## Neil L Kelleher

## List of Publications by Year in descending order

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392 papers

33,645 citations

90 h-index 161 g-index

452 all docs

452 docs citations

times ranked

452

25401 citing authors

#	Article	IF	CITATIONS
1	Electron Capture Dissociation of Multiply Charged Protein Cations. A Nonergodic Process. Journal of the American Chemical Society, 1998, 120, 3265-3266.	6.6	1,766
2	Proteoform: a single term describing protein complexity. Nature Methods, 2013, 10, 186-187.	9.0	1,180
3	Electron Capture Dissociation for Structural Characterization of Multiply Charged Protein Cations. Analytical Chemistry, 2000, 72, 563-573.	3.2	903
4	EZH2 Is Required for Germinal Center Formation and Somatic EZH2 Mutations Promote Lymphoid Transformation. Cancer Cell, 2013, 23, 677-692.	7.7	706
5	Mapping intact protein isoforms in discovery mode using top-down proteomics. Nature, 2011, 480, 254-258.	13.7	587
6	How many human proteoforms are there?. Nature Chemical Biology, 2018, 14, 206-214.	3.9	580
7	A computational framework to explore large-scale biosynthetic diversity. Nature Chemical Biology, 2020, 16, 60-68.	3.9	569
8	Top Down versus Bottom Up Protein Characterization by Tandem High-Resolution Mass Spectrometry. Journal of the American Chemical Society, 1999, 121, 806-812.	6.6	535
9	Peer Reviewed: Top-Down Proteomics. Analytical Chemistry, 2004, 76, 196 A-203 A.	3.2	472
10	Decoding protein modifications using top-down mass spectrometry. Nature Methods, 2007, 4, 817-821.	9.0	449
11	Progress in Top-Down Proteomics and the Analysis of Proteoforms. Annual Review of Analytical Chemistry, 2016, 9, 499-519.	2.8	427
12	A roadmap for natural product discovery based on large-scale genomics and metabolomics. Nature Chemical Biology, 2014, 10, 963-968.	3.9	416
13	Top Down proteomics: Facts and perspectives. Biochemical and Biophysical Research Communications, 2014, 445, 683-693.	1.0	393
14	Precision proteomics: The case for high resolution and high mass accuracy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18132-18138.	3.3	388
15	Localization of Labile Posttranslational Modifications by Electron Capture Dissociation: The Case of γ-Carboxyglutamic Acid. Analytical Chemistry, 1999, 71, 4250-4253.	3.2	362
16	Genetically encoded short peptide tag for versatile protein labeling by Sfp phosphopantetheinyl transferase. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15815-15820.	3.3	362
17	A monovalent streptavidin with a single femtomolar biotin binding site. Nature Methods, 2006, 3, 267-273.	9.0	334
18	Therapeutic targeting of polycomb and BET bromodomain proteins in diffuse intrinsic pontine gliomas. Nature Medicine, 2017, 23, 493-500.	15.2	332

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19	The MMSET histone methyl transferase switches global histone methylation and alters gene expression in $t(4;14)$ multiple myeloma cells. Blood, 2011, 117, 211-220.	0.6	300
20	Complete Protein Characterization Using Top-Down Mass Spectrometry and Ultraviolet Photodissociation. Journal of the American Chemical Society, 2013, 135, 12646-12651.	6.6	297
21	Loss of BAP1 function leads to EZH2-dependent transformation. Nature Medicine, 2015, 21, 1344-1349.	15.2	297
22	Certain and Progressive Methylation of Histone H4 at Lysine 20 during the Cell Cycle. Molecular and Cellular Biology, 2008, 28, 468-486.	1.1	264
23	Gaseous Conformational Structures of Cytochromec. Journal of the American Chemical Society, 1998, 120, 4732-4740.	6.6	255
24	Best practices and benchmarks for intact protein analysis for top-down mass spectrometry. Nature Methods, 2019, 16, 587-594.	9.0	241
25	Evolution of translation machinery in recoded bacteria enables multi-site incorporation of nonstandard amino acids. Nature Biotechnology, 2015, 33, 1272-1279.	9.4	234
26	Quantitative Analysis of Modified Proteins and Their Positional Isomers by Tandem Mass Spectrometry:Â Human Histone H4. Analytical Chemistry, 2006, 78, 4271-4280.	3.2	223
27	ProSight PTM 2.0: improved protein identification and characterization for top down mass spectrometry. Nucleic Acids Research, 2007, 35, W701-W706.	6.5	222
28	Lacticin 481: In Vitro Reconstitution of Lantibiotic Synthetase Activity. Science, 2004, 303, 679-681.	6.0	221
29	Pervasive combinatorial modification of histone H3 in human cells. Nature Methods, 2007, 4, 487-489.	9.0	217
30	Discovery and in vitro biosynthesis of haloduracin, a two-component lantibiotic. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17243-17248.	3.3	215
31	Attomole-Sensitivity Electrospray Source for Large-Molecule Mass Spectrometry. Analytical Chemistry, 1995, 67, 3802-3805.	3.2	214
32	Informatics and multiplexing of intact protein identification in bacteria and the archaea. Nature Biotechnology, 2001, 19, 952-957.	9.4	205
33	Proteoforms as the next proteomics currency. Science, 2018, 359, 1106-1107.	6.0	205
34	Deconstruction of Iterative Multidomain Polyketide Synthase Function. Science, 2008, 320, 243-246.	6.0	202
35	The emerging landscape of single-molecule protein sequencing technologies. Nature Methods, 2021, 18, 604-617.	9.0	198
36	Negative regulation of NF-κB action by Set9-mediated lysine methylation of the RelA subunit. EMBO Journal, 2009, 28, 1055-1066.	3.5	197

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37	ProSight Lite: Graphical software to analyze top-down mass spectrometry data. Proteomics, 2015, 15, 1235-1238.	1.3	196
38	Mass Spectrometric Characterization of Human Histone H3:Â A Bird's Eye View. Journal of Proteome Research, 2006, 5, 240-247.	1.8	179
39	Histone Methyltransferase MMSET/NSD2 Alters EZH2 Binding and Reprograms the Myeloma Epigenome through Global and Focal Changes in H3K36 and H3K27 Methylation. PLoS Genetics, 2014, 10, e1004566.	1.5	178
40	On the Scalability and Requirements of Whole Protein Mass Spectrometry. Analytical Chemistry, 2011, 83, 6868-6874.	3.2	177
41	Processing Complex Mixtures of Intact Proteins for Direct Analysis by Mass Spectrometry. Analytical Chemistry, 2002, 74, 2923-2929.	3.2	176
42	ProSight PTM: an integrated environment for protein identification and characterization by top-down mass spectrometry. Nucleic Acids Research, 2004, 32, W340-W345.	6.5	176
43	Rapid Sequencing of Oligonucleotides by High-Resolution Mass Spectrometry. Journal of the American Chemical Society, 1994, 116, 4893-4897.	6.6	169
44	Histone H3K4 monomethylation catalyzed by Trr and mammalian COMPASS-like proteins at enhancers is dispensable for development and viability. Nature Genetics, 2017, 49, 1647-1653.	9.4	168
45	Dichlorination of a pyrrolyl-S-carrier protein by FADH2-dependent halogenase PltA during pyoluteorin biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13843-13848.	3.3	166
46	Cell-free protein synthesis from genomically recoded bacteria enables multisite incorporation of noncanonical amino acids. Nature Communications, 2018, 9, 1203.	5.8	165
47	Combinatorial Modification of Human Histone H4 Quantitated by Two-dimensional Liquid Chromatography Coupled with Top Down Mass Spectrometry. Journal of Biological Chemistry, 2008, 283, 14927-14937.	1.6	164
48	Convergence of isoprene and polyketide biosynthetic machinery: Isoprenyl-S-carrier proteins in the pksX pathway of Bacillus subtilis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8977-8982.	3.3	161
49	Spatial mapping of protein composition and tissue organization: a primer for multiplexed antibody-based imaging. Nature Methods, 2022, 19, 284-295.	9.0	156
50	Histone H1 loss drives lymphoma by disrupting 3D chromatin architecture. Nature, 2021, 589, 299-305.	13.7	155
51	Facile Detection of Acyl and Peptidyl Intermediates on Thiotemplate Carrier Domains via Phosphopantetheinyl Elimination Reactions during Tandem Mass Spectrometryâ€. Biochemistry, 2006, 45, 12756-12766.	1.2	154
52	A scalable platform to identify fungal secondary metabolites and their gene clusters. Nature Chemical Biology, 2017, 13, 895-901.	3.9	154
53	Assembly line enzymology by multimodular nonribosomal peptide synthetases: the thioesterase domain of E. coli EntF catalyzes both elongation and cyclolactonization. Chemistry and Biology, 1999, 6, 385-400.	6.2	153
54	Shotgun Annotation of Histone Modifications:Â A New Approach for Streamlined Characterization of Proteins by Top Down Mass Spectrometry. Journal of the American Chemical Society, 2004, 126, 3386-3387.	6.6	150

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55	Precise Characterization of Human Histones in the H2A Gene Family by Top Down Mass Spectrometry. Journal of Proteome Research, 2006, 5, 248-253.	1.8	150
56	From Protein Complexes to Subunit Backbone Fragments: A Multi-stage Approach to Native Mass Spectrometry. Analytical Chemistry, 2013, 85, 11163-11173.	3.2	148
57	Identification and Quantification of Proteoforms by Mass Spectrometry. Proteomics, 2019, 19, e1800361.	1.3	147
58	Thiamin Biosynthesis in Escherichia coli. Journal of Biological Chemistry, 1998, 273, 16555-16560.	1.6	143
59	Analysis of Intact Monoclonal Antibody IgG1 by Electron Transfer Dissociation Orbitrap FTMS. Molecular and Cellular Proteomics, 2012, 11, 1758-1767.	2.5	137
60	Mutant-IDH1-dependent chromatin state reprogramming, reversibility, and persistence. Nature Genetics, 2018, 50, 62-72.	9.4	137
61	Cell-free Protein Synthesis from a Release Factor 1 Deficient <i>Escherichia coli</i> Activates Efficient and Multiple Site-specific Nonstandard Amino Acid Incorporation. ACS Synthetic Biology, 2014, 3, 398-409.	1.9	133
62	Large-scale Top-down Proteomics of the Human Proteome: Membrane Proteins, Mitochondria, and Senescence. Molecular and Cellular Proteomics, 2013, 12, 3465-3473.	2.5	132
63	Web and Database Software for Identification of Intact Proteins Using "Top Down―Mass Spectrometry. Analytical Chemistry, 2003, 75, 4081-4086.	3.2	130
64	Detection and localization of protein modifications by high resolution tandem mass spectrometry. Mass Spectrometry Reviews, 2005, 24, 126-134.	2.8	129
65	Total kinetic analysis reveals how combinatorial methylation patterns are established on lysines 27 and 36 of histone H3. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13549-13554.	3.3	129
66	Biosynthesis of Pipecolic Acid by RapL, a Lysine Cyclodeaminase Encoded in the Rapamycin Gene Cluster. Journal of the American Chemical Society, 2006, 128, 3838-3847.	6.6	126
67	Unusual transformations in the biosynthesis of the antibiotic phosphinothricin tripeptide. Nature Chemical Biology, 2007, 3, 480-485.	3.9	126
68	A proteomics approach to discovering natural products and their biosynthetic pathways. Nature Biotechnology, 2009, 27, 951-956.	9.4	125
69	Diversity of Amyloid-beta Proteoforms in the Alzheimer's Disease Brain. Scientific Reports, 2017, 7, 9520.	1.6	125
70	Unit resolution mass spectra of $112\mathrm{kDa}$ molecules with 3 Da accuracy. Journal of the American Society for Mass Spectrometry, 1997, 8, 380-383.	1.2	123
71	Hydroxymalonyl-acyl carrier protein (ACP) and aminomalonyl-ACP are two additional type I polyketide synthase extender units. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14349-14354.	3.3	123
72	Lacticin 481 Synthetase Phosphorylates its Substrate during Lantibiotic Production. Journal of the American Chemical Society, 2005, 127, 15332-15333.	6.6	120

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73	Directed Evolution of the Nonribosomal Peptide Synthetase AdmK Generates New Andrimid Derivatives InÂVivo. Chemistry and Biology, 2011, 18, 601-607.	6.2	119
74	Cover Picture: Proteomics 7'15. Proteomics, 2015, 15, NA-NA.	1.3	119
75	Heterologous Production of Fosfomycin and Identification of the Minimal Biosynthetic Gene Cluster. Chemistry and Biology, 2006, 13, 1171-1182.	6.2	116
76	Top-Down Proteomics on a Chromatographic Time Scale Using Linear Ion Trap Fourier Transform Hybrid Mass Spectrometers. Analytical Chemistry, 2007, 79, 7984-7991.	3.2	116
77	Preferential Dimethylation of Histone H4 Lysine 20 by Suv4-20. Journal of Biological Chemistry, 2008, 283, 12085-12092.	1.6	115
78	Top-down characterization of endogenous protein complexes with native proteomics. Nature Chemical Biology, 2018, 14, 36-41.	3.9	115
79	Multiplexed mass spectrometry of individual ions improves measurement of proteoforms and their complexes. Nature Methods, 2020, 17, 391-394.	9.0	110
80	Facile synthesis of site-specifically acetylated and methylated histone proteins: Reagents for evaluation of the histone code hypothesis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12033-12038.	3.3	109
81	Construction of a hybrid quadrupole/fourier transform ion cyclotron resonance mass spectrometer for versatile MS/MS above 10 kDa. Journal of the American Society for Mass Spectrometry, 2004, 15, 1099-1108.	1.2	107
82	UTX/KDM6A Loss Enhances the Malignant Phenotype of Multiple Myeloma and Sensitizes Cells to EZH2 inhibition. Cell Reports, 2017, 21, 628-640.	2.9	106
83	The Human Proteoform Project: Defining the human proteome. Science Advances, 2021, 7, eabk0734.	4.7	106
84	A protease for 'middle-down' proteomics. Nature Methods, 2012, 9, 822-824.	9.0	103
85	Efficient sequence analysis of the six gene products (7â€74 kDA) from the escherichia coli thiamin biosynthetic operon by tandem highâ€resolution mass spectrometry. Protein Science, 1998, 7, 1796-1801.	3.1	101
86	Gene-Specific Characterization of Human Histone H2B by Electron Capture Dissociation. Journal of Proteome Research, 2006, 5, 233-239.	1.8	101
87	Mass spectrometry-based discovery of circadian peptides. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12527-12532.	3.3	101
88	The biosynthesis of methanobactin. Science, 2018, 359, 1411-1416.	6.0	101
89	Measurement of acetylation turnover at distinct lysines in human histones identifies long-lived acetylation sites. Nature Communications, 2013, 4, 2203.	5.8	100
90	Accurate Sequence Analysis of a Monoclonal Antibody by Top-Down and Middle-Down Orbitrap Mass Spectrometry Applying Multiple Ion Activation Techniques. Analytical Chemistry, 2018, 90, 8421-8429.	3.2	100

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91	Nine Enzymes Are Required for Assembly of the Pacidamycin Group of Peptidyl Nucleoside Antibiotics. Journal of the American Chemical Society, 2011, 133, 5240-5243.	6.6	99
92	Metabologenomics: Correlation of Microbial Gene Clusters with Metabolites Drives Discovery of a Nonribosomal Peptide with an Unusual Amino Acid Monomer. ACS Central Science, 2016, 2, 99-108.	5.3	99
93	Mo-, V-, and Fe-Nitrogenases Use a Universal Eight-Electron Reductive-Elimination Mechanism To Achieve N <sub>2</sub> Reduction. Biochemistry, 2019, 58, 3293-3301.	1.2	99
94	Precise and Parallel Characterization of Coding Polymorphisms, Alternative Splicing, and Modifications in Human Proteins by Mass Spectrometry. Molecular and Cellular Proteomics, 2005, 4, 1002-1008.	2.5	95
95	An interpreted atlas of biosynthetic gene clusters from 1,000 fungal genomes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	94
96	Targeted analysis and discovery of posttranslational modifications in proteins from methanogenic archaea by top-down MS. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2678-2683.	3.3	93
97	Top Down Proteomics. Analytical Chemistry, 2013, 85, 6151-6151.	3.2	93
98	Mutant EZH2 Induces a Pre-malignant Lymphoma Niche by Reprogramming the Immune Response. Cancer Cell, 2020, 37, 655-673.e11.	7.7	93
99	The emerging process of Top Down mass spectrometry for protein analysis: biomarkers, protein-therapeutics, and achieving high throughput. Molecular BioSystems, 2010, 6, 1532.	2.9	92
100	A robust two-dimensional separation for top-down tandem mass spectrometry of the low-mass proteome. Journal of the American Society for Mass Spectrometry, 2009, 20, 2183-2191.	1.2	91
101	Size-Sorting Combined with Improved Nanocapillary Liquid Chromatographyâ^'Mass Spectrometry for Identification of Intact Proteins up to 80 kDa. Analytical Chemistry, 2010, 82, 1234-1244.	3.2	91
102	The first pilot project of the consortium for topâ€down proteomics: <scp>A</scp> status report. Proteomics, 2014, 14, 1130-1140.	1.3	90
103	Large-Scale Metabolomics Reveals a Complex Response of <i>Aspergillus nidulans</i> to Epigenetic Perturbation. ACS Chemical Biology, 2015, 10, 1535-1541.	1.6	90
104	The emergence of top-down proteomics in clinical research. Genome Medicine, 2013, 5, 53.	3.6	89
105	Quantitation and Identification of Thousands of Human Proteoforms below 30 kDa. Journal of Proteome Research, 2016, 15, 976-982.	1.8	89
106	Cloning, Expression, and Biochemical Characterization of Streptomyces rubellomurinus Genes Required for Biosynthesis of Antimalarial Compound FR900098. Chemistry and Biology, 2008, 15, 765-770.	6.2	88
107	Histone H1 phosphorylation is associated with transcription by RNA polymerases I and II. Journal of Cell Biology, 2010, 189, 407-415.	2.3	88
108	Analysis of Intact Protein Isoforms by Mass Spectrometry. Journal of Biological Chemistry, 2011, 286, 25451-25458.	1.6	88

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109	Applying Label-Free Quantitation to Top Down Proteomics. Analytical Chemistry, 2014, 86, 4961-4968.	3.2	88
110	A phosphopantetheinylating polyketide synthase producing a linear polyene to initiate enediyne antitumor antibiotic biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1460-1465.	3.3	87
111	Evaluation of the Compact High-Field Orbitrap for Top-Down Proteomics of Human Cells. Journal of Proteome Research, 2012, 11, 4308-4314.	1.8	84
112	Endogenous Peptide Discovery of the Rat Circadian Clock. Molecular and Cellular Proteomics, 2010, 9, 285-297.	2.5	83
113	Ultraviolet Photodissociation for Characterization of Whole Proteins on a Chromatographic Time Scale. Analytical Chemistry, 2014, 86, 2185-2192.	3.2	81
114	Identification and Characterization of Human Proteoforms by Top-Down LC-21 Tesla FT-ICR Mass Spectrometry. Journal of Proteome Research, 2017, 16, 1087-1096.	1.8	81
115	A community resource for paired genomic and metabolomic data mining. Nature Chemical Biology, 2021, 17, 363-368.	3.9	81
116	tRNA-dependent peptide bond formation by the transferase PacB in biosynthesis of the pacidamycin group of pentapeptidyl nucleoside antibiotics. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12249-12253.	3.3	80
117	Expansion for the <i>Brachylophosaurus canadensis </i> Collagen I Sequence and Additional Evidence of the Preservation of Cretaceous Protein. Journal of Proteome Research, 2017, 16, 920-932.	1.8	80
118	<i>In Vitro</i> Reconstruction of Nonribosomal Peptide Biosynthesis Directly from DNA Using Cell-Free Protein Synthesis. ACS Synthetic Biology, 2017, 6, 39-44.	1.9	80
119	Mechanism of N <sub>2</sub> Reduction Catalyzed by Fe-Nitrogenase Involves Reductive Elimination of H <sub>2</sub> . Biochemistry, 2018, 57, 701-710.	1.2	80
120	Structure Determination and Interception of Biosynthetic Intermediates for the Plantazolicin Class of Highly Discriminating Antibiotics. ACS Chemical Biology, 2011, 6, 1307-1313.	1.6	79
121	Global Assessment of Combinatorial Post-translational Modification of Core Histones in Yeast Using Contemporary Mass Spectrometry. Journal of Biological Chemistry, 2007, 282, 27923-27934.	1.6	77
122	Improving Cellâ€Free Protein Synthesis through Genome Engineering of <i>Escherichia coli</i> Lacking Release Factor 1. ChemBioChem, 2015, 16, 844-853.	1.3	77
123	Top-Down Approaches for Measuring Expression Ratios of Intact Yeast Proteins Using Fourier Transform Mass Spectrometry. Analytical Chemistry, 2006, 78, 686-694.	3.2	76
124	Optimizing capillary electrophoresis for topâ€down proteomics of 30–80 kDa proteins. Proteomics, 2014, 14, 1158-1164.	1.3	76
125	The C-Score: A Bayesian Framework to Sharply Improve Proteoform Scoring in High-Throughput Top Down Proteomics. Journal of Proteome Research, 2014, 13, 3231-3240.	1.8	76
126	Fungal artificial chromosomes for mining of the fungal secondary metabolome. BMC Genomics, 2015, 16, 343.	1.2	76

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127	Kinetic and Mass Spectrometric Analysis of p300 Histone Acetyltransferase Domain Autoacetylation. Journal of Biological Chemistry, 2006, 281, 40292-40301.	1.6	75
128	Precise characterization of KRAS4b proteoforms in human colorectal cells and tumors reveals mutation/modification cross-talk. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4140-4145.	3.3	74
129	Native top-down mass spectrometry provides insights into the copper centers of membrane-bound methane monooxygenase. Nature Communications, 2019, 10, 2675.	5.8	74
130	Molecular-Level Description of Proteins from Saccharomyces cerevisiae Using Quadrupole FT Hybrid Mass Spectrometry for Top Down Proteomics. Analytical Chemistry, 2004, 76, 2852-2858.	3.2	72
131	Top Down Proteomics of Human Membrane Proteins from Enriched Mitochondrial Fractions. Analytical Chemistry, 2013, 85, 1880-1888.	3.2	72
132	Incorporation of Nonmethyl Branches by Isoprenoid-like Logic: Multiple β-Alkylation Events in the Biosynthesis of Myxovirescin A1. Chemistry and Biology, 2007, 14, 835-846.	6.2	71
133	Interpreting Top-Down Mass Spectra Using Spectral Alignment. Analytical Chemistry, 2008, 80, 2499-2505.	3.2	71
134	New and automated MSn approaches for top-down identification of modified proteins. Journal of the American Society for Mass Spectrometry, 2005, 16, 2027-2038.	1.2	70
135	The Loading Module of Mycosubtilin:  An Adenylation Domain with Fatty Acid Selectivity. Journal of the American Chemical Society, 2007, 129, 6366-6367.	6.6	70
136	Redox Metabolites Signal Polymicrobial Biofilm Development via the NapA Oxidative Stress Cascade in Aspergillus. Current Biology, 2015, 25, 29-37.	1.8	70
137	Mapping Proteoforms and Protein Complexes From King Cobra Venom Using Both Denaturing and Native Top-down Proteomics. Molecular and Cellular Proteomics, 2016, 15, 2423-2434.	2.5	69
138	High-Throughput Analysis of Intact Human Proteins Using UVPD and HCD on an Orbitrap Mass Spectrometer. Journal of Proteome Research, 2017, 16, 2072-2079.	1.8	69
139	Integrated Bottom-Up and Top-Down Proteomics of Patient-Derived Breast Tumor Xenografts. Molecular and Cellular Proteomics, 2016, 15, 45-56.	2.5	68
140	Advancing Top-down Analysis of the Human Proteome Using a Benchtop Quadrupole-Orbitrap Mass Spectrometer. Journal of Proteome Research, 2017, 16, 609-618.	1.8	68
141	Interlaboratory Study for Characterizing Monoclonal Antibodies by Top-Down and Middle-Down Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 1783-1802.	1.2	67
142	USP7 Cooperates with NOTCH1 to Drive the Oncogenic Transcriptional Program in T-Cell Leukemia. Clinical Cancer Research, 2019, 25, 222-239.	3.2	66
143	A Mutation in Histone H2B Represents a New Class of Oncogenic Driver. Cancer Discovery, 2019, 9, 1438-1451.	7.7	65
144	Protein Assembly Line Components in Prodigiosin Biosynthesis:Â Characterization of PigA,G,H,I,J. Journal of the American Chemical Society, 2006, 128, 12600-12601.	6.6	64

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145	The Blood Proteoform Atlas: A reference map of proteoforms in human hematopoietic cells. Science, 2022, 375, 411-418.	6.0	64
146	Dissecting non-ribosomal and polyketide biosynthetic machineries using electrospray ionization Fourier-Transform mass spectrometry. Natural Product Reports, 2006, 23, 893.	5.2	63
147	Tissue-Specific Expression and Post-Translational Modification of Histone H3 Variants. Journal of Proteome Research, 2008, 7, 4225-4236.	1.8	63
148	Top Down Mass Spectrometry of <60-kDa Proteins from Methanosarcina acetivorans Using Quadrupole FTMS with Automated Octopole Collisionally Activated Dissociation. Molecular and Cellular Proteomics, 2006, 5, 14-25.	2.5	62
149	Robust Analysis of the Yeast Proteome under 50 kDa by Molecular-Mass-Based Fractionation and Top-Down Mass Spectrometry. Analytical Chemistry, 2012, 84, 209-215.	3.2	62
150	Epiproteomics: quantitative analysis of histone marks and codes by mass spectrometry. Current Opinion in Chemical Biology, 2016, 33, 142-150.	2.8	62
151	A comprehensive pipeline for translational top-down proteomics from a single blood draw. Nature Protocols, 2019, 14, 119-152.	5.5	62
152	NMT1 and NMT2 are lysine myristoyltransferases regulating the ARF6 GTPase cycle. Nature Communications, 2020, 11, 1067.	5.8	62
153	Mechanistic Studies on Thiaminase I. Journal of Biological Chemistry, 1996, 271, 3445-3452.	1.6	61
154	Tandem Mass Spectrometry with Ultrahigh Mass Accuracy Clarifies Peptide Identification by Database Retrieval. Journal of Proteome Research, 2009, 8, 374-379.	1.8	61
155	Elucidating the Substrate Specificity and Condensation Domain Activity of FkbP, the FK520 Pipecolate-Incorporating Enzyme. Biochemistry, 2005, 44, 5993-6002.	1.2	60
156	"Proteotyping―  Population Proteomics of Human Leukocytes Using Top Down Mass Spectrometry. Analytical Chemistry, 2008, 80, 2857-2866.	3.2	60
157	Natural products from thioester reductase containing biosynthetic pathways. Natural Product Reports, 2018, 35, 847-878.	5.2	60
158	Neuropeptidomics of the Supraoptic Rat Nucleus. Journal of Proteome Research, 2008, 7, 4992-5003.	1.8	59
159	Mass Spectrometry and Antibody-Based Characterization of Blood Vessels from <i>Brachylophosaurus canadensis</i> ). Journal of Proteome Research, 2015, 14, 5252-5262.	1.8	59
160	An informatic framework for decoding protein complexes by top-down mass spectrometry. Nature Methods, 2016, 13, 237-240.	9.0	59
161	A Highly Productive, One-Pot Cell-Free Protein Synthesis Platform Based on Genomically Recoded Escherichia coli. Cell Chemical Biology, 2019, 26, 1743-1754.e9.	2.5	59
162	Precision Targeting with EZH2 and HDAC Inhibitors in Epigenetically Dysregulated Lymphomas. Clinical Cancer Research, 2019, 25, 5271-5283.	3.2	59

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163	Metabolomics and genomics in natural products research: complementary tools for targeting new chemical entities. Natural Product Reports, 2021, 38, 2041-2065.	5.2	59
164	Toward efficient analysis of $<70~\text{kDa}$ proteins with 100% sequence coverage. Proteomics, 2001, 1, 927-933.	1.3	57
165	Proteomics-Based Discovery of Koranimine, a Cyclic Imine Natural Product. Journal of the American Chemical Society, 2011, 133, 7316-7319.	6.6	57
166	Colibactin assembly line enzymes use S-adenosylmethionine to build a cyclopropane ring. Nature Chemical Biology, 2017, 13, 1063-1065.	3.9	57
167	Measurement of Individual Ions Sharply Increases the Resolution of Orbitrap Mass Spectra of Proteins. Analytical Chemistry, 2019, 91, 2776-2783.	3.2	57
168	In vivo processing and antibiotic activity of microcin B17 analogs with varying ring content and altered bisheterocyclic sites. Chemistry and Biology, 1999, 6, 305-318.	6.2	56
169	Characterization of a New Tailoring Domain in Polyketide Biogenesis:Â The Amine Transferase Domain of MycA in the Mycosubtilin Gene Cluster. Journal of the American Chemical Society, 2005, 127, 14986-14987.	6.6	56
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