Raja Ghosh

List of Publications by Year in descending order

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117 2,856 28 46 papers citations h-index g-index

122 122 1972 all docs docs citations times ranked citing authors

#	Article	IF	Citations
1	Purification of monoclonal antibody using cation exchange z2 laterally-fed membrane chromatography $\hat{a} \in A$ potential alternative to protein A affinity chromatography. Biochemical Engineering Journal, 2022, 178, 108293.	1.8	11
2	Dry-compression packing of hydroxyapatite nanoparticles within a flat cuboid chromatography device and its use for fast protein separation. Journal of Chromatography A, 2022, 1667, 462881.	1.8	10
3	Ultrahigh speed, ultrahigh resolution preparative separation of protein biopharmaceuticals using membrane chromatography. Journal of Separation Science, 2022, , .	1.3	6
4	Comparison of the performance of anion exchange membrane materials for adenovirus purification using laterally-fed membrane chromatography. Biochemical Engineering Journal, 2022, 182, 108417.	1.8	3
5	Fast and high-resolution fractionation of positional isomers of a PEGylated protein using membrane chromatography. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2022, 1203, 123292.	1.2	4
6	Integrated development of enzymatic DNA digestion and membrane chromatography processes for the purification of therapeutic adenoviruses. Separation and Purification Technology, 2021, 254, 117503.	3.9	21
7	A cuboid chromatography device having short bed-height gives better protein separation at a significantly lower pressure drop than a taller column having the same bed-volume. Journal of Chromatography A, 2021, 1647, 462167.	1.8	6
8	Extraction, purification and applications of curcumin from plant materials-A comprehensive review. Trends in Food Science and Technology, 2021, 112, 419-430.	7.8	64
9	Fast and high-resolution purification of a PEGylated protein using a z2 laterally-fed membrane chromatography device. Journal of Chromatography A, 2021, 1652, 462375.	1.8	5
10	Manufacturing T cells in hollow fiber membrane bioreactors changes their programming and enhances their potency. Oncolmmunology, 2021, 10, 1995168.	2.1	2
11	Simulation and experimental study of the transport of protein bands through cuboid packed-bed devices during chromatographic separations. Journal of Chromatography A, 2020, 1615, 460764.	1.8	O
12	High-resolution purification of a therapeutic PEGylated protein using a cuboid packed-bed device. Journal of Chromatography A, 2020, 1630, 461524.	1.8	2
13	A flow distribution and collection feature for ensuring scalable uniform flow in a chromatography device. Journal of Chromatography A, 2020, 1618, 460892.	1.8	19
14	A z2 laterally-fed membrane chromatography device for fast high-resolution purification of biopharmaceuticals. Journal of Chromatography A, 2020, 1629, 461453.	1.8	19
15	Production enhancement of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) in Halogeometricum borinquense, characterization of the bioplastic and desalination of the bioreactor effluent. Process Biochemistry, 2020, 94, 243-257.	1.8	11
16	An annular-flow, hollow-fiber membrane chromatography device for fast, high-resolution protein separation at low pressure. Journal of Membrane Science, 2019, 590, 117305.	4.1	9
17	Computational fluid dynamic (CFD) simulation of a cuboid packed-bed chromatography device. Chemical Engineering Research and Design, 2019, 152, 393-401.	2.7	13
18	Fast, low-pressure chromatographic separation of proteins using hydroxyapatite nanoparticles. Talanta, 2019, 199, 472-477.	2.9	11

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19	Enhancing the efficiency of disc membrane chromatography modules by using a flow directing layer. Journal of Membrane Science, 2019, 580, 154-160.	4.1	7
20	Feasibility study of the fractionation of monoclonal antibody charge variants using a cuboid packed-bed device. Biochemical Engineering Journal, 2019, 147, 48-56.	1.8	9
21	Purification of therapeutic adenoviruses using laterally-fed membrane chromatography. Journal of Membrane Science, 2019, 579, 351-358.	4.1	10
22	Efficient capture of monoclonal antibody from cell culture supernatant using protein A media contained in a cuboid packed-bed device. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2019, 1134-1135, 121853.	1.2	2
23	Performance Comparison of a Laterally-Fed Membrane Chromatography (LFMC) Device with a Commercial Resin Packed Column. Membranes, 2019, 9, 138.	1.4	9
24	Stimuli-Responsive Membranes for Separations. Polymers and Polymeric Composites, 2019, , 1-18.	0.6	0
25	Stimuli-Responsive Membranes for Separations. Polymers and Polymeric Composites, 2019, , 491-508.	0.6	2
26	Feasibility study for high-resolution multi-component separation of protein mixture using a cation-exchange cuboid packed-bed device. Journal of Chromatography A, 2018, 1549, 25-30.	1.8	11
27	Effects of process parameters on the efficiency of chromatographic separations using a cuboid packed-bed device. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1086, 23-28.	1.2	8
28	Rapid preparative separation of monoclonal antibody charge variants using laterally-fed membrane chromatography. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1073, 27-33.	1.2	18
29	Isolation of ellagic acid from pomegranate peel extract by hydrophobic interaction chromatography using graphene oxide grafted cotton fiber adsorbent. Journal of Separation Science, 2018, 41, 747-755.	1.3	14
30	Open-Source Low-Cost Wireless Potentiometric Instrument for pH Determination Experiments. Journal of Chemical Education, 2018, 95, 326-330.	1.1	45
31	Effect of the Length-to-Width Aspect Ratio of a Cuboid Packed-Bed Device on Efficiency of Chromatographic Separation. Processes, 2018, 6, 160.	1.3	4
32	Comparison of membrane chromatography devices in laboratory-scale preparative flow-through separation of a recombinant protein. Separation Science and Technology, 2018, 53, 2990-2997.	1.3	6
33	Enrichment and immobilization of macromolecular analytes on a porous membrane utilizing permeation drag. Journal of Pharmaceutical Analysis, 2018, 8, 187-193.	2.4	0
34	Cuboid Packed-Beds as Chemical Reactors?. Processes, 2018, 6, 44.	1.3	6
35	Computational fluid dynamic (CFD) simulation of laterally-fed membrane chromatography. Chemical Engineering Research and Design, 2018, 137, 412-420.	2.7	18
36	Preparative separation of monoclonal antibody aggregates by cation-exchange laterally-fed membrane chromatography. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2017, 1055-1056, 158-164.	1.2	20

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37	Ultrafast Separation and Analysis of Monoclonal Antibody Aggregates Using Membrane Chromatography. Analytical Chemistry, 2017, 89, 4716-4720.	3.2	25
38	Mathematical modelling and evaluation of performance of cuboid packed-bed devices for chromatographic separations. Journal of Chromatography A, 2017, 1515, 138-145.	1.8	15
39	Purification of Danshensu from <i>Salvia miltiorrhiza</i> Extract Using Graphene Oxide-Based Composite Adsorbent. Industrial & Engineering Chemistry Research, 2017, 56, 8972-8980.	1.8	7
40	Dewatering of microalgae suspension using air-sparged ultrafiltration. Separation Science and Technology, 2017, 52, 344-351.	1.3	5
41	Preparation of graphene oxide-cotton fiber composite adsorbent and its application for the purification of polyphenols from pomegranate peel extract. Separation and Purification Technology, 2017, 174, 561-569.	3.9	18
42	Recovery of functionallyâ€active protein from inclusion bodies using a thermalâ€cycling method. Biotechnology Progress, 2017, 33, 133-139.	1.3	0
43	Paper-Based, Hand-Drawn Free Chlorine Sensor with Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate). Analytical Chemistry, 2016, 88, 10384-10389.	3.2	25
44	Using a box instead of a column for process chromatography. Journal of Chromatography A, 2016, 1468, 164-172.	1.8	18
45	High-resolution, preparative purification of PEGylated protein using a laterally-fed membrane chromatography device. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2016, 1035, 1-7.	1.2	25
46	Modeling and Optimization of Protein PEGylation. Industrial & Engineering Chemistry Research, 2016, 55, 11785-11794.	1.8	7
47	On the workings of laterally-fed membrane chromatography. Journal of Membrane Science, 2016, 516, 26-32.	4.1	40
48	Low-temperature solution processing of palladium/palladium oxide films and their pH sensing performance. Talanta, 2016, 146, 517-524.	2.9	23
49	High-resolution protein separation using a laterally-fed membrane chromatography device. Journal of Membrane Science, 2016, 499, 126-133.	4.1	37
50	Transmission behavior of pNIPAM microgel particles through porous membranes. Journal of Membrane Science, 2015, 479, 141-147.	4.1	10
51	A technique for drying and storing a protein as a soluble composite thin film on the surface of an ultrafiltration membrane. Journal of Membrane Science, 2015, 490, 256-265.	4.1	1
52	A laterally-fed membrane chromatography module. Journal of Membrane Science, 2015, 487, 173-179.	4.1	49
53	Poly(N-isopropylacrylamide)-grafted dual stimuli-responsive filter paper for protein separation. Chinese Journal of Polymer Science (English Edition), 2015, 33, 1048-1057.	2.0	17
54	A Thermal-Cycling Method for Disaggregating Monoclonal Antibody Oligomers. Journal of Pharmaceutical Sciences, 2014, 103, 870-878.	1.6	4

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55	Purification of chimeric heavy chain monoclonal antibody EG2â€hFc using hydrophobic interaction membrane chromatography: An alternative to proteinâ€A affinity chromatography. Biotechnology and Bioengineering, 2014, 111, 1139-1149.	1.7	18
56	An osmolyte-based micro-volume ultrafiltration technique. Lab on A Chip, 2014, 14, 4559-4566.	3.1	5
57	Membrane reactor for continuous and selective protein mono-PEGylation. Journal of Membrane Science, 2014, 451, 177-184.	4.1	11
58	Temperature-responsive membrane for hydrophobic interaction based chromatographic separation of proteins in bind-and-elute mode. Journal of Membrane Science, 2014, 471, 56-64.	4.1	33
59	Thermo-Responsive Hydrogels for Stimuli-Responsive Membranes. Processes, 2013, 1, 238-262.	1.3	57
60	Purification of transgenic tobacco-derived recombinant human monoclonal antibody. Biochemical Engineering Journal, 2013, 72, 33-41.	1.8	13
61	A Pulsed Tangential-Flow Ultrafiltration Technique for Studying Protein-Drug Binding. Journal of Pharmaceutical Sciences, 2013, 102, 2679-2688.	1.6	1
62	Purification and analysis of monoâ€ <scp>PEG</scp> ylated HSA by hydrophobic interaction membrane chromatography. Journal of Separation Science, 2013, 36, 3673-3681.	1.3	13
63	Simultaneous removal of leached protein-A and aggregates from monoclonal antibody using hydrophobic interaction membrane chromatography. Journal of Membrane Science, 2012, 390-391, 263-269.	4.1	18
64	Integrated Solid-Phase Synthesis and Purification of PEGylated Protein. Biomacromolecules, 2011, 12, 2772-2779.	2.6	23
65	Enzymatic fragmentation of cation exchange membrane bound immunoglobulin G. Biotechnology Progress, 2011, 27, 61-66.	1.3	3
66	Recovery and isolation of recombinant human monoclonal antibody from transgenic tobacco plants. Biochemical Engineering Journal, 2011, 54, 103-108.	1.8	43
67	Gas-Sparged Ultrafiltration: Recent Trends, Applications and Future Challenges. , 2011, , 669-697.		1
68	Cascade ultrafiltration bioreactor-separator system for continuous production of F(ab′)2 fragment from immunoglobulin G. Journal of Membrane Science, 2010, 351, 96-103.	4.1	10
69	Membrane bioreactor separator system for integrated IgG fragmentation and Fab purification. Journal of Immunological Methods, 2010, 359, 37-41.	0.6	5
70	Purification of PEGylated Protein Using Membrane Chromatography. Journal of Pharmaceutical Sciences, 2010, 99, 3326-3333.	1.6	29
71	Cascade ultrafiltration systems—Integrated processes for purification and concentration of lysozyme. Journal of Membrane Science, 2010, 347, 150-158.	4.1	40
72	Paper-based composite lyotropic salt-responsive membranes for chromatographic separation of proteins. Journal of Membrane Science, 2010, 360, 149-154.	4.1	24

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73	Fractionation of different PEGylated forms of a protein by chromatography using environment-responsive membranes. Journal of Chromatography A, 2010, 1217, 5595-5601.	1.8	19
74	Purification of Plant-Derived Antibodies through Direct Immobilization of Affinity Ligands on Cellulose. Journal of Agricultural and Food Chemistry, 2010, 58, 3451-3459.	2.4	30
75	Method for Studying Immunoglobulin G Binding on Hydrophobic Surfaces. Langmuir, 2010, 26, 924-929.	1.6	22
76	Feasibility Study for the Fractionation of the Major Human Immunoglobulin G Subclasses Using Hydrophobic Interaction Membrane Chromatography. Analytical Chemistry, 2010, 82, 452-455.	3.2	9
77	Integrated fragmentation of human IgG and purification of Fab using a reactant adsorptive membrane bioreactor separator system. Biotechnology and Bioengineering, 2009, 104, 152-161.	1.7	17
78	Continuous fractionation of plasma proteins HSA and HIgG using cascade ultrafiltration systems. Separation and Purification Technology, 2009, 70, 231-241.	3.9	19
79	Study of hydrophobic interaction based binding of immunoglobulin G on synthetic membranes. Journal of Membrane Science, 2009, 344, 165-171.	4.1	11
80	Chromatographic separation of proteins using hydrophobic membrane shielded with an environment-responsive hydrogel. Journal of Membrane Science, 2009, 345, 177-182.	4.1	24
81	Purification of human IgG using membrane based hybrid bioseparation technique and its variants: A comparative study. Separation and Purification Technology, 2009, 66, 242-247.	3.9	15
82	Reversible and irreversible membrane fouling during in-line microfiltration of concentrated protein solutions. Journal of Membrane Science, 2008, 315, 1-10.	4.1	37
83	Characterization and theoretical analysis of protein fouling of cellulose acetate membrane during constant flux dead-end microfiltration. Journal of Membrane Science, 2008, 320, 372-380.	4.1	38
84	Purification of equine IgG using membrane based enhanced hybrid bioseparation technique: A potential method for manufacturing hyperimmune antibody. Biotechnology and Bioengineering, 2008, 99, 625-633.	1.7	13
85	Paperâ€PEGâ€based membranes for hydrophobic interaction chromatography: Purification of monoclonal antibody. Biotechnology and Bioengineering, 2008, 99, 1434-1442.	1.7	24
86	Novel tangential-flow countercurrent cascade ultrafiltration configuration for continuous purification of humanized monoclonal antibody. Journal of Membrane Science, 2008, 307, 117-125.	4.1	37
87	Purification of monoclonal antibody from tobacco extract using membrane-based bioseparation techniques. Journal of Membrane Science, 2008, 323, 159-166.	4.1	21
88	Purification of a human immunoglobulin G1 monoclonal antibody from transgenic tobacco using membrane chromatographic processes. Journal of Chromatography A, 2008, 1187, 128-137.	1.8	34
89	Fractionation of monoclonal antibody aggregates using membrane chromatography. Journal of Membrane Science, 2008, 318, 311-316.	4.1	28
90	Biocompatible poly(N-vinyllactam)-based materials with environmentally-responsive permeability. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 275-290.	1.9	22

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91	Separation of human plasma proteins HSA and HIgG using high-capacity macroporous gel-filled membranes. Biochemical Engineering Journal, 2007, 35, 295-300.	1.8	11
92	A constant flux based mathematical model for predicting permeate flux decline in constant pressure protein ultrafiltration. Journal of Membrane Science, 2007, 290, 207-215.	4.1	28
93	Non-Size-Based Membrane Chromatographic Separation and Analysis of Monoclonal Antibody Aggregates. Analytical Chemistry, 2006, 78, 6863-6867.	3.2	32
94	Purification of humanized monoclonal antibody by hydrophobic interaction membrane chromatography. Journal of Chromatography A, 2006, 1107, 104-109.	1.8	44
95	Rapid antibody screening by membrane chromatographic immunoassay technique. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2006, 844, 163-167.	1.2	10
96	Effect of module design on the efficiency of membrane chromatographic separation processes. Journal of Membrane Science, 2006, 281, 532-540.	4.1	84
97	Enhancement of membrane permeability by gas-sparging in submerged hollow fibre ultrafiltration of macromolecular solutions: Role of module design. Journal of Membrane Science, 2006, 274, 73-82.	4.1	39
98	Purification of humanized monoclonal antibodies by membrane-based hybrid bioseparation technique. Journal of Immunological Methods, 2006, 314, 1-8.	0.6	15
99	Membrane chromatographic immunoassay method for rapid quantitative analysis of specific serum antibodies. Biotechnology and Bioengineering, 2006, 93, 280-285.	1.7	8
100	Fractionation of human plasma proteins by hydrophobic interaction membrane chromatography. Journal of Membrane Science, 2005, 260, 112-118.	4.1	20
101	Fractionation of bovine serum albumin and monoclonal antibody alemtuzumab using carrier phase ultrafiltration. Biotechnology and Bioengineering, 2005, 90, 303-315.	1.7	13
102	Separation of monoclonal antibody alemtuzumab monomer and dimers using ultrafiltration. Biotechnology and Bioengineering, 2005, 90, 422-432.	1.7	27
103	Effects of protein–protein interaction in ultrafiltration based fractionation processes. Biotechnology and Bioengineering, 2005, 91, 678-687.	1.7	14
104	Separation of human serum albumin and human immunoglobulins using carrier phase ultrafiltration. Biotechnology Progress, 2004, 20, 1103-1112.	1.3	11
105	A novel approach for high-resolution protein–protein separation by ultrafiltration using a dual-facilitating agent. Journal of Membrane Science, 2004, 243, 223-228.	4.1	7
106	Parameter scanning ultrafiltration: Rapid optimisation of protein separation. Biotechnology and Bioengineering, 2003, 81, 673-682.	1.7	37
107	Purification of lysozyme by microporous PVDF membrane-based chromatographic process. Biochemical Engineering Journal, 2003, 14, 109-116.	1.8	32
108	Study of membrane fouling by BSA using pulsed injection technique. Journal of Membrane Science, 2002, 195, 115-123.	4.1	47

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109	Protein separation using membrane chromatography: opportunities and challenges. Journal of Chromatography A, 2002, 952, 13-27.	1.8	500
110	High-resolution plasma protein fractionation using ultrafiltration. Desalination, 2002, 144, 301-306.	4.0	49
111	Bioseparation using supported liquid membrane chromatography. Journal of Membrane Science, 2001, 192, 243-247.	4.1	14
112	Fractionation of biological macromolecules using carrier phase ultrafiltration. Biotechnology and Bioengineering, 2001, 74, 1-11.	1.7	40
113	Separation of proteins using hydrophobic interaction membrane chromatography. Journal of Chromatography A, 2001, 923, 59-64.	1.8	67
114	Lysozyme separation by hollow-fibre ultrafiltration. Biochemical Engineering Journal, 2000, 6, 19-24.	1.8	74
115	Analysis of protein transport and polarization through membranes using pulsed sample injection technique. Journal of Membrane Science, 2000, 175, 75-84.	4.1	36
116	Fractionation of BSA and lysozyme using ultrafiltration: Effect of gas sparging. AICHE Journal, 1998, 44, 61-67.	1.8	54
117	Surfaces Modified by Amphiphilic Copolymer: Preparation and Application. Advanced Materials Research, 0, 47-50, 1311-1314.	0.3	2