## **Anurag S Rathore**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5226047/publications.pdf

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263 papers 6,646 citations

39 h-index 95083 68 g-index

287 all docs

287 docs citations

times ranked

287

3986 citing authors

#	Article	IF	CITATIONS
1	Prevalence of highly actionable mutations among Indian patients with advanced nonâ€small cell lung cancer: A systematic review and metaâ€analysis. Asia-Pacific Journal of Clinical Oncology, 2023, 19, 158-171.	0.7	O
2	RNA dependent RNA polymerase (RdRp) as a drug target for SARS-CoV2. Journal of Biomolecular Structure and Dynamics, 2022, 40, 6039-6051.	2.0	29
3	Contribution of protein <scp>A</scp> step towards cost of goods for continuous production of monoclonal antibody therapeutics. Journal of Chemical Technology and Biotechnology, 2022, 97, 2420-2433.	1.6	13
4	The global landscape on interchangeability of biosimilars. Expert Opinion on Biological Therapy, 2022, 22, 133-148.	1.4	7
5	Current status and future challenges in transitioning to continuous bioprocessing of virusâ€like particles. Journal of Chemical Technology and Biotechnology, 2022, 97, 2376-2385.	1.6	11
6	Ion Exchange Chromatographic Methods for of. Methods in Molecular Biology, 2022, 2313, 179-186.	0.4	0
7	Need for a risk-based control strategy for managing glycosylation profile for biosimilar products. Expert Opinion on Biological Therapy, 2022, 22, 123-131.	1.4	3
8	Multi-wavelength UV-based PAT tool for measuring protein concentration. Journal of Pharmaceutical and Biomedical Analysis, 2022, 207, 114394.	1.4	10
9	Applications of capillary electrophoresis for biopharmaceutical product characterization. Electrophoresis, 2022, 43, 143-166.	1.3	25
10	Purification of Therapeutic Antibodies by Protein A Affinity Chromatography. Methods in Molecular Biology, 2022, 2313, 169-177.	0.4	3
11	Biomass to fuels and chemicals: A review of enabling processes and technologies. Journal of Chemical Technology and Biotechnology, 2022, 97, 597-607.	1.6	16
12	Ethanol as additive enhances expression of Ranibizumab in Escherichia coli: Impact on cellular physiology and transcriptome. Process Biochemistry, 2022, 112, 167-176.	1.8	3
13	Biopharmaceutical Industry Capability Building in India: Report from a Symposium. Journal of Pharmaceutical Innovation, 2022, 17, 1555-1562.	1.1	3
14	Pharmacophore screening to identify natural origin compounds to target RNA-dependent RNA polymerase (RdRp) of SARS-CoV2. Molecular Diversity, 2022, 26, 2613-2629.	2.1	4
15	Enablers of continuous processing of biotherapeutic products. Trends in Biotechnology, 2022, 40, 804-815.	4.9	12
16	Coleâ€Cole modeling of realâ€time capacitance data for estimation of cell physiological properties in recombinant <i>Escherichia coli</i> cultivation. Biotechnology and Bioengineering, 2022, 119, 922-935.	1.7	7
17	Slow post-induction specific growth rate enhances recombinant protein expression in Escherichia coli: Pramlintide multimer and ranibizumab production as case studies. Process Biochemistry, 2022, 114, 21-27.	1.8	4
18	Dimerization of SARS-CoV-2 nucleocapsid protein affects sensitivity of ELISA based diagnostics of COVID-19. International Journal of Biological Macromolecules, 2022, 200, 428-437.	3.6	15

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19	Analytical Similarity Assessment of Biosimilars: Global Regulatory Landscape, Recent Studies and Major Advancements in Orthogonal Platforms. Frontiers in Bioengineering and Biotechnology, 2022, 10, 832059.	2.0	21
20	Oxidation and Deamidation of Monoclonal Antibody Products: Potential Impact on Stability, Biological Activity, and Efficacy. Journal of Pharmaceutical Sciences, 2022, 111, 903-918.	1.6	45
21	A Charge Variant of Bevacizumab Offers Enhanced FcRn-Dependent Pharmacokinetic Half-Life and Efficacy. Pharmaceutical Research, 2022, 39, 851-865.	1.7	3
22	Raman spectroscopy as process analytical technology tool for monitoring atomic layer deposition (ALD) of drug particles. Materials Chemistry and Physics, 2022, 282, 125976.	2.0	3
23	NMR based quality evaluation of mAb therapeutics: A proof of concept higher order structure biosimilarity assessment of trastuzumab biosimilars. Journal of Pharmaceutical and Biomedical Analysis, 2022, 214, 114710.	1.4	1
24	Assessment of Functional Characterization and Comparability of Biotherapeutics: a Review. AAPS Journal, 2022, 24, 15.	2.2	4
25	Unexplored Excipients in Biotherapeutic Formulations: Natural Osmolytes as Potential Stabilizers Against Thermally Induced Aggregation of IgG1 Biotherapeutics. AAPS PharmSciTech, 2022, 23, 26.	1.5	8
26	Challenges in Expression and Purification of Functional Fab Fragments in E. coli: Current Strategies and Perspectives. Fermentation, 2022, 8, 175.	1.4	9
27	N-Glycosylation of monoclonal antibody therapeutics: A comprehensive review on significance and characterization. Analytica Chimica Acta, 2022, 1209, 339828.	2.6	23
28	Achieving charge variant profile of innovator molecule during development of monoclonal antibody based biosimilars – Use of media components. Biochemical Engineering Journal, 2022, 182, 108438.	1.8	1
29	Dynamics of biosimilar uptake in emerging markets. Expert Opinion on Biological Therapy, 2022, 22, 679-688.	1.4	2
30	Optimization of multi flow rate loading strategy for process intensification of Protein A chromatography. Journal of Chromatography Open, 2022, 2, 100049.	0.8	3
31	Atomic Layer Deposition Coating on the Surface of Active Pharmaceutical Ingredients to Reduce Surface Charge Build-Up. ACS Applied Materials & Surface Charge Build-Up. ACS Applied Mate	4.0	3
32	Process Analytical Technology (PAT) Implementation for Membrane Operations in Continuous Manufacturing of mAbs: Model-Based Control of Single-Pass Tangential Flow Ultrafiltration. AAPS Journal, 2022, 24, .	2.2	5
33	Al-ML applications in bioprocessing: ML as an enabler of real time quality prediction in continuous manufacturing of mAbs. Computers and Chemical Engineering, 2022, 164, 107896.	2.0	16
34	Approval of biosimilars: a review of unsuccessful regulatory filings. Expert Opinion on Biological Therapy, 2021, 21, 19-28.	1.4	8
35	Reinforcement learning based optimization of process chromatography for continuous processing of biopharmaceuticals. Chemical Engineering Science, 2021, 230, 116171.	1.9	31
36	Process analytical technology application for protein PEGylation using near infrared spectroscopy: G-CSF as a case study. Journal of Biotechnology, 2021, 325, 303-311.	1.9	8

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37	Monitoring size and oligomeric-state distribution of therapeutic mAbs by NMR and DLS: Trastuzumab as a case study. Journal of Pharmaceutical and Biomedical Analysis, 2021, 195, 113841.	1.4	5
38	<scp>COVIDâ€19</scp> pandemic: mechanism, diagnosis, and treatment. Journal of Chemical Technology and Biotechnology, 2021, 96, 299-308.	1.6	20
39	Economic assessment of continuous processing for manufacturing of biotherapeutics. Biotechnology Progress, 2021, 37, e3108.	1.3	23
40	Identification and characterization of carbonylation sites in trastuzumab biosimilars. International Journal of Biological Macromolecules, 2021, 169, 95-102.	3.6	4
41	Modulation of <scp>granulocyte colony stimulating factor</scp> conformation and receptor binding by methionine oxidation. Proteins: Structure, Function and Bioinformatics, 2021, 89, 68-80.	1.5	2
42	Regulatory considerations in biosimilars: Asia pacific regions. Preparative Biochemistry and Biotechnology, 2021, 51, 1-8.	1.0	9
43	LC–MS based case-by-case analysis of the impact of acidic and basic charge variants of bevacizumab on stability and biological activity. Scientific Reports, 2021, 11, 2487.	1.6	17
44	Considerations related to comparative clinical studies for biosimilars. Expert Opinion on Drug Safety, 2021, 20, 265-274.	1.0	1
45	Regulatory considerations in biosimilars: Latin America region. Preparative Biochemistry and Biotechnology, 2021, 51, 201-206.	1.0	5
46	Challenges in process control for continuous processing for production of monoclonal antibody products. Current Opinion in Chemical Engineering, 2021, 31, 100671.	3.8	29
47	A novel reactor configuration for continuous virus inactivation. Biochemical Engineering Journal, 2021, 167, 107885.	1.8	14
48	Control of surge tanks for continuous manufacturing of monoclonal antibodies. Biotechnology and Bioengineering, 2021, 118, 1913-1931.	1.7	16
49	Complete or periodic continuity in continuous manufacturing platforms for production of monoclonal antibodies?. Biotechnology Journal, 2021, 16, e2000524.	1.8	14
50	Raman spectroscopy for in situ, real time monitoring of protein aggregation in lyophilized biotherapeutic products. International Journal of Biological Macromolecules, 2021, 179, 309-313.	3.6	10
51	CFD based mass transfer modeling of a single use bioreactor for production of monoclonal antibody biotherapeutics. Chemical Engineering Journal, 2021, 412, 128592.	6.6	29
52	Near Infrared Spectroscopy as a PAT tool for monitoring and control of protein and excipient concentration in ultrafiltration of highly concentrated antibody formulations. International Journal of Pharmaceutics, 2021, 600, 120456.	2.6	13
53	Effect of vitamins and metal ions on productivity and charge heterogeneity of IgG1 expressed in CHO cells. Biotechnology Journal, 2021, 16, e2000464.	1.8	7
54	Novel semi-automated fluorescence microscope imaging algorithm for monitoring IgG aggregates in serum. Scientific Reports, 2021, 11, 11375.	1.6	4

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55	A novel piperazine derivative that targets hepatitis B surface antigen effectively inhibits tenofovir resistant hepatitis B virus. Scientific Reports, 2021, 11, 11723.	1.6	7
56	Bioprocess Control: Current Progress and Future Perspectives. Life, 2021, 11, 557.	1.1	43
57	A simple, rapid, and robust "onâ€theâ€goâ€identity testing of biotherapeutics using FTIR spectroscopy. Electrophoresis, 2021, 42, 1655-1664.	1.3	2
58	Supplementation of critical amino acids improves glycerol and lactose uptake and enhances recombinant protein production in <i>Escherichia coli</i> i> Biotechnology Journal, 2021, 16, e2100143.	1.8	5
59	A chemical engineer's take of COVIDâ€19 epidemiology. AICHE Journal, 2021, 67, e17359.	1.8	1
60	Freeze thaw and lyophilization induced alteration in mAb therapeutics: Trastuzumab as a case study. Journal of Pharmaceutical and Biomedical Analysis, 2021, 201, 114122.	1.4	6
61	Checking counterfeiting of pharmaceutical products by attenuated total reflection mid-infrared spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 255, 119710.	2.0	0
62	Regulatory considerations in biosimilars: Middle East and Africa regions. Preparative Biochemistry and Biotechnology, 2021, 51, 731-737.	1.0	8
63	Process development in the QbD paradigm: Implementing design of experiments (DoE) in anti-solvent crystallization for production of pharmaceuticals. Journal of Crystal Growth, 2021, 571, 126263.	0.7	4
64	Rapid aggregation of therapeutic monoclonal antibodies by bubbling induced air/liquid interfacial and agitation stress at different conditions. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 168, 97-109.	2.0	12
65	Mechanistic modelling of Chinese hamster ovary cell clarification using acoustic wave separator. Chemical Engineering Science, 2021, 246, 116894.	1.9	6
66	Harnessing the power of electrophoresis and chromatography: Offline coupling of reverse phase liquid chromatography apillary zone electrophoresisâ€ŧandem mass spectrometry for analysis of host cell proteins in monoclonal antibody producing CHO cell line. Electrophoresis, 2021, 42, 735-741.	1.3	13
67	Synergistic Effects of Natural Compounds Toward Inhibition of SARS-CoV-2 3CL Protease. Journal of Chemical Information and Modeling, 2021, 61, 5708-5718.	2.5	8
68	Image Analysis Algorithm-Based Platform for Determining Micron and Higher Aggregate Size Distribution of Therapeutic IgG Using Brightfield and Fluorescence Microscope Images. Pharmaceutical Research, 2021, 38, 1747-1763.	1.7	2
69	Process analytical technology in continuous processing: Model-based real time control of pH between capture chromatography and viral inactivation for monoclonal antibody production. Journal of Chromatography A, 2021, 1658, 462614.	1.8	5
70	Cyclodextrins as modulators for separation of charged variants of mAbs by capillary zone electrophoresis. Journal of Chromatography Open, 2021, 1, 100011.	0.8	0
71	High-Throughput Process Development: lâ€"Process Chromatography. Methods in Molecular Biology, 2021, 2178, 11-20.	0.4	0
72	High-Throughput Process Development: Ilâ€"Membrane Chromatography. Methods in Molecular Biology, 2021, 2178, 21-26.	0.4	0

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73	Aqueous Two-Phase-Assisted Precipitation of Proteins: A Platform for Isolation of Process-Related Impurities from Therapeutic Proteins. Methods in Molecular Biology, 2021, 2178, 81-91.	0.4	О
74	Assessing the Structural and Functional Similarity of Insulin Glargine Biosimilars. Journal of Diabetes Science and Technology, 2021, , 193229682110584.	1.3	4
75	Neural network–based fingerprinting of monoclonal antibody aggregation using biolayer interferometry. Analytical and Bioanalytical Chemistry, 2020, 412, 2177-2186.	1.9	4
76	Process intensification in peptide manufacturing: Recombinant lethal toxin neutralizing factor (rLTNF) as a case study. Process Biochemistry, 2020, 90, 193-203.	1.8	1
77	Understanding the mechanism of copurification of "difficult to remove―host cell proteins in rituximab biosimilar products. Biotechnology Progress, 2020, 36, e2936.	1.3	14
78	Population balance modelling of aggregation of monoclonal antibody based therapeutic proteins. Chemical Engineering Science, 2020, 216, 115479.	1.9	5
79	Biosimilars in Developed Economies: Overview, Status, and Regulatory Considerations. Regulatory Toxicology and Pharmacology, 2020, 110, 104525.	1.3	11
80	An NIRâ€based PAT approach for realâ€time control of loading in Protein A chromatography in continuous manufacturing of monoclonal antibodies. Biotechnology and Bioengineering, 2020, 117, 673-686.	1.7	46
81	Modeling and prediction of excipient and pH drifts during ultrafiltration/diafiltration of monoclonal antibody biotherapeutic for high concentration formulations. Separation and Purification Technology, 2020, 238, 116392.	3.9	15
82	Does interaction of monoclonal antibody charge variants with VEGF-A and ELISA reagents affect its quantification?. Analytical Biochemistry, 2020, 590, 113513.	1.1	6
83	Engineering Staphylococcal Protein A for high-throughput affinity purification of monoclonal antibodies. Biotechnology Advances, 2020, 44, 107632.	6.0	18
84	Phosphate starvation controls lactose metabolism to produce recombinant protein in Escherichia coli. Applied Microbiology and Biotechnology, 2020, 104, 9707-9718.	1.7	6
85	Understanding Oxidation Propensity in GCSF and Assessment of its Safety and Efficacy. Pharmaceutical Research, 2020, 37, 207.	1.7	2
86	Multiobjective Optimization for Enhanced Production of Therapeutic Proteins in <i>Escherichia coli</i> : Application of Real-Time Dielectric Spectroscopy. Industrial & Engineering Chemistry Research, 2020, 59, 21841-21853.	1.8	5
87	Development of an integrated continuous PEGylation and purification Process for granulocyte colony stimulating factor. Journal of Biotechnology, 2020, 322, 79-89.	1.9	15
88	Implementing PAT for single-pass tangential flow ultrafiltration for continuous manufacturing of monoclonal antibodies. Journal of Membrane Science, 2020, 613, 118492.	4.1	27
89	Automation of Dead End Filtration: An Enabler for Continuous Processing of Biotherapeutics. Frontiers in Bioengineering and Biotechnology, 2020, 8, 758.	2.0	16
90	The selection of highly specific and selective aptamers using modified SELEX and their use in process analytical techniques for Lucentis bioproduction. RSC Advances, 2020, 10, 28906-28917.	1.7	8

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91	Amino acid supplementation for enhancing recombinant protein production in <i>E. coli</i> . Biotechnology and Bioengineering, 2020, 117, 2420-2433.	1.7	25
92	Microaerobic fermentation alters lactose metabolism in Escherichia coli. Applied Microbiology and Biotechnology, 2020, 104, 5773-5785.	1.7	8
93	Impact of mAb Aggregation on Its Biological Activity: Rituximab as a Case Study. Journal of Pharmaceutical Sciences, 2020, 109, 2684-2698.	1.6	21
94	Covid 19 – pandemic in India. Journal of Chemical Technology and Biotechnology, 2020, 95, 1841-1841.	1.6	5
95	Process Analytical Technology Implementation for Peptide Manufacturing: Cleavage Reaction of Recombinant Lethal Toxin Neutralizing Factor Concatemer as a Case Study. Analytical Chemistry, 2020, 92, 5676-5681.	3.2	1
96	Effect of chemically defined growth medium components on characteristics of bacterial inclusion bodies. Journal of Chemical Technology and Biotechnology, 2020, 95, 1640-1648.	1.6	3
97	Mechanistic explanation of structural and functional changes induced by methionine mutation in G-CSF protein. Current Research in Biotechnology, 2020, 2, 37-44.	1.9	0
98	Harnessing the power of electrophoresis and chromatography: Offline coupling of reverse phase liquid chromatography-capillary zone electrophoresis-tandem mass spectrometry for peptide mapping for monoclonal antibodies. Journal of Chromatography A, 2020, 1620, 460954.	1.8	16
99	Assessment of Structural and Functional Comparability of Biosimilar Products: Trastuzumab as a Case Study. BioDrugs, 2020, 34, 209-223.	2.2	22
100	An application of Nano Differential Scanning Fluorimetry for Higher Order Structure assessment between mAb originator and biosimilars: Trastuzumab and Rituximab as case studies. Journal of Pharmaceutical and Biomedical Analysis, 2020, 186, 113270.	1.4	11
101	Pretreatments for enhancing clarification efficiency of depth filtration during production of monoclonal antibody therapeutics. Biotechnology Progress, 2020, 36, e2996.	1.3	7
102	Structure-Based Design of Small Peptide Ligands to Inhibit Early-Stage Protein Aggregation Nucleation. Journal of Chemical Information and Modeling, 2020, 60, 3304-3314.	2.5	12
103	Polymer-Coated Fiber Optic Sensor as a Process Analytical Tool for Biopharmaceutical Impurity Detection. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7666-7674.	2.4	5
104	Role of data science in managing COVID-19 pandemic. Indian Chemical Engineer, 2020, 62, 385-395.	0.9	8
105	Implementing Process Analytical Technology for the Production of Recombinant Proteins in Escherichia coli Using an Advanced Controller Scheme. Biotechnology Journal, 2019, 14, 1800556.	1.8	5
106	Analytical tools for monitoring changes in physical and chemical properties of chromatography resin upon reuse. Electrophoresis, 2019, 40, 3074-3083.	1.3	3
107	A novel approach for protein identification from complex cell proteome using modified peptide mass fingerprinting algorithm. Electrophoresis, 2019, 40, 3062-3073.	1.3	0
108	Analytical Platform for Monitoring Aggregation of Monoclonal Antibody Therapeutics. Pharmaceutical Research, 2019, 36, 152.	1.7	37

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109	An overview of mechanistic modeling of liquid chromatography. Preparative Biochemistry and Biotechnology, 2019, 49, 623-638.	1.0	35
110	QbD Based Media Development for the Production of Fab Fragments in E. coli. Bioengineering, 2019, 6, 29.	1.6	16
111	The influence of domestic manufacturing capabilities on biologic pricing in emerging economies. Nature Biotechnology, 2019, 37, 498-501.	9.4	18
112	Usability of NISTmAb reference material for biosimilar analytical development. Analytical and Bioanalytical Chemistry, 2019, 411, 2867-2883.	1.9	4
113	High performance liquid chromatography (HPLC) based direct and simultaneous estimation of excipients in biopharmaceutical products. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2019, 1117, 118-126.	1.2	7
114	Shadow pricing and the art of profiteering from outdated therapies. Nature Biotechnology, 2019, 37, 217-220.	9.4	5
115	Process analytical technology implementation for protein refolding: GCSF as a case study. Biotechnology and Bioengineering, 2019, 116, 1039-1052.	1.7	20
116	Mechanistic modeling based process analytical technology implementation for pooling in hydrophobic interaction chromatography. Biotechnology Progress, 2019, 35, e2758.	1.3	7
117	Design, preparation, and evaluation of liposomal gel formulations for treatment of acne: <i>in vitro</i> and <i>in vivo</i> 535-404.	0.9	36
118	Design of experiments applications in bioprocessing: Chromatography process development using split design of experiments. Biotechnology Progress, 2019, 35, e2730.	1.3	14
119	Comparison and implementation of different control strategies for improving production of rHSA using Pichia pastoris. Journal of Biotechnology, 2019, 290, 33-43.	1.9	11
120	Stability of Therapeutic Enzymes: Challenges and Recent Advances. Advances in Experimental Medicine and Biology, 2019, 1148, 131-150.	0.8	4
121	Approval of Ogivri. PDA Journal of Pharmaceutical Science and Technology, 2018, 72, 1-1.	0.3	2
122	Lifetime and Aging of Chromatography Resins during Biopharmaceutical Manufacture. Trends in Biotechnology, 2018, 36, 992-995.	4.9	20
123	Application of CFD in Bioprocessing: Separation of mammalian cells using disc stack centrifuge during production of biotherapeutics. Journal of Biotechnology, 2018, 267, 1-11.	1.9	19
124	Process for production and purification of lethal toxin neutralizing factor (LTNF) from <i>E. coli</i> and its economic analysis. Journal of Chemical Technology and Biotechnology, 2018, 93, 959-967.	1.6	4
125	Role of raw materials in biopharmaceutical manufacturing: risk analysis and fingerprinting. Current Opinion in Biotechnology, 2018, 53, 99-105.	3.3	17
126	Protein A chromatography resin lifetimeâ€"impact of feed composition. Biotechnology Progress, 2018, 34, 412-419.	1.3	12

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127	Process Development in the QbD Paradigm: Mechanistic Modeling of Antisolvent Crystallization for Production of Pharmaceuticals. Crystal Growth and Design, 2018, 18, 3352-3359.	1.4	6
128	Recent developments in chromatographic purification of biopharmaceuticals. Biotechnology Letters, 2018, 40, 895-905.	1.1	64
129	Enhanced product understanding in the QbD paradigm: linkage between charge heterogeneity and stability of monoclonal antibody therapeutic products. Journal of Chemical Technology and Biotechnology, 2018, 93, 2102-2110.	1.6	2
130	Assessment of structural and functional similarity of biosimilar products: Rituximab as a case study. MAbs, 2018, 10, 143-158.	2.6	46
131	Process Analysis: High Performance Liquid Chromatography. , 2018, , .		3
132	Development and Commercialization of Biosimilars in India: Current Regulatory and Clinical Experience. AAPS Advances in the Pharmaceutical Sciences Series, 2018, , 653-674.	0.2	0
133	Process integration and control in continuous bioprocessing. Current Opinion in Chemical Engineering, 2018, 22, 18-25.	3.8	41
134	Non-protein A purification platform for continuous processing of monoclonal antibody therapeutics. Journal of Chromatography A, 2018, 1579, 60-72.	1.8	35
135	Implementation of QbD for Manufacturing of Biologics—Has It Met the Expectations?. , 2018, , 1051-1073.		2
136	Kinetics and Characterization of Non-enzymatic Fragmentation of Monoclonal Antibody Therapeutics. Pharmaceutical Research, 2018, 35, 142.	1.7	11
137	Use of HPLC as an Enabler of Process Analytical Technology in Process Chromatography. Analytical Chemistry, 2018, 90, 7824-7829.	3.2	41
138	Process development in the Quality by Design paradigm: Modeling of Protein A chromatography resin fouling. Journal of Chromatography A, 2018, 1570, 56-66.	1.8	11
139	Mechanistic modeling of hydrophobic interaction chromatography for monoclonal antibody purification: process optimization in the quality by design paradigm. Journal of Chemical Technology and Biotechnology, 2018, 93, 2784-2784.	1.6	2
140	Monitoring and Control of Bioethanol Production From Lignocellulosic Biomass., 2018,, 727-749.		10
141	Multimodal Chromatography for Purification of Biotherapeutics – A Review. Current Protein and Peptide Science, 2018, 20, 4-13.	0.7	42
142	Continuous Processing To Enable Manufacturing Of Affordable Biotherapeutics. , 2018, , .		0
143	Optimization of ion exchange sigmoidal gradients using hybrid models: Implementation of quality by design in analytical method development. Journal of Chromatography A, 2017, 1491, 145-152.	1.8	18
144	Implementation of quality by design toward processing of food products. Preparative Biochemistry and Biotechnology, 2017, 47, 435-440.	1.0	10

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145	Mechanistic modeling of hydrophobic interaction chromatography for monoclonal antibody purification: process optimization in the quality by design paradigm. Journal of Chemical Technology and Biotechnology, 2017, 92, 2527-2537.	1.6	9
146	Fluorescence based real time monitoring of fouling in process chromatography. Scientific Reports, 2017, 7, 45640.	1.6	9
147	Cover Image, Volume 92, Issue 4. Journal of Chemical Technology and Biotechnology, 2017, 92, i-i.	1.6	0
148	<scp>ATF</scp> for cell culture harvest clarification: mechanistic modelling and comparison with <scp>TFF</scp> . Journal of Chemical Technology and Biotechnology, 2017, 92, 732-740.	1.6	26
149	Integrated continuous processing of proteins expressed as inclusion bodies: GCSF as a case study. Biotechnology Progress, 2017, 33, 998-1009.	1.3	32
150	Integrated Chromatographic Platform for Simultaneous Separation of Charge Variants and Aggregates from Monoclonal Antibody Therapeutic Products. Biotechnology Journal, 2017, 12, 1700133.	1.8	26
151	Peptide Dendrons as Thermal-Stability Amplifiers for Immunoglobulin G1 Monoclonal Antibody Biotherapeutics. Bioconjugate Chemistry, 2017, 28, 2549-2559.	1.8	14
152	Determination of Critical Quality Attributes for a Biotherapeutic in the QbD Paradigm: GCSF as a Case Study. AAPS Journal, 2017, 19, 1826-1841.	2.2	11
153	A three plus three parameters mechanistic model for viral filtration. Biotechnology Progress, 2017, 33, 1538-1547.	1.3	2
154	Mechanistic Modeling Based PAT Implementation for Ionâ€Exchange Process Chromatography of Charge Variants of Monoclonal Antibody Products. Biotechnology Journal, 2017, 12, 1700286.	1.8	21
155	Implementation of a fluorescence based PAT control for fouling of protein A chromatography resin. Journal of Chemical Technology and Biotechnology, 2017, 92, 2799-2807.	1.6	8
156	Role of Knowledge Management in Development and Lifecycle Management of Biopharmaceuticals. Pharmaceutical Research, 2017, 34, 243-256.	1.7	14
157	Enabler for process analytical technology implementation in ⟨i⟩Pichia pastoris⟨/i⟩ fermentation: Fluorescenceâ€based soft sensors for rapid quantitation of product titer. Engineering in Life Sciences, 2017, 17, 448-457.	2.0	6
158	Economic benefits of membrane chromatography versus packed bed column purification of therapeutic proteins expressed in microbial and mammalian hosts. Journal of Chemical Technology and Biotechnology, 2017, 92, 59-68.	1.6	20
159	Opossum peptide that can neutralize rattlesnake venom is expressed in <scp><i>E</i></scp> <i>scp&gt;<i>Escherichia coli</i></i>	1.3	17
160	CFD of mixing of multiâ€phase flow in a bioreactor using population balance model. Biotechnology Progress, 2016, 32, 613-628.	1.3	42
161	Process development in the <scp>Q</scp> b <scp>D</scp> paradigm: Role of process integration in process optimization for production of biotherapeutics. Biotechnology Progress, 2016, 32, 355-362.	1.3	20
162	Knowledge management in a waste based biorefinery in the QbD paradigm. Bioresource Technology, 2016, 215, 63-75.	4.8	13

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163	Implementation of Quality by Design for processing of food products and biotherapeutics. Food and Bioproducts Processing, 2016, 99, 231-243.	1.8	15
164	Analytical characterization of in vitro refolding in the quality by design paradigm: Refolding of recombinant human granulocyte colony stimulating factor. Journal of Pharmaceutical and Biomedical Analysis, 2016, 126, 124-131.	1.4	16
165	Monitoring Quality of Biotherapeutic Products Using Multivariate Data Analysis. AAPS Journal, 2016, 18, 793-800.	2.2	8
166	Glycosylation of monoclonal antibody products: Current status and future prospects. Biotechnology Progress, 2016, 32, 1091-1102.	1.3	40
167	Role of Proteomics in Characterization of Biosimilar Products. , 2016, , 83-97.		1
168	Residual on column host cell protein analysis during lifetime studies of protein A chromatography. Journal of Chromatography A, 2016, 1461, 70-77.	1.8	25
169	Bridging the gap between PAT concepts and implementation: An integrated software platform for fermentation. Biotechnology Journal, 2016, 11, 164-171.	1.8	21
170	Artificial neural network (ANN)â€based prediction of depth filter loading capacity for filter sizing. Biotechnology Progress, 2016, 32, 1436-1443.	1.3	14
171	Mechanistic understanding of fouling of protein A chromatography resin. Journal of Chromatography A, 2016, 1459, 78-88.	1.8	36
172	Continuous precipitation of process related impurities from clarified cell culture supernatant using a novel coiled flow inversion reactor (CFIR). Biotechnology Journal, 2016, 11, 1320-1331.	1.8	48
173	Should charge variants of monoclonal antibody therapeutics be considered critical quality attributes?. Electrophoresis, 2016, 37, 2338-2346.	1.3	39
174	Assessing analytical comparability of biosimilars: GCSF as a case study. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2016, 1032, 165-171.	1.2	23
175	Enablers for QbD implementation: Mechanistic modeling for ion-exchange membrane chromatography. Journal of Membrane Science, 2016, 500, 86-98.	4.1	25
176	Production of Protein Therapeutics in the Quality by Design (QbD) Paradigm. Topics in Medicinal Chemistry, 2016, , 41-67.	0.4	7
177	Quality by Design (QbD)-Based Process Development for Purification of a Biotherapeutic. Trends in Biotechnology, 2016, 34, 358-370.	4.9	46
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