Torgny Fornstedt

List of Publications by Year
in descending order

122	3,423	136950	189892
papers	citations	32 h-index	50 g-index

123	123	123	1422
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermodynamic Study of an Unusual Chiral Separation. Propranolol Enantiomers on an Immobilized Cellulase. Journal of the American Chemical Society, 1997, 119, 1254-1264.	13.7	183
2	Peak tailing and mass transfer kinetics in linear chromatography. Journal of Chromatography A, 1996, 741, 1-12.	3.7	122
3	A closer study of chiral retention mechanisms. Chirality, 1998, 10, 375-381.	2.6	112
4	Dependence on the Mobile-Phase pH of the Adsorption Behavior of Propranolol Enantiomers on a Cellulase Protein Used as the Chiral Selector. Journal of the American Chemical Society, 1999, 121, 1164-1174.	13.7	97
5	Characterization of adsorption processes in analytical liquidâ€“solid chromatography. Journal of Chromatography A, 2010, 1217, 792-812.	3.7	92
6	Apparent and true enantioselectivity in enantioseparations. Chirality, 2000, 12, 558-564.	2.6	86
7	Peak tailing and slow mass transfer kinetics in nonlinear chromatography. Journal of Chromatography A, 1996, 742, 55-68.	3.7	85
8	Potential of adsorption isotherm measurements for closer elucidating of binding in chiral liquid chromatographic phase systems. Journal of Separation Science, 2009, 32, 1491-1506.	2.5	79
9	Retention Mechanism of Î²-Blockers on an Immobilized Cellulase. Relative Importance of the Hydrophobic And Ionic Contributions To Their Enantioselective and Nonselective Interactions. Analytical Chemistry, 2000, 72, 3908-3915.	6.5	76
10	Experimental and Theoretical Study of the Adsorption Behavior and Mass Transfer Kinetics of Propranolol Enantiomers on Cellulase Protein as the Selector. Analytical Chemistry, 1996, 68, 2370-2378.	6.5	74
11	Peak tailing and mass transfer kinetics in linear chromatography. Journal of Chromatography A, 1999, 831, 17-35.	3.7	62
12	Evaluation of co-solvent fraction, pressure and temperature effects in analytical and preparative supercritical fluid chromatography. Journal of Chromatography A, 2014, 1374, 254-260.	3.7	62
13	Thermodynamic characterization of separations on alkaline-stable silica-based C18 columns: Why basic solutes may have better capacity and peak performance at higher pH. Journal of Chromatography A, 2007, 1163, 177-189.	3.7	59
14	Validation of the Accuracy of the Perturbation Peak Method for Determination of Single and Binary Adsorption Isotherm Parameters in LC. Analytical Chemistry, 2004, 76, 4856-4865.	6.5	55
15	Tuneable Peak Deformations in Chiral Liquid Chromatography. Analytical Chemistry, 2007, 79, 5838-5847.	6.5	49
16	A closer study of methanol adsorption and its impact on solute retentions in supercritical fluid chromatography. Journal of Chromatography A, 2016, 1442, 129-139.	3.7	49
17	Accurate and rapid estimation of adsorption isotherms in liquid chromatography using the inverse method on plateaus. Journal of Chromatography A, 2005, 1099, 167-174.	3.7	46
18	Theoretical and experimental study of binary perturbation peaks with focus on peculiar retention behaviour and vanishing peaks in chiral liquid chromatography. Journal of Chromatography A, 2003, 991, 31-45.	3.7	44

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19	A closer study of peak distortions in supercritical fluid chromatography as generated by the injection. Journal of Chromatography A, 2015, 1400, 131-139.	3.7	44
20	Impact of an error in the column hold-up time for correct adsorption isotherm determination in chromatography. Journal of Chromatography A, 2008, 1189, 19-31.	3.7	43
21	Comparison between Experimental and Theoretical Profiles of High Concentration Elution Bands and Large System Peaks in Nonlinear Chromatography. Analytical Chemistry, 1994, 66, 2686-2693.	6.5	41
22	Theoretical study of the accuracy of the elution by characteristic points method for bi-Langmuir isotherms. Journal of Chromatography A, 2001, 908, 111-130.	3.7	41
23	Approach for Reliable Evaluation of Drug Proteins Interactions Using Surface Plasmon Resonance Technology. Analytical Chemistry, 2009, 81, 3551-3559.	6.5	41
24	Injection profiles in liquid chromatography. I. A fundamental investigation. Journal of Chromatography A, 2010, 1217, 4306-4312.	3.7	41
25	Investigation of factors influencing the separation of diastereomers of phosphorothioated oligonucleotides. Analytical and Bioanalytical Chemistry, 2019, 411, 3383-3394.	3.7	40
26	Influence of the solute hydrophobicity on the enantioselective adsorption of Î²-blockers on a cellulase protein used as the chiral selector. Journal of Chromatography A, 2001, 905, 3-17.	3.7	39
27	Analytical Characterization of Chiral Drugâ^'Protein Interactions:Â Comparison between the Optical Biosensor (Surface Plasmon Resonance) Assay and the HPLC Perturbation Method. Analytical Chemistry, 2006, 78, 1682-1689.	6.5	38
28	Theoretical Study of High-Concentration Elution Profiles and Large System Peaks in Nonlinear Chromatography. Analytical Chemistry, 1994, 66, 2116-2128.	6.5	36
29	Investigation of the Heterogeneous Adsorption Behavior of Selected Enantiomers on Immobilized Î±1-Acid Glycoprotein. Analytical Chemistry, 2002, 74, 2950-2959.	6.5	35
30	Advanced Analysis of Biosensor Data for SARS-CoV-2 RBD and ACE2 Interactions. Analytical Chemistry, 2020, 92, 11520-11524.	6.5	34
31	Validation of the Accuracy of the Perturbation Peak Method for Determination of Multicomponent Adsorption Isotherm Parameters in LC. Analytical Chemistry, 2004, 76, 5472-5478.	6.5	33
32	Injection Technique for Generating Accurate Adsorption Isotherm Data Using the Elution by Characteristic Points Method. Analytical Chemistry, 2008, 80, 7887-7893.	6.5	32
33	Analytical and preparative separation of phosphorothioated oligonucleotides: columns and ion-pair reagents. Analytical and Bioanalytical Chemistry, 2020, 412, 299-309.	3.7	32
34	Improvement in the generation of adsorption isotherm data in the elution by characteristic points methodâ€"The ECP-slope approach. Journal of Chromatography A, 2010, 1217, 7215-7221.	3.7	31
35	Development of the Tracer-Pulse Method for Adsorption Studies of Analyte Mixtures in Liquid Chromatography Utilizing Mass Spectrometric Detection. Analytical Chemistry, 2008, 80, 2105-2112.	6.5	30
36	Determination of adsorption isotherms in supercritical fluid chromatography. Journal of Chromatography A, 2013, 1312, 124-133.	3.7	30

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37	Method transfer from high-pressure liquid chromatography to ultra-high-pressure liquid chromatography. II. Temperature and pressure effects. Journal of Chromatography A, 2015, 1401, 52-59.	3.7	30
38	Chemometric evaluation of the combined effect of temperature, pressure, and co-solvent fractions on the chiral separation of basic pharmaceuticals using actual vs set operational conditions. Journal of Chromatography A, 2017, 1499, 165-173.	3.7	30
39	Reliable Strategy for Analysis of Complex Biosensor Data. Analytical Chemistry, 2018, 90, 5366-5374.	6.5	30
40	Investigation of robustness for supercritical fluid chromatography separation of peptides: Isocratic vs gradient mode. Journal of Chromatography A, 2018, 1568, 177-187.	3.7	30
41	Experimental Proof of a Chromatographic Paradox:Â Are the Injected Molecules in the Peak?. Analytical Chemistry, 2004, 76, 953-958.	6.5	29
42	Evaluation of scale-up from analytical to preparative supercritical fluid chromatography. Journal of Chromatography A, 2015, 1425, 280-286.	3.7	28
43	The importance of ion-pairing in peptide purification by reversed-phase liquid chromatography. Journal of Chromatography A, 2017, 1496, 80-91.	3.7	27
44	Impact of an error in the column hold-up time for correct adsorption isotherm determination in chromatography. Journal of Chromatography A, 2008, 1194, 205-212.	3.7	26
45	Adsorption behaviour of a quinidine carbamate-based chiral stationary phase: Role of the additive. Journal of Chromatography A, 2009, 1216, 3480-3487.	3.7	26
46	Peer Reviewed: Nonlinear Effects in LC and Chiral LC. Analytical Chemistry, 2001, 73, 608 A-617 A.	6.5	25
47	Investigation of the adsorption behaviour of a chiral model compound on a tartardiamide-based network-polymeric chiral stationary phase. Journal of Chromatography A, 2005, 1095, 50-59.	3.7	24
48	Expanding the elution by characteristic point method for determination of various types of adsorption isotherms. Journal of Chromatography A, 2011, 1218, 3737-3742.	3.7	24
49	Injection profiles in liquid chromatography II: Predicting accurate injection-profiles for computer-assisted preparative optimizations. Journal of Chromatography A, 2011, 1218, 5794-5800.	3.7	24
50	Chiral Assay of Atenolol Present in Microdialysis and Plasma Samples of Rats Using Chiral CBH as Stationary Phase. , 1997, 9, 329-334.		23
51	Heterogeneous Adsorption of Î²-Blockers on Immobilized Cel7A and Adsorption Energy Distribution of Two Enantiomers on a Chiral Phase. Langmuir, 2003, 19, 6950-6956.	3.5	23
52	Fast estimation of adsorption isotherm parameters in gradient elution preparative liquid chromatography. I: The single component case. Journal of Chromatography A, 2013, 1299, 64-70.	3.7	23
53	Evaluation and analysis of environmentally sustainable methodologies for extraction of betulin from birch bark with a focus on industrial feasibility. Green Chemistry, 2016, 18, 516-523.	9.0	22
54	Effects on analyte peak performance by separated system peaks in ion-pair adsorption chromatography. Journal of Chromatography A, 1993, 648, 315-324.	3.7	21

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55	Thermodynamic characterization of the adsorption of selected chiral compounds on immobilized amyloglucosidase in liquid chromatography. Journal of Chromatography A, 2007, 1156, 3-13.	3.7	21
56	Impact of assay temperature on antibody binding characteristics in living cells: A case study. Biomedical Reports, 2017, 7, 400-406.	2.0	21
57	Selectivity limits of and opportunities for ion pair chromatographic separation of oligonucleotides. Journal of Chromatography A, 2021, 1651, 462269.	3.7	21
58	Profiles of large-size system peaks and vacancy bands in liquid chromatography I. Analytical solution of the ideal model. Journal of Chromatography A, 1996, 734, 63-74.	3.7	20
59	A quality control method enhancement conceptâ€"Continual improvement of regulatory approved QC methods. Journal of Pharmaceutical and Biomedical Analysis, 2016, 129, 273-281.	2.8	20
60	Three Different Approaches for the Clarification of the Interactions between Lipoproteins and Chondroitin-6-sulfate. Analytical Chemistry, 2011, 83, 6040-6046.	6.5	19
61	Evaluation of a combined linear-nonlinear approach for column characterization using modern alkaline-stable columns as model. Journal of Separation Science, 2013, 36, 1753-1761.	2.5	19
62	Investigation of plateau methods for adsorption isotherm determination in supercritical fluid chromatography. Journal of Chromatography A, 2014, 1354, 129-138.	3.7	19
63	Profiles of large-size system peaks and vacancy bands in liquid chromatography II. Comparison of experimental and calculated profiles. Journal of Chromatography A, 1996, 734, 75-81.	3.7	18
64	Highlighting Important Parameters Often Neglected in Numerical Optimization of Preparative Chromatography. Chemical Engineering and Technology, 2012, 35, 149-156.	1.5	18
65	Method transfer from high-pressure liquid chromatography to ultra-high-pressure liquid chromatography. I. A thermodynamic perspective. Journal of Chromatography A, 2014, 1362, 206-217.	3.7	18
66	Systematic investigations of peak deformations due to co-solvent adsorption in preparative supercritical fluid chromatography. Journal of Chromatography A, 2017, 1496, 141-149.	3.7	18
67	Calculations of the energy distribution from perturbation peak dataâ€"A new tool for characterization of chromatographic phases. Journal of Chromatography A, 2008, 1203, 177-184.	3.7	17
68	A quest for the optimal additive in chiral preparative chromatography. Journal of Chromatography A, 2009, 1216, 4719-4727.	3.7	17
69	Characterization of an unusual adsorption behavior of racemic methyl-mandelate on a tris-(3,5-dimethylphenyl) carbamoyl cellulose chiral stationary phase. Journal of Chromatography A, 2011, 1218, 6688-6696.	3.7	17
70	Peak deformations in preparative supercritical fluid chromatography due to co-solvent adsorption. Journal of Chromatography A, 2016, 1468, 200-208.	3.7	17
71	Determining gradient conditions for peptide purification in RPLC with machine-learning-based retention time predictions. Journal of Chromatography A, 2019, 1598, 92-100.	3.7	17
72	Use of liquid chromatographyâ€“diode-array detection and mass spectrometry for rapid product identification in biotechnological synthesis of a hydroxyprogesterone. Journal of Chromatography A, 2003, 992, 85-100.	3.7	16

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73	Investigation of the adsorption behavior of glycine peptides on 12% cross-linked agarose gel media. Journal of Chromatography A, 2010, 1217, 1916-1925.	3.7	16
74	Deformations of overloaded bands under pH-stable conditions in reversed phase chromatography. Journal of Chromatography A, 2011, 1218, 1966-1973.	3.7	16
75	System peaks and their impact in liquid chromatography. TrAC - Trends in Analytical Chemistry, 2016, 81, 42-50.	11.4	16
76	A practical approach for predicting retention time shifts due to pressure and temperature gradients in ultra-high-pressure liquid chromatography. Journal of Chromatography A, 2017, 1479, 107-120.	3.7	16
77	Thermodynamic and kinetic approaches for evaluation of monoclonal antibody - Lipoprotein interactions. Analytical Biochemistry, 2017, 518, 25-34.	2.4	16
78	Peak distortion effects of suramin due to large system peaks in bioanalysis using ion-pair adsorption chromatography. Biomedical Applications, 1993, 612, 137-144.	1.7	15
79	Biotechnological Approach to the Synthesis of 9Î±â€Hydroxylated Steroids. Preparative Biochemistry and Biotechnology, 2007, 37, 309-321.	1.9	15
80	A systematic investigation of algorithm impact in preparative chromatography with experimental verifications. Journal of Chromatography A, 2011, 1218, 662-672.	3.7	15
81	Relative importance of column and adsorption parameters on the productivity in preparative liquid chromatography. I: Investigation of a chiral separation system. Journal of Chromatography A, 2013, 1299, 58-63.	3.7	15
82	Fast estimation of adsorption isotherm parameters in gradient elution preparative liquid chromatography II: The competitive case. Journal of Chromatography A, 2013, 1314, 70-76.	3.7	15
83	Impact of stationary-phase pore size on chromatographic performance using oligonucleotide separation as a model. Journal of Chromatography A, 2020, 1634, 461653.	3.7	15
84	Impact of Methanol Adsorption on the Robustness of Analytical Supercritical Fluid Chromatography in Transfer from SFC to UHPSFC. Analytical Chemistry, 2020, 92, 15429-15436.	6.5	15
85	Enhanced interpretation of adsorption data generated by liquid chromatography and by modern biosensors. Journal of Chromatography A, 2013, 1317, 22-31.	3.7	14
86	Choice of Model for Estimation of Adsorption Isotherm Parameters in Gradient Elution Preparative Liquid Chromatography. Chromatographia, 2015, 78, 1293-1297.	1.3	14
87	A model free method for estimation of complicated adsorption isotherms in liquid chromatography. Journal of Chromatography A, 2015, 1409, 108-115.	3.7	14
88	Rapid affinity chromatographic isolation method for LDL in human plasma by immobilized chondroitin-6-sulfate and anti-apoB-100 antibody monolithic disks in tandem. Scientific Reports, 2019, 9, 11235.	3.3	14
89	Systematic investigations of peak distortions due to additives in supercritical fluid chromatography. Journal of Chromatography A, 2020, 1621, 461048.	3.7	14
90	Validation of the Tracer-Pulse Method for Multicomponent Liquid Chromatography, A Classical Paradox Revisited. Analytical Chemistry, 2006, 78, 4615-4623.	6.5	13

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91	Why ultra high performance liquid chromatography produces more tailing peaks than high performance liquid chromatography, why it does not matter and how it can be addressed. Journal of Chromatography A, 2011, 1218, 6914-6921.	3.7	13
92	Three complementary techniques for the clarification of temperature effect on low-density lipoproteinâ€“chondroitin-6-sulfate interaction. Analytical Biochemistry, 2013, 443, 139-147.	2.4	13
93	Building machine-learning-based models for retention time and resolution predictions in ion pair chromatography of oligonucleotides. Journal of Chromatography A, 2022, 1671, 462999.	3.7	13
94	Guidelines for analytical method development and validation of biotechnological synthesis of drugs. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2003, 791, 323-336.	2.3	12
95	Relative importance of column and adsorption parameters on the productivity in preparative liquid chromatography II: Investigation of separation systems with competitive Langmuir adsorption isotherms. Journal of Chromatography A, 2014, 1347, 72-79.	3.7	12
96	A fundamental study of the impact of pressure on the adsorption mechanism in reversed-phase liquid chromatography. Journal of Chromatography A, 2016, 1457, 97-106.	3.7	12
97	Kinetics and interaction studies of anti-tetraspanin antibodies and ICAM-1 with extracellular vesicle subpopulations using continuous flow quartz crystal microbalance biosensor. Biosensors and Bioelectronics, 2022, 206, 114151.	10.1	12
98	General theory of indirect detection in chromatography. Journal of Chromatography A, 2006, 1126, 268-275.	3.7	11
99	Sample conditions to avoid pH distortion in RPâ€ŁC. Journal of Separation Science, 2013, 36, 3769-3775.	2.5	11
100	A regularization method for the reconstruction of adsorption isotherms in liquid chromatography. Inverse Problems, 2016, 32, 105005.	2.0	11
101	Estimation of Nonlinear Adsorption Isotherms in Gradient Elution RP-LC of Peptides in the Presence of an Adsorbing Additive. Chromatographia, 2017, 80, 961-966.	1.3	11
102	Optimization strategies accounting for the additive in preparative chiral liquid chromatography. Journal of Chromatography A, 2012, 1269, 279-286.	3.7	10
103	Partial-filling affinity capillary electrophoresis and quartz crystal microbalance with adsorption energy distribution calculations in the study of biomolecular interactions with apolipoprotein E as interaction partner. Analytical and Bioanalytical Chemistry, 2014, 406, 4137-4146.	3.7	10
104	Sample introduction for high performance separations. TrAC - Trends in Analytical Chemistry, 2016, 81, 34-41.	11.4	10
105	Invisible Analyte Peak Deformations in Single-Component Liquid Chromatography. Analytical Chemistry, 2006, 78, 2765-2771.	6.5	9
106	Enantioseparation of omeprazoleâ€”Effect of different packing particle size on productivity. Journal of Chromatography A, 2012, 1240, 123-131.	3.7	9
107	Evaluating the advantages of higher heat conductivity in a recently developed type of core-shell diamond stationary phase particle in UHPLC. Journal of Chromatography A, 2020, 1625, 461076.	3.7	9
108	Biosensor-Enabled Deconvolution of the Avidity-Induced Affinity Enhancement for the SARS-CoV-2 Spike Protein and ACE2 Interaction. Analytical Chemistry, 2022, 94, 1187-1194.	6.5	9

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109	Viscosity contrast effects in analytical scale chromatography - Evidence and impact. Microchemical Journal, 2017, 130, 102-107.	4.5	8
110	Combining Chemometric Models with Adsorption Isotherm Measurements to Study Omeprazole in RP-LC. Chromatographia, 2016, 79, 1283-1291.	1.3	7
111	Impact of column and stationary phase properties on the productivity in chiral preparative LC. Journal of Separation Science, 2018, 41, 1346-1354.	2.5	7
112	A Retention-Matching Strategy for Method Transfer in Supercritical Fluid Chromatography: Introducing the Isomolar Plot Approach. Analytical Chemistry, 2021, 93, 6385-6393.	6.5	6
113	Experimental and theoretical investigation of high- concentration elution bands in ion-pair chromatography. Journal of Chromatography A, 2021, 1656, 462541.	3.7	6
114	Discovery of invisible extra fronts in single-component frontal analysis in liquid chromatography. Journal of Chromatography A, 2006, 1114, 53-61.	3.7	5
115	Predictions of overloaded concentration profiles in supercritical fluid chromatography. Journal of Chromatography A, 2021, 1639, 461926.	3.7	5
116	Method transfer in SFC from a fundamental perspective. TrAC - Trends in Analytical Chemistry, 2022, 149, 116551.	11.4	5
117	Estimating the rate constant from biosensor data via an adaptive variational Bayesian approach. Annals of Applied Statistics, 2019, 13, .	1.1	4
118	Exogenous factors contributing to column bed heterogeneity. Journal of Chromatography A, 2015, 1406, 186-191.	3.7	2
119	Modeling of preparative liquidÂchromatography. , 2017, , 573-592.		2
120	Regeneration of a silica monolithic rod column using harsh methods followed by firm thermodynamic and kinetic validation. Journal of Separation Science, 2014, 37, 906-911.	2.5	1
121	Introduction to â€œFundamental challenges and opportunities for preparative supercritical fluid chromatography by G. Guiochon, A. Tarafder [J. Chromatogr. A 1218 (2011) 1037â€“1114]â€• Journal of Chromatography A, 2016, 1446, 19-20.	3.7	1
122	Influence of the solution pH on the interaction mechanisms between the molecules of the (R)- and (S)-enantiomers of a few Î²-receptor blocking agents and those of cellobiohydrolase I (CBH I). Thermochimica Acta, 2003, 398, 73-74.	2.7	0