Bernt Nilsson

List of Publications by Year
in descending order

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Version: 2024-02-01

51	861	471509	526287
papers	citations	17	27
		h-index	g-index

52	52	52	430
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Model-based optimization of a preparative ion-exchange step for antibody purification. Journal of Chromatography A, 2004, 1055, 29-39.	3.7	65
2	Optimisation and robustness analysis of a hydrophobic interaction chromatography step. Journal of Chromatography A, 2005, 1099, 157-166.	3.7	52
3	Modeling and robust pooling design of a preparative cation-exchange chromatography step for purification of monoclonal antibody monomer from aggregates. Journal of Chromatography A, 2014, 1359, 170-181.	3.7	46
4	Modelâ€based design and control of a smallâ€scale integrated continuous endâ€toâ€end <scp>mAb</scp> platform. Biotechnology Progress, 2020, 36, e2995.	2.6	41
5	Using computer simulation to assist in the robustness analysis of an ion-exchange chromatography step. Journal of Chromatography A, 2005, 1063, 99-109.	3.7	40
6	Model based robustness analysis of an ion-exchange chromatography step. Journal of Chromatography A, 2007, 1138, 109-119.	3.7	36
7	Optimization study on periodic counter-current chromatography integrated in a monoclonal antibody downstream process. Journal of Chromatography A, 2020, 1621, 461055.	3.7	35
8	Effects of uncertainties in experimental conditions on the estimation of adsorption model parameters in preparative chromatography. Computers and Chemical Engineering, 2013, 55, 148-157.	3.8	32
9	Modeling and optimization of preparative reversed-phase liquid chromatography for insulin purification. Journal of Chromatography A, 2007, 1162, 41-49.	3.7	31
10	Methodologies for model calibration to assist the design of a preparative ion-exchange step for antibody purification. Journal of Chromatography A, 2004, 1033, 71-82.	3.7	30
11	Constrained optimization of a preparative ion-exchange step for antibody purification. Journal of Chromatography A, 2006, 1113, 92-100.	3.7	30
12	Design and control of integrated chromatography column sequences. Biotechnology Progress, 2017, 33, 923-930.	2.6	27
13	Integrated continuous biomanufacturing on pilot scale for acidâ€sensitive monoclonal antibodies. Biotechnology and Bioengineering, 2022, 119, 2152-2166.	3.3	25
14	Experimental productivity rate optimization of rare earth element separation through preparative solid phase extraction chromatography. Journal of Chromatography A, 2014, 1348, 47-51.	3.7	24
15	Optimization of preparative chromatographic separation of multiple rare earth elements. Journal of Chromatography A, 2011, 1218, 9155-9161.	3.7	20
16	Coupled diffusion and adsorption effects for multiple proteins in agarose gel. AICHE Journal, 2004, 50, 3006-3018.	3.6	18
17	Modelling and optimisation of preparative chromatographic purification of europium. Journal of Chromatography A, 2012, 1220, 21-25.	3.7	18
18	Continuous adsorption in food industry: The recovery of sinapic acid from rapeseed meal extract. Separation and Purification Technology, 2021, 254, 117403.	7.9	18

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19	An integrated continuous downstream process with realâ€time control: A case study with periodic countercurrent chromatography and continuous virus inactivation. Biotechnology and Bioengineering, 2021, 118, 1645-1657.	3.3	17
20	Combined effects of potassium chloride and ethanol as mobile phase modulators on hydrophobic interaction and reversed-phase chromatography of three insulin variants. Journal of Chromatography A, 2015, 1381, 64-73.	3.7	16
21	Pooling control in variable preparative chromatography processes. Bioprocess and Biosystems Engineering, 2010, 33, 375-382.	3.4	15
22	Model-Based Comparison of Batch and Continuous Preparative Chromatography in the Separation of Rare Earth Elements. Industrial & Engineering Chemistry Research, 2014, 53, 16485-16493.	3.7	15
23	Integration of a complete downstream process for the automated lab-scale production of a recombinant protein. Journal of Biotechnology, 2019, 301, 45-51.	3.8	15
24	Discretized multi-level elution trajectory: A proof-of-concept demonstration. Journal of Chromatography A, 2017, 1481, 73-81.	3.7	13
25	Estimation of adsorption parameters in a detailed affinity chromatography model based on shallow bed experiments. Process Biochemistry, 2005, 40, 1649-1659.	3.7	12
26	Designing an Autonomous Integrated Downstream Sequence From a Batch Separation Process â^' An Industrial Case Study. Biotechnology Journal, 2018, 13, e1700691.	3.5	12
27	Design of two-column batch-to-batch recirculation to enhance performance in ion-exchange chromatography. Journal of Chromatography A, 2018, 1531, 112-121.	3.7	11
28	Optimal loading flow rate trajectory in monoclonal antibody capture chromatography. Journal of Chromatography A, 2021, 1635, 461760.	3.7	11
29	Design of an integrated continuous downstream process for acid-sensitive monoclonal antibodies based on a calcium-dependent Protein A ligand. Journal of Chromatography A, 2022, 1664, 462806.	3.7	11
30	Aspects of estimating parameter dependencies in a detailed chromatography model based on frontal experiments. Process Biochemistry, 2006, 41, 1812-1821.	3.7	10
31	Multi-flowrate Optimization of the Loading Phase of a Preparative Chromatographic Separation. Computer Aided Chemical Engineering, 2018, 43, 1619-1624.	0.5	10
32	Optimization of integrated chromatography sequences for purification of biopharmaceuticals. Biotechnology Progress, 2019, 35, e2871.	2.6	10
33	Multi-objective optimization of chromatographic rare earth element separation. Journal of Chromatography A, 2015, 1416, 57-63.	3.7	9
34	Modelâ€based risk analysis of coupled process steps. Biotechnology and Bioengineering, 2013, 110, 2462-2470.	3.3	8
35	Model-Based Comparison of Antibody Dimerization in Continuous and Batch-Wise Downstream Processing. Antibodies, 2015, 4, 157-169.	2.5	8
36	Method development in inverse modeling applied to supercritical fluid extraction of lipids. Journal of Supercritical Fluids, 2016, 111, 14-27.	3.2	8

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37	Modeling Preparative Chromatographic Separation of Heavy Rare Earth Elements and Optimization of Thulium Purification. Advances in Materials Physics and Chemistry, 2015, 05, 151-160.	0.7	8
38	Mechanistic Modeling of Reversed-Phase Chromatography of Insulins within the Temperature Range 10â€“40 Â°C. ACS Omega, 2018, 3, 1946-1954.	3.5	7
39	Trajectory optimization of an oscillating industrial two-stage evaporator utilizing a Python-Aspen Plus Dynamics toolchain. Chemical Engineering Research and Design, 2020, 155, 12-17.	5.6	7
40	Mechanistic Modeling of Reversed-Phase Chromatography of Insulins with Potassium Chloride and Ethanol as Mobile-Phase Modulators. ACS Omega, 2017, 2, 136-146.	3.5	6
41	Model-based design and integration of a two-step biopharmaceutical production process. Bioprocess and Biosystems Engineering, 2014, 37, 1989-1996.	3.4	5
42	Prediction of IgG1 aggregation in solution. Biotechnology Journal, 2014, 9, 800-804.	3.5	5
43	Automation of Modeling and Calibration of Integrated Preparative Protein Chromatography Systems. Processes, 2022, 10, 945.	2.8	5
44	Prediction of reversible IgG1 aggregation occurring in a size exclusion chromatography column is enabled through a model based approach. Biotechnology Journal, 2015, 10, 1814-1821.	3.5	4
45	Binary separation control in preparative gradient chromatography using iterative learning control. Journal of Chromatography A, 2022, 1673, 463078.	3.7	4
46	Numerical Analysis of Model Parameter Uncertainties as a Result of Experimental Uncertainty â€” An Example from Preparative Chromatography. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 991-995.	0.4	3
47	Pareto-optimal reversed-phase chromatography separation of three insulin variants with a solubility constraint. Journal of Chromatography A, 2018, 1532, 98-104.	3.7	3
48	Single-shooting optimization of an industrial process through co-simulation of a modularized Aspen Plus Dynamics model. Computer Aided Chemical Engineering, 2019, 46, 721-726.	0.5	1
49	Smart platform for development of small-scale integrated continuous downstream processes. Advances in Chemical Engineering, 2022, , 131-158.	0.9	1
50	Modelâ€based monitoring of industrial reversed phase chromatography to predict insulin variants. Biotechnology Progress, 2019, 35, e2813.	2.6	0
51	Development and Optimization of a Single Column Analog Model for a Multi-Column Counter-Current Solvent Gradient Purification Process. Computer Aided Chemical Engineering, 2017, , 187-192.	0.5	0