Massimo Morbidelli

List of Publications by Year
in descending order

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333 papers	10,983 citations	34105 52 h-index	62596 80 g-index
351 all docs	351 docs citations	351 times ranked	7701 citing authors

#	Article	IF	Citations
1	Optimal operation of simulated moving bed units for nonlinear chromatographic separations. Journal of Chromatography A, 1997, 769, 3-24.	3.7	537
2	A continuous multicolumn countercurrent solvent gradient purification (MCSGP) process. Biotechnology and Bioengineering, 2007, 98, 1043-1055.	3.3	173
3	Perfusion mammalian cell culture for recombinant protein manufacturing â€“ A critical review. Biotechnology Advances, 2018, 36, 1328-1340.	11.7	171
4	Process for protein PEGylation. Journal of Controlled Release, 2014, 180, 134-149.	9.9	163
5	Epoxy-Layered Silicate Nanocomposites and Their Gas Permeation Properties. Macromolecules, 2004, 37, 7250-7257.	4.8	156
6	A simple model for the structure of fractal aggregates. Journal of Colloid and Interface Science, 2003, 268, 106-120.	9.4	153
7	Bioprocessing in the Digital Age: The Role of Process Models. Biotechnology Journal, 2020, 15, e1900172.	3.5	147
8	Bottle-grade polyethylene furanoate from ring-opening polymerisation of cyclic oligomers. Nature Communications, 2018, 9, 2701.	12.8	145
9	Effect of shear rate on aggregate size and morphology investigated under turbulent conditions in stirred tank. Journal of Colloid and Interface Science, 2008, 319, 577-589.	9.4	142
10	Twin-column CaptureSMB: A novel cyclic process for protein A affinity chromatography. Journal of Chromatography A, 2015, 1389, 85-95.	3.7	138
11	Selective Nanovector Mediated Treatment of Activated Proinflammatory Microglia/Macrophages in Spinal Cord Injury. ACS Nano, 2013, 7, 9881-9895.	14.6	136
12	Colloidal stability of polymeric nanoparticles in biological fluids. Journal of Nanoparticle Research, 2012, 14, 920.	1.9	126
13	Characterization and comparison of ATF and TFF in stirred bioreactors for continuous mammalian cell culture processes. Biochemical Engineering Journal, 2016, 110, 17-26.	3.6	126
14	Comparison of batch and continuous multiâ€column protein A capture processes by optimal design. Biotechnology Journal, 2016, 11, 920-931.	3.5	120
15	Continuous counterâ€current chromatography for capture and polishing steps in biopharmaceutical production. Biotechnology Journal, 2016, 11, 1126-1141.	3.5	117
16	Process performance and product quality in an integrated continuous antibody production process. Biotechnology and Bioengineering, 2017, 114, 298-307.	3.3	115
17	Chromatographic separation of three monoclonal antibody variants using multicolumn countercurrent solvent gradient purification (MCSGP). Biotechnology and Bioengineering, 2008, 100, 1166-1177.	3.3	114
18	Theory of activated-rate processes under shear with application to shear-induced aggregation of colloids. Physical Review E, 2009, 80, 051404.	2.1	110

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19	Design and operation of a continuous integrated monoclonal antibody production process. Biotechnology Progress, 2017, 33, 1303-1313.	2.6	106
20	Aggregation Mechanism of an IgG2 and two IgG1 Monoclonal Antibodies at low pH: From Oligomers to Larger Aggregates. Pharmaceutical Research, 2013, 30, 641-654.	3.5	102
21	A continuous, counter-current multi-column chromatographic process incorporating modifier gradients for ternary separations. Journal of Chromatography A, 2006, 1126, 338-346.	3.7	100
22	Polymeric nanoparticle system to target activated microglia/macrophages in spinal cord injury. Journal of Controlled Release, 2014, 174, 15-26.	9.9	100
23	Continuous integrated manufacturing of therapeutic proteins. Current Opinion in Biotechnology, 2018, 53, 76-84.	6.6	99
24	Evaluating the impact of cell culture process parameters on monoclonal antibody N-glycosylation. Journal of Biotechnology, 2014, 188, 88-96.	3.8	98
25	Optimal modelâ€based design of the twinâ€column CaptureSMB process improves capacity utilization and productivity in protein A affinity capture. Biotechnology Journal, 2016, 11, 135-145.	3.5	96
26	Machine Learning for Biologics: Opportunities for Protein Engineering, Developability, and Formulation. Trends in Pharmacological Sciences, 2021, 42, 151-165.	8.7	94
27	Breakup of dense colloidal aggregates under hydrodynamic stresses. Physical Review E, 2009, 79, 061401.	2.1	92
28	Îµ-Caprolactone-Based Macromonomers Suitable for Biodegradable Nanoparticles Synthesis through Free Radical Polymerization. Macromolecules, 2011, 44, 9205-9212.	4.8	90
29	Aggregation Stability of a Monoclonal Antibody During Downstream Processing. Pharmaceutical Research, 2011, 28, 1884-1894.	3.5	90
30	Model based adaptive control of a continuous capture process for monoclonal antibodies production. Journal of Chromatography A, 2016, 1444, 50-56.	3.7	89
31	Kinetics of Ring-Opening Polymerization of <scp>l</scp>,<scp>l</scp>-Lactide. Industrial & Engineering Chemistry Research, 2011, 50, 7927-7940.	3.7	88
32	Population Balance Modeling of Antibodies Aggregation Kinetics. Journal of Physical Chemistry B, 2012, 116, 7066-7075.	2.6	84
33	Induction of mammalian cell death by simple shear and extensional flows. Biotechnology and Bioengineering, 2009, 104, 360-370.	3.3	83
34	A new generation of predictive models: The added value of hybrid models for manufacturing processes of therapeutic proteins. Biotechnology and Bioengineering, 2019, 116, 2540-2549.	3.3	82
35	Development of a Scale-Down Model of hydrodynamic stress to study the performance of an industrial CHO cell line under simulated production scale bioreactor conditions. Journal of Biotechnology, 2013, 164, 41-49.	3.8	81
36	A semicontinuous 3â€column countercurrent solvent gradient purification (MCSGP) process. Biotechnology and Bioengineering, 2008, 99, 728-733.	3.3	78

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37	Ring-Opening Polymerization of<scp>l</scp>,<scp>l</scp>-Lactide: Kinetic and Modeling Study. Macromolecules, 2009, 42, 8187-8197.	4.8	74
38	Dependence of Aggregate Strength, Structure, and Light Scattering Properties on Primary Particle Size under Turbulent Conditions in Stirred Tank. Langmuir, 2008, 24, 3070-3081.	3.5	73
39	Optimizing model predictive control of the chromatographic multi-column solvent gradient purification (MCSGP) process. Journal of Process Control, 2010, 20, 618-629.	3.3	73
40	Aggregate Breakup in a Contracting Nozzle. Langmuir, 2010, 26, 10-18.	3.5	73
41	On the role of salt type and concentration on the stability behavior of a monoclonal antibody solution. Biophysical Chemistry, 2012, 168-169, 19-27.	2.8	73
42	Experimental and CFD physical characterization of animal cell bioreactors: From micro- to production scale. Biochemical Engineering Journal, 2018, 131, 84-94.	3.6	73
43	Processâ€wide control and automation of an integrated continuous manufacturing platform for antibodies. Biotechnology and Bioengineering, 2020, 117, 1367-1380.	3.3	73
44	Modulation and modeling of monoclonal antibody Nâ€linked glycosylation in mammalian cell perfusion reactors. Biotechnology and Bioengineering, 2017, 114, 1978-1990.	3.3	72
45	Impact of aggregate formation on the viscosity of protein solutions. Soft Matter, 2015, 11, 5513-5522.	2.7	69
46	Sorption and swelling of semicrystalline polymers in supercritical CO2. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1531-1546.	2.1	67
47	A multiscale view of therapeutic protein aggregation: A colloid science perspective. Biotechnology Journal, 2015, 10, 367-378.	3.5	65
48	Determination of the maximum operating range of hydrodynamic stress in mammalian cell culture. Journal of Biotechnology, 2015, 194, 100-109.	3.8	62
49	Current trends in the production of biodegradable bioplastics: The case of polyhydroxyalkanoates. Biotechnology Advances, 2020, 42, 107582.	11.7	61
50	Parametric study of a 6-column countercurrent solvent gradient purification (MCSGP) unit. Biotechnology and Bioengineering, 2007, 98, 1029-1042.	3.3	60
51	Analysis of site-specificN-glycan remodeling in the endoplasmic reticulum and the Golgi. Glycobiology, 2015, 25, 1335-1349.	2.5	60
52	multifraction separation in countercurrent chromatography (MCSGP). Biotechnology and Bioengineering, 2013, 110, 2436-2444.	3.3	59
53	Experimental design of a twin-column countercurrent gradient purification process. Journal of Chromatography A, 2017, 1492, 19-26.	3.7	58
54	Advanced control strategies for the multicolumn countercurrent solvent gradient purification process. AICHE Journal, 2016, 62, 2341-2357.	3.6	56

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55	Estimation of Fractal Dimension in Colloidal Gels. Langmuir, 2003, 19, 6312-6316.	3.5	55
56	Role of Counterion Association in Colloidal Stability. Langmuir, 2009, 25, 2696-2702.	3.5	55
57	Enhanced process understanding and multivariate prediction of the relationship between cell culture process and monoclonal antibody quality. Biotechnology Progress, 2017, 33, 1368-1380.	2.6	54
58	Controlling the time evolution of mAb Nâ€linked glycosylation â€•Part II: Modelâ€based predictions. Biotechnology Progress, 2016, 32, 1135-1148.	2.6	53
59	Simulation model for overloaded monoclonal antibody variants separations in ion-exchange chromatography. Journal of Chromatography A, 2012, 1253, 32-43.	3.7	52
60	Modelling the breakup of solid aggregates in turbulent flows. Journal of Fluid Mechanics, 2008, 612, 261-289.	3.4	50
61	Investigation of size, surface charge, PEGylation degree and concentration on the cellular uptake of polymer nanoparticles. Colloids and Surfaces B: Biointerfaces, 2014, 123, 639-647.	5.0	50
62	Role of the ligand density in cation exchange materials for the purification of proteins. Journal of Chromatography A, 2010, 1217, 2216-2225.	3.7	49
63	Electrostatic model for protein adsorption in ion-exchange chromatography and application to monoclonal antibodies, lysozyme and chymotrypsinogen A. Journal of Chromatography A, 2010, 1217, 5610-5621.	3.7	49
64	Shear-Driven Solidification of Dilute Colloidal Suspensions. Physical Review Letters, 2011, 106, 138301.	7.8	49
65	Fragmentation of Amyloid Fibrils Occurs in Preferential Positions Depending on the Environmental Conditions. Journal of Physical Chemistry B, 2015, 119, 4644-4652.	2.6	49
66	End-to-End Self-Assembly of RADA 16-I Nanofibrils in Aqueous Solutions. Biophysical Journal, 2012, 102, 1617-1626.	0.5	48
67	Hybridâ€EKF: Hybrid model coupled with extended Kalman filter for realâ€time monitoring and control of mammalian cell culture. Biotechnology and Bioengineering, 2020, 117, 2703-2714.	3.3	48
68	Sequential Multivariate Cell Culture Modeling at Multiple Scales Supports Systematic Shaping of a Monoclonal Antibody Toward a Quality Target. Biotechnology Journal, 2018, 13, e1700461.	3.5	47
69	Guaiacol hydrodeoxygenation as a model for lignin upgrading. Role of the support surface features on Ni-based alumina-silica catalysts. Fuel, 2019, 243, 501-508.	6.4	47
70	Application of mixed mode resins for the purification of antibodies. Journal of Chromatography A, 2010, 1217, 5753-5760.	3.7	46
71	Time evolution of amyloid fibril length distribution described by a population balance model. Chemical Engineering Science, 2012, 78, 21-32.	3.8	46
72	Insights into pHâ€induced metabolic switch by flux balance analysis. Biotechnology Progress, 2015, 31, 347-357.	2.6	46

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73	Synthesis of surfactant free PCLâ€“PEG brushed nanoparticles with tunable degradation kinetics. International Journal of Pharmaceutics, 2013, 453, 551-559.	5.2	45
74	Intracellular CHO Cell Metabolite Profiling Reveals Steadyâ€State Dependent Metabolic Fingerprints in Perfusion Culture. Biotechnology Progress, 2017, 33, 879-890.	2.6	44
75	Dependence of fractal dimension of DLCA clusters on size of primary particles. Advances in Colloid and Interface Science, 2013, 195-196, 41-49.	14.7	43
76	Kinetic Analysis of the Multistep Aggregation Mechanism of Monoclonal Antibodies. Journal of Physical Chemistry B, 2014, 118, 10595-10606.	2.6	43
77	Controlling the time evolution of mAb Nâ€linked glycosylation, Part I: Microbioreactor experiments. Biotechnology Progress, 2016, 32, 1123-1134.	2.6	43
78	Protein adsorption on ion exchange resins and monoclonal antibody charge variant modulation. Journal of Chromatography A, 2016, 1447, 82-91.	3.7	43
79	Improved Performance in Mammalian Cell Perfusion Cultures by Growth Inhibition. Biotechnology Journal, 2019, 14, e1700722.	3.5	43
80	Shear-induced reaction-limited aggregation kinetics of Brownian particles at arbitrary concentrations. Journal of Chemical Physics, 2010, 132, 134903.	3.0	42
81	Criticality for shear-induced gelation of charge-stabilized colloids. Soft Matter, 2010, 6, 2692.	2.7	42
82	A new flow cell and chemometric protocol for implementing inâ€line Raman spectroscopy in chromatography. Biotechnology Progress, 2019, 35, e2847.	2.6	42
83	Role of Sedimentation and Buoyancy on the Kinetics of Diffusion Limited Colloidal Aggregation. Langmuir, 2003, 19, 10710-10718.	3.5	41
84	Role of Cleaning-in-Place in the Purification of mAb Supernatants Using Continuous Cation Exchange Chromatography. Separation Science and Technology, 2009, 44, 1-26.	2.5	41
85	Characterization of Lowâ€Molecularâ€Weight PLA using HPLC. Macromolecular Materials and Engineering, 2010, 295, 58-66.	3.6	41
86	Modeling of Molecular Weight Distribution in Ring-Opening Polymerization of <scp>l</scp>,<scp>l</scp>-Lactide. Industrial & Engineering Chemistry Research, 2014, 53, 7333-7342.	3.7	41
87	Kinetics of Monoclonal Antibody Aggregation from Dilute toward Concentrated Conditions. Journal of Physical Chemistry B, 2016, 120, 3267-3280.	2.6	40
88	Hybrid Models for the simulation and prediction of chromatographic processes for protein capture. Journal of Chromatography A, 2021, 1650, 462248.	3.7	40
89	Chromatographic behavior of a polyclonal antibody mixture on a strong cation exchanger column. Part I: Adsorption characterization. Journal of Chromatography A, 2008, 1214, 59-70.	3.7	39
90	Adaptation for survival: Phenotype and transcriptome response of CHO cells to elevated stress induced by agitation and sparging. Journal of Biotechnology, 2014, 189, 94-103.	3.8	39

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91	Production of Polymeric Materials with Controlled Pore Structure: the â€œReactive Gelationâ€•Process. Macromolecular Materials and Engineering, 2005, 290, 221-229.	3.6	38
92	Current status and future challenges in continuous biochromatography. Current Opinion in Chemical Engineering, 2018, 22, 138-144.	7.8	38
93	Fingerprint detection and process prediction by multivariate analysis of fedâ€batch monoclonal antibody cell culture data. Biotechnology Progress, 2015, 31, 1633-1644.	2.6	37
94	Influence of protein/glycan interaction on siteâ€specific glycan heterogeneity. FASEB Journal, 2017, 31, 4623-4635.	0.5	37
95	Chromatographic behavior of a polyclonal antibody mixture on a strong cation exchanger column. Part II: Adsorption modelling. Journal of Chromatography A, 2008, 1214, 71-80.	3.7	36
96	PLAâ€based nanoparticles with tunable hydrophobicity and degradation kinetics. Journal of Polymer Science Part A, 2012, 50, 5191-5200.	2.3	36
97	Role of tentacles and protein loading on pore accessibility and mass transfer in cation exchange materials for proteins. Journal of Chromatography A, 2013, 1285, 48-56.	3.7	36
98	Synthesis and Ring-Opening Polymerization of Cyclic Butylene 2,5-Furandicarboxylate. Macromolecular Chemistry and Physics, 2015, 216, 2141-2146.	2.2	36
99	Experimental determination of maximum effective hydrodynamic stress in multiphase flow using shear sensitive aggregates. AICHE Journal, 2015, 61, 1735-1744.	3.6	36
100	Stabilization of polymer colloid dispersions with pH-sensitive poly-acrylic acid brushes. Colloid and Polymer Science, 2013, 291, 1659-1667.	2.1	35
101	High-throughput profiling of nucleotides and nucleotide sugars to evaluate their impact on antibody N-glycosylation. Journal of Biotechnology, 2016, 229, 3-12.	3.8	35
102	Development of a shake tubeâ€based scaleâ€down model for perfusion cultures. Biotechnology and Bioengineering, 2018, 115, 2703-2713.	3.3	35
103	Perfusion cell culture for the production of conjugated recombinant fusion proteins reduces clipping and quality heterogeneity compared to batch-mode processes. Journal of Biotechnology, 2019, 302, 26-31.	3.8	35
104	Effect of polyol sugars on the stabilization of monoclonal antibodies. Biophysical Chemistry, 2015, 197, 40-46.	2.8	34
105	Model assisted comparison of Protein A resins and multi-column chromatography for capture processes. Journal of Biotechnology, 2018, 285, 64-73.	3.8	34
106	Minimizing hydrodynamic stress in mammalian cell culture through the lobed Taylorâ€Couette bioreactor. Biotechnology Journal, 2011, 6, 1504-1515.	3.5	33
107	Distributed pore model for bio-molecule chromatography. Journal of Chromatography A, 2013, 1298, 26-34.	3.7	33
108	Robust factor selection in early cell culture process development for the production of a biosimilar monoclonal antibody. Biotechnology Progress, 2017, 33, 181-191.	2.6	33

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109	Effect of Temperature on High Shear-Induced Gelation of Charge-Stabilized Colloids without Adding Electrolytes. Langmuir, 2010, 26, 2761-2768.	3.5	32
110	Understanding mAb aggregation during low pH viral inactivation and subsequent neutralization. Biotechnology and Bioengineering, 2020, 117, 687-700.	3.3	32
111	Oligonucleotides: Current Trends and Innovative Applications in the Synthesis, Characterization, and Purification. Biotechnology Journal, 2020, 15, e1900226.	3.5	32
112	PEGylated Nanoparticles Obtained through Emulsion Polymerization as Paclitaxel Carriers. Molecular Pharmaceutics, 2016, 13, 40-46.	4.6	31
113	Perfusive ion-exchange chromatographic materials with high capacity. Journal of Chromatography A, 2014, 1374, 180-188.	3.7	30
114	Biocompatible fluorescent nanoparticles forin vivostem cell tracking. Nanotechnology, 2013, 24, 245603.	2.6	29
115	Decision Treeâ€PLS (DTâ€PLS) algorithm for the development of process: Specific local prediction models. Biotechnology Progress, 2019, 35, e2818.	2.6	29
116	Modern trends in downstream processing of biotherapeutics through continuous chromatography: The potential of Multicolumn Countercurrent Solvent Gradient Purification. TrAC - Trends in Analytical Chemistry, 2020, 132, 116051.	11.4	29
117	Hybrid Models Based on Machine Learning and an Increasing Degree of Process Knowledge: Application to Capture Chromatographic Step. Industrial & Engineering Chemistry Research, 2021, 60, 10466-10478.	3.7	29
118	Synthesis of Fluorescent PMMAâ€Based Nanoparticles. Macromolecular Materials and Engineering, 2013, 298, 771-778.	3.6	28
119	Kinetic modeling of protein PEGylation. Chemical Engineering Science, 2015, 137, 816-827.	3.8	28
120	Strong cation-exchange chromatography of proteins on a sulfoalkylated monolithic cryogel. Journal of Chromatography A, 2015, 1386, 13-21.	3.7	28
121	Isotope labeling to determine the dynamics of metabolic response in CHO cell perfusion bioreactors using MALDIâ€TOFâ€MS. Biotechnology Progress, 2017, 33, 1630-1639.	2.6	28
122	Diffusion (DOSY) 1H NMR as an Alternative Method for Molecular Weight Determination of Poly(ethylene furanoate) (PEF) Polyesters. Macromolecular Chemistry and Physics, 2017, 218, 1600436.	2.2	28
123	Modelâ€assisted process characterization and validation for a continuous twoâ€column protein A capture process. Biotechnology and Bioengineering, 2019, 116, 87-98.	3.3	28
124	Longitudinal Tracking of Human Fetal Cells Labeled with Super Paramagnetic Iron Oxide Nanoparticles in the Brain of Mice with Motor Neuron Disease. PLoS ONE, 2012, 7, e32326.	2.5	28
125	High Shear-Induced Gelation of Charge-Stabilized Colloids in a Microchannel without Adding Electrolytes. Langmuir, 2009, 25, 4715-4723.	3.5	27
126	Model-based design space determination of peptide chromatographic purification processes. Journal of Chromatography A, 2013, 1284, 80-87.	3.7	27

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127	Combining Mechanistic Modeling and Raman Spectroscopy for Monitoring Antibody Chromatographic Purification. Processes, 2019, 7, 683.	2.8	27
128	Bioactive polyacrylamide hydrogels with gradients in mechanical stiffness. Biotechnology and Bioengineering, 2013, 110, 1508-1519.	3.3	26
129	Behavior of human serum albumin on strong cation exchange resins: I. Experimental analysis. Journal of Chromatography A, 2010, 1217, 5484-5491.	3.7	25
130	Controlled PEGylation of PLAâ€Based Nanoparticles. Macromolecular Chemistry and Physics, 2012, 213, 2012-2018.	2.2	25
131	Separation of Lanthanides by Continuous Chromatography. Industrial & Engineering Chemistry Research, 2013, 52, 8880-8886.	3.7	25
132	Model-based prediction of monoclonal antibody retention in ion-exchange chromatography. Journal of Chromatography A, 2013, 1298, 17-25.	3.7	25
133	Microarray-based MALDI-TOF mass spectrometry enables monitoring of monoclonal antibody production in batch and perfusion cell cultures. Methods, 2016, 104, 33-40.	3.8	25
134	Effect of SiO2 Nanoparticles on the Performance of PVdF-HFP/Ionic Liquid Separator for Lithium-Ion Batteries. Nanomaterials, 2018, 8, 926.	4.1	25
135	Process design and development of a mammalian cell perfusion culture in shakeâ€tube and benchtop bioreactors. Biotechnology and Bioengineering, 2019, 116, 1973-1985.	3.3	25
136	Semiâ€continuous scaleâ€down models for clone and operating parameter screening in perfusion bioreactors. Biotechnology Progress, 2019, 35, e2790.	2.6	25
137	Design of Biopharmaceutical Formulations Accelerated by Machine Learning. Molecular Pharmaceutics, 2021, 18, 3843-3853.	4.6	25
138	Hybrid modeling â€" a key enabler towards realizing digital twins in biopharma?. Current Opinion in Chemical Engineering, 2021, 34, 100715.	7.8	25
139	Analysis of the aggregationâ€"fragmentation population balance equation with application to coagulation. Journal of Colloid and Interface Science, 2007, 316, 428-441.	9.4	24
140	Experimental implementation of automatic â€˜cycle to cycleâ€™ control to a nonlinear chiral simulated moving bed separation. Journal of Chromatography A, 2010, 1217, 2013-2021.	3.7	24
141	Flow-Induced Aggregation and Breakup of Particle Clusters Controlled by Surface Nanoroughness. Langmuir, 2013, 29, 14386-14395.	3.5	24
142	Pilot-scale verification of maximum tolerable hydrodynamic stress for mammalian cell culture. Applied Microbiology and Biotechnology, 2016, 100, 3489-3498.	3.6	24
143	Equilibrium Theory Based Design Space for the Multicolumn Countercurrent Solvent Gradient Purification Process. Industrial & Engineering Chemistry Research, 2017, 56, 13482-13489.	3.7	24
144	Aggregation Kinetics of Coalescing Polymer Colloids. Langmuir, 2009, 25, 9703-9713.	3.5	23

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145	Synthesis of Water-Based Dispersions of Polymer/TiO2 Hybrid Nanospheres. Nanomaterials, 2015, 5, 1454-1468.	4.1	23
146	Integrated process for high conversion and high yield protein PEGylation. Biotechnology and Bioengineering, 2016, 113, 1711-1718.	3.3	23
147	Cell culture process metabolomics together with multivariate data analysis tools opens new routes for bioprocess development and glycosylation prediction. Biotechnology Progress, 2020, 36, e3012.	2.6	23
148	Kinetics of Free-Radical Cross-Linking Polymerization: Comparative Experimental and Numerical Study. Macromolecules, 2013, 46, 5831-5841.	4.8	22
149	Linear isotherm determination from linear gradient elution experiments. Journal of Chromatography A, 2015, 1375, 33-41.	3.7	22
150	Insight into the Synthesis Process of an Industrial Zieglerâ€“Natta Catalyst. Industrial & Engineering Chemistry Research, 2019, 58, 886-896.	3.7	22
151	Design space and robustness analysis of batch and counter-current frontal chromatography processes for the removal of antibody aggregates. Journal of Chromatography A, 2020, 1619, 460943.	3.7	22
152	Effect of flow field heterogeneity in coagulators on aggregate size and structure. AICHE Journal, 2010, 56, 2573-2587.	3.6	21
153	Stability and gelation behavior of bovine serum albumin pre-aggregates in the presence of calcium chloride. Physical Chemistry Chemical Physics, 2012, 14, 4906.	2.8	21
154	In Vitro Aggregation Behavior of a Non-Amyloidogenic Î» Light Chain Dimer Deriving from U266 Multiple Myeloma Cells. PLoS ONE, 2012, 7, e33372.	2.5	21
155	Modeling Focused Beam Reflectance Measurement and its Application to Sizing of Particles of Variable Shape. Particle and Particle Systems Characterization, 2006, 23, 360-373.	2.3	20
156	Taylor-Couette unit with a lobed inner cylinder cross section. AICHE Journal, 2007, 53, 1109-1120.	3.6	20
157	Copolymerization of VDF and HFP in Supercritical Carbon Dioxide: Experimental Analysis of the Reaction Loci. Macromolecules, 2010, 43, 9714-9723.	4.8	20
158	Synthesis of Macroporous Polymer Particles Using Reactive Gelation under Shear. Langmuir, 2014, 30, 6946-6953.	3.5	20
159	Viscosity scaling in concentrated dispersions and its impact on colloidal aggregation. Physical Chemistry Chemical Physics, 2015, 17, 24392-24402.	2.8	20
160	Model-based development of an on-column PEGylation process. Reaction Chemistry and Engineering, 2016, 1, 204-217.	3.7	20
161	Biocompatible Polymer Nanoformulation To Improve the Release and Safety of a Drug Mimic Molecule Detectable via ICP-MS. Molecular Pharmaceutics, 2017, 14, 124-134.	4.6	20
162	Effect of Surface Properties of Elastomer Colloids on Their Coalescence and Aggregation Kinetics. Langmuir, 2009, 25, 12073-12083.	3.5	19

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163	Kinetics of the ringâ€opening polymerization of <scp>D</scp>,<scp>L</scp>â€lactide using zinc (II) octoate as catalyst. Polymer International, 2012, 61, 265-273.	3.1	19
164	Modeling of mixed-mode chromatography of peptides. Journal of Chromatography A, 2013, 1283, 46-52.	3.7	19
165	Integrated multiplatform method forin vitroquantitative assessment of cellular uptake for fluorescent polymer nanoparticles. Nanotechnology, 2014, 25, 045102.	2.6	19
166	Experimental and Modeling Study of Acrylamide Copolymerization with Quaternary Ammonium Salt in Aqueous Solution. Macromolecules, 2015, 48, 5076-5087.	4.8	19
167	Fate of PLA and PCL-Based Polymeric Nanocarriers in Cellular and Animal Models of Triple-Negative Breast Cancer. Biomacromolecules, 2016, 17, 744-755.	5.4	19
168	Accelerated Bioprocess Development of Endopolygalacturonase-Production with Saccharomyces cerevisiae Using Multivariate Prediction in a 48 Mini-Bioreactor Automated Platform. Bioengineering, 2018, 5, 101.	3.5	19
169	PVdF-HFP and Ionic-Liquid-Based, Freestanding Thin Separator for Lithium-Ion Batteries. ACS Applied Energy Materials, 0, , .	5.1	19
170	A two-step procedure for the design of perfusion bioreactors. Biochemical Engineering Journal, 2019, 151, 107295.	3.6	19
171	Process intensification by frontal chromatography: Performance comparison of resin and membrane adsorber for monovalent antibody aggregate removal. Biotechnology and Bioengineering, 2020, 117, 662-672.	3.3	19
172	From batch to continuous chromatographic purification of a therapeutic peptide through multicolumn countercurrent solvent gradient purification. Journal of Chromatography A, 2020, 1625, 461304.	3.7	19
173	Dependence of initial cluster aggregation kinetics on shear rate for particles of different sizes under turbulence. AICHE Journal, 2009, 55, 3076-3087.	3.6	18
174	Behavior of human serum albumin on strong cation exchange resins: II. Model analysis. Journal of Chromatography A, 2010, 1217, 5492-5500.	3.7	18
175	Structure and Kinetics of Shear Aggregation in Turbulent Flows. I. Early Stage of Aggregation. Langmuir, 2010, 26, 13142-13152.	3.5	18
176	Model-based design of peptide chromatographic purification processes. Journal of Chromatography A, 2013, 1284, 69-79.	3.7	18
177	Role of Cosolutes in the Aggregation Kinetics of Monoclonal Antibodies. Journal of Physical Chemistry B, 2014, 118, 11921-11930.	2.6	18
178	Population-balance description of shear-induced clustering, gelation and suspension viscosity in sheared DLVO colloids. Soft Matter, 2016, 12, 5313-5324.	2.7	18
179	Intelligent, model-based control towards the intensification of downstream processes. Computers and Chemical Engineering, 2017, 105, 173-184.	3.8	18
180	Proteomic analysis of micro-scale bioreactors as scale-down model for a mAb producing CHO industrial fed-batch platform. Journal of Biotechnology, 2018, 279, 27-36.	3.8	18

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181	Calixarene-immobilized monolithic cryogels for preparative protein chromatography. Journal of Chromatography A, 2018, 1558, 59-68.	3.7	18
182	Model-based description of peptide retention on doped reversed-phase media. Journal of Chromatography A, 2015, 1407, 169-175.	3.7	17
183	Model-based high-throughput design of ion exchange protein chromatography. Journal of Chromatography A, 2016, 1459, 67-77.	3.7	17
184	Conductive framework of inverse opal structure for sulfur cathode in lithium-sulfur batteries. Scientific Reports, 2016, 6, 32800.	3.3	17
185	Experimental Evaluation of the Impact of Intrinsic Process Parameters on the Performance of a Continuous Chromatographic Polishing Unit (MCSGP). Biotechnology Journal, 2019, 14, e1800732.	3.5	17
186	Application of polymeric macroporous supports for temperature-responsive chromatography of pharmaceuticals. Journal of Chromatography A, 2015, 1407, 90-99.	3.7	16
187	A Colloidal Description of Intermolecular Interactions Driving Fibrilâ€“Fibril Aggregation of a Model Amphiphilic Peptide. Langmuir, 2015, 31, 7590-7600.	3.5	16
188	Polyacrylonitrile Nanoparticleâ€Derived Hierarchical Structure for CO₂ Capture. Energy Technology, 2018, 6, 718-727.	3.8	16
189	Core-Shell Morphology of Redispersible Powders in Polymer-Cement Waterproof Mortars. Polymers, 2018, 10, 1122.	4.5	16
190	A discretization method for computing chain length distributions. Macromolecular Symposia, 2004, 206, 481-494.	0.7	15
191	Dispersion Polymerization of Methyl Methacrylate in Supercritical Carbon Dioxide: Control of Molecular Weight Distribution by Adjusting Particle Surface Area. Macromolecular Symposia, 2007, 259, 218-225.	0.7	15
192	Dendronized Polymers via Macromonomer Route in Supercritical Carbon Dioxide. Macromolecular Rapid Communications, 2008, 29, 1609-1613.	3.9	15
193	The role of ion-pairing in peak deformations in overloaded reversed-phase chromatography of peptides. Journal of Chromatography A, 2010, 1217, 7065-7073.	3.7	15
194	Gelation of polymeric nanoparticles. Particuology, 2014, 14, 1-11.	3.6	15
195	Role of urea on recombinant Apo A-I stability and its utilization in anion exchange chromatography. Journal of Chromatography A, 2014, 1354, 18-25.	3.7	15
196	Contribution of Electrostatics in the Fibril Stability of a Model Ionic-Complementary Peptide. Biomacromolecules, 2015, 16, 3792-3801.	5.4	15
197	Modeling the Kinetics of Protein Conjugation Reactions. Chemie-Ingenieur-Technik, 2016, 88, 1598-1608.	0.8	15
198	Expansion processes for cell-based therapies. Biotechnology Advances, 2019, 37, 107455.	11.7	15

#	Article	IF	Citations
199	Microgel Formation in Emulsion Polymerization. Macromolecular Theory and Simulations, 2007, 16, 441-457.	1.4	14
200	Implementation of an automated on-line high-performance liquid chromatography monitoring system for â€˜cycle to cycleâ€™ control of simulated moving beds. Journal of Chromatography A, 2009, 1216, 8806-8815.	3.7	14
201	Multi-rate optimizing control of simulated moving beds. Journal of Process Control, 2010, 20, 490-505.	3.3	14
202	Influence of the pore size of reversed phase materials on peptide purification processes. Journal of Chromatography A, 2011, 1218, 2912-2922.	3.7	14
203	Kinetics of colloidal gelation and scaling of the gelation point. Soft Matter, 2013, 9, 4437.	2.7	14
204	A continuum theory for multicomponent chromatography modeling. Journal of Chromatography A, 2016, 1446, 50-58.	3.7	14
205	NMR Metabolomics for Stem Cell type discrimination. Scientific Reports, 2017, 7, 15808.	3.3	14
206	Glycosylation Flux Analysis of Immunoglobulin G in Chinese Hamster Ovary Perfusion Cell Culture. Processes, 2018, 6, 176.	2.8	14
207	Synthesis of Cyclic (Ethylene Furanoate) Oligomers via Cyclodepolymerization. Macromolecular Reaction Engineering, 2018, 12, 1800018.	1.5	14
208	Modeling the nonlinear behavior of a bioactive peptide in reversed-phase gradient elution chromatography. Journal of Chromatography A, 2020, 1616, 460789.	3.7	14
209	Model based strategies towards protein A resin lifetime optimization and supervision. Journal of Chromatography A, 2020, 1625, 461261.	3.7	14
210	Crowding, Intermolecular Interactions, and Shear Flow Effects in the Diffusion Model of Chemical Reactions. Journal of Physical Chemistry B, 2011, 115, 7383-7396.	2.6	13
211	Macroporous Polymer Particles via Reactive Gelation under Shear: Effect of Primary Particle Properties and Operating Parameters. Langmuir, 2014, 30, 13970-13978.	3.5	13
212	Shear-Induced Reactive Gelation. Langmuir, 2015, 31, 12727-12735.	3.5	13
213	Highâ€throughput nucleoside phosphate monitoring in mammalian cell fedâ€batch cultivation using quantitative matrixâ€assisted laser desorption/ionization timeâ€ofâ€flight mass spectrometry. Biotechnology Journal, 2015, 10, 190-198.	3.5	13
214	Recovery of monosaccharides from lignocellulosic hydrolysates by ion exclusion chromatography. Journal of Chromatography A, 2017, 1496, 25-36.	3.7	13
215	Process Intensification for the Purification of Peptidomimetics: The Case of Icatibant through Multicolumn Countercurrent Solvent Gradient Purification (MCSGP). Industrial & Engineering Chemistry Research, 2021, 60, 6826-6834.	3.7	13
216	Experimental Design of the Multicolumn Countercurrent Solvent Gradient Purification (MCSGP) Unit for the Separation of PEGylated Proteins. Industrial & Engineering Chemistry Research, 2021, 60, 10764-10776.	3.7	13

#	Article	IF	Citations
217	Functional-Hybrid modeling through automated adaptive symbolic regression for interpretable mathematical expressions. Chemical Engineering Journal, 2022, 430, 133032.	12.7	13
218	Characterization of Particle Interaction Energy through Incipient Turbulent Aggregation. Journal of Colloid and Interface Science, 2002, 256, 304-313.	9.4	12
219	Control of Coalescence in Clusters of Elastomer Colloids through Manipulation of Polymer Composition. Macromolecules, 2009, 42, 9103-9110.	4.8	12
220	Coalescence Control of Elastomer Clusters by Fixed Surface Charges. Journal of Physical Chemistry B, 2010, 114, 1562-1567.	2.6	12
221	An integrated approach for the systematic evaluation of polymeric nanoparticles in healthy and diseased organisms. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	12
222	Kinetics and Cluster Morphology Evolution of Shear-Driven Aggregation of Well-Stabilized Colloids. Langmuir, 2015, 31, 1113-1119.	3.5	12
223	A two level hierarchical model of protein retention in ion exchange chromatography. Journal of Chromatography A, 2015, 1411, 50-62.	3.7	12
224	Ion Exclusion Chromatography: Model Development and Experimental Evaluation. Industrial & Engineering Chemistry Research, 2017, 56, 1621-1632.	3.7	12
225	Readily prepared biodegradable nanoparticles to formulate poorly water soluble drugs improving their pharmacological properties: The example of trabectedin. Journal of Controlled Release, 2018, 276, 140-149.	9.9	12
226	Reaction kinetics and simulations of ring-opening polymerization for the synthesis of polybutylene terephthalate. Polymer, 2018, 146, 120-132.	3.8	12
227	Master Curves for Aggregation and Gelation:Â Effects of Cluster Structure and Polydispersity. Industrial & Engineering Chemistry Research, 2007, 46, 1709-1720.	3.7	11
228	Swelling Deswelling Behavior of PSâ€PNIPAAM Copolymer Particles and PNIPAAM Brushes Grafted from Polystyrene Particles & Monoliths. Macromolecular Materials and Engineering, 2008, 293, 491-502.	3.6	11
229	Investigation of the Porosity Variation during Chromatographic Experiments. Industrial & Engineering Chemistry Research, 2008, 47, 9133-9140.	3.7	11
230	Effect of repulsive interactions on the rate of doublet formation of colloidal nanoparticles in the presence of convective transport. Journal of Colloid and Interface Science, 2011, 355, 42-53.	9.4	11
231	Modeling of ion-pairing effect in peptide reversed-phase chromatography. Journal of Chromatography A, 2012, 1249, 92-102.	3.7	11
232	Process for Continuous Fab Production by Digestion of IgG. Biotechnology Journal, 2019, 14, e1800677.	3.5	11
233	Transcriptome and proteome analysis of steadyâ€state in a perfusion CHO cell culture process. Biotechnology and Bioengineering, 2019, 116, 1959-1972.	3.3	11
234	Ultrasound Attenuation in Polystyrene Latexes. Langmuir, 2003, 19, 3953-3957.	3.5	10

#	Article	IF	Citations
235	Sizing Polydisperse Dispersions by Focused Beam Reflectance and Small Angle Static Light Scattering. Particle and Particle Systems Characterization, 2006, 23, 438-447.	2.3	10
236	Copolymerization of VDF and HFP in Supercritical Carbon Dioxide: A Robust Approach for Modeling Precipitation and Dispersion Kinetics. Macromolecular Reaction Engineering, 2012, 6, 24-44.	1.5	10
237	Dispersion of single-walled carbon nanotubes by intense turbulent shear in micro-channels. Carbon, 2014, 68, 610-618.	10.3	10
238	Doping reversed-phase media for improved peptide purification. Journal of Chromatography A, 2015, 1397, 11-18.	3.7	10
239	Small interfering RNA delivery through positively charged polymer nanoparticles. Nanotechnology, 2016, 27, 125102.	2.6	10
240	A reactive continuous chromatographic process for protein PEGylation. Reaction Chemistry and Engineering, 2016, 1, 218-228.	3.7	10
241	Modeling of Polyolefin Polymerization in Semibatch Slurry Reactors: Experiments and Simulations. Macromolecular Reaction Engineering, 2017, 11, 1600036.	1.5	10
242	Monitoring Parallel Robotic Cultivations with Online Multivariate Analysis. Processes, 2020, 8, 582.	2.8	10
243	Modeling Polycondensation of Lactic Acid. Macromolecular Symposia, 2007, 259, 116-123.	0.7	9
244	Effect of Primary Particle Morphology on the Structure of Gels Formed in Intense Turbulent Shear. Langmuir, 2010, 26, 6643-6649.	3.5	9
245	Experimental Optimizing Control of the Simulated Moving Bed Separation of TrÃ¶gerâ€™s Base Enantiomers. Industrial & Engineering Chemistry Research, 2010, 49, 11996-12003.	3.7	9
246	Shear-stability and gelation of inverse latexes. Soft Matter, 2013, 9, 10866.	2.7	9
247	Synthesis of Hetero-nanoclusters: The Case of Polymerâ€“Magnetite Systems. Langmuir, 2014, 30, 2266-2273.	3.5	9
248	Selfâ€Assembling PCLâ€Based Nanoparticles as PTX Solubility Enhancer Excipients. Macromolecular Bioscience, 2018, 18, e1800164.	4.1	9
249	Reactive Gelation Synthesis of Monodisperse Polymeric Capsules Using Dropletâ€Based Microfluidics. Advanced Materials Technologies, 2019, 4, 1900092.	5.8	9
250	Analysis and optimal design of batch and twoâ€column continuous chromatographic frontal processes for monoclonal antibody purification. Biotechnology and Bioengineering, 2021, 118, 3420-3434.	3.3	9
251	Modeling of the Chromatographic Solvent Gradient Reversed Phase Purification of a Multicomponent Polypeptide Mixture. Separation Science and Technology, 2008, 43, 1310-1337.	2.5	8
252	Effect of Primary Particle Size and Salt Concentration on the Structure of Colloidal Gels. Journal of Physical Chemistry C, 2011, 115, 931-936.	3.1	8

#	Article	IF	Citations
253	Effect of Surfactants on Shear-Induced Gelation and Gel Morphology of Soft Strawberry-like Particles. Langmuir, 2011, 27, 7168-7175.	3.5	8
254	Precipitation Copolymerization of Vinylâ€imidazole and Vinylâ€pyrrolidone, 2 â€“ Kinetic Model. Macromolecular Reaction Engineering, 2011, 5, 501-517.	1.5	8
255	Precipitation Copolymerization of Vinylâ€Imidazole and Vinylâ€Pyrrolidone, 1 â€“ Experimental Analysis. Macromolecular Reaction Engineering, 2011, 5, 490-500.	1.5	8
256	The rate of polymerization in two loci reaction systems: VDFâ€HFP precipitation copolymerization in supercritical carbon dioxide. Polymer Engineering and Science, 2011, 51, 2093-2102.	3.1	8
257	Monitoring coalescence behavior of soft colloidal particles in water by small-angle light scattering. Colloid and Polymer Science, 2012, 290, 1033-1040.	2.1	8
258	Simulation of porosity decrease with protein adsorption using the distributed pore model. Journal of Chromatography A, 2013, 1314, 77-85.	3.7	8
259	Effect of Dispersed Polymeric Nanoparticles on the Bulk Polymerization of Methyl Methacrylate. Macromolecules, 2016, 49, 7758-7766.	4.8	8
260	Tracking of Fluorescently Labeled Polymer Particles Reveals Surface Effects during Shear-Controlled Aggregation. Langmuir, 2017, 33, 14038-14044.	3.5	8
261	The Effect of Residence Time Distribution on the Slurryâ€Phase Catalytic Ethylene Polymerization: An Experimental and Computational Study. Macromolecular Reaction Engineering, 2018, 12, 1700058.	1.5	8
262	Control of Pore Structure in Polymeric Monoliths Prepared from Colloidal Dispersions. Macromolecular Materials and Engineering, 2018, 303, 1700417.	3.6	8
263	Effect of the charge interactions on the composition behavior of acrylamide/acrylic acid copolymerization in aqueous medium. European Polymer Journal, 2018, 98, 302-312.	5.4	8
264	110th Anniversary: Fast and Easy-to-Use Method for Coating Tissue Culture Polystyrene Surfaces with Nonfouling Copolymers To Prevent Cell Adhesion. Industrial & Engineering Chemistry Research, 2019, 58, 22290-22298.	3.7	8
265	Purification of Human Monoclonal Antibodies and Their Fragments. Methods in Molecular Biology, 2019, 1904, 163-188.	0.9	8
266	Readily Adsorbable Thermoresponsive Polymers for the Preparation of Smart Cell-Culturing Surfaces on Site. ACS Biomaterials Science and Engineering, 2020, 6, 5337-5345.	5.2	8
267	Peptide pore accessibility in reversed-phase chromatography. Journal of Chromatography A, 2009, 1216, 933-940.	3.7	7
268	Application of Asymmetric Flow-Field Flow Fractionation to the Characterization of Colloidal Dispersions Undergoing Aggregation. Langmuir, 2010, 26, 7062-7071.	3.5	7
269	Strong cation exchange monoliths for HPLC by Reactive Gelation. Journal of Separation Science, 2011, 34, 2159-2163.	2.5	7
270	Mass transfer coefficients determination from linear gradient elution experiments. Journal of Chromatography A, 2015, 1375, 42-48.	3.7	7

#	Article	IF	Citations
271	A poly-(styrene-acrylonitrile) copolymer-derived hierarchical architecture in electrode materials for lithium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 11481-11490.	10.3	7
272	Reactive separation processes for the production of PEGylated proteins. Current Opinion in Colloid and Interface Science, 2017, 31, 86-91.	7.4	7
273	Preparation of perfusive chromatographic materials via shear-induced reactive gelation. Journal of Chromatography A, 2018, 1538, 25-33.	3.7	7
274	Continuous and Integrated Expression and Purification of Recombinant Antibodies. Methods in Molecular Biology, 2018, 1850, 147-178.	0.9	7
275	Macroporous Polymerâ€“Protein Hybrid Materials for Antibody Purification by Combination of Reactive Gelation and Click-Chemistry. Materials, 2019, 12, 1580.	2.9	7
276	PNIPAAM Grafted Polymeric Monoliths Synthesized by the Reactive Gelation Process and their Swelling/Deswelling Characteristics. Macromolecular Reaction Engineering, 2008, 2, 215-221.	1.5	6
277	Reduction of Surface Charges during Coalescence of Elastomer Particles. Journal of Physical Chemistry B, 2010, 114, 8838-8845.	2.6	6
278	A control strategy for periodic systems â€“ application to the twin-column MCSGP. Computer Aided Chemical Engineering, 2015, 37, 1505-1510.	0.5	6
279	Competitive Adsorption of Xanthates with Different Chain Lengths on Chalcopyrite Particles. Industrial & Engineering Chemistry Research, 2016, 55, 1461-1468.	3.7	6
280	Relating saturation capacity to charge density in strong cation exchangers. Journal of Chromatography A, 2017, 1507, 95-103.	3.7	6
281	Aggregation of stable colloidal dispersion under short high-shear microfluidic conditions. Chemical Engineering Journal, 2019, 378, 122225.	12.7	6
282	Purification of Human Monoclonal Antibodies and Their Fragments. Methods in Molecular Biology, 2014, 1060, 331-351.	0.9	6
283	Shear-induced gelation of soft strawberry-like particles in the presence of polymeric P(BA-b-AA) surfactants. Physical Chemistry Chemical Physics, 2012, 14, 14374.	2.8	5
284	Protein adsorption in polyelectrolyte brush type cation-exchangers. Journal of Chromatography A, 2016, 1471, 126-137.	3.7	5
285	Uniform distribution of graphene oxide sheets into a poly-vinylidene fluoride nanoparticle matrix through shear-driven aggregation. Soft Matter, 2016, 12, 5876-5882.	2.7	5
286	Shear-driven aggregation of binary colloids for randomly distributing nanoparticles in a matrix. Soft Matter, 2016, 12, 3696-3702.	2.7	5
287	Why Wasnâ€™t My Manuscript Sent Out for Review?. Industrial & Engineering Chemistry Research, 2017, 56, 7109-7111.	3.7	5
288	Monitoring of antibody glycosylation pattern based on microarray MALDI-TOF mass spectrometry. Journal of Biotechnology, 2019, 302, 77-84.	3.8	5

#	Article	IF	Citations
289	Encapsulation of octenidine hydrochloride into bioresorbable polyesters for extended antimicrobial activity. European Polymer Journal, 2020, 138, 109987.	5.4	5
290	Continuous countercurrent chromatographic twinâ€column purification of oligonucleotides: The role of the displacement effect. Biotechnology and Bioengineering, 2022, 119, 1861-1872.	3.3	5
291	Effect of high pH column regeneration on the separation performances in reversed phase chromatography of peptides. Journal of Chromatography A, 2010, 1217, 3531-3537.	3.7	4
292	Snapshotted glass and gel transitions of stable colloidal dispersions after shear-driven aggregation in a microchannel. Soft Matter, 2015, 11, 981-986.	2.7	4
293	Introduction to â€œFundamentals of Preparative and Nonlinear Chromatographyâ€•by G. Guiochon, A. Felinger, D.G. Shirazi [Elsevier, Amsterdam, 2nd ed., 2006, Ch. 1]. Journal of Chromatography A, 2016, 1446, 10.	3.7	4
294	Effects of Coalescence on Shear-Induced Gelation of Colloids. Langmuir, 2017, 33, 1180-1188.	3.5	4
295	Synthesis of Strong Cation Exchange Macroporous Polymer Cluster for Convective Protein Chromatography. Macromolecular Materials and Engineering, 2019, 304, 1900311.	3.6	4
296	Control of Small-Scale Chromatographic Systems Under Disturbances. Computer Aided Chemical Engineering, 2019, 47, 269-274.	0.5	4
297	RAFT Polymerization in Bulk and Emulsion. Macromolecular Symposia, 2007, 248, 168-181.	0.7	3
298	Adsorption Behavior of Charge Isoforms of Monoclonal Antibodies on Strong Cation Exchangers. Biotechnology Journal, 2017, 12, 1700123.	3.5	3
299	Incorporation and distribution of noble metal atoms in polyacrylonitrile colloidal particles using different polymerization strategies. Polymer, 2018, 145, 41-53.	3.8	3
300	Zieglerâ€“Natta catalyst sonofragmentation for controlling size and size distribution of the produced polymer particles. AICHE Journal, 2019, 65, e16676.	3.6	3
301	Development of Mammalian Cell Perfusion Cultures at Lab Scale: From Orbitally Shaken Tubes to Benchtop Bioreactors. Methods in Molecular Biology, 2020, 2095, 125-140.	0.9	3
302	Maltodextrin as stabilizer for emulsion polymerization: Adsorption and grafting behavior. Journal of Polymer Science, 2020, 58, 1642-1654.	3.8	3
303	Performance of C18 Derivatized Silica Gels: A Structure-Performance Study. Separation Science and Technology, 2009, 44, 2471-2490.	2.5	2
304	Recovery of Mineral Oil from Underground Electrical Cables. International Journal of Environmental Research and Public Health, 2019, 16, 2357.	2.6	2
305	Synthesis and Application of Hydrophilic Polymer Nanoparticles for Water Shut-Off. Energy & Fuels, 2022, 36, 1874-1881.	5.1	2
306	Heterogeneous Polymerization in Supercritical Carbon Dioxide. , 2006, , 105-138.		1

#	Article	IF	Citations
307	Mechanically stirred singleâ€stage column for continuous gelation of colloidal systems. AICHE Journal, 2008, 54, 3106-3115.	3.6	1
308	Multi-rate optimizing control of simulated moving beds. , 2008, , .		1
309	Foreword. Journal of Chromatography A, 2009, 1216, 8677.	3.7	1
310	Continuous Chromatography for the Purification of Monoclonal Antibodies. , 0, , 223-238.		1
311	Effects of temperature and concentration on mechanism and kinetics of thermally induced deposition from coffee extracts. Chemical Papers, 2014, 68, .	2.2	1
312	Thermoresponsive Stability of Colloids in Butyl Acetate/Ethanol Binary Solvent Realized by Grafting Linear Acrylate Copolymers. Langmuir, 2017, 33, 9687-9693.	3.5	1
313	Research Update: Distribution and stabilization of Pd catalysts in porous carbon-based supports by aggregation of pre-doped colloidal particles. APL Materials, 2018, 6, 100704.	5.1	1
314	Microcapsules: Reactive Gelation Synthesis of Monodisperse Polymeric Capsules Using Dropletâ€Based Microfluidics (Adv. Mater. Technol. 6/2019). Advanced Materials Technologies, 2019, 4, 1970032.	5.8	1
315	Design and Optimisation of Mammalian Cell Perfusion Cultures. , 2020, , 67-99.		1
316	Novel Anisotropic Porous Materials through Self-Assembly of Super-Paramagnetic Particles. Chimia, 2009, 63, 78.	0.6	1
317	Arvind Varma: Educator, Researcher and Leader. Industrial & Engineering Chemistry Research, 2008, 47, 8957-8959.	3.7	0
318	Macromol. Chem. Phys. 19/2012. Macromolecular Chemistry and Physics, 2012, 213, 2011-2011.	2.2	0
319	The Generalized Stability Model and Its Applications in Polymer Colloids. Advances in Polymer Science, 2017, , 79-104.	0.8	0
320	Introduction to Biopharmaceutical Processes. , 0, , 1-26.		0
321	Countercurrrent Separation Processes. , 0, , 84-109.		0
322	Countercurrent Chromatography for the Capture Step. , 0, , 110-152.		0
323	Countercurrent Chromatography for the Polishing Steps. , 0, , 153-202.		0
324	Protein Conjugation. , 0, , 203-246.		0

#	Article	IF	Citations
325	Protein Aggregation in Biopharmaceutical Processes. , 0, , 247-298.		0
326	Fundamentals of Protein Chromatography. , 0, , 27-83.		0
327	Perfusion Mammalian Cell Culture for Recombinant Protein Manufacturing. , 2020, , 1-19.		0
328	Perfusion Bioreactors:The Set-Up and Process Characterisation. , 2020, , 20-45.		0
329	Scale-Down Models and Sensors for Process Development. , 2020, , 46-66.		0
330	Clinical- and Commercial-Scale Reactors. , 2020, , 100-137.		0
331	Mechanistic and Statistical Modelling of Bioprocesses. , 2020, , 138-173.		0
332	Intensified Production of Recombinant Proteins. RSC Green Chemistry, 2018, , 327-343.	0.1	0
333	RAFT Polymerization in Bulk and Emulsion. , 0, , 168-181.		0