Shuichi Yamamoto

List of Publications by Year
in descending order

125 papers	2,522 citations	186265 28 h-index	254184 43 g-index
128 all docs	128 docs citations	128 times ranked	1310 citing authors

#	Article	IF	Citations
1	Linear flowâ€velocity gradient chromatographyâ€"An efficient method for increasing the process efficiency of batch and continuous capture chromatography of proteins. Biotechnology and Bioengineering, 2021, 118, 1262-1272.	3.3	9
2	Elution Profiles of Antibody-Drug Conjugates in Preparative Chromatography. MATEC Web of Conferences, 2021, 333, 14001.	0.2	0
3	A Simplified Method for Predicting the Effect of Temperature on the Separation Performance by Chromatography. Japan Journal of Food Engineering, 2021, 22, 53-57.	0.3	2
4	Statistical Evaluation of Cleaning Processes in Food Manufacturing Facilities. Japan Journal of Food Engineering, 2021, 22, 47-51.	0.3	0
5	Rapid Purification of Immunoglobulin G Using a Protein A-immobilized Monolithic Spin Column with Hydrophilic Polymers. Analytical Sciences, 2021, 37, 985-990.	1.6	4
6	Correlation between protein desorption behavior and its adsorption enthalpy change in polymer grafted anion exchange chromatography. Colloids and Surfaces B: Biointerfaces, 2021, 205, 111853.	5.0	3
7	A regressive approach to the design of continuous capture process with multi-column chromatography for monoclonal antibodies. Journal of Chromatography A, 2021, 1658, 462604.	3.7	8
8	Measurement of High Protein Concentrations by Optical Rotation: A Case Study for Monitoring of Monoclonal Antibody Drug Downstream Processes. Current Protein and Peptide Science, 2021, 22, 898-904.	1.4	1
9	Retention and diffusion characteristics of oligonucleotides in a solid phase with polymer grafted anion-exchanger. Journal of Chromatography A, 2020, 1629, 461495.	3.7	2
10	Microcalorimetric Analysis of the Adsorption of Lysozyme and Cytochrome c onto Cation-Exchange Chromatography Resins: Influence of Temperature on Retention. Langmuir, 2020, 36, 3336-3345.	3.5	8
11	Prediction of the Performance of Capture Chromatography Processes of Proteins and Its Application to the Repeated Cyclic Operation Optimization. Journal of Chemical Engineering of Japan, 2020, 53, 689-697.	0.6	7
12	Optimization of Flow-Through Chromatography of Proteins. Journal of Chemical Engineering of Japan, 2020, 53, 214-221.	0.6	6
13	Accelerated Method for Designing Flow-Through Chromatography of Proteins. Journal of Chemical Engineering of Japan, 2020, 53, 206-213.	0.6	7
14	A method for designing flow-through chromatography processes. MATEC Web of Conferences, 2019, 268, 01004.	0.2	1
15	Thermodynamic analysis of polyphenols retention in polymer resin chromatography by vanâ€™t Hoff plot and isothermal titration calorimetry. Journal of Chromatography A, 2019, 1608, 460405.	3.7	17
16	Simplified Mechanistic Models for Food Processes-Drying and Chromatography. Japan Journal of Food Engineering, 2019, 20, 81-97.	0.3	1
17	Methods for Thermodynamic Analysis of Temperature Dependence of Distribution Coefficients in Chromatography Separations. Japan Journal of Food Engineering, 2019, 20, 99-105.	0.3	1
18	Reactionâ€Mediated Desorption of Macromolecules: Novel Phenomenon Enabling Simultaneous Reaction and Separation. Biotechnology Journal, 2018, 13, e1700738.	3.5	2

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19	Retention Mechanism of Proteins in Hydroxyapatite Chromatography â€“ Multimodal Interaction Based Protein Separations: A Model Study. Current Protein and Peptide Science, 2018, 20, 75-81.	1.4	19
20	A Method for Calculating the Productivity of Simulated Moving Bed Chromatography Based on the Optimized Repeated Cyclic Operation Chromatography. Japan Journal of Food Engineering, 2018, 19, 35-41.	0.3	1
21	A simple method for calculating the productivity of polyphenol separations by polymer-based chromatography. Bioscience, Biotechnology and Biochemistry, 2017, 81, 812-816.	1.3	13
22	A Statistical Model for Estimating the Effects of Oil Droplet Size and Oil Fraction in Microcapsules on Oxidation of Oil. European Journal of Lipid Science and Technology, 2017, 119, 1700225.	1.5	2
23	Effect of pore size on performance of monolithic tube chromatography of large biomolecules. Electrophoresis, 2017, 38, 2892-2899.	2.4	10
24	Choosing the right protein A affinity chromatography media can remove aggregates efficiently. Biotechnology Journal, 2017, 12, 1600427.	3.5	14
25	Methods for Measuring Molecular Diffusion Coefficients of Large Proteins and Bio-nanopartilces. Japan Journal of Food Engineering, 2017, 18, 187-191.	0.3	0
26	Monolith disk chromatography separates PEGylated protein positional isoforms within minutes at low pressure. Biotechnology Journal, 2016, 11, 100-106.	3.5	9
27	A Simple Method for Predicting the Adsorption Performance of Capture Chromatography of Proteins. Japan Journal of Food Engineering, 2016, 17, 95-98.	0.3	7
28	Salt tolerant chromatography provides salt tolerance and a better selectivity for protein monomer separations. Biotechnology Journal, 2015, 10, 1929-1934.	3.5	18
29	Effects of the Oil-droplet Size and Entire Oil Fraction in Microcapsules on the Interior Oil Fraction. Japan Journal of Food Engineering, 2015, 16, 303-305.	0.3	3
30	Effect of Reducing Oil Droplet Size on Lipid Oxidation in an Oil-in-water Emulsion. Japan Journal of Food Engineering, 2014, 15, 43-47.	0.3	9
31	Drying Rates and Desorption Isotherms of Lemon Juice. Japan Journal of Food Engineering, 2014, 15, 105-108.	0.3	6
32	Effects of Pre-Treatments on Browning of Lemon Peels during Drying. Japan Journal of Food Engineering, 2014, 15, 181-187.	0.3	4
33	Surface-oil Contents of Microcapsules with Different Oil Droplet-to-Microcapsule Size Ratios. Japan Journal of Food Engineering, 2014, 15, 191-193.	0.3	4
34	Highâ€throughput process development methods for chromatography and precipitation of proteins: Advantages and precautions. Engineering in Life Sciences, 2013, 13, 446-455.	3.6	17
35	Enzyme Retention During Drying of Amorphous Sugar and Carbohydrate Solutions: Diffusion Model Revisited. Drying Technology, 2013, 31, 1525-1531.	3.1	4
36	Fast separation of large biomolecules using short monolithic columns. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2013, 927, 80-89.	2.3	76

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37	PEG chain length impacts yield of solidâ€phase protein PEGylation and efficiency of PEGylated protein separation by ionâ€exchange chromatography: Insights of mechanistic models. Biotechnology Journal, 2013, 8, 801-810.	3.5	19
38	Surface Oil Content of Microcapsules Containing Various Oil Fractions and Oil-Droplet Sizes. Japan Journal of Food Engineering, 2013, 14, 169-175.	0.3	16
39	PEGylated protein separations: Challenges and opportunities. Biotechnology Journal, 2012, 7, 592-593.	3.5	19
40	Rational Method for Designing Efficient Chromatography Processes based on the Isoâ€Resolution Curve. Chemical Engineering and Technology, 2012, 35, 198-203.	1.5	9
41	Drying of Yeastsâ€"Factors Affecting Inactivation During Drying. Drying Technology, 2011, 29, 1981-1985.	3.1	18
42	Peak spreading in linear gradient elution chromatography with a thin monolithic disk. Journal of Chromatography A, 2011, 1218, 2460-2466.	3.7	12
43	Editorial: Asia Pacific Biochemical engineering. Biotechnology Journal, 2010, 5, 436-437.	3.5	3
44	Diffusion Coefficients as Mass Transfer Properties and Water Ad/Desorption (Drying). Japan Journal of Food Engineering, 2010, 11, 73-83.	0.3	10
45	Interaction mechanism of monoâ€PEGylated proteins in electrostatic interaction chromatography. Biotechnology Journal, 2010, 5, 477-483.	3.5	39
46	Theoretical background of monolithic short layer ion-exchange chromatography for separation of charged large biomolecules or bioparticles. Journal of Chromatography A, 2009, 1216, 2612-2615.	3.7	16
47	Binding site and elution behavior of DNA and other large biomolecules in monolithic anion-exchange chromatography. Journal of Chromatography A, 2009, 1216, 2616-2620.	3.7	21
48	Diseases of protein aggregation and the hunt for potential pharmacological agents. Biotechnology Journal, 2008, 3, 165-192.	3.5	40
49	Micro-Plate Based Monolithic Ion-Exchange Chromatography for High Throughput Protein Purification Process Design. Journal of Chemical Engineering of Japan, 2008, 41, 200-205.	0.6	4
50	Water Diffusion and Desorption Behavior during Low-Temperature Drying of Foods. Journal of Chemical Engineering of Japan, 2007, 40, 168-172.	0.6	1
51	Effects of protein conformational changes on separation performance in electrostatic interaction chromatography: Unfolded proteins and PEGylated proteins. Journal of Biotechnology, 2007, 132, 196-201.	3.8	40
52	Studies of the interaction mechanism between single strand and double-strand DNA with hydroxyapatite by microcalorimetry and isotherm measurements. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 295, 274-283.	4.7	32
53	Retention studies of DNA on anion-exchange monolith chromatography. Journal of Chromatography A, 2007, 1144, 155-160.	3.7	49
54	Application of a chromatography model with linear gradient elution experimental data to the rapid scale-up in ion-exchange process chromatography of proteins. Journal of Chromatography A, 2007, 1162, 34-40.	3.7	49

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55	Rational method for designing efficient separations by chromatography on polystyreneâ€“divinylbenzene resins eluted with aqueous ethanol. Journal of Chromatography A, 2007, 1162, 50-55.	3.7	11
56	The hydrophobic interactions of the ion-exchanger resin ligands with proteins at high salt concentrations by adsorption isotherms and isothermal titration calorimetry. Separation and Purification Technology, 2007, 54, 212-219.	7.9	51
57	Solid-Phase PEGylation of Recombinant Interferon Î±-2a for Site-Specific Modification: Process Performance, Characterization, and<i>in Vitro</i>Bioactivity. Bioconjugate Chemistry, 2007, 18, 1728-1734.	3.6	69
58	Optimization of elution salt concentration in stepwise elution of protein chromatography using linear gradient elution data. Journal of Chromatography A, 2006, 1114, 97-101.	3.7	25
59	Analysis of Water Diffusion and Enzyme Inactivation Mechanisms During Drying of Liquid Foods. Japan Journal of Food Engineering, 2006, 7, 215-224.	0.3	2
60	Optimization of monoclonal antibody purification by ion-exchange chromatography. Journal of Chromatography A, 2005, 1069, 99-106.	3.7	68
61	Theoretical background of short chromatographic layers. Journal of Chromatography A, 2005, 1065, 45-50.	3.7	26
62	Rational methods for predicting human monoclonal antibodies retention in protein A affinity chromatography and cation exchange chromatography. Journal of Chromatography A, 2005, 1093, 126-138.	3.7	52
63	Electrostatic Interaction Chromatography Process for Protein Separations: Impact of Engineering Analysis of Biorecognition Mechanism on Process Optimization. Chemical Engineering and Technology, 2005, 28, 1387-1393.	1.5	43
64	Effects of Surface Concentration on Drying Behavior of Carbohydrate Solutions. Drying Technology, 2005, 23, 1319-1330.	3.1	10
65	Effects of Pre-treatments on Rehydration Properties and Microscopic Structure Changes of Dried Vegetables. Japan Journal of Food Engineering, 2004, 5, 267-272.	0.3	5
66	Engineering Aspects of Ion-Exchange Chromatography. , 2002, , .		0
67	A SHORT-CUT METHOD FOR DETERMINING CONCENTRATION DEPENDENT DIFFUSIVITY IN LIQUID FOODS AND POLYMER SOLUTIONS FROM REGULAR REGIME DRYING CURVES. Drying Technology, 2001, 19, 1479-1490.	3.1	23
68	Microcalorimetric studies of the interaction mechanisms between proteins and Q-Sepharose at pH near the isoelectric point (pI). Journal of Chromatography A, 2001, 912, 281-289.	3.7	80
69	Effects of adsorbent properties on zone spreading in expanded bed chromatography. Bioseparation, 2001, 10, 1-6.	0.7	18
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71	Bioseparation Engineering. Selective Purification of HTLV-II p20EII and HTLV-II Virion with Specific Monoclonal Antibody.. Kagaku Kogaku Ronbunshu, 2001, 27, 205-207.	0.3	0
72	Separation behavior of proteins near the isoelectric points in electrostatic interaction (ion) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (	0.2	2

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73	Column Qualification in Process Ion-Exchange Chromatography. Progress in Biotechnology, 2000, 16, 201-206.	0.2	5
74	Dynamic binding performance of large biomolecules such as Î³-globulin, viruses and virus-like particles on various chromatographic supports. Progress in Biotechnology, 2000, , 81-86.	0.2	2
75	Resolution and Retention of Proteins near Isoelectric Points in Ion-Exchange Chromatography. Molecular Recognition in Electrostatic Interaction Chromatography. Separation Science and Technology, 2000, 35, 1707-1717.	2.5	31
76	Expanded Bed Chromatography for Food Separation. Japan Journal of Food Engineering, 2000, 1, 51-57.	0.3	1
77	Characterization of unstable ion-exchange chromatographic separation of proteins. Journal of Chromatography A, 1999, 852, 37-41.	3.7	22
78	Ion-exchange chromatography of proteins near the isoelectric points. Journal of Chromatography A, 1999, 852, 31-36.	3.7	82
79	Retention behavior of very large biomolecules in ion-exchange chromatography. Journal of Chromatography A, 1999, 852, 25-30.	3.7	41
80	Factors affecting dispersion in expanded bed chromatography. Bioseparation, 1999, 8, 33-41.	0.7	11
81	EFFECTS OF GLYCEROL ON THE DRYING OF GELATIN AND SUGAR SOLUTIONS. Drying Technology, 1999, 17, 1681-1695.	3.1	16
82	Measurement and Correlation of Mutual Diffusion Coefficients for Acrylic Adhesive-Solvent Systems.. Kagaku Kogaku Ronbunshu, 1998, 24, 123-130.	0.3	4
83	Sorption Process of System with Power Relation between Diffusivity and Concentration.. Kagaku Kogaku Ronbunshu, 1998, 24, 306-312.	0.3	1
84	Integral Form of Diffusion Equation and its Application to the Calculation of Concentration Dependent Diffusion Coefficient for Desorption (Isothermal Drying).. Kagaku Kogaku Ronbunshu, 1997, 23, 37-46.	0.3	3
85	Acetic Acid Separation from Anaerobically Treated Palm Oil Mill Effluent by Ion Exchange Resins for the Production of Polyhydroxyalkanoate by<i>Alcaligenes eutrophus</i>. Bioscience, Biotechnology and Biochemistry, 1997, 61, 1465-1468.	1.3	43
86	Prediction of the preparative chromatography performance with a very small column. Journal of Chromatography A, 1997, 760, 41-53.	3.7	58
87	Chromatographic separation of galactosylkojic acid. Journal of Bioscience and Bioengineering, 1997, 84, 82-85.	0.9	4
88	Supercritical Fluid Chromatographic Separation.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1996, 5, 78-83.	0.0	0
89	Predicting the Separation Performance in Ion-Exchange Chromatography of Proteins. Kluwer International Series in Engineering and Computer Science, 1996, , 1027-1034.	0.2	0
90	Calculation of concentration dependent mutual diffusion coefficients for the penetration period of sorption process in polymer film.. Journal of Chemical Engineering of Japan, 1995, 28, 193-197.	0.6	3

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91	Plate height determination for gradient elution chromatography of proteins. Biotechnology and Bioengineering, 1995, 48, 444-451.	3.3	75
92	Enzymatic Synthesis of Galactosylkojic Acid with ImmobilizedÎ²-Galactosidase fromBacillus circulans. Bioscience, Biotechnology and Biochemistry, 1995, 59, 543-545.	1.3	15
93	Drying of Carbohydrate and Protein Solutions. Drying Technology, 1995, 13, 29-41.	3.1	9
94	DRYING OF CARBOHYDRATE AND PROTEIN SOLUTIONS. Drying Technology, 1994, 12, 1069-1080.	3.1	18
95	Calculation of peak profiles in preparative chromatography of biomolecules. Journal of Chromatography A, 1994, 658, 399-406.	3.7	10
96	Recovery of Lysozyme and Avidin from Egg White by Ion-Exchange Chromatography. , 1994, , 639-640.		2
97	Drying of Enzymes: Relationships between Thermal Stability of Enzymes and Water Concentration. , 1994, , 451-452.		0
98	Mutual Diffusion Coefficient of Aqueous Sugar Solutions.. Journal of Chemical Engineering of Japan, 1993, 26, 633-636.	0.6	42
99	PREPARATIVE SEPARATION OF PROTEINS BY GRADIENT- AND STEPWISE-ELUTION CHROMATOGRAPHY: ZONE-SHARPENING EFFECT. Chemical Engineering Communications, 1993, 119, 221-230.	2.6	24
100	Short-cut method for predicting the productivity of affinity chromatography. Journal of Chromatography A, 1992, 597, 173-179.	3.7	46
101	Drying of enzymes: enzyme retention during drying of a single droplet. Chemical Engineering Science, 1992, 47, 177-183.	3.8	52
102	Stepwise elution chromatography as a method for both purification and concentration of proteins. Chemical Engineering Science, 1992, 47, 185-188.	3.8	12
103	Predicting the Performance of Production-Scale Chromatography. , 1992, , 548-550.		0
104	Calculation Method of Mutual Diffusion Coefficient in the Regular Regime of Desorption Process in Polymer Film Based on Approximation of the Power Function for Concentration Dependence of the Diffusion Coefficient.. Kagaku Kogaku Ronbunshu, 1991, 17, 997-1005.	0.3	4
105	Calculation of concentration-dependent mutual diffusion coefficient in desorption of film.. Journal of Chemical Engineering of Japan, 1990, 23, 331-338.	0.6	18
106	Predicting the performance of gel-filtration chromatography of proteins. Journal of Chromatography A, 1990, 512, 77-87.	3.7	20
107	Preparative chromatography of proteins. Journal of Chromatography A, 1990, 512, 89-100.	3.7	19
108	Adsorption chromatography of proteins: Determination of optimum conditions. AICHE Journal, 1987, 33, 1426-1434.	3.6	57

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109	Resolution of proteins in linear gradient elution ion-exchange and hydrophobic interaction chromatography. Journal of Chromatography A, 1987, 409, 101-110.	3.7	50
110	Purification of Î²-galactosidase by large-scale gradient elution ion-exchange chromatography. Journal of Chromatography A, 1987, 396, 355-362.	3.7	10
111	Factors affecting the relationship between the plate height and the linear mobile phase velocity in gel filtration chromatography of proteins. Journal of Chromatography A, 1987, 394, 363-367.	3.7	29
112	Scaling up of medium-performance gel filtration chromatography of proteins.. Journal of Chemical Engineering of Japan, 1986, 19, 227-231.	0.6	38
113	Enzyme Inactivation During Drying of a Single Droplet. , 1985, , 330-337.		6
114	Determination of Concentration Dependent Diffusion Coefficient from Drying Rates. , 1985, , 490-497.		6
115	Drying of a drop of polymer solution of PAN (polyacrylonitrile)-DMF (dimethylformamide) system.. Journal of Chemical Engineering of Japan, 1984, 17, 114-119.	0.6	2
116	Ion exchange chromatography of proteins?predictions of elution curves and operating conditions. II. Experimental verification. Biotechnology and Bioengineering, 1983, 25, 1373-1391.	3.3	89
117	Ion exchange chromatography of proteins?prediction of elution curves and operating conditions. I. Theoretical considerations. Biotechnology and Bioengineering, 1983, 25, 1465-1483.	3.3	116
118	Mutual Diffusion CoeMcient of PAN-DMF System. Kagaku Kogaku Ronbunshu, 1983, 9, 1-7.	0.3	5
119	Operational Conditions for Desalting by Gel Chromatography. Agricultural and Biological Chemistry, 1979, 43, 2507-2513.	0.3	0
120	Analysis of dispersion mechanism in gel chromatography. IV. Operational conditions for gel chromatography - Prediction of elution curves.. Agricultural and Biological Chemistry, 1979, 43, 2499-2506.	0.3	15
121	Analysis of dispersion mechanism in gel chromatography. V. Operational conditions for desalting by gel chromatography.. Agricultural and Biological Chemistry, 1979, 43, 2507-2513.	0.3	5
122	Effect of Particle Size Distribution on Column Efficiency in Gel Chromatography. Agricultural and Biological Chemistry, 1978, 42, 1943-1945.	0.3	1
123	Effect of particle size distribution on column efficiency in gel chromatography.. Agricultural and Biological Chemistry, 1978, 42, 1943-1945.	0.3	13
124	Analysis of dispersion mechanism in gel chromatography.. Agricultural and Biological Chemistry, 1977, 41, 1465-1473.	0.3	23
125	Analysis of Dispersion Mechanism in Gel Chromatography. Agricultural and Biological Chemistry, 1977, 41, 1465-1473.	0.3	20