

# Alain Beck

## List of Publications by Year in descending order

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178  
papers

12,595  
citations

22153

59  
h-index

29157

104  
g-index

201  
all docs

201  
docs citations

201  
times ranked

9291  
citing authors

#	ARTICLE	IF	CITATIONS
1	Strategies and challenges for the next generation of antibody-drug conjugates. <i>Nature Reviews Drug Discovery</i> , 2017, 16, 315-337.	46.4	1,527
2	Strategies and challenges for the next generation of therapeutic antibodies. <i>Nature Reviews Immunology</i> , 2010, 10, 345-352.	22.7	742
3	Characterization of Therapeutic Antibodies and Related Products. <i>Analytical Chemistry</i> , 2013, 85, 715-736.	6.5	509
4	Trends in Glycosylation, Glycoanalysis and Glycoengineering of Therapeutic Antibodies and Fc-Fusion Proteins. <i>Current Pharmaceutical Biotechnology</i> , 2008, 9, 482-501.	1.6	228
5	Theory and practice of size exclusion chromatography for the analysis of protein aggregates. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2014, 101, 161-173.	2.8	226
6	Biosimilar, Biobetter, and Next Generation Antibody Characterization by Mass Spectrometry. <i>Analytical Chemistry</i> , 2012, 84, 4637-4646.	6.5	225
7	Identification and characterization of asparagine deamidation in the light chain CDR1 of a humanized IgG1 antibody. <i>Analytical Biochemistry</i> , 2009, 392, 145-154.	2.4	222
8	A recombinant humanized anti-insulin-like growth factor receptor type I antibody (h7C10) enhances the antitumor activity of vinorelbine and anti-epidermal growth factor receptor therapy against human cancer xenografts. <i>International Journal of Cancer</i> , 2005, 113, 316-328.	5.1	207
9	Antibody-Drug Conjugates: The Last Decade. <i>Pharmaceuticals</i> , 2020, 13, 245.	3.8	207
10	Marketing approval of mogamulizumab. <i>MAbs</i> , 2012, 4, 419-425.	5.2	193
11	Ion-exchange chromatography for the characterization of biopharmaceuticals. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 113, 43-55.	2.8	186
12	Structure, heterogeneity and developability assessment of therapeutic antibodies. <i>MAbs</i> , 2019, 11, 239-264.	5.2	186
13	Forced degradation of recombinant monoclonal antibodies: A practical guide. <i>MAbs</i> , 2017, 9, 1217-1230.	5.2	163
14	Correct primary structure assessment and extensive glyco-profiling of cetuximab by a combination of intact, middle-up, middle-down and bottom-up ESI and MALDI mass spectrometry techniques. <i>MAbs</i> , 2013, 5, 699-710.	5.2	159
15	Therapeutic Fc-fusion proteins and peptides as successful alternatives to antibodies. <i>MAbs</i> , 2011, 3, 415-416.	5.2	156
16	Innovative Native MS Methodologies for Antibody Drug Conjugate Characterization: High Resolution Native MS and IM-MS for Average DAR and DAR Distribution Assessment. <i>Analytical Chemistry</i> , 2014, 86, 10674-10683.	6.5	147
17	Middle-Down Analysis of Monoclonal Antibodies with Electron Transfer Dissociation Orbitrap Fourier Transform Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 3005-3012.	6.5	147
18	Determination of isoelectric points and relative charge variants of 23 therapeutic monoclonal antibodies. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017, 1065-1066, 119-128.	2.3	135

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19	Method development for the separation of monoclonal antibody charge variants in cation exchange chromatography, Part I: Salt gradient approach. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 102, 33-44.	2.8	133
20	Antibody-drug conjugates. <i>MAbs</i> , 2014, 6, 15-17.	5.2	131
21	Characterization by liquid chromatography combined with mass spectrometry of monoclonal anti-IGF-1 receptor antibodies produced in CHO and NSO cells. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2005, 819, 203-218.	2.3	120
22	Approval of the first biosimilar antibodies in Europe. <i>MAbs</i> , 2013, 5, 621-623.	5.2	114
23	Native mass spectrometry and ion mobility characterization of trastuzumab emtansine, a lysine-linked antibody drug conjugate. <i>Protein Science</i> , 2015, 24, 1210-1223.	7.6	113
24	Method development for the separation of monoclonal antibody charge variants in cation exchange chromatography, Part II: pH gradient approach. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 102, 282-289.	2.8	113
25	Safety and Immunogenicity of a Novel Recombinant Subunit Respiratory Syncytial Virus Vaccine (BBG2Na) in Healthy Young Adults. <i>Journal of Infectious Diseases</i> , 2001, 184, 1456-1460.	4.0	111
26	Cutting-edge mass spectrometry characterization of originator, biosimilar and biobetter antibodies. <i>Journal of Mass Spectrometry</i> , 2015, 50, 285-297.	1.6	109
27	Analytical characterization of biosimilar antibodies and Fc-fusion proteins. <i>TrAC - Trends in Analytical Chemistry</i> , 2013, 48, 81-95.	11.4	104
28	Antibody-drug conjugate model fast characterization by LC-MS following IdeS proteolytic digestion. <i>MAbs</i> , 2014, 6, 173-184.	5.2	104
29	Hydrophobic interaction chromatography for the characterization of monoclonal antibodies and related products. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 130, 3-18.	2.8	104
30	A new reagent for the removal of the 4-methoxybenzyl ether: application to the synthesis of unusual macrocyclic and bolaform phosphatidylcholines.. <i>Journal of Organic Chemistry</i> , 1992, 57, 1777-1783.	3.2	97
31	Cutting-edge mass spectrometry methods for the multi-level structural characterization of antibody-drug conjugates. <i>Expert Review of Proteomics</i> , 2016, 13, 157-183.	3.0	91
32	Direct Identification of Rituximab Main Isoforms and Subunit Analysis by Online Selective Comprehensive Two-Dimensional Liquid Chromatography-Mass Spectrometry. <i>Analytical Chemistry</i> , 2015, 87, 8307-8315.	6.5	90
33	NIST Interlaboratory Study on Glycosylation Analysis of Monoclonal Antibodies: Comparison of Results from Diverse Analytical Methods. <i>Molecular and Cellular Proteomics</i> , 2020, 19, 11-30.	3.8	87
34	Rapid and improved characterization of therapeutic antibodies and antibody related products using IdeS digestion and subunit analysis. <i>Analyst</i> , The, 2016, 141, 3114-3125.	3.5	85
35	Biosimilar, biobetter and next generation therapeutic antibodies. <i>MAbs</i> , 2011, 3, 107-110.	5.2	84
36	The way forward, enhanced characterization of therapeutic antibody glycosylation: Comparison of three level mass spectrometry-based strategies. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2008, 872, 23-37.	2.3	81

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37	Rapid and multi-level characterization of trastuzumab using sheathless capillary electrophoresis-tandem mass spectrometry. <i>MAbs</i> , 2013, 5, 479-490.	5.2	80
38	Full Antibody Primary Structure and Microvariant Characterization in a Single Injection Using Transient Isotachopheresis and Sheathless Capillary Electrophoresis-Tandem Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 9074-9081.	6.5	80
39	Potential of hydrophilic interaction chromatography for the analytical characterization of protein biopharmaceuticals. <i>Journal of Chromatography A</i> , 2016, 1448, 81-92.	3.7	80
40	Extending Mass Spectrometry Contribution to Therapeutic Monoclonal Antibody Lead Optimization: Characterization of Immune Complexes Using Noncovalent ESI-MS. <i>Analytical Chemistry</i> , 2009, 81, 6364-6373.	6.5	79
41	Development of Comprehensive Online Two-Dimensional Liquid Chromatography/Mass Spectrometry Using Hydrophilic Interaction and Reversed-Phase Separations for Rapid and Deep Profiling of Therapeutic Antibodies. <i>Analytical Chemistry</i> , 2018, 90, 5923-5929.	6.5	78
42	Therapeutic Fc-fusion proteins: Current analytical strategies. <i>Journal of Separation Science</i> , 2021, 44, 35-62.	2.5	78
43	The next generation of antibody-drug conjugates comes of age. <i>Discovery Medicine</i> , 2010, 10, 329-39.	0.5	78
44	Hydrophilic Interaction Chromatography Hyphenated with Mass Spectrometry: A Powerful Analytical Tool for the Comparison of Originator and Biosimilar Therapeutic Monoclonal Antibodies at the Middle-up Level of Analysis. <i>Analytical Chemistry</i> , 2017, 89, 2086-2092.	6.5	77
45	Comparison of originator and biosimilar therapeutic monoclonal antibodies using comprehensive two-dimensional liquid chromatography coupled with time-of-flight mass spectrometry. <i>MAbs</i> , 2016, 8, 1224-1234.	5.2	76
46	Cutting-edge capillary electrophoresis characterization of monoclonal antibodies and related products. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2016, 1032, 61-78.	2.3	76
47	An Online Four-Dimensional HIC-SEC-IM-MS Methodology for Proof-of-Concept Characterization of Antibody Drug Conjugates. <i>Analytical Chemistry</i> , 2018, 90, 1578-1586.	6.5	75
48	Characterization of 30 therapeutic antibodies and related products by size exclusion chromatography: Feasibility assessment for future mass spectrometry hyphenation. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017, 1065-1066, 35-43.	2.3	73
49	Glycoform Separation and Characterization of Cetuximab Variants by Middle-up Off-Line Capillary Zone Electrophoresis-UV/Electrospray Ionization-MS. <i>Analytical Chemistry</i> , 2015, 87, 6240-6250.	6.5	72
50	Macro- and Micro-Heterogeneity of Natural and Recombinant IgG Antibodies. <i>Antibodies</i> , 2019, 8, 18.	2.5	71
51	Structural characterization of antibody drug conjugate by a combination of intact, middle-up and bottom-up techniques using sheathless capillary electrophoresis-Tandem mass spectrometry as nanoESI infusion platform and separation method. <i>Analytica Chimica Acta</i> , 2016, 918, 50-59.	5.4	70
52	Orthogonal liquid chromatography-mass spectrometry methods for the comprehensive characterization of therapeutic glycoproteins, from released glycans to intact protein level. <i>Journal of Chromatography A</i> , 2017, 1498, 128-146.	3.7	70
53	Characterization of therapeutic antibodies and related products by two-dimensional liquid chromatography coupled with UV absorbance and mass spectrometric detection. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2016, 1032, 51-60.	2.3	69
54	Hyphenation of size exclusion chromatography to native ion mobility mass spectrometry for the analytical characterization of therapeutic antibodies and related products. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2018, 1086, 176-183.	2.3	69

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55	Interlaboratory Study for Characterizing Monoclonal Antibodies by Top-Down and Middle-Down Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 1783-1802.	2.8	67
56	Evaluation of size exclusion chromatography columns packed with sub-3 $\mu$ m particles for the analysis of biopharmaceutical proteins. <i>Journal of Chromatography A</i> , 2017, 1498, 80-89.	3.7	64
57	Analytical comparability study of recombinant monoclonal antibody therapeutics. <i>MAbs</i> , 2018, 10, 513-538.	5.2	63
58	Time Resolved Native Ion-Mobility Mass Spectrometry to Monitor Dynamics of IgG4 Fab Arm Exchange and $\alpha$ -Bispecific Monoclonal Antibody Formation. <i>Analytical Chemistry</i> , 2013, 85, 9785-9792.	6.5	62
59	Glycosylation of biosimilars: Recent advances in analytical characterization and clinical implications. <i>Analytica Chimica Acta</i> , 2019, 1089, 1-18.	5.4	62
60	Absence of Lung Immunopathology Following Respiratory Syncytial Virus (RSV) Challenge in Mice Immunized with a Recombinant RSV G Protein Fragment. <i>Virology</i> , 1999, 258, 128-140.	2.4	61
61	GlycoFi's technology to control the glycosylation of recombinant therapeutic proteins. <i>Expert Opinion on Drug Discovery</i> , 2010, 5, 95-111.	5.0	61
62	Practical method development for the separation of monoclonal antibodies and antibody-drug-conjugate species in hydrophobic interaction chromatography, part 1: optimization of the mobile phase. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 118, 393-403.	2.8	61
63	Priming by Microbial Antigens from the Intestinal Flora Determines the Ability of CD4+ T Cells to Rapidly Secrete IL-4 in BALB/c Mice Infected with <i>Leishmania major</i> . <i>Journal of Immunology</i> , 2000, 165, 5637-5645.	0.8	60
64	Identification of Multiple Protective Epitopes (Protectopes) in the Central Conserved Domain of a Prototype Human Respiratory Syncytial Virus G Protein. <i>Journal of Virology</i> , 1999, 73, 5637-5645.	3.4	60
65	Protocols for the analytical characterization of therapeutic monoclonal antibodies. II – Enzymatic and chemical sample preparation. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017, 1060, 325-335.	2.3	59
66	Monoclonal antibodies biosimilarity assessment using transient isotachopheresis capillary zone electrophoresis-tandem mass spectrometry. <i>MAbs</i> , 2014, 6, 1464-1473.	5.2	58
67	Characterization of antibody drug conjugate positional isomers at cysteine residues by peptide mapping LC-MS analysis. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2015, 981-982, 9-13.	2.3	56
68	Full validation of therapeutic antibody sequences by middle-up mass measurements and middle-down protein sequencing. <i>MAbs</i> , 2016, 8, 318-330.	5.2	55
69	Insights from native mass spectrometry approaches for top- and middle- level characterization of site-specific antibody-drug conjugates. <i>MAbs</i> , 2017, 9, 801-811.	5.2	55
70	Current possibilities of liquid chromatography for the characterization of antibody-drug conjugates. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2018, 147, 493-505.	2.8	54
71	Analysis of antibody-drug conjugates by comprehensive on-line two-dimensional hydrophobic interaction chromatography x reversed phase liquid chromatography hyphenated to high resolution mass spectrometry. I – Optimization of separation conditions. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2016, 1032, 103-111.	2.3	51
72	Native Mass Spectrometry, Ion Mobility, and Collision-Induced Unfolding for Conformational Characterization of IgG4 Monoclonal Antibodies. <i>Analytical Chemistry</i> , 2018, 90, 8865-8872.	6.5	51

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73	Advantages of Extended Bottom-Up Proteomics Using Sap9 for Analysis of Monoclonal Antibodies. <i>Analytical Chemistry</i> , 2014, 86, 9945-9953.	6.5	50
74	Monoclonal antibody N-glycosylation profiling using capillary electrophoresis – Mass spectrometry: Assessment and method validation. <i>Talanta</i> , 2018, 178, 530-537.	5.5	50
75	Insights from capillary electrophoresis approaches for characterization of monoclonal antibodies and antibody drug conjugates in the period 2016–2018. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2019, 1122-1123, 1-17.	2.3	50
76	A Novel Online Four-Dimensional SEC–SEC-IM–MS Methodology for Characterization of Monoclonal Antibody Size Variants. <i>Analytical Chemistry</i> , 2018, 90, 13929-13937.	6.5	49
77	Insights from native mass spectrometry and ion mobility-mass spectrometry for antibody and antibody-based product characterization. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2016, 1032, 79-90.	2.3	48
78	Unraveling the mysteries of modern size exclusion chromatography - the way to achieve confident characterization of therapeutic proteins. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2018, 1092, 368-378.	2.3	48
79	Structural Analysis of Monoclonal Antibodies by Ultrahigh Resolution MALDI In-Source Decay FT-ICR Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 2079-2085.	6.5	48
80	Cetuximab Fab and Fc N-Glycan Fast Characterization Using IdeS Digestion and Liquid Chromatography Coupled to Electrospray Ionization Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2013, 988, 93-113.	0.9	47
81	Top-down analysis of immunoglobulin G isotypes 1 and 2 with electron transfer dissociation on a high-field Orbitrap mass spectrometer. <i>Journal of Proteomics</i> , 2017, 159, 67-76.	2.4	47
82	Cutting-edge multi-level analytical and structural characterization of antibody-drug conjugates: present and future. <i>Expert Review of Proteomics</i> , 2019, 16, 337-362.	3.0	47
83	Practical method development for the separation of monoclonal antibodies and antibody-drug-conjugate species in hydrophobic interaction chromatography, part 2: Optimization of the phase system. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 121, 161-173.	2.8	46
84	Characterization of cetuximab Fc/2 dimers by off-line CZE-MS. <i>Analytica Chimica Acta</i> , 2016, 908, 168-176.	5.4	44
85	Targeting of Nasal Mucosa-Associated Antigen-Presenting Cells In Vivo with an Outer Membrane Protein A Derived from <i>Klebsiella pneumoniae</i> . <i>Infection and Immunity</i> , 2001, 69, 6434-6444.	2.2	42
86	DDA adjuvant induces a mixed Th1/Th2 immune response when associated with BGG2Na, a respiratory syncytial virus potential vaccine. <i>Vaccine</i> , 2002, 20, 2743-2751.	3.8	42
87	Adsorption and recovery issues of recombinant monoclonal antibodies in reversed-phase liquid chromatography. <i>Journal of Separation Science</i> , 2015, 38, 1-8.	2.5	42
88	Protocols for the analytical characterization of therapeutic monoclonal antibodies. I – Non-denaturing chromatographic techniques. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017, 1058, 73-84.	2.3	42
89	The recombinant <i>Klebsiella pneumoniae</i> outer membrane protein OmpA has carrier properties for conjugated antigenic peptides. <i>FEBS Journal</i> , 1998, 255, 446-454.	0.2	41
90	Analysis of monoclonal antibody by a novel CE–UV/MALDI–MS interface. <i>Electrophoresis</i> , 2014, 35, 2986-2995.	2.4	40

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91	Characterization of an antibody-drug conjugate by hydrophilic interaction chromatography coupled to mass spectrometry. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2018, 1080, 37-41.	2.3	39
92	Combination of intact, middle-up and bottom-up levels to characterize 7 therapeutic monoclonal antibodies by capillary electrophoresis â€“ Mass spectrometry. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 182, 113107.	2.8	39
93	CD4+ T-Cell-Mediated Antiviral Protection of the Upper Respiratory Tract in BALB/c Mice following Parenteral Immunization with a Recombinant Respiratory Syncytial Virus G Protein Fragment. <i>Journal of Virology</i> , 2000, 74, 3455-3463.	3.4	38
94	A sensitive multidimensional method for the detection, characterization, and quantification of trace free drug species in antibody-drug conjugate samples using mass spectral detection. <i>MABs</i> , 2016, 8, 306-317.	5.2	38
95	Multiplexed Middle-Down Mass Spectrometry as a Method for Revealing Light and Heavy Chain Connectivity in a Monoclonal Antibody. <i>Analytical Chemistry</i> , 2018, 90, 12527-12535.	6.5	38
96	Coupling non-denaturing chromatography to mass spectrometry for the characterization of monoclonal antibodies and related products. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 185, 113207.	2.8	38
97	Expression of recombinant proteins in a lipid A mutant of <i>Escherichia coli</i> BL21 with a strongly reduced capacity to induce dendritic cell activation and maturation. <i>Journal of Immunological Methods</i> , 2003, 272, 199-210.	1.4	37
98	Advanced assessment of the physicochemical characteristics of Remicade® and Inflectra® by sensitive LC/MS techniques. <i>MABs</i> , 2016, 8, 1021-1034.	5.2	36
99	Utility of a high coverage phenyl-bonding and wide-pore superficially porous particle for the analysis of monoclonal antibodies and related products. <i>Journal of Chromatography A</i> , 2018, 1549, 63-76.	3.7	36
100	Systematic evaluation of mobile phase additives for the LCâ€“MS characterization of therapeutic proteins. <i>Talanta</i> , 2015, 136, 60-67.	5.5	34
101	Characterization of cation exchanger stationary phases applied for the separations of therapeutic monoclonal antibodies. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2015, 111, 169-176.	2.8	34
102	Analysis of recombinant monoclonal antibodies in hydrophilic interaction chromatography: A generic method development approach. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017, 145, 24-32.	2.8	32
103	Influence of the length of the spacer on the partitioning properties of amphiphilic fluorescent membrane probes. <i>Chemistry and Physics of Lipids</i> , 1993, 66, 135-142.	3.2	31
104	Independent highly sensitive characterization of asparagine deamidation and aspartic acid isomerization by sheathless CZEâ€“ESIâ€“MS/MS. <i>Journal of Mass Spectrometry</i> , 2016, 51, 150-158.	1.6	31
105	Development of a fast workflow to screen the charge variants of therapeutic antibodies. <i>Journal of Chromatography A</i> , 2017, 1498, 147-154.	3.7	31
106	Top-down and middle-down approach by fraction collection enrichment using off-line capillary electrophoresis â€“ mass spectrometry coupling: Application to monoclonal antibody Fc/2 charge variants. <i>Journal of Chromatography A</i> , 2017, 1498, 120-127.	3.7	31
107	UV and Xâ€“ray structural studies of a 101â€“residue long Tat protein from a HIVâ€“1 primary isolate and of its mutated, detoxified, vaccine candidate. <i>Proteins: Structure, Function and Bioinformatics</i> , 2010, 78, 1441-1456.	2.6	30
108	Analysis of antibody-drug conjugates by comprehensive on-line two-dimensional hydrophobic interaction chromatography x reversed phase liquid chromatography hyphenated to high resolution mass spectrometry. II- Identification of sub-units for the characterization of even and odd load drug species. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2016, 1032, 91-102.	2.3	30

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109	Proof of Concept To Achieve Infinite Selectivity for the Chromatographic Separation of Therapeutic Proteins. <i>Analytical Chemistry</i> , 2019, 91, 12954-12961.	6.5	30
110	Determination of size variants by CE-SDS for approved therapeutic antibodies: Key implications of subclasses and light chain specificities. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 184, 113166.	2.8	30
111	Gamma Interferon-Dependent Protection of the Mouse Upper Respiratory Tract following Parenteral Immunization with a Respiratory Syncytial Virus G Protein Fragment. <i>Journal of Virology</i> , 2002, 76, 10203-10210.	3.4	29
112	Orthogonal Middle-up Approaches for Characterization of the Glycan Heterogeneity of Etanercept by Hydrophilic Interaction Chromatography Coupled to High-Resolution Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 873-880.	6.5	29
113	Characterization of the N-Terminal Heterogeneities of Monoclonal Antibodies Using In-Gel Charge Derivatization of $\text{Lys}$ -Amines and LC-MS/MS. <i>Analytical Chemistry</i> , 2015, 87, 3784-3790.	6.5	28
114	Impact of organic modifier and temperature on protein denaturation in hydrophobic interaction chromatography. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2016, 131, 124-132.	2.8	28
115	A New Anti-CXCR4 Antibody That Blocks the CXCR4/SDF-1 Axis and Mobilizes Effector Cells. <i>Molecular Cancer Therapeutics</i> , 2016, 15, 1890-1899.	4.1	28
116	Protocols for the analytical characterization of therapeutic monoclonal antibodies. III – Denaturing chromatographic techniques hyphenated to mass spectrometry. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2018, 1096, 95-106.	2.3	28
117	Tuning selectivity in cation-exchange chromatography applied for monoclonal antibody separations, part 1: Alternative mobile phases and fine tuning of the separation. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2019, 168, 138-147.	2.8	28
118	Towards a simple on-line coupling of ion exchange chromatography and native mass spectrometry for the detailed characterization of monoclonal antibodies. <i>Journal of Chromatography A</i> , 2021, 1655, 462499.	3.7	28
119	Development of a quantitative assay for residual host cell proteins in a recombinant subunit vaccine against human respiratory syncytial virus. <i>Journal of Immunological Methods</i> , 2001, 251, 151-159.	1.4	27
120	Use of Ultrashort Columns for Therapeutic Protein Separations. Part 1: Theoretical Considerations and Proof of Concept. <i>Analytical Chemistry</i> , 2021, 93, 1277-1284.	6.5	26
121	Comprehensive study on the effects of sodium and potassium additives in size exclusion chromatographic separations of protein biopharmaceuticals. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017, 144, 242-251.	2.8	25
122	Characterizing various monoclonal antibodies with milder reversed phase chromatography conditions. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2018, 1096, 1-10.	2.3	25
123	Spanning or Looping? The Order and Conformation of Bipolar Phospholipids in Lipid Membranes Using $^2\text{H}$ -NMR Spectroscopy. <i>Chemistry - A European Journal</i> , 2000, 6, 4379-4384.	3.3	24
124	A novel bipolar mode of attachment to aluminium-containing adjuvants by BBG2Na, a recombinant subunit hRSV vaccine. <i>Vaccine</i> , 2001, 19, 4143-4152.	3.8	24
125	High-resolution separation of monoclonal antibodies mixtures and their charge variants by an alternative and generic CZE method. <i>Electrophoresis</i> , 2018, 39, 2083-2090.	2.4	24
126	Influence of administration dose and route on the immunogenicity and protective efficacy of BBG2Na, a recombinant respiratory syncytial virus subunit vaccine candidate. <i>Vaccine</i> , 2000, 18, 2735-2742.	3.8	23



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127	Peptides as tools and drugs for immunotherapies. <i>Journal of Peptide Science</i> , 2007, 13, 588-602.	1.4	23
128	A Case Study to Identify the Drug Conjugation Site of a Site-Specific Antibody-Drug-Conjugate Using Middle-Down Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2419-2429.	2.8	23
129	<i>Streptococcus pneumoniae</i> polysaccharides conjugated to the outer membrane protein A from <i>Klebsiella pneumoniae</i> elicit protective antibodies. <i>Vaccine</i> , 2002, 20, 2174-2180.	3.8	20
130	Intact monoclonal antibodies separation and analysis by sheathless capillary electrophoresis-mass spectrometry. <i>European Journal of Mass Spectrometry</i> , 2019, 25, 324-332.	1.0	20
131	Efficacy of the Antibody-Drug Conjugate W0101 in Preclinical Models of IGF-1 Receptor Overexpressing Solid Tumors. <i>Molecular Cancer Therapeutics</i> , 2020, 19, 168-177.	4.1	19
132	Monitoring therapeutic monoclonal antibodies in brain tumor. <i>MAbs</i> , 2014, 6, 1385-1393.	5.2	18
133	Absolute and multiplex quantification of antibodies in serum using PSAQ <sub>2</sub> standards and LC-MS/MS. <i>Bioanalysis</i> , 2015, 7, 1237-1251.	1.5	18
134	A novel antagonist anti-Met antibody with antitumor activities targeting both ligand-dependent and ligand-independent c-Met receptors. <i>International Journal of Cancer</i> , 2016, 139, 1851-1863.	5.1	18
135	Toward Automation of Collision-Induced Unfolding Experiments through Online Size Exclusion Chromatography Coupled to Native Mass Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 12900-12908.	6.5	18
136	Identification and characterisation of multiple linear B cell protectopes in the respiratory syncytial virus G protein. <i>Vaccine</i> , 2001, 19, 2345-2351.	3.8	17
137	Tuning selectivity in cation-exchange chromatography applied for monoclonal antibody separations, part 2: Evaluation of recent stationary phases. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2019, 172, 320-328.	2.8	17
138	Glycan-Mediated Technology for Obtaining Homogeneous Site-Specific Conjugated Antibody-Drug Conjugates: Synthesis and Analytical Characterization by Using Complementary Middle-up LC/HRMS Analysis. <i>Analytical Chemistry</i> , 2020, 92, 8170-8177.	6.5	17
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