10
203	On the feasibility to conduct gradient liquid chromatography separations in narrow-bore columns at pressures up to 2000 bar. <i>Journal of Chromatography A</i> , 2016, 1473, 48-55.	1.8	10
204	Preparation and evaluation of mesoporous silica layers on radially elongated pillars. <i>Journal of Chromatography A</i> , 2017, 1523, 234-241.	1.8	10
205	Assessment of intra-particle diffusion in hydrophilic interaction liquid chromatography and reversed-phase liquid chromatography under conditions of identical packing structure. <i>Journal of Chromatography A</i> , 2017, 1523, 204-214.	1.8	10
206	Impact of particle size gradients on the apparent efficiency of chromatographic columns. <i>Journal of Chromatography A</i> , 2019, 1603, 208-215.	1.8	10
207	Spatial Segregation of Microspheres by Rubbing-Induced Triboelectrification on Patterned Surfaces. <i>Langmuir</i> , 2020, 36, 6793-6800.	1.6	10
208	Deep Q-learning for the selection of optimal isocratic scouting runs in liquid chromatography. <i>Journal of Chromatography A</i> , 2021, 1638, 461900.	1.8	10
209	Detailed numerical study of the peak shapes of neutral analytes injected at high solvent strength in short reversed-phase liquid chromatography columns and comparison with experimental observations. <i>Journal of Chromatography A</i> , 2021, 1643, 462078.	1.8	10
210	Experimental Van Deemter plots of shear-driven liquid chromatographic separations in disposable microchannels. <i>Journal of Chromatography A</i> , 2003, 987, 39-48.	1.8	9
211	Modeling the effect of species retention on the band broadening in perfectly ordered silica monolithic column mimics with variable external porosity and intra-skeleton diffusivity. <i>Journal of Separation Science</i> , 2009, 32, 2707-2722.	1.3	9
212	Modelling the relation between the species retention factor and the C_m term band broadening in pressure-driven and electrically driven flows through perfectly ordered 2D chromatographic media. <i>Journal of Separation Science</i> , 2009, 32, 4077-4088.	1.3	9
213	Estimation of surface desorption times in hydrophobically coated nanochannels and their effect on shear-driven and pressure-driven chromatography. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 394, 399-411.	1.9	9
214	Experimental study of the retention properties of a cyclo olefin polymer pillar array column in reversed-phase mode. <i>Journal of Separation Science</i> , 2010, 33, 3313-3318.	1.3	9
215	Micron-sized pillars for ion-pair reversed-phase DNA separations. <i>Journal of Separation Science</i> , 2010, 33, 3613-3618.	1.3	9
216	Computer-assisted multi-segment gradient optimization in ion chromatography. <i>Journal of Chromatography A</i> , 2015, 1381, 101-109.	1.8	9

#	ARTICLE	IF	CITATIONS
217	Exploring the pressure resistance limits of monolithic silica capillary columns. <i>Journal of Chromatography A</i> , 2016, 1446, 164-169.	1.8	9
218	Possibilities and Limitations of Computer-Assisted Method Development in HILIC: A Case Study. <i>Chromatographia</i> , 2017, 80, 771-781.	0.7	9
219	An explicit expression for the retention factor and velocity dependency of the mobile zone mass transfer band broadening in packed spheres beds used in liquid chromatography. <i>Journal of Chromatography A</i> , 2020, 1634, 461710.	1.8	9
220	Application of evolutionary algorithms to optimise one- and two-dimensional gradient chromatographic separations. <i>Journal of Chromatography A</i> , 2020, 1628, 461435.	1.8	9
221	On the potential use of two-photon polymerization to 3D print chromatographic packed bed supports. <i>Journal of Chromatography A</i> , 2022, 1663, 462763.	1.8	9
222	Novel shape and placement definitions with retention modeling for solid microfabricated pillar columns for CEC and HPLC. <i>Electrophoresis</i> , 2010, 31, 3681-3690.	1.3	8
223	Fabrication of integrated porous glass for microfluidic applications. <i>Lab on A Chip</i> , 2013, 13, 3061.	3.1	8
224	Effect of gradient steepness on the kinetic performance limits and peak compression for reversed-phase gradient separations of small molecules. <i>Journal of Chromatography A</i> , 2015, 1409, 152-158.	1.8	8
225	Prototyping of a Microfluidic Modulator Chip and Its Application in Heart-Cut Strong-Cation-Exchange-Reversed-Phase Liquid Chromatography Coupled to Nanoelectrospray Mass Spectrometry for Targeted Proteomics. <i>Analytical Chemistry</i> , 2020, 92, 2388-2392.	3.2	8
226	Optimizing design and employing permeability differences to achieve flow confinement in devices for spatial multidimensional liquid chromatography. <i>Journal of Chromatography A</i> , 2020, 1612, 460665.	1.8	8
227	A detailed study of the interaction between levitated microspheres and the target electrode in a strong electric field. <i>Powder Technology</i> , 2021, 383, 292-301.	2.1	8
228	Taylor-Aris dispersion for N-zone and continuous systems with variable sorption strength – extending Aris’s approach. <i>Chemical Engineering Science</i> , 2022, 247, 117051.	1.9	8
229	Convolutional neural network for automated peak detection in reversed-phase liquid chromatography. <i>Journal of Chromatography A</i> , 2022, 1672, 463005.	1.8	8
230	Review of recent insights in the measurement and modelling of the B-term dispersion and related mass transfer properties in liquid chromatography. <i>Analytica Chimica Acta</i> , 2022, 1214, 339955.	2.6	8
231	Efficiency gain limits of the parallel segmented inlet and outlet flow concept in analytical liquid chromatography columns suffering from radial transcolumn packing density gradients. <i>Journal of Chromatography A</i> , 2012, 1258, 66-75.	1.8	7
232	Enhancing detection sensitivity in gradient liquid chromatography via post-column refocusing and strong-solvent remobilization. <i>Journal of Chromatography A</i> , 2016, 1455, 86-92.	1.8	7
233	Measurement of the Band Broadening of UV Detectors used in Ultra-high Performance Liquid Chromatography using an On-tubing Fluorescence Detector. <i>Chromatographia</i> , 2019, 82, 489-498.	0.7	7
234	Chromatographic study of the structural properties of mesoporous silica layers deposited on radially elongated pillars. <i>Journal of Chromatography A</i> , 2019, 1595, 58-65.	1.8	7

#	ARTICLE	IF	CITATIONS
235	Effect of the feed injection method on band broadening in analytical supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2020, 1630, 461525.	1.8	7
236	Modelling of analyte profiles and band broadening generated by interface loops used in multi-dimensional liquid chromatography. <i>Journal of Chromatography A</i> , 2021, 1659, 462578.	1.8	7
237	Vacuum-driven assembly of electrostatically levitated microspheres on perforated surfaces. <i>Materials and Design</i> , 2022, 216, 110573.	3.3	7
238	Self-organization of agitated microspheres on various substrates. <i>Soft Matter</i> , 2022, 18, 3660-3677.	1.2	7
239	Wafer-Scale Particle Assembly in Connected and Isolated Micromachined Pockets via PDMS Rubbing. <i>Langmuir</i> , 2022, 38, 7709-7719.	1.6	7
240	Computational study of the relationship between the flow resistance and the microscopic structure of polymer monoliths. <i>Journal of Separation Science</i> , 2011, 34, 2038-2046.	1.3	6
241	Using the column wall itself as resistive heater for fast temperature gradients in liquid chromatography. <i>Journal of Chromatography A</i> , 2015, 1420, 129-134.	1.8	6
242	Optimal mixing rate in reverse phase liquid chromatography. Experimental evaluations. <i>Journal of Chromatography A</i> , 2017, 1513, 84-92.	1.8	6
243	Numerical and analytical investigation of the possibilities to enhance the thermal conductivity of core-shell particle packed beds. <i>Journal of Chromatography A</i> , 2018, 1575, 26-33.	1.8	6
244	Peak sharpening limits of solvent-assisted post-column refocusing to enhance detection limits in liquid chromatography. <i>Journal of Chromatography A</i> , 2019, 1586, 52-61.	1.8	6
245	A Methodology for the Estimation and Modelling of the Obstruction Factor in the Expression for Mesopore Diffusion in Reversed-Phase Liquid Chromatography Particles. <i>Journal of Chromatography A</i> , 2020, 1625, 461285.	1.8	6
246	Rapid vacuum-driven monolayer assembly of microparticles on the surface of perforated microfluidic devices. <i>Powder Technology</i> , 2021, 390, 330-338.	2.1	6
247	Exact analytical expressions for the band broadening in polydisperse 2-D multi-capillary columns with diffusional bridging. <i>Journal of Chromatography A</i> , 2021, 1659, 462632.	1.8	6
248	High-Speed Shear-Driven Flows Through Microstructured 1D-Nanochannels. <i>Analytical Chemistry</i> , 2009, 81, 943-952.	3.2	5
249	Performance limits and kinetic optimization of parallel and serially connected multi-column systems spanning a wide range of efficiencies for liquid chromatography. <i>Journal of Chromatography A</i> , 2012, 1219, 114-127.	1.8	5
250	Computational fluid dynamics study of the optimal design and operating conditions of the segmentation ring used in parallel segmented flow columns. <i>Journal of Chromatography A</i> , 2013, 1294, 50-57.	1.8	5
251	Quantification aspects of constant pressure (ultra) high pressure liquid chromatography using mass-sensitive detectors with a nebulizing interface. <i>Journal of Chromatography A</i> , 2013, 1274, 118-128.	1.8	5
252	Variable column length method development strategy for amino acid analysis in serum samples of neonates with metabolic disorders. <i>Journal of Chromatography A</i> , 2013, 1292, 229-238.	1.8	5

#	ARTICLE	IF	CITATIONS
253	Kinetic plots for programmed temperature gas chromatography. <i>Journal of Chromatography A</i> , 2016, 1450, 94-100.	1.8	5
254	Study of peak capacities generated by a porous layered radially elongated pillar array column coupled to a nano-LC system. <i>Analyst</i> , The, 2019, 144, 1809-1817.	1.7	5
255	A multiscale modelling study on the sense and nonsense of thermal conductivity enhancement of liquid chromatography packings and other potential solutions for viscous heating effects. <i>Journal of Chromatography A</i> , 2020, 1620, 461022.	1.8	5
256	Implementations of temperature gradients in temperature-responsive liquid chromatography. <i>Journal of Chromatography A</i> , 2021, 1654, 462425.	1.8	5
257	Taylor-Aris methodology for the experimental determination of molecular diffusion coefficients: Tutorial with focus on large biomolecules. <i>Journal of Chromatography A</i> , 2022, 1664, 462787.	1.8	5
258	Detection enhancement in nano-channels using micro-machined silicon groove. <i>Journal of Chromatography A</i> , 2006, 1130, 151-157.	1.8	4
259	INFLUENCE OF THE PILLAR SHAPE ON THE BAND BROADENING IN PRESSURE-DRIVEN AND ELECTRO-OSMOSIS-DRIVEN ORDERED 2D POROUS CHROMATOGRAPHIC COLUMNS. <i>International Journal of Computational Methods</i> , 2008, 05, 551-574.	0.8	4
260	Extending the Total Pore Blocking method to normal phase high performance liquid chromatography. <i>Journal of Chromatography A</i> , 2011, 1218, 7781-7787.	1.8	4
261	Use of pressure drop profiles to assess the accuracy of Total Pore Blocking measurements of the external porosity of chromatographic columns. <i>Journal of Chromatography A</i> , 2011, 1218, 3940-3943.	1.8	4
262	The axial rearrangement mixer: Working principles and in-depth investigation. <i>Electrophoresis</i> , 2014, 35, 298-305.	1.3	4
263	Theoretical study on the impact of slip flow on chromatographic performance. <i>Journal of Chromatography A</i> , 2014, 1366, 120-125.	1.8	4
264	The chromatographic performance of flow-through particles: A computational fluid dynamics study. <i>Journal of Chromatography A</i> , 2016, 1429, 166-174.	1.8	4
265	Assessing effects of ultra-high-pressure liquid chromatography instrument configuration on dispersion, system pressure, and retention. <i>Journal of Chromatography A</i> , 2020, 1634, 461660.	1.8	4
266	Detailed numerical analysis of the effect of radial column heterogeneities on peak parking experiments with slowly diffusing analytes. <i>Journal of Chromatography A</i> , 2021, 1656, 462557.	1.8	4
267	Detailed computational fluid dynamics study of the parameters contributing to the viscous heating band broadening in liquid chromatography at pressures up to 2500 Åbar in 2.1 mm columns. <i>Journal of Chromatography A</i> , 2022, 1661, 462683.	1.8	4
268	Transient Taylor-Aris dispersion in N-capillary systems: Convergence properties of the band broadening in polydisperse multi-capillary columns with diffusional bridging. <i>Journal of Chromatography A</i> , 2022, 1678, 463346.	1.8	4
269	Column-in-valve designs to minimize extra-column volumes. <i>Journal of Chromatography A</i> , 2021, 1637, 461779.	1.8	3
270	Computational fluid dynamics study of potential solutions to alleviate viscous heating band broadening in 2.1 millimeter liquid chromatography columns. <i>Journal of Chromatography A</i> , 2021, 1654, 462452.	1.8	3

#	ARTICLE	IF	CITATIONS
271	The checkerboard model for the eddy-dispersion in laminar flows through porous media. Part I: Theory and velocity field properties. <i>Journal of Chromatography A</i> , 2020, 1624, 461195.	1.8	3
272	Theory of separation performance and peak width in gradient elution liquid chromatography: A tutorial. <i>Analytica Chimica Acta</i> , 2022, 1218, 339962.	2.6	3
273	Use of the kinetic plot method to compare the efficiency and resolution of liquid-phase separation techniques based on different driving forces. <i>Journal of Planar Chromatography - Modern TLC</i> , 2010, 23, 440-446.	0.6	2
274	Signal enhancement by trapping in microscale liquid chromatography: Numerical modelling. <i>Journal of Separation Science</i> , 2011, 34, 2822-2832.	1.3	2
275	Numerical study and theoretical performance limit of interconnected multi-capillary gas chromatography columns with perfectly ordered pillar patterns. <i>Journal of Chromatography A</i> , 2017, 1524, 215-221.	1.8	2
276	Detailed efficiency analysis of columns with a different packing quality and confirmation via total pore blocking. <i>Journal of Chromatography A</i> , 2018, 1581-1582, 55-62.	1.8	2
277	Diffusion coefficients of an extensive set of pharmaceutical compounds in supercritical fluid chromatography over a wide range of mobile phase compositions. <i>Journal of Chromatography A</i> , 2022, 1678, 463327.	1.8	2
278	Improved Liquid Phase Chromatography Separation using Sub-micron Micromachining Technology. , 2007, , .		1
279	Through-pore polymerization in polar high-performance liquid chromatography columns allowing scanning electron microscopy based imaging of the packing order. <i>Journal of Chromatography A</i> , 2021, 1638, 461851.	1.8	1
280	The checkerboard model for the Eddy-dispersion in Laminar flows through porous media. Part II: Application to ordered and disordered 2-D flow systems. <i>Journal of Chromatography A</i> , 2020, 1624, 461196.	1.8	1
281	SHEAR-DRIVEN CHROMATOGRAPHY: PERFORMING HIGH-VELOCITY OPEN-TUBULAR CHROMATOGRAPHIC SEPARATIONS AT ZERO PRESSURE DROP. , 2000, , .		0
282	Alternative method to study the radial dispersion in liquid chromatography columns. Part I: Theory. <i>Journal of Chromatography A</i> , 2020, 1618, 460868.	1.8	0
283	Alternative method to study the radial dispersion in liquid chromatography columns. Part II: Experimental. <i>Journal of Chromatography A</i> , 2020, 1618, 460870.	1.8	0
284	Performance of functionalized monolithic silica capillary columns with different mesopore sizes using radical polymerization of octadecyl methacrylate. <i>Journal of Chromatography A</i> , 2021, 1651, 462282.	1.8	0
285	Pressure-Driven Separation Methods on a Chip. , 2005, , 165-207.		0
286	Shear-Driven Micro- and Nanofluidics. , 2013, , 1-13.		0