

Andrew L Zydney

List of Publications by Year in descending order

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260
papers

15,245
citations

25423

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docs citations

272
times ranked

9479
citing authors

#	ARTICLE	IF	CITATIONS
1	The behavior of suspensions and macromolecular solutions in crossflow microfiltration. <i>Journal of Membrane Science</i> , 1994, 96, 1-58.	4.1	1,180
2	A Combined Pore Blockage and Cake Filtration Model for Protein Fouling during Microfiltration. <i>Journal of Colloid and Interface Science</i> , 2000, 232, 389-399.	5.0	650
3	Bioprocess membrane technology. <i>Journal of Membrane Science</i> , 2007, 297, 16-50.	4.1	637
4	Humic Acid Fouling during Ultrafiltration. <i>Environmental Science & Technology</i> , 2000, 34, 5043-5050.	4.6	396
5	Membrane separations in biotechnology. <i>Current Opinion in Biotechnology</i> , 2001, 12, 208-211.	3.3	379
6	Tight ultrafiltration membranes for enhanced separation of dyes and Na ₂ SO ₄ during textile wastewater treatment. <i>Journal of Membrane Science</i> , 2016, 514, 217-228.	4.1	378
7	Humic acid fouling during microfiltration. <i>Journal of Membrane Science</i> , 1999, 157, 1-12.	4.1	375
8	Permeability and selectivity analysis for ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2005, 249, 245-249.	4.1	337
9	A CONCENTRATION POLARIZATION MODEL FOR THE FILTRATE FLUX IN CROSS-FLOW MICROFILTRATION OF PARTICULATE SUSPENSIONS. <i>Chemical Engineering Communications</i> , 1986, 47, 1-21.	1.5	306
10	Polyacrylamide degradation and its implications in environmental systems. <i>Npj Clean Water</i> , 2018, 1, .	3.1	271
11	Diffusive and convective protein transport through asymmetric membranes. <i>AIChE Journal</i> , 1991, 37, 1497-1510.	1.8	244
12	Continuous downstream processing for high value biological products: A Review. <i>Biotechnology and Bioengineering</i> , 2016, 113, 465-475.	1.7	224
13	Effect of solution pH and ionic strength on the separation of albumin from immunoglobulins (IgG) by selective filtration. <i>Biotechnology and Bioengineering</i> , 1994, 43, 960-968.	1.7	219
14	Protein Separations Using Membrane Filtration: New Opportunities for Whey Fractionation. <i>International Dairy Journal</i> , 1998, 8, 243-250.	1.5	208
15	Stagnant film model for concentration polarization in membrane systems. <i>Journal of Membrane Science</i> , 1997, 130, 275-281.	4.1	205
16	Analysis of humic acid fouling during microfiltration using a pore blockage "cake filtration model. <i>Journal of Membrane Science</i> , 2002, 198, 51-62.	4.1	200
17	Mechanisms for BSA fouling during microfiltration. <i>Journal of Membrane Science</i> , 1995, 107, 115-127.	4.1	197
18	Nanoscale control of internal inhomogeneity enhances water transport in desalination membranes. <i>Science</i> , 2021, 371, 72-75.	6.0	193

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19	Effect of membrane morphology on the initial rate of protein fouling during microfiltration. Journal of Membrane Science, 1999, 155, 261-275.	4.1	176
20	Effect of electrostatic, hydrodynamic, and Brownian forces on particle trajectories and sieving in normal flow filtration. Journal of Colloid and Interface Science, 2004, 269, 425-431.	5.0	166
21	High performance tangential flow filtration. , 1997, 56, 71-82.		156
22	Impact of Undergraduate Research Experience in Engineering. Journal of Engineering Education, 2002, 91, 151-157.	1.9	156
23	The influence of protein aggregates on the fouling of microfiltration membranes during stirred cell filtration. Journal of Membrane Science, 1993, 80, 175-187.	4.1	154
24	High-performance silicon nanopore hemofiltration membranes. Journal of Membrane Science, 2009, 326, 58-63.	4.1	151
25	A two-stage ultrafiltration process for fractionation of whey protein isolate. Journal of Membrane Science, 2004, 231, 159-167.	4.1	145
26	Fouling behavior of zwitterionic membranes: Impact of electrostatic and hydrophobic interactions. Journal of Membrane Science, 2014, 452, 97-103.	4.1	143
27	Use of the log-normal probability density function to analyze membrane pore size distributions: functional forms and discrepancies. Journal of Membrane Science, 1994, 91, 293-298.	4.1	136
28	Effects of solution environment on humic acid fouling during microfiltration. Desalination, 1999, 122, 63-76.	4.0	121
29	Effects of intermolecular thiol-disulfide interchange reactions on bsa fouling during microfiltration. Biotechnology and Bioengineering, 1994, 44, 972-982.	1.7	117
30	Permeability-selectivity analysis for ultrafiltration: Effect of pore geometry. Journal of Membrane Science, 2010, 349, 405-410.	4.1	117
31	Protein fractionation using electrostatic interactions in membrane filtration. Biotechnology and Bioengineering, 1995, 48, 406-414.	1.7	110
32	Theoretical analysis of pore size distribution effects on membrane transport. Journal of Membrane Science, 1993, 82, 211-227.	4.1	108
33	Electrostatic and Electrokinetic Interactions during Protein Transport through Narrow Pore Membranes. Industrial & Engineering Chemistry Research, 1994, 33, 2473-2482.	1.8	107
34	Ultrafiltration membrane performance: Effects of pore blockage/constriction. Journal of Membrane Science, 2013, 434, 106-120.	4.1	107
35	Effect of solution pH on protein transport through ultrafiltration membranes. , 1999, 64, 27-37.		106
36	Electrostatic effects on protein partitioning in size-exclusion chromatography and membrane ultrafiltration. Journal of Chromatography A, 1998, 796, 229-238.	1.8	105

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37	Boundary Effects on the Electrophoretic Motion of a Charged Particle in a Spherical Cavity. Journal of Colloid and Interface Science, 1995, 169, 476-485.	5.0	103
38	Protein fouling during microfiltration: Comparative behavior of different model proteins. , 1997, 55, 91-100.		100
39	Separation of γ -lactalbumin and γ -lactoglobulin using membrane ultrafiltration. Biotechnology and Bioengineering, 2003, 83, 201-209.	1.7	99
40	Transmembrane pressure profiles during constant flux microfiltration of bovine serum albumin. Journal of Membrane Science, 2002, 209, 363-377.	4.1	96
41	Protein adsorption in asymmetric ultrafiltration membranes with highly constricted pores. Journal of Colloid and Interface Science, 1990, 134, 563-575.	5.0	95
42	Bench-scale testing of surfactant-modified reverse osmosis/nanofiltration membranes. Desalination, 1998, 115, 15-32.	4.0	95
43	Intermolecular electrostatic interactions and their effect on flux and protein deposition during protein filtration. Biotechnology Progress, 1994, 10, 207-213.	1.3	94
44	Perspectives on integrated continuous bioprocessing—opportunities and challenges. Current Opinion in Chemical Engineering, 2015, 10, 8-13.	3.8	92
45	Effect of Membrane Charge on Flow and Protein Transport during Ultrafiltration. Biotechnology Progress, 2006, 22, 484-492.	1.3	91
46	Hydraulic permeability of protein layers deposited during ultrafiltration. Journal of Colloid and Interface Science, 1991, 142, 41-60.	5.0	90
47	Dextran transport through asymmetric ultrafiltration membranes: Comparison with hydrodynamic models. Journal of Membrane Science, 1992, 68, 21-41.	4.1	89
48	Contributions to electrostatic interactions on protein transport in membrane systems. AIChE Journal, 2001, 47, 1101-1114.	1.8	82
49	Theoretical analysis of convective flow profiles in a hollow-fiber membrane bioreactor. Chemical Engineering Science, 1990, 45, 3211-3220.	1.9	79
50	Faculty Perspectives Regarding the Undergraduate Research Experience in Science and Engineering. Journal of Engineering Education, 2002, 91, 291-297.	1.9	77
51	Charge Regulation and Electrostatic Interactions for a Spherical Particle in a Cylindrical Pore. Journal of Colloid and Interface Science, 1997, 192, 338-349.	5.0	76
52	Compaction and permeability effects with virus filtration membranes. Journal of Membrane Science, 2005, 254, 71-79.	4.1	76
53	Fouling of microfiltration membranes by flowback and produced waters from the Marcellus shale gas play. Water Research, 2016, 99, 162-170.	5.3	76
54	Application of a pore-blockage/cake-filtration model to protein fouling during microfiltration. Biotechnology and Bioengineering, 2002, 79, 260-270.	1.7	72

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55	Role of electrostatic interactions during protein ultrafiltration. <i>Advances in Colloid and Interface Science</i> , 2010, 160, 40-48.	7.0	72
56	Flux-dependent transmission of supercoiled plasmid DNA through ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2007, 294, 169-177.	4.1	71
57	Improving dextran tests for ultrafiltration membranes: Effect of device format. <i>Journal of Membrane Science</i> , 2007, 291, 180-190.	4.1	69
58	Measurement of Protein Charge and Ion Binding Using Capillary Electrophoresis. <i>Analytical Chemistry</i> , 1998, 70, 1581-1584.	3.2	68
59	Chemical Degradation of Polyacrylamide during Hydraulic Fracturing. <i>Environmental Science & Technology</i> , 2018, 52, 327-336.	4.6	68
60	Protein-Membrane Interactions During Hemodialysis Effects on Solute Transport. <i>ASAIO Journal</i> , 1998, 44, 319-326.	0.9	66
61	Recovery of small dye molecules from aqueous solutions using charged ultrafiltration membranes. <i>Journal of Hazardous Materials</i> , 2015, 284, 58-64.	6.5	65
62	Effect of bleach on the transport characteristics of polysulfone hemodialyzers. <i>Journal of Membrane Science</i> , 2004, 243, 389-399.	4.1	62
63	Effects of membrane pore geometry on fouling behavior during yeast cell microfiltration. <i>Journal of Membrane Science</i> , 2006, 285, 334-342.	4.1	61
64	Hydraulic permeability of protein deposits formed during microfiltration: effect of solution pH and ionic strength. <i>Journal of Membrane Science</i> , 1994, 95, 71-81.	4.1	60
65	Determination of Effective Protein Charge by Capillary Electrophoresis: Effects of Charge Regulation in the Analysis of Charge Ladders. <i>Analytical Chemistry</i> , 2000, 72, 5714-5717.	3.2	60
66	Influence of protein-protein interactions on bulk mass transport during ultrafiltration. <i>Journal of Membrane Science</i> , 1997, 125, 93-108.	4.1	59
67	Development and characterization of nanoporous carbon membranes for protein ultrafiltration. <i>Journal of Membrane Science</i> , 2007, 295, 40-49.	4.1	57
68	Intermolecular Interactions and the Viscosity of Highly Concentrated Monoclonal Antibody Solutions. <i>Pharmaceutical Research</i> , 2015, 32, 3102-3109.	1.7	57
69	Protein Fouling of Asymmetric and Composite Microfiltration Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 1412-1421.	1.8	55
70	Staging of affinity ultrafiltration processes for chiral separations. <i>Journal of Membrane Science</i> , 2002, 209, 107-119.	4.1	53
71	Membrane technology for purification of therapeutic proteins. <i>Biotechnology and Bioengineering</i> , 2009, 103, 227-230.	1.7	53
72	Separation of PEGylated α -Lactalbumin from Unreacted Precursors and Byproducts Using Ultrafiltration. <i>Biotechnology Progress</i> , 2007, 23, 1417-1424.	1.3	50

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73	Theoretical analysis of particle trajectories and sieving in a two-dimensional cross-flow filtration system. <i>Journal of Membrane Science</i> , 2006, 281, 666-675.	4.1	49
74	Radius of gyration of plasmid DNA isoforms from static light scattering. <i>Biotechnology and Bioengineering</i> , 2010, 107, 134-142.	1.7	49
75	Characterizing the surface charge of synthetic nanomembranes by the streaming potential method. <i>Journal of Colloid and Interface Science</i> , 2010, 348, 85-95.	5.0	49
76	Effect of Blood Contact on the Transport Properties of Hemodialysis Membranes: A Two-Layer Membrane Model. <i>Blood Purification</i> , 1994, 12, 292-307.	0.9	48
77	Effect of ionic environment on BSA filtration and the properties of BSA deposits. <i>Desalination</i> , 1993, 90, 147-159.	4.0	44
78	High throughput screening for membrane process development. <i>Journal of Membrane Science</i> , 2004, 237, 181-188.	4.1	44
79	Probing effects of pressure release on virus capture during virus filtration using confocal microscopy. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2115-2122.	1.7	44
80	New developments in membranes for bioprocessing – A review. <i>Journal of Membrane Science</i> , 2021, 620, 118804.	4.1	44
81	A Facile Surface Modification for Antifouling Reverse Osmosis Membranes Using Polydopamine under UV Irradiation. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 5756-5760.	1.8	44
82	Protein Fouling of Virus Filtration Membranes: Effects of Membrane Orientation and Operating Conditions. <i>Biotechnology Progress</i> , 2006, 22, 1163-1169.	1.3	43
83	Ultrafiltration membrane synthesis by nanoscale templating of porous carbon. <i>Journal of Membrane Science</i> , 2002, 198, 173-186.	4.1	42
84	Measurement of membrane pore interconnectivity. <i>Journal of Membrane Science</i> , 2000, 170, 101-112.	4.1	40
85	Diffusive Silicon Nanopore Membranes for Hemodialysis Applications. <i>PLoS ONE</i> , 2016, 11, e0159526.	1.1	40
86	Scale-up of microfiltration systems: fouling phenomena and Vmax analysis. <i>Desalination</i> , 2002, 146, 75-81.	4.0	39
87	Internal virus polarization model for virus retention by the Ultipor [®] VF Grade DV20 membrane. <i>Biotechnology Progress</i> , 2014, 30, 856-863.	1.3	39
88	A combined ultrafiltration–reverse osmosis process for external reuse of Weiyuan shale gas flowback and produced water. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 942-955.	1.2	39
89	Continuous precipitation for monoclonal antibody capture using countercurrent washing by microfiltration. <i>Biotechnology Progress</i> , 2019, 35, e2886.	1.3	39
90	Use of confocal scanning laser microscopy to study virus retention during virus filtration. <i>Journal of Membrane Science</i> , 2011, 379, 260-267.	4.1	38

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91	Probing pore structure of virus filters using scanning electron microscopy with gold nanoparticles. <i>Journal of Membrane Science</i> , 2018, 552, 144-152.	4.1	38
92	Pore size distribution effects on electrokinetic phenomena in semipermeable membranes. <i>Journal of Membrane Science</i> , 1995, 105, 203-215.	4.1	37
93	Protein transport through zwitterionic ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2012, 397-398, 1-8.	4.1	37
94	Purification of monoclonal antibodies from clarified cell culture fluid using Protein A capture continuous countercurrent tangential chromatography. <i>Journal of Biotechnology</i> , 2015, 213, 54-64.	1.9	37
95	Effects of a pressure release on virus retention with the Ultipor DV20 membrane. <i>Biotechnology and Bioengineering</i> , 2014, 111, 545-551.	1.7	35
96	Use of fluorescently-labeled nanoparticles to study pore morphology and virus capture in virus filtration membranes. <i>Journal of Membrane Science</i> , 2017, 536, 52-58.	4.1	35
97	Particle-particle interactions during normal flow filtration: Model simulations. <i>Chemical Engineering Science</i> , 2005, 60, 4073-4082.	1.9	34
98	Countercurrent staged diafiltration for formulation of high value proteins. <i>Biotechnology and Bioengineering</i> , 2018, 115, 139-144.	1.7	34
99	Hydraulic resistance of red cell beds in an unstirred filtration cell. <i>Chemical Engineering Science</i> , 1989, 44, 147-159.	1.9	33
100	Theoretical Analysis of the Effect of Membrane Morphology on Fouling during Microfiltration. <i>Separation Science and Technology</i> , 1999, 34, 2461-2483.	1.3	33
101	Effect of membrane morphology on system capacity during normal flow microfiltration. <i>Biotechnology and Bioengineering</i> , 2003, 83, 537-543.	1.7	33
102	Optimization of ultrafiltration/diafiltration processes for partially bound impurities. <i>Biotechnology and Bioengineering</i> , 2004, 87, 286-292.	1.7	33
103	Overview of Fouling Phenomena and Modeling Approaches for Membrane Bioreactors. <i>Separation Science and Technology</i> , 2006, 41, 1231-1251.	1.3	33
104	Ultrafiltration characteristics of pegylated proteins. <i>Biotechnology and Bioengineering</i> , 2006, 95, 474-482.	1.7	33
105	Bulk Mass Transport Limitations during High-Flux Hemodialysis. <i>Artificial Organs</i> , 1993, 17, 919-924.	1.0	33
106	Elongational flow model for transmission of supercoiled plasmid DNA during membrane ultrafiltration. <i>Journal of Membrane Science</i> , 2009, 329, 201-208.	4.1	33
107	The osmotic pressure of highly concentrated monoclonal antibody solutions: Effect of solution conditions. <i>Biotechnology and Bioengineering</i> , 2014, 111, 529-536.	1.7	33
108	Diffusiophoresis contributes significantly to colloidal fouling in low salinity reverse osmosis systems. <i>Journal of Membrane Science</i> , 2015, 479, 67-76.	4.1	33

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109	Effect of protein adsorption on the transport characteristics of asymmetric ultrafiltration membranes. <i>Biotechnology Progress</i> , 1992, 8, 553-561.	1.3	32
110	CHIRAL SEPARATIONS USING ULTRAFILTRATION WITH A STEREOSELECTIVE BINDING AGENT. <i>Separation Science and Technology</i> , 2001, 36, 1575-1594.	1.3	32
111	Effect of spacer arm length on the performance of charge-modified ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2008, 313, 304-314.	4.1	32
112	Protein a chromatography at high titers. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2445-2451.	1.7	32
113	Effect of ion binding on protein transport through ultrafiltration membranes. , 1999, 63, 298-307.		31
114	High resolution protein separations using affinity ultrafiltration with small charged ligands. <i>Journal of Membrane Science</i> , 2006, 280, 781-789.	4.1	31
115	Continuous Countercurrent Tangential Chromatography for Monoclonal Antibody Purification. <i>Separation Science and Technology</i> , 2013, 48, 1289-1297.	1.3	31
116	Ultrafiltration of highly concentrated antibody solutions: Experiments and modeling for the effects of module and buffer conditions. <i>Biotechnology Progress</i> , 2016, 32, 692-701.	1.3	31
117	Ultrafiltration behavior of monoclonal antibodies and Fc fusion proteins: Effects of physical properties. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2057-2065.	1.7	31
118	Analysis of protein fouling during ultrafiltration using a two-layer membrane model. , 1998, 59, 451-460.		30
119	Effect of solution pH on protein transmission and membrane capacity during virus filtration. <i>Biotechnology and Bioengineering</i> , 2008, 100, 108-117.	1.7	30
120	Separation of plasmid DNA isoforms by highly converging flow through small membrane pores. <i>Journal of Colloid and Interface Science</i> , 2011, 357, 548-553.	5.0	30
121	Effects of solution conditions on virus retention by the Viresolve [®] NFP filter. <i>Biotechnology Progress</i> , 2015, 31, 1280-1286.	1.3	30
122	Sieving characteristics of multilayer ultrafiltration membranes. <i>Journal of Membrane Science</i> , 1997, 131, 155-165.	4.1	29
123	Development of high performance charged ligands to control protein transport through charge-modified ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2010, 362, 434-443.	4.1	29
124	Purification of singly PEGylated Î±-lactalbumin using charged ultrafiltration membranes. <i>Biotechnology and Bioengineering</i> , 2011, 108, 822-829.	1.7	29
125	Hindered protein diffusion in asymmetric ultrafiltration membranes with highly constricted pores. <i>Journal of Membrane Science</i> , 1990, 49, 287-303.	4.1	28
126	Diffusive and convective solute transport through hemodialysis membranes: A hydrodynamic analysis. <i>Journal of Biomedical Materials Research Part B</i> , 1994, 28, 573-582.	3.0	28

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127	Salt-induced changes in plasmid DNA transmission through ultrafiltration membranes. <i>Biotechnology and Bioengineering</i> , 2008, 99, 390-398.	1.7	28
128	Effect of electrostatic interactions on transmission of PEGylated proteins through charged ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2010, 353, 60-69.	4.1	28
129	Countercurrent tangential chromatography for large-scale protein purification. <i>Biotechnology and Bioengineering</i> , 2011, 108, 582-591.	1.7	28
130	Effects of Histidine and Sucrose on the Biophysical Properties of a Monoclonal Antibody. <i>Pharmaceutical Research</i> , 2017, 34, 629-639.	1.7	28
131	Separation of Protein Charge Variants by Ultrafiltration. <i>Biotechnology Progress</i> , 2008, 20, 543-549.	1.3	27
132	Modeling electrostatic exclusion effects during ion exchange chromatography of monoclonal antibodies. <i>Biotechnology and Bioengineering</i> , 2009, 102, 1131-1140.	1.7	27
133	Development of an electroosmotic pump for high performance actuation. <i>Journal of Membrane Science</i> , 2006, 286, 153-160.	4.1	26
134	Multistage continuous countercurrent diafiltration for formulation of monoclonal antibodies. <i>Biotechnology Progress</i> , 2019, 35, e2810.	1.3	26
135	Importance of asymmetric structure in determining mass transport characteristics of hollow fiber hemodialyzers. <i>Journal of Membrane Science</i> , 2003, 224, 39-49.	4.1	25
136	Effect of surface charge distribution on protein transport through semipermeable ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2009, 337, 324-331.	4.1	25
137	Theoretical analysis of the ultrafiltration behavior of highly concentrated protein solutions. <i>Journal of Membrane Science</i> , 2015, 494, 216-223.	4.1	25
138	Polyacrylamide in hydraulic fracturing fluid causes severe membrane fouling during flowback water treatment. <i>Journal of Membrane Science</i> , 2018, 560, 125-131.	4.1	25
139	Size exclusion chromatography of plasmid DNA isoforms. <i>Journal of Chromatography A</i> , 2009, 1216, 6295-6302.	1.8	24
140	Intermolecular interactions in highly concentrated formulations of recombinant therapeutic proteins. <i>Current Opinion in Biotechnology</i> , 2018, 53, 59-64.	3.3	24
141	Internal membrane fouling by proteins during microfiltration. <i>Journal of Membrane Science</i> , 2021, 637, 119589.	4.1	24
142	A Stefan-Maxwell Analysis of Protein Transport in Porous Membranes. <i>Separation Science and Technology</i> , 1988, 23, 1799-1811.	1.3	23
143	Dextran sieving test for characterization of virus filtration membranes. <i>Journal of Membrane Science</i> , 2011, 379, 239-248.	4.1	23
144	Single-use, single-pass tangential flow filtration using low-cost hollow fiber modules. <i>Journal of Membrane Science</i> , 2020, 595, 117517.	4.1	23

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145	Affinity ultrafiltration: Effects of ligand binding on selectivity and process optimization. <i>Biotechnology and Bioengineering</i> , 2002, 77, 256-265.	1.7	22
146	Controlling protein transport in ultrafiltration using small charged ligands. <i>Biotechnology and Bioengineering</i> , 2005, 91, 733-742.	1.7	22
147	Sieving Characteristics of Albumin Deposits Formed during Microfiltration. <i>Journal of Colloid and Interface Science</i> , 1993, 158, 136-145.	5.0	21
148	Retention of small charged impurities during ultrafiltration. <i>Biotechnology and Bioengineering</i> , 2004, 87, 7-13.	1.7	21
149	Plasmid DNA transmission through charged ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2009, 344, 123-128.	4.1	21
150	Impact of protein fouling on nanoparticle capture within the Viresolve® Pro and Viresolve® NFP virus removal membranes. <i>Biotechnology and Bioengineering</i> , 2019, 116, 2285-2291.	1.7	21
151	The effect of membrane properties on the separation of protein charge variants using ultrafiltration. <i>Journal of Membrane Science</i> , 2004, 243, 379-388.	4.1	19
152	Effects of Plasma Proteins on the Transport and Surface Characteristics of Polysulfone/Polyethersulfone and Asymmetric Cellulose Triacetate High Flux Dialyzers. <i>Artificial Organs</i> , 2018, 42, 1070-1077.	1.0	19
153	Ultrafiltration behavior of bacterial polysaccharides used in vaccines. <i>Journal of Membrane Science</i> , 2015, 490, 294-300.	4.1	18
154	Quantitative study of RNA transmission through ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2017, 544, 272-277.	4.1	18
155	FIB-SEM tomography reveals the nanoscale 3D morphology of virus removal filters. <i>Journal of Membrane Science</i> , 2021, 640, 119766.	4.1	18
156	Concentration effects on membrane sieving: development of a stagnant film model incorporating the effects of solute-solute interactions. <i>Journal of Membrane Science</i> , 1992, 68, 183-190.	4.1	17
157	Effects of Pressure and Electrical Charge on Macromolecular Transport Across Bovine Lens Basement Membrane. <i>Biophysical Journal</i> , 2013, 104, 1476-1484.	0.2	17
158	Twisted hollow fiber membranes for enhanced mass transfer. <i>Journal of Membrane Science</i> , 2016, 514, 586-594.	4.1	17
159	Mass Balance Model with Donnan Equilibrium Accurately Describes Unusual pH and Excipient Profiles during Diafiltration of Monoclonal Antibodies. <i>Biotechnology Journal</i> , 2019, 14, 1800517.	1.8	17
160	Effectiveness of host cell protein removal using depth filtration with a filter containing diatomaceous earth. <i>Biotechnology Progress</i> , 2020, 36, e3028.	1.3	17
161	pH and salt effects on chiral separations using affinity ultrafiltration. <i>Desalination</i> , 2002, 148, 159-164.	4.0	16
162	Development of an optimized dextran retention test for large pore size hollow fiber ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2012, 421-422, 32-38.	4.1	16

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163	Effects of chemical sanitization using NaOH on the properties of polysulfone and polyethersulfone ultrafiltration membranes. <i>Biotechnology Progress</i> , 2015, 31, 90-96.	1.3	16
164	Improving extraction and post-purification concentration of membrane proteins. <i>Analyst, The</i> , 2018, 143, 1378-1386.	1.7	16
165	Hollow fiber countercurrent dialysis for continuous buffer exchange of high-value biotherapeutics. <i>Biotechnology Progress</i> , 2019, 35, e2763.	1.3	16
166	High throughput solubility and redissolution screening for antibody purification via combined PEG and zinc chloride precipitation. <i>Biotechnology Progress</i> , 2020, 36, e3041.	1.3	16
167	A RED CELL DEFORMATION MODEL FOR HEMOLYSIS IN CROSS FLOW MEMBRANE PLASMAPHERESIS. <i>Chemical Engineering Communications</i> , 1984, 30, 191-207.	1.5	15
168	Boundary effects on the sedimentation and hindered diffusion of charged particles. <i>AIChE Journal</i> , 1996, 42, 2101-2111.	1.8	15
169	Use of protein charge ladders to study electrostatic interactions during protein ultrafiltration. <i>Biotechnology and Bioengineering</i> , 2004, 85, 166-176.	1.7	15
170	Understanding dextran retention data for hollow fiber ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2011, 385-386, 243-250.	4.1	15
171	Outside-in hemofiltration for prolonged operation without clogging. <i>Journal of Membrane Science</i> , 2014, 464, 173-178.	4.1	15
172	Membrane fouling during ultrafiltration of plasmid DNA through semipermeable membranes. <i>Journal of Membrane Science</i> , 2014, 450, 189-196.	4.1	15
173	Ultrafiltration behavior of an Fc-fusion protein: Filtrate flux data and modeling. <i>Journal of Membrane Science</i> , 2017, 528, 171-177.	4.1	15
174	Effect of zinc chloride and PEG concentrations on the critical flux during tangential flow microfiltration of BSA precipitates. <i>Biotechnology Progress</i> , 2017, 33, 1561-1567.	1.3	15
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