Rainer Hahn

List of Publications by Year
in descending order

70 papers	2,605 citations	218677 26 h-index	197818 49 g-index
72 all docs	72 docs citations	72 times ranked	1876 citing authors

#	Article	IF	Citations
1	Alkaline treatment enhances mass transfer in Protein A affinity chromatography. Journal of Chromatography A, 2022, 1673, 463058.	3.7	4
2	Mass transfer of proteins in chromatographic media: Comparison of pure and crude feed solutions. Journal of Chromatography A, 2022, 1676, 463264.	3.7	4
3	Three-dimensional chromatography for purification and characterization of antibody fragments and related impurities from Escherichia coli crude extracts. Journal of Chromatography A, 2021, 1638, 461702.	3.7	8
4	Integrated process development: The key to improve Fab production in E. coli. Biotechnology Journal, 2021, 16, e2000562.	3.5	7
5	Efficient production of recombinant secretory IgA against Clostridium difficile toxins in CHO-K1 cells. Journal of Biotechnology, 2021, 331, 1-13.	3.8	7
6	A comprehensive antigen production and characterisation study for easy-to-implement, specific and quantitative SARS-CoV-2 serotests. EBioMedicine, 2021, 67, 103348.	6.1	34
7	Patterns of protein adsorption in ion-exchange particles and columns: Evolution of protein concentration profiles during load, hold, and wash steps predicted for pore and solid diffusion mechanisms. Journal of Chromatography A, 2021, 1653, 462412.	3.7	7
8	Compartment Model of Mixing in a Bubble Trap and Its Impact on Chromatographic Separations. Processes, 2020, 8, 780.	2.8	1
9	Scale up of a chromatographic capture step for a clarified bacterial homogenate â€“ Influence of mass transport limitation and competitive adsorption of impurities. Journal of Chromatography A, 2020, 1618, 460856.	3.7	11
10	Extraction of recombinant periplasmic proteins under industrially relevant process conditions: Selectivity and yield strongly depend on protein titer and methodology. Biotechnology Progress, 2020, 36, e2999.	2.6	10
11	Decoupling of recombinant protein production from Escherichia coli cell growth enhances functional expression of plant Leloir glycosyltransferases. Biotechnology and Bioengineering, 2019, 116, 1259-1268.	3.3	22
12	Hindered diffusion of proteins in mixture adsorption on porous anion exchangers and impact on flow-through purification of large proteins. Journal of Chromatography A, 2019, 1585, 121-130.	3.7	11
13	Hydrophobic interaction chromatography of proteins: Studies of unfolding upon adsorption by isothermal titration calorimetry. Journal of Separation Science, 2018, 41, 3069-3080.	2.5	14
14	A nonchromatographic process for purification of secretory immunoglobulins from caprine whey. Biotechnology Progress, 2017, 33, 642-653.	2.6	4
15	Secretory immunoglobulin purification from whey by chromatographic techniques. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2017, 1060, 53-62.	2.3	11
16	Real-time monitoring of protein precipitation in a tubular reactor for continuous bioprocessing. Process Biochemistry, 2016, 51, 1610-1621.	3.7	11
17	The Effect of Shear on the Structural Conformation of rhGH and IgG1 in Free Solution. Journal of Pharmaceutical Sciences, 2016, 105, 1810-1818.	3.3	18
18	A systematic evaluation of mechanisms, material effects, and protein-dependent differences on friction-related protein particle formation in formulation and filling steps. International Journal of Pharmaceutics, 2016, 511, 931-945.	5.2	15

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19	A microscale method of protein extraction from bacteria: Interaction of Escherichia coli with cationic microparticles. Journal of Biotechnology, 2015, 207, 21-29.	3.8	7
20	Engineering batch and pulse refolding with transition of aggregation kinetics: An investigation using green fluorescent protein (GFP). Chemical Engineering Science, 2015, 131, 91-100.	3.8	7
21	Prediction of inclusion body solubilization from shaken to stirred reactors. Biotechnology and Bioengineering, 2014, 111, 84-94.	3.3	14
22	Continuous processing of recombinant proteins: Integration of refolding and purification using simulated moving bed size-exclusion chromatography with buffer recycling. Journal of Chromatography A, 2014, 1337, 48-56.	3.7	51
23	Integrated continuous dissolution, refolding and tag removal of fusion proteins from inclusion bodies in a tubular reactor. Journal of Biotechnology, 2014, 185, 39-50.	3.8	12
24	Impact of Sulfur and Vitamin C on the Allergenicity of Mal d 2 from Apple (Malus domestica). Journal of Agricultural and Food Chemistry, 2014, 62, 7622-7630.	5.2	6
25	Continuous protein refolding in a tubular reactor. Chemical Engineering Science, 2014, 116, 763-772.	3.8	17
26	Identification and deletion of the major secreted protein of Pichia pastoris. Applied Microbiology and Biotechnology, 2013, 97, 1241-1249.	3.6	32
27	Continuous processing of recombinant proteins: Integration of inclusion body solubilization and refolding using simulated moving bed size exclusion chromatography with buffer recycling. Journal of Chromatography A, 2013, 1319, 107-117.	3.7	26
28	Mechanism and model for solubilization of inclusion bodies. Chemical Engineering Science, 2013, 101, 631-641.	3.8	13
29	Autoprotease Npro: Analysis of self-cleaving fusion protein. Journal of Chromatography A, 2013, 1304, 92-100.	3.7	4
30	Methods for characterization of biochromatography media. Journal of Separation Science, 2012, 35, 3001-3032.	2.5	41
31	Purification and Formulation: Silent but Important Players in Vaccine Development. , 2012, , 145-188.		1
32	Hydrophobic interaction chromatography of proteins: Thermodynamic analysis of conformational changes. Journal of Chromatography A, 2010, 1217, 184-190.	3.7	63
33	Matrix-assisted refolding of autoprotease fusion proteins on an ion exchange column: A kinetic investigation. Journal of Chromatography A, 2010, 1217, 5950-5956.	3.7	13
34	Peptide affinity chromatography media that bind Npro fusion proteins under chaotropic conditions. Journal of Chromatography A, 2010, 1217, 6203-6213.	3.7	7
35	NproAutoprotease Fusion Technology: Development, Characteristics, and Influential Factors. Separation Science and Technology, 2010, 45, 2194-2209.	2.5	10
36	Refolding of N^{pro} fusion proteins. Biotechnology and Bioengineering, 2009, 104, 774-784.	3.3	30

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37	EDDIE fusion proteins: Triggering autoproteolytic cleavage. Process Biochemistry, 2009, 44, 1217-1224.	3.7	18
38	Matrix-assisted refolding of autoprotease fusion proteins on an ion exchange column. Journal of Chromatography A, 2009, 1216, 8460-8469.	3.7	14
39	Conformational changes of Mal d 2, a thaumatin-like apple allergen, induced by food processing. Food Chemistry, 2009, 112, 803-811.	8.2	33
40	Highâ€throughput system for determining dissolution kinetics of inclusion bodies. Biotechnology Journal, 2009, 4, 722-729.	3.5	12
41	Chapter 22 Ion-Exchange Chromatography. Methods in Enzymology, 2009, 463, 349-371.	1.0	68
42	Polymethacrylate monoliths for preparative and industrial separation of biomolecular assemblies. Journal of Chromatography A, 2008, 1184, 62-79.	3.7	201
43	Hydrophobic interaction chromatography of proteins. Journal of Chromatography A, 2008, 1198-1199, 154-163.	3.7	63
44	High level expression of a promising anti-idiotypic antibody fragment vaccine against HIV-1 in Pichia pastoris. Journal of Biotechnology, 2007, 128, 735-746.	3.8	41
45	Mapping of Malus domestica allergens by 2â€Ð electrophoresis and IgEâ€reactivity. Electrophoresis, 2007, 28, 437-448.	2.4	49
46	Hydrophobic interaction chromatography of proteins IV. Journal of Chromatography A, 2007, 1139, 84-94.	3.7	61
47	Npro fusion technology to produce proteins with authentic N termini in E. coli. Nature Methods, 2007, 4, 1037-1043.	19.0	108
48	Dispersion effects in preparative polymethacrylate monoliths operated in radial-flow columns. Journal of Proteomics, 2007, 70, 87-94.	2.4	24
49	Comparison of protein A affinity sorbents III. Life time study. Journal of Chromatography A, 2006, 1102, 224-231.	3.7	118
50	Evaluation of a sensitive detection method for peptide arrays prepared by SPOT synthesis. Journal of Proteomics, 2006, 66, 45-57.	2.4	14
51	In situ determination of adsorption kinetics of proteins in a finite bath. Journal of Chromatography A, 2005, 1069, 23-30.	3.7	11
52	Hydrophobic interaction chromatography of proteins. Journal of Chromatography A, 2005, 1079, 221-228.	3.7	135
53	Comparison of protein A affinity sorbents. Journal of Chromatography A, 2005, 1093, 98-110.	3.7	151
54	Performance and characterization of a nanophased porous hydroxyapatite for protein chromatography. Biotechnology and Bioengineering, 2004, 87, 364-375.	3.3	74

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55	Mass transfer characteristics of plasmids in monoliths. Journal of Separation Science, 2004, 27, 819-827.	2.5	70
56	Monoliths for fast bioseparation and bioconversion and their applications in biotechnology. Journal of Separation Science, 2004, 27, 767-778.	2.5	160
57	Hydrophobic interaction chromatography of proteins. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2003, 790, 99-114.	2.3	65
58	Comparison of protein A affinity sorbents. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2003, 790, 35-51.	2.3	221
59	Directed Immobilization of Peptide Ligands to Accessible Pore Sites by Conjugation with a Placeholder Molecule. Analytical Chemistry, 2003, 75, 543-548.	6.5	34
60	Large Scale Separations. Journal of Chromatography Library, 2003, , 561-599.	0.1	3
61	Catalysts and Enzyme Reactors. Journal of Chromatography Library, 2003, 67, 699-724.	0.1	3
62	Hydrophobic interaction chromatography of proteins. Journal of Chromatography A, 2002, 972, 3-19.	3.7	80
63	Quantification of plasma-derived blood coagulation factor VIII by real-time biosensor measurements. Biomedical Applications, 2001, 752, 335-347.	1.7	6
64	Control method for integrity of continuous beds. Journal of Chromatography A, 2001, 908, 179-184.	3.7	23
65	Affinity Chromatography of Human Blood Coagulation Factor VIII on Monoliths with Peptides from a Combinatorial Library. Journal of High Resolution Chromatography, 2000, 23, 47-58.	1.4	76
66	A simple method to quantify staphylococcal protein A in the presence of human or animal IgG in various samples. Journal of Immunological Methods, 2000, 235, 61-69.	1.4	18
67	Peak Broadening in Protein Chromatography with Monoliths at Very Fast Separations. Analytical Chemistry, 2000, 72, 4853-4858.	6.5	76
68	Affinity Chromatography of Human Blood Coagulation Factor VIII on Monoliths with Peptides from a Combinatorial Library. Journal of High Resolution Chromatography, 2000, 23, 47-58.	1.4	2
69	Affinity chromatography of human estrogen receptor-Î± expressed in Saccharomyces cerevisiae. Journal of Chromatography A, 1999, 852, 161-173.	3.7	9
70	Cytokine activity assay by means of proliferation measured in plane convex microtiter wells. Journal of Proteomics, 1996, 32, 85-96.	2.4	6