

Jrgen J Hubbuch

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

215
papers

4,308
citations

36
h-index

52
g-index

228
ext. papers

4,912
ext. citations

4.4
avg, IF

5.97
L-index

#	Paper	IF	Citations
215	Modeling the Gibbs-Donnan effect during ultrafiltration and diafiltration processes using the Poisson-Boltzmann theory in combination with a basic Stern model. <i>Journal of Membrane Science</i> , 2022 , 648, 120333	9.6	1
214	Investigation of Lysozyme Diffusion in Agarose Hydrogels Employing a Microfluidics-Based UV Imaging Approach.. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022 , 10, 849271	5.8	0
213	Evaluation of the Reproducibility and Robustness of Extrusion-Based Bioprinting Processes Applying a Flow Sensor.. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022 , 10, 831350	5.8	0
212	Immobilization of β -Galactosidase by Encapsulation of Enzyme-Conjugated Polymer Nanoparticles Inside Hydrogel Microparticles.. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021 , 9, 818053	5.8	2
211	Streamlined process development procedure incorporating the selection of various stationary phase types established in a mAb aggregate reduction study with different mixed mode ligands.. <i>Biotechnology Progress</i> , 2021 , e3230	2.8	
210	Thiol-Functional Polymer Nanoparticles via Aerosol Photopolymerization.. <i>Polymers</i> , 2021 , 13,	4.5	1
209	Temperature Based Process Characterization of Pharmaceutical Freeze-Thaw Operations. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021 , 9, 617770	5.8	2
208	Modeling the impact of amino acid substitution in a monoclonal antibody on cation exchange chromatography. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 2923-2933	4.9	1
207	A multisensor approach for improved protein A load phase monitoring by conductivity-based background subtraction of UV spectra. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 905-917	4.9	2
206	Image analysis as PAT-Tool for use in extrusion-based bioprinting. <i>Bioprinting</i> , 2021 , 21, e00112	7	2
205	Influence of image analysis strategy, cooling rate, and sample volume on apparent protein cloud-point temperature determination. <i>Bioprocess and Biosystems Engineering</i> , 2021 , 44, 525-536	3.7	1
204	Cross-scale quality assessment of a mechanistic cation exchange chromatography model. <i>Biotechnology Progress</i> , 2021 , 37, e3081	2.8	7
203	Impact of freeze-thaw processes on monoclonal antibody platform process development. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 3914-3925	4.9	1
202	Process development for cross-flow diafiltration-based VLP disassembly: A novel high-throughput screening approach. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 3926-3940	4.9	0
201	Process development exploiting competitive adsorption-based displacement effects in monoclonal antibody aggregate removal-A new high-throughput screening procedure for membrane chromatography. <i>Biotechnology and Applied Biochemistry</i> , 2021 ,	2.8	1
200	Comparison of UV- and Raman-based monitoring of the Protein A load phase and evaluation of data fusion by PLS models and CNNs. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 4255-4268	4.9	1
199	Application of ultraviolet, visible, and infrared light imaging in protein-based biopharmaceutical formulation characterization and development studies. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2021 , 165, 319-336	5.7	2

198	In silico process characterization for biopharmaceutical development following the quality by design concept. <i>Biotechnology Progress</i> , 2021 , e3196	2.8	2
197	Piezoelectric Silicon Micropump for Drug Delivery Applications. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 8008	2.6	2
196	Exploration of fiber-based cation exchange adsorbents for the removal of monoclonal antibody aggregates. <i>Journal of Chromatography A</i> , 2021 , 1654, 462451	4.5	1
195	High throughput screening of fiber-based adsorbents for material and process development. <i>Journal of Chromatography A</i> , 2021 , 1653, 462387	4.5	
194	Analysis of complex protein elution behavior in preparative ion exchange processes using a colloidal particle adsorption model. <i>Journal of Chromatography A</i> , 2021 , 1654, 462439	4.5	2
193	Raman spectroscopy as a process analytical technology to investigate biopharmaceutical freeze concentration processes. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 4708-4719	4.9	1
192	Protein adsorption on ion exchange adsorbents: A comparison of a stoichiometric and non-stoichiometric modeling approach. <i>Journal of Chromatography A</i> , 2021 , 1653, 462397	4.5	3
191	Ensembles of Hydrophobicity Scales as Potent Classifiers for Chimeric Virus-Like Particle Solubility - An Amino Acid Sequence-Based Machine Learning Approach. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 395	5.8	2
190	Integrated Process for Capture and Purification of Virus-Like Particles: Enhancing Process Performance by Cross-Flow Filtration. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 489	5.8	9
189	A critical review of recent trends, and a future perspective of optical spectroscopy as PAT in biopharmaceutical downstream processing. <i>Analytical and Bioanalytical Chemistry</i> , 2020 , 412, 2047-2064	4.4	36
188	Investigation of the reversibility of freeze/thaw stress-induced protein instability using heat cycling as a function of different cryoprotectants. <i>Bioprocess and Biosystems Engineering</i> , 2020 , 43, 1309-1327	3.7	5
187	Multi-attribute PAT for UF/DF of Proteins-Monitoring Concentration, particle sizes, and Buffer Exchange. <i>Analytical and Bioanalytical Chemistry</i> , 2020 , 412, 2123-2136	4.4	19
186	Straightforward method for calibration of mechanistic cation exchange chromatography models for industrial applications. <i>Biotechnology Progress</i> , 2020 , 36, e2984	2.8	16
185	Modeling of hydrophobic interaction chromatography for the separation of antibody-drug conjugates and its application towards quality by design. <i>Journal of Biotechnology</i> , 2020 , 317, 48-58	3.7	3
184	Time-Dependent Multi-Light-Source Image Classification Combined With Automated Multidimensional Protein Phase Diagram Construction for Protein Phase Behavior Analysis. <i>Journal of Pharmaceutical Sciences</i> , 2020 , 109, 331-339	3.9	2
183	Modifying an ßTApurifier System for the Automated Acquisition of Samples for Kinetic Modeling of Batch Reactions. <i>SLAS Technology</i> , 2020 , 25, 106-110	3	
182	Apparent protein cloud point temperature determination using a low volume high-throughput cryogenic device in combination with automated imaging. <i>Bioprocess and Biosystems Engineering</i> , 2020 , 43, 439-456	3.7	3
181	On the analysis of chromatographic biopharmaceutical data by curve resolution techniques in the framework of the area of feasible solutions. <i>Journal of Chromatography A</i> , 2020 , 1627, 461420	4.5	0

180	3D-Printable and Enzymatically Active Composite Materials Based on Hydrogel-Filled High Internal Phase Emulsions. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 713	5.8	11
179	High throughput screening setup of a scale-down device for membrane chromatography-aggregate removal of monoclonal antibodies. <i>Biotechnology Progress</i> , 2020 , 36, e3055	2.8	4
178	Optimization of a Soft Ensemble Vote Classifier for the Prediction of Chimeric Virus-Like Particle Solubility and Other Biophysical Properties. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 881	5.8	1
177	A phase diagram-based toolbox to assess the impact of freeze/thaw ramps on the phase behavior of proteins. <i>Bioprocess and Biosystems Engineering</i> , 2020 , 43, 179-192	3.7	6
176	Adsorption of colloidal proteins in ion-exchange chromatography under consideration of charge regulation. <i>Journal of Chromatography A</i> , 2020 , 1611, 460608	4.5	7
175	Kinetic reaction modeling for antibody-drug conjugate process development. <i>Journal of Biotechnology</i> , 2019 , 306, 71-80	3.7	2
174	Fourier-transform infrared spectroscopy as a process analytical technology for near real time in-line estimation of the degree of PEGylation in chromatography. <i>Journal of Chromatography A</i> , 2019 , 1608, 460410	4.5	3
173	Process monitoring of virus-like particle reassembly by diafiltration with UV/Vis spectroscopy and light scattering. <i>Biotechnology and Bioengineering</i> , 2019 , 116, 1366-1379	4.9	13
172	Precipitation of complex antibody solutions: influence of contaminant composition and cell culture medium on the precipitation behavior. <i>Bioprocess and Biosystems Engineering</i> , 2019 , 42, 1039-1051	3.7	4
171	High-throughput computational pipeline for 3-D structure preparation and in silico protein surface property screening: A case study on HBcAg dimer structures. <i>International Journal of Pharmaceutics</i> , 2019 , 563, 337-346	6.5	2
170	Automated image processing as an analytical tool in cell cryopreservation for bioprocess development. <i>Bioprocess and Biosystems Engineering</i> , 2019 , 42, 665-675	3.7	1
169	Correlating multidimensional short-term empirical protein properties to long-term protein physical stability data via empirical phase diagrams. <i>International Journal of Pharmaceutics</i> , 2019 , 560, 166-174	6.5	4
168	Redesigning food protein formulations with empirical phase diagrams: A case study on glycerol-poor and glycerol-free formulations. <i>Food Research International</i> , 2019 , 125, 108609	7	
167	Machine-assisted cultivation and analysis of biofilms. <i>Scientific Reports</i> , 2019 , 9, 8933	4.9	9
166	3D-Printed Phenacrylate Decarboxylase Flow Reactors for the Chemoenzymatic Synthesis of 4-Hydroxystilbene. <i>Chemistry - A European Journal</i> , 2019 , 25, 15998	4.8	20
165	High-throughput screening of aqueous biphasic systems with ionic liquids as additives for extraction and purification of enveloped virus-like particles. <i>Engineering Reports</i> , 2019 , 1, e12030	1.2	4
164	Preparative Protein Crystallization. <i>Chemical Engineering and Technology</i> , 2019 , 42, 2275-2281	2	9
163	Analysis of phase behavior and morphology during freeze-thaw applications of lysozyme. <i>International Journal of Pharmaceutics</i> , 2019 , 555, 153-164	6.5	10

162	Water on hydrophobic surfaces: mechanistic modeling of polyethylene glycol-induced protein precipitation. <i>Bioprocess and Biosystems Engineering</i> , 2019 , 42, 513-520	3.7	4
161	Prediction uncertainty assessment of chromatography models using Bayesian inference. <i>Journal of Chromatography A</i> , 2019 , 1587, 101-110	4.5	25
160	Factorization of preparative protein chromatograms with hard-constraint multivariate curve resolution and second-derivative pretreatment. <i>Journal of Chromatography A</i> , 2019 , 1585, 152-160	4.5	5
159	On-Demand Production of Flow-Reactor Cartridges by 3D Printing of Thermostable Enzymes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5539-5543	16.4	33
158	In-line Fourier-transform infrared spectroscopy as a versatile process analytical technology for preparative protein chromatography. <i>Journal of Chromatography A</i> , 2018 , 1547, 37-44	4.5	33
157	3D bioprinting of flow cytometry as analytical strategy for 3D cell structures. <i>Bioprinting</i> , 2018 , 11, e000237	3.7	5
156	Cell Separation in Aqueous Two-Phase Systems - Influence of Polymer Molecular Weight and Tie-Line Length on the Resolution of Five Model Cell Lines. <i>Biotechnology Journal</i> , 2018 , 13, 1700250	5.6	5
155	Selective protein quantification for preparative chromatography using variable pathlength UV/Vis spectroscopy and partial least squares regression. <i>Chemical Engineering Science</i> , 2018 , 176, 157-164	4.4	33
154	The Biomaker: an entry-level bioprinting device for biotechnological applications. <i>Journal of Chemical Technology and Biotechnology</i> , 2018 , 93, 792-799	3.5	13
153	Packing characteristics of winged shaped polymer fiber supports for preparative chromatography. <i>Journal of Chromatography A</i> , 2018 , 1553, 67-80	4.5	4
152	Multi-step high-throughput conjugation platform for the development of antibody-drug conjugates. <i>Journal of Biotechnology</i> , 2018 , 278, 48-55	3.7	6
151	An integrated precipitation and ion-exchange chromatography process for antibody manufacturing: Process development strategy and continuous chromatography exploration. <i>Journal of Chromatography A</i> , 2018 , 1533, 66-76	4.5	18
150	Monitoring of antibody-drug conjugation reactions with UV/Vis spectroscopy. <i>Journal of Biotechnology</i> , 2018 , 288, 15-22	3.7	6
149	Impact of Polymer Bioconjugation on Protein Stability and Activity Investigated with Discrete Conjugates: Alternatives to PEGylation. <i>Biomacromolecules</i> , 2018 , 19, 4250-4262	6.9	19
148	Application of Empirical Phase Diagrams for Multidimensional Data Visualization of High-Throughput Microbatch Crystallization Experiments. <i>Journal of Pharmaceutical Sciences</i> , 2018 , 107, 2063-2069	3.9	7
147	Downstream process development strategies for effective bioprocesses: Trends, progress, and combinatorial approaches. <i>Engineering in Life Sciences</i> , 2017 , 17, 1142-1158	3.4	30
146	Predictive approach for protein aggregation: Correlation of protein surface characteristics and conformational flexibility to protein aggregation propensity. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 1170-1183	4.9	17
145	Advances in downstream processing of biologics - Spectroscopy: An emerging process analytical technology. <i>Journal of Chromatography A</i> , 2017 , 1490, 2-9	4.5	42

144	Effect of PEG molecular weight and PEGylation degree on the physical stability of PEGylated lysozyme. <i>International Journal of Pharmaceutics</i> , 2017 , 519, 408-417	6.5	42
143	Estimation of adsorption isotherm and mass transfer parameters in protein chromatography using artificial neural networks. <i>Journal of Chromatography A</i> , 2017 , 1487, 211-217	4.5	29
142	High-Throughput Column Chromatography Performed on Liquid Handling Stations 2017 , 293-332		3
141	Single amino acid fingerprinting of the human antibody repertoire with high density peptide arrays. <i>Journal of Immunological Methods</i> , 2017 , 443, 45-54	2.5	25
140	HIGH-THROUGHPUT SCREENING AND MODELING TECHNOLOGIES FOR PROCESS DEVELOPMENT IN ANTIBODY PURIFICATION 2017 , 515-535		
139	High-throughput downstream process development for cell-based products using aqueous two-phase systems (ATPS) - A case study. <i>Biotechnology Journal</i> , 2017 , 12, 1600587	5.6	5
138	Characterization of highly concentrated antibody solution - A toolbox for the description of protein long-term solution stability. <i>MABs</i> , 2017 , 9, 1169-1185	6.6	33
137	Influence of the production system on the surface properties of influenza A virus particles. <i>Engineering in Life Sciences</i> , 2017 , 17, 1071-1077	3.4	2
136	Strategy for assessment of the colloidal and biological stability of H1N1 influenza A viruses. <i>International Journal of Pharmaceutics</i> , 2017 , 517, 80-87	6.5	3
135	Modeling of complex antibody elution behavior under high protein load densities in ion exchange chromatography using an asymmetric activity coefficient. <i>Biotechnology Journal</i> , 2017 , 12, 1600336	5.6	11
134	An orientation sensitive approach in biomolecule interaction quantitative structure-activity relationship modeling and its application in ion-exchange chromatography. <i>Journal of Chromatography A</i> , 2017 , 1482, 48-56	4.5	6
133	Identification of a Tetanus Toxin Specific Epitope in Single Amino Acid Resolution. <i>Biotechnology Journal</i> , 2017 , 12, 1700197	5.6	10
132	Prediction and characterization of the stability enhancing effect of the Cherry-Tag α n highly concentrated protein solutions by complex rheological measurements and MD simulations. <i>International Journal of Pharmaceutics</i> , 2017 , 531, 360-371	6.5	6
131	Antibody fingerprints in lyme disease deciphered with high density peptide arrays. <i>Engineering in Life Sciences</i> , 2017 , 17, 1078-1087	3.4	14
130	Root cause investigation of deviations in protein chromatography based on mechanistic models and artificial neural networks. <i>Journal of Chromatography A</i> , 2017 , 1515, 146-153	4.5	17
129	Model-Based Investigation on the Mass Transfer and Adsorption Mechanisms of Mono-Pegylated Lysozyme in Ion-Exchange Chromatography. <i>Biotechnology Journal</i> , 2017 , 12, 1700255	5.6	5
128	Orientation of monoclonal antibodies in ion-exchange chromatography: A predictive quantitative structure-activity relationship modeling approach. <i>Journal of Chromatography A</i> , 2017 , 1510, 33-39	4.5	8
127	Feasibility of using continuous chromatography in downstream processing: Comparison of costs and product quality for a hybrid process vs. a conventional batch process. <i>Journal of Biotechnology</i> , 2017 , 259, 213-220	3.7	22

126	Impact of additives on the formation of protein aggregates and viscosity in concentrated protein solutions. <i>International Journal of Pharmaceutics</i> , 2017 , 516, 82-90	6.5	16
125	Influence of structure properties on protein-protein interactions-QSAR modeling of changes in diffusion coefficients. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 821-831	4.9	8
124	Real-time monitoring and control of the load phase of a protein A capture step. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 368-373	4.9	31
123	Investigation and prediction of protein precipitation by polyethylene glycol using quantitative structure-activity relationship models. <i>Journal of Biotechnology</i> , 2017 , 241, 87-97	3.7	8
122	High-throughput downstream process development for cell-based products using aqueous two-phase systems. <i>Journal of Chromatography A</i> , 2016 , 1464, 1-11	4.5	15
121	Concentration-dependent changes in apparent diffusion coefficients as indicator for colloidal stability of protein solutions. <i>International Journal of Pharmaceutics</i> , 2016 , 511, 276-287	6.5	19
120	A mechanistic model of ion-exchange chromatography on polymer fiber stationary phases. <i>Journal of Chromatography A</i> , 2016 , 1475, 18-30	4.5	6
119	Comparison of Tobacco Host Cell Protein Removal Methods by Blanching Intact Plants or by Heat Treatment of Extracts. <i>Journal of Visualized Experiments</i> , 2016 ,	1.6	11
118	High-throughput cell quantification assays for use in cell purification development - enabling technologies for cell production. <i>Biotechnology Journal</i> , 2016 , 11, 676-86	5.6	6
117	A versatile noninvasive method for adsorber quantification in batch and column chromatography based on the ionic capacity. <i>Biotechnology Progress</i> , 2016 , 32, 666-77	2.8	16
116	Surface tension determination by means of liquid handling stations. <i>Engineering in Life Sciences</i> , 2016 , 16, 532-537	3.4	4
115	Impact of polymer surface characteristics on the microrheological measurement quality of protein solutions - A tracer particle screening. <i>International Journal of Pharmaceutics</i> , 2016 , 505, 246-54	6.5	9
114	Prediction of salt effects on protein phase behavior by HIC retention and thermal stability. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016 , 128, 216-225	3.5	10
113	UV absorption-based inverse modeling of protein chromatography. <i>Engineering in Life Sciences</i> , 2016 , 16, 99-106	3.4	21
112	Calibration-free inverse modeling of ion-exchange chromatography in industrial antibody purification. <i>Engineering in Life Sciences</i> , 2016 , 16, 107-113	3.4	18
111	Modeling and simulation of anion-exchange membrane chromatography for purification of Sf9 insect cell-derived virus-like particles. <i>Journal of Chromatography A</i> , 2016 , 1429, 142-54	4.5	23
110	High-throughput characterization of virus-like particles by interlaced size-exclusion chromatography. <i>Vaccine</i> , 2016 , 34, 1259-67	4.1	19
109	High-throughput process development of an alternative platform for the production of virus-like particles in <i>Escherichia coli</i> . <i>Journal of Biotechnology</i> , 2016 , 219, 7-19	3.7	17

108	Deconvolution of high-throughput multicomponent isotherms using multivariate data analysis of protein spectra. <i>Engineering in Life Sciences</i> , 2016 , 16, 194-201	3.4	6
107	Photoinitiated miniemulsion polymerization in microfluidic chips on automated liquid handling stations: Proof of concept. <i>Engineering in Life Sciences</i> , 2016 , 16, 505-514	3.4	2
106	Squeeze flow rheometry as a novel tool for the characterization of highly concentrated protein solutions. <i>Biotechnology and Bioengineering</i> , 2016 , 113, 576-87	4.9	14
105	The influence of mixed salts on the capacity of HIC adsorbers: A predictive correlation to the surface tension and the aggregation temperature. <i>Biotechnology Progress</i> , 2016 , 32, 346-54	2.8	9
104	Implementation of an analytical microfluidic device for the quantification of protein concentrations in high-throughput format. <i>Engineering in Life Sciences</i> , 2016 , 16, 515-524	3.4	1
103	Application of spectral deconvolution and inverse mechanistic modelling as a tool for root cause investigation in protein chromatography. <i>Journal of Chromatography A</i> , 2016 , 1437, 158-167	4.5	14
102	Water on hydrophobic surfaces: Mechanistic modeling of hydrophobic interaction chromatography. <i>Journal of Chromatography A</i> , 2016 , 1465, 71-8	4.5	18
101	Quantification of PEGylated proteases with varying degree of conjugation in mixtures: An analytical protocol combining protein precipitation and capillary gel electrophoresis. <i>Journal of Chromatography A</i> , 2016 , 1462, 153-64	4.5	9
100	Simulating and Optimizing Preparative Protein Chromatography with ChromX. <i>Journal of Chemical Education</i> , 2015 , 92, 1497-1502	2.4	26
99	Robust high-throughput batch screening method in 384-well format with optical in-line resin quantification. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2015 , 988, 98-105	3.2	14
98	Systematic purification of salt-intolerant proteins by ion-exchange chromatography: The example of human β -galactosidase A. <i>Engineering in Life Sciences</i> , 2015 , 15, 195-207	3.4	3
97	Influence of binding pH and protein solubility on the dynamic binding capacity in hydrophobic interaction chromatography. <i>Journal of Chromatography A</i> , 2015 , 1396, 77-85	4.5	24
96	Next generation vaccines and vectors: Designing downstream processes for recombinant protein-based virus-like particles. <i>Biotechnology Journal</i> , 2015 , 10, 715-27	5.6	57
95	Light extinction and scattering by agarose based resin beads and applications in high-throughput screening. <i>Journal of Chromatography A</i> , 2015 , 1397, 52-8	4.5	3
94	Integrated development of up- and downstream processes supported by the Cherry-Tag for real-time tracking of stability and solubility of proteins. <i>Journal of Biotechnology</i> , 2015 , 200, 27-37	3.7	13
93	Manipulation of lysozyme phase behavior by additives as function of conformational stability. <i>International Journal of Pharmaceutics</i> , 2015 , 494, 370-80	6.5	17
92	Non-invasive high throughput approach for protein hydrophobicity determination based on surface tension. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 2485-94	4.9	20
91	Custom-tailored adsorbers: A molecular dynamics study on optimal design of ion exchange chromatography material. <i>Journal of Chromatography A</i> , 2015 , 1413, 60-7	4.5	3

90	Effect of lysozyme solid-phase PEGylation on reaction kinetics and isoform distribution. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2015 , 1002, 313-8	3.2	12
89	Influence of macromolecular precipitants on phase behavior of monoclonal antibodies. <i>Biotechnology Progress</i> , 2015 , 31, 145-53	2.8	15
88	Cationic Aerosol Photopolymerization. <i>Macromolecular Materials and Engineering</i> , 2015 , 300, 136-139	3.9	7
87	Predicting recombinant protein expression experiments using molecular dynamics simulation. <i>Chemical Engineering Science</i> , 2015 , 121, 340-350	4.4	8
86	High-throughput micro-scale cultivations and chromatography modeling: Powerful tools for integrated process development. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 2123-33	4.9	18
85	High-throughput process development of purification alternatives for the protein avidin. <i>Biotechnology Progress</i> , 2015 , 31, 957-73	2.8	10
84	Advances in inline quantification of co-eluting proteins in chromatography: Process-data-based model calibration and application towards real-life separation issues. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 1406-16	4.9	37
83	Determination of protein phase diagrams by microbatch experiments: exploring the influence of precipitants and pH. <i>International Journal of Pharmaceutics</i> , 2015 , 479, 28-40	6.5	37
82	A comprehensive molecular dynamics approach to protein retention modeling in ion exchange chromatography. <i>Journal of Chromatography A</i> , 2015 , 1381, 184-93	4.5	13
81	Downstream processing of virus-like particles: single-stage and multi-stage aqueous two-phase extraction. <i>Journal of Chromatography A</i> , 2015 , 1383, 35-46	4.5	51
80	Computational study of elements of stability of a four-helix bundle protein biosurfactant. <i>Journal of Computer-Aided Molecular Design</i> , 2015 , 29, 47-58	4.2	5
79	High-throughput characterization of an insect cell-free expression. <i>Engineering in Life Sciences</i> , 2014 , 14, 409-417	3.4	5
78	Characterization of aqueous two phase systems by combining lab-on-a-chip technology with robotic liquid handling stations. <i>Journal of Chromatography A</i> , 2014 , 1367, 68-77	4.5	16
77	Perspectives of Aerosol-Photopolymerization: Nanostructured Polymeric Particles. <i>Macromolecular Materials and Engineering</i> , 2014 , 299, 1316-1328	3.9	7
76	Soluble full-length expression and characterization of snRNP protein U1-68/70K. <i>Protein Expression and Purification</i> , 2014 , 104, 65-70	2	
75	Defined polymer shells on nanoparticles via a continuous aerosol-based process. <i>Journal of Nanoparticle Research</i> , 2014 , 16, 1	2.3	6
74	Model-based integrated optimization and evaluation of a multi-step ion exchange chromatography. <i>Separation and Purification Technology</i> , 2014 , 136, 207-222	8.3	43
73	Perspectives of aerosol-photopolymerization: organic-inorganic hybrid nanoparticles. <i>Colloid and Polymer Science</i> , 2014 , 292, 1241-1247	2.4	10

72	Molecular dynamics simulations approach for the characterization of peptides with respect to hydrophobicity. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 1707-14	3.4	6
71	Automated measurement of apparent protein solubility to rapidly assess complex parameter interactions. <i>Food and Bioproducts Processing</i> , 2014 , 92, 133-142	4.9	9
70	A tool for selective inline quantification of co-eluting proteins in chromatography using spectral analysis and partial least squares regression. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 1365-73	4.9	52
69	Cell-free expression of recombinant antigens of <i>Borrelia burgdorferi</i> and microarray-based multiplex detection using different patient sera. <i>Engineering in Life Sciences</i> , 2014 , 14, 399-408	3.4	1
68	Optimization of random PEGylation reactions by means of high throughput screening. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 104-14	4.9	34
67	Moving through three-dimensional phase diagrams of monoclonal antibodies. <i>Biotechnology Progress</i> , 2014 , 30, 1103-13	2.8	13
66	Adjoint-based estimation and optimization for column liquid chromatography models. <i>Computers and Chemical Engineering</i> , 2014 , 64, 41-54	4	25
65	Molecular dynamics simulations of aqueous two-phase systems: Understanding phase formation and protein partitioning. <i>Chemical Engineering Science</i> , 2013 , 96, 142-151	4.4	13
64	Microfluidics on liquid handling stations (E-on-LHS): an industry compatible chip interface between microfluidics and automated liquid handling stations. <i>Lab on A Chip</i> , 2013 , 13, 2337-43	7.2	21
63	Perspectives of aerosol-photopolymerization: Nanoscale polymer particles. <i>Chemical Engineering Science</i> , 2013 , 101, 248-252	4.4	13
62	Evaluation of PEG/phosphate aqueous two-phase systems for the purification of the chicken egg white protein avidin by using high-throughput techniques. <i>Chemical Engineering Science</i> , 2013 , 104, 945-956	4.4	25
61	Self-interaction chromatography in pre-packed columns: a critical evaluation of self-interaction chromatography methodology to determine the second virial coefficient. <i>Journal of Chromatography A</i> , 2013 , 1293, 75-84	4.5	11
60	Analytical characterization of complex, biotechnological feedstocks by pH gradient ion exchange chromatography for purification process development. <i>Journal of Chromatography A</i> , 2013 , 1311, 55-64	4.5	17
59	Accurate retention time determination of co-eluting proteins in analytical chromatography by means of spectral data. <i>Biotechnology and Bioengineering</i> , 2013 , 110, 683-93	4.9	8
58	Alternative separation steps for monoclonal antibody purification: combination of centrifugal partitioning chromatography and precipitation. <i>Journal of Chromatography A</i> , 2013 , 1319, 118-26	4.5	43
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