

Fred W Mclafferty

List of Publications by Year in descending order

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191
papers

18,833
citations

13332

70
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133
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198
all docs

198
docs citations

198
times ranked

7444
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron Capture Dissociation of Multiply Charged Protein Cations. A Nonergodic Process. <i>Journal of the American Chemical Society</i> , 1998, 120, 3265-3266.	6.6	1,766
2	Electron Capture Dissociation for Structural Characterization of Multiply Charged Protein Cations. <i>Analytical Chemistry</i> , 2000, 72, 563-573.	3.2	903
3	Infrared Multiphoton Dissociation of Large Multiply Charged Ions for Biomolecule Sequencing. <i>Analytical Chemistry</i> , 1994, 66, 2809-2815.	3.2	724
4	Electron Capture Dissociation of Gaseous Multiply-Charged Proteins Is Favored at Disulfide Bonds and Other Sites of High Hydrogen Atom Affinity. <i>Journal of the American Chemical Society</i> , 1999, 121, 2857-2862.	6.6	539
5	Top Down versus Bottom Up Protein Characterization by Tandem High-Resolution Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 1999, 121, 806-812.	6.6	535
6	Automated reduction and interpretation of. <i>Journal of the American Society for Mass Spectrometry</i> , 2000, 11, 320-332.	1.2	500
7	Stepwise evolution of protein native structure with electrospray into the gas phase, 10 ¹² to 10 ² s. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 18145-18152.	3.3	374
8	Localization of Labile Posttranslational Modifications by Electron Capture Dissociation: The Case of β -Carboxyglutamic Acid. <i>Analytical Chemistry</i> , 1999, 71, 4250-4253.	3.2	362
9	Top Down Characterization of Larger Proteins (45 kDa) by Electron Capture Dissociation Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2002, 124, 672-678.	6.6	357
10	Neutralization-reionization mass spectrometry (NRMS). <i>Chemical Reviews</i> , 1987, 87, 485-500.	23.0	355
11	Phosphopeptide/Phosphoprotein Mapping by Electron Capture Dissociation Mass Spectrometry. <i>Analytical Chemistry</i> , 2001, 73, 19-22.	3.2	332
12	Activated Ion Electron Capture Dissociation for Mass Spectral Sequencing of Larger (42 kDa) Proteins. <i>Analytical Chemistry</i> , 2000, 72, 4778-4784.	3.2	321
13	Extending Top-Down Mass Spectrometry to Proteins with Masses Greater Than 200 Kilodaltons. <i>Science</i> , 2006, 314, 109-112.	6.0	309
14	Detailed Unfolding and Folding of Gaseous Ubiquitin Ions Characterized by Electron Capture Dissociation. <i>Journal of the American Chemical Society</i> , 2002, 124, 6407-6420.	6.6	296
15	Collisional Activation of Large Multiply Charged Ions Using Fourier Transform Mass Spectrometry. <i>Analytical Chemistry</i> , 1994, 66, 2801-2808.	3.2	288
16	Thiamin biosynthesis in prokaryotes. <i>Archives of Microbiology</i> , 1999, 171, 293-300.	1.0	277
17	Quantitative Analysis of Phospholipids in Functionally Important Membrane Domains from RBL-2H3 Mast Cells Using Tandem High-Resolution Mass Spectrometry. <i>Biochemistry</i> , 1999, 38, 8056-8063.	1.2	274
18	Gaseous Conformational Structures of Cytochrome c. <i>Journal of the American Chemical Society</i> , 1998, 120, 4732-4740.	6.6	255

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19	Top-down mass spectrometry of a 29-kDa protein for characterization of any posttranslational modification to within one residue. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1774-1779.	3.3	248
20	Electron capture dissociation of gaseous multiply charged ions by Fourier-transform ion cyclotron resonance. Journal of the American Society for Mass Spectrometry, 2001, 12, 245-249.	1.2	226
21	Secondary and tertiary structures of gaseous protein ions characterized by electron capture dissociation mass spectrometry and photofragment spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15863-15868.	3.3	226
22	Attomole-Sensitivity Electrospray Source for Large-Molecule Mass Spectrometry. Analytical Chemistry, 1995, 67, 3802-3805.	3.2	214
23	High-resolution tandem FT mass spectrometry above 10 kDa. Accounts of Chemical Research, 1994, 27, 379-386.	7.6	200
24	Tandem mass spectrometry (MS/MS): a promising new analytical technique for specific component determination in complex mixtures. Accounts of Chemical Research, 1980, 13, 33-39.	7.6	190
25	Kinetic Intermediates in the Folding of Gaseous Protein Ions Characterized by Electron Capture Dissociation Mass Spectrometry. Journal of the American Chemical Society, 2001, 123, 9792-9799.	6.6	170
26	Rapid Sequencing of Oligonucleotides by High-Resolution Mass Spectrometry. Journal of the American Chemical Society, 1994, 116, 4893-4897.	6.6	169
27	Nonergodic and conformational control of the electron capture dissociation of protein cations. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14011-14016.	3.3	158
28	Top-down MS, a powerful complement to the high capabilities of proteolysis proteomics. FEBS Journal, 2007, 274, 6256-6268.	2.2	157
29	Infrared Photodissociation Spectroscopy of Electrosprayed Ions in a Fourier Transform Mass Spectrometer. Journal of the American Chemical Society, 2005, 127, 4076-4083.	6.6	155
30	Fourier-transform electrospray instrumentation for tandem high-resolution mass spectrometry of large molecules. Journal of the American Society for Mass Spectrometry, 1993, 4, 557-565.	1.2	147
31	Thiamin Biosynthesis in Escherichia coli. Journal of Biological Chemistry, 1998, 273, 16555-16560.	1.6	143
32	Sequence Information from 42 ⁺ 108-mer DNAs (Complete for a 50-mer) by Tandem Mass Spectrometry. Journal of the American Chemical Society, 1996, 118, 9352-9359.	6.6	139
33	Collisional activation and metastable ion characteristics. 73. High-resolution tandem mass spectrometer (MS/MS) of increased sensitivity and mass range. Journal of the American Chemical Society, 1980, 102, 3360-3363.	6.6	135
34	Collisional activation and metastable ion characteristics. 59. Efficiency of collisional activation of gaseous organic ions. Journal of the American Chemical Society, 1978, 100, 3279-3282.	6.6	133
35	Early gas chromatography/mass spectrometry. Journal of the American Society for Mass Spectrometry, 1993, 4, 367-371.	1.2	127
36	Neutralization-reionization mass spectrometry (NRMS). Journal of the American Chemical Society, 1983, 105, 7454-7456.	6.6	124

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37	Biosynthesis of the Thiazole Moiety of Thiamin Pyrophosphate (Vitamin B1)â€. Biochemistry, 2003, 42, 12430-12438.	1.2	124
38	Unit resolution mass spectra of 112 kDa molecules with 3 Da accuracy. Journal of the American Society for Mass Spectrometry, 1997, 8, 380-383.	1.2	123
39	Separation/identification system for complex mixtures using mass separation and mass spectral characterization. Analytical Chemistry, 1978, 50, 69-76.	3.2	120
40	Developments in analytical fourier-transform mass spectrometry. Analytica Chimica Acta, 1985, 178, 43-66.	2.6	118
41	Automated assignment of charge states from resolved isotopic peaks for multiply charged ions. Journal of the American Society for Mass Spectrometry, 1995, 6, 52-56.	1.2	117
42	Electrospray ionization with Fourier-transform mass spectrometry. Charge state assignment from resolved isotopic peaks. Organic Mass Spectrometry, 1990, 25, 490-492.	1.3	115
43	Reconstitution and Biochemical Characterization of a New Pyridoxal-5â€-Phosphate Biosynthetic Pathway. Journal of the American Chemical Society, 2005, 127, 3682-3683.	6.6	112
44	Top-down identification and characterization of biomolecules by mass spectrometry. Journal of the American Society for Mass Spectrometry, 2008, 19, 1045-1053.	1.2	109
45	Surface-induced dissociation of peptide ions in Fourier-transform mass spectrometry. Journal of the American Society for Mass Spectrometry, 1990, 1, 413-416.	1.2	108
46	High-resolution electrospray mass spectra of large molecules. Journal of the American Chemical Society, 1991, 113, 5447-5449.	6.6	108
47	Substituent effects in unimolecular ion decompositions. XV. Mechanistic interpretations and the quasi-equilibrium theory. Journal of the American Chemical Society, 1970, 92, 6867-6880.	6.6	107
48	Surface-Induced Dissociation of Multiply-Protonated Proteins. Analytical Chemistry, 1995, 67, 1042-1046.	3.2	107
49	193 nm photodissociation of larger multiply-charged biomolecules. International Journal of Mass Spectrometry and Ion Processes, 1996, 157-158, 357-364.	1.9	103
50	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
51	Efficiency of collisionally-activated dissociation and 193-nm photodissociation of peptide ions in fourier transform mass spectrometry. Journal of the American Society for Mass Spectrometry, 1990, 1, 288-294.	1.2	100
52	How Ubiquitin Unfolds after Transfer into the Gas Phase. Journal of the American Society for Mass Spectrometry, 2012, 23, 1011-1014.	1.2	93
53	Mass spectrometric studies on noncovalent dimers of leucine zipper peptides. Journal of the American Chemical Society, 1993, 115, 8409-8413.	6.6	91
54	Oligomer Characterization of 4-23 kDa Polymers by Electrospray Fourier Transform Mass Spectrometry. Journal of the American Chemical Society, 1995, 117, 12826-12831.	6.6	90

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55	High-resolution tandem mass spectra of 37-67 kDa proteins. <i>Journal of Mass Spectrometry</i> , 1995, 30, 39-42.	0.7	88
56	Multiple remeasurement of ions in Fourier-transform mass spectrometry. <i>Journal of the American Chemical Society</i> , 1990, 112, 6157-6162.	6.6	87
57	Sequencing 50-mer DNAs Using Electrospray Tandem Mass Spectrometry and Complementary Fragmentation Methods. <i>Journal of the American Chemical Society</i> , 1995, 117, 6783-6784.	6.6	85
58	Electron capture dissociation of multiply charged peptide cations. <i>International Journal of Mass Spectrometry</i> , 1999, 185-187, 787-793.	0.7	85
59	Native Electron Capture Dissociation for the Structural Characterization of Noncovalent Interactions in Native Cytochrome c. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 4900-4904.	7.2	84
60	High-resolution tandem mass spectrometry of carbonic anhydrase. <i>Analytical Chemistry</i> , 1994, 66, 415-417.	3.2	81
61	Improved fourier-transform ion-cyclotron-resonance mass spectrometry of large biomolecules. <i>Journal of the American Society for Mass Spectrometry</i> , 1993, 4, 190-192.	1.2	80
62	Phosphopantothenoylcysteine Synthetase from <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2001, 276, 13513-13516.	1.6	80
63	Collisionally activated decompositions of gaseous ions: the effect of multiple collisions. <i>International Journal of Mass Spectrometry and Ion Physics</i> , 1981, 38, 371-378.	1.3	79
64	Mass Spectrometry: A Recent Advances and Future Directions. <i>The Journal of Physical Chemistry</i> , 1996, 100, 12897-12910.	2.9	77
65	Unknown identification using reference mass spectra. Quality evaluation of databases. <i>Journal of the American Society for Mass Spectrometry</i> , 1999, 10, 1229-1240.	1.2	77
66	Top down characterization of secreted proteins from <i>Mycobacterium tuberculosis</i> by electron capture dissociation mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2003, 14, 253-261.	1.2	76
67	Long-lived metallized tips for nanoliter electrospray mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 1996, 7, 1270-1272.	1.2	75
68	Electron capture versus energetic dissociation of protein ions. <i>International Journal of Mass Spectrometry</i> , 1999, 182-183, 1-5.	0.7	75
69	Plasma Electron Capture Dissociation for the Characterization of Large Proteins by Top Down Mass Spectrometry. <i>Analytical Chemistry</i> , 2003, 75, 1599-1603.	3.2	74
70	A New Approach for Plant Proteomics. <i>Molecular and Cellular Proteomics</i> , 2003, 2, 1253-1260.	2.5	73
71	Neutralization-reionization mass spectrometry. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1992, 118-119, 221-235.	1.9	72
72	The Thermal Unfolding of Native Cytochrome c in the Transition from Solution to Gas Phase Probed by Native Electron Capture Dissociation. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 4911-4914.	7.2	71

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73	Stepwise Deamidation of Ribonuclease A at Five Sites Determined by Top Down Mass Spectrometry. <i>Biochemistry</i> , 2006, 45, 987-992.	1.2	71
74	Distonic oxonium and ammonium radical cations. A neutralization-reionization and collisional activation study. <i>Journal of the American Chemical Society</i> , 1985, 107, 8059-8066.	6.6	70
75	Mass Spectrometry in Chemical Research and Production. <i>Applied Spectroscopy</i> , 1957, 11, 148-156.	1.2	67
76	Comparison of algorithms and databases for matching unknown mass spectra. <i>Journal of the American Society for Mass Spectrometry</i> , 1998, 9, 92-95.	1.2	67
77	A Century of Progress in Molecular Mass Spectrometry. <i>Annual Review of Analytical Chemistry</i> , 2011, 4, 1-22.	2.8	67
78	Early Structural Evolution of Native Cytochrome c after Solvent Removal. <i>ChemBioChem</i> , 2008, 9, 2417-2423.	1.3	66
79	Reliability ranking and scaling improvements to the probability based matching system for unknown mass spectra. <i>Analytical Chemistry</i> , 1985, 57, 899-903.	3.2	63
80	Hadamard transform measurement of tandem Fourier-transform mass spectra. <i>Analytical Chemistry</i> , 1990, 62, 698-703.	3.2	63
81	Retrieval and interpretative computer programs for mass spectrometry. <i>Journal of Chemical Information and Computer Sciences</i> , 1985, 25, 245-252.	2.8	62
82	Heterogeneous Glycosylation of Immunoglobulin E Constructs Characterized by Top-Down High-Resolution 2-D Mass Spectrometry. <i>Biochemistry</i> , 2000, 39, 3369-3376.	1.2	62
83	Mechanistic Studies on Thiaminase I. <i>Journal of Biological Chemistry</i> , 1996, 271, 3445-3452.	1.6	61
84	Stable ylides H ₂ CCLH, H ₂ CFH, H ₂ COH ₂ , and H ₂ CNH ₃ studied by neutralization-reionization mass spectrometry. <i>Journal of the American Chemical Society</i> , 1986, 108, 5847-5853.	6.6	60
85	Sequencing of Specific Copolymer Oligomers by Electron-Capture-Dissociation Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2002, 124, 9287-9291.	6.6	60
86	Neutralization-reionization mass spectrometry (NRMS). Structural information from vertical neutralization and reionization efficiencies. <i>Organic Mass Spectrometry</i> , 1986, 21, 689-695.	1.3	57
87	Automatic reduction of high-resolution mass spectral data. Computer techniques for improved mass-measuring accuracy and resolution. <i>Analytical Chemistry</i> , 1967, 39, 178-185.	3.2	54
88	Tandem mass spectrometry of carbonic anhydrase (29 kDa). <i>Journal of Mass Spectrometry</i> , 1995, 30, 88-93.	0.7	54
89	Tandem mass spectrometric analysis of complex biological mixtures. <i>International Journal of Mass Spectrometry</i> , 2001, 212, 81-87.	0.7	54
90	Non-ergodic behavior in acetone-enol ion dissociations. <i>Journal of the American Chemical Society</i> , 1984, 106, 2525-2528.	6.6	53

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91	Thiaminase I (42 kDa) heterogeneity, sequence refinement, and active site location from high-resolution tandem mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 1995, 6, 981-984.	1.2	53
92	Biosynthesis of the Thioquinolobactin Siderophore: an Interesting Variation on Sulfur Transfer. <i>Journal of Bacteriology</i> , 2007, 189, 2941-2944.	1.0	53
93	Neutralization agents for neutralization-reionization mass spectrometry. <i>Analytical Chemistry</i> , 1986, 58, 348-354.	3.2	51
94	Electron capture dissociation of multiply-charged oxygenated cations. A nonergodic process. <i>European Journal of Mass Spectrometry</i> , 1999, 5, 335.	0.7	51
95	Hydrogen Atom Loss in Electron-Capture Dissociation: A Fourier Transform-Ion Cyclotron Resonance Study with Single Isotopomeric Ubiquitin Ions. <i>European Journal of Mass Spectrometry</i> , 2002, 8, 177-180.	0.5	51
96	Consecutive Ion Activation for Top Down Mass Spectrometry: Improved Protein Sequencing by Nozzle-Skimmer Dissociation. <i>Analytical Chemistry</i> , 2005, 77, 5777-5784.	3.2	50
97	The Mechanism of Inactivation of 3-Hydroxyanthranilate-3,4-dioxygenase by 4-Chloro-3-hydroxyanthranilate. <i>Biochemistry</i> , 2005, 44, 7623-7631.	1.2	50
98	Overexpression of recombinant proteins with a C-terminal thiocarboxylate: Implications for protein semisynthesis and thiamin biosynthesis. <i>Protein Science</i> , 1998, 7, 1839-1842.	3.1	49
99	Charge/radical site initiation versus coulombic repulsion for cleavage of multiply charged ions. Charge solvation in poly(alkene glycol) ions. <i>Journal of the American Society for Mass Spectrometry</i> , 2001, 12, 565-570.	1.2	48
100	Formation and stability of gaseous tolyl ions. <i>Organic Mass Spectrometry</i> , 1979, 14, 181-184.	1.3	47
101	Identification of Modification Sites in Large Biomolecules by Stable Isotope Labeling and Tandem High Resolution Mass Spectrometry. <i>Journal of Biological Chemistry</i> , 1997, 272, 32215-32220.	1.6	47
102	The Biosynthesis of the Thiazole Phosphate Moiety of Thiamin (Vitamin B1): The Early Steps Catalyzed by Thiazole Synthase. <i>Journal of the American Chemical Society</i> , 2004, 126, 3091-3096.	6.6	47
103	A quality index for reference mass spectra. <i>Organic Mass Spectrometry</i> , 1978, 13, 209-213.	1.3	46
104	Detection of mass 16241 ions by Fourier-transform mass spectrometry. <i>Analytical Chemistry</i> , 1986, 58, 483-485.	3.2	44
105	Cesium ion desorption ionization with Fourier transform mass spectrometry. <i>Analytical Chemistry</i> , 1987, 59, 313-317.	3.2	41
106	Two-dimensional mass spectrometry of biomolecules at the subfemtomole level. <i>Current Opinion in Chemical Biology</i> , 1998, 2, 571-578.	2.8	38
107	Mechanistic Studies on Phosphopantothenoylcysteine Decarboxylase: Trapping of an Enethiolate Intermediate with a Mechanism-Based Inactivating Agent. <i>Biochemistry</i> , 2004, 43, 15520-15533.	1.2	38
108	Thiamin biosynthesis: still yielding fascinating biological chemistry. <i>Biochemical Society Transactions</i> , 2012, 40, 555-560.	1.6	38

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109	Quantitation of isomeric ion mixtures using collisional activation mass spectra. <i>Organic Mass Spectrometry</i> , 1983, 18, 193-197.	1.3	37
110	The reactions of metastable [C ₅ H ₁₀ O] ⁺ E TM ions with the oxygen on the second carbon. <i>Organic Mass Spectrometry</i> , 1984, 19, 353-362.	1.3	37
111	Direct Sequence Data from Heterogeneous Creatine Kinase (43 kDa) by High-Resolution Tandem Mass Spectrometry. <i>Biochemistry</i> , 1995, 34, 16251-16254.	1.2	37
112	The Biosynthesis of the Thiazole Phosphate Moiety of Thiamin. <i>Chemistry and Biology</i> , 2004, 11, 1373-1381.	6.2	37
113	Numerous Isomers of Serine Octamer Ions Characterized by Infrared Photodissociation Spectroscopy. <i>ChemPhysChem</i> , 2009, 10, 2603-2606.	1.0	37
114	Infrared photodissociation of non-covalent adducts of electrosprayed nucleotide ions. <i>Journal of the American Society for Mass Spectrometry</i> , 1996, 7, 209-210.	1.2	36
115	Thiamin Biosynthesis in <i>Bacillus subtilis</i> : Structure of the Thiazole Synthase/Sulfur Carrier Protein Complex. <i>Biochemistry</i> , 2004, 43, 11647-11657.	1.2	36
116	Rearrangement and methyl loss from ionized propene oxide and methyl vinyl ether. <i>Journal of the American Chemical Society</i> , 1984, 106, 2528-2531.	6.6	35
117	High-resolution ion isolation with the ion cyclotron resonance capacitively coupled open cell. <i>Journal of the American Society for Mass Spectrometry</i> , 1995, 6, 533-535.	1.2	33
118	Accurate base composition of double-strand DNA by mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 1996, 7, 1266-1269.	1.2	32
119	Blackbody infrared radiative dissociation of larger (42 kDa) multiply charged proteins. <i>International Journal of Mass Spectrometry</i> , 2001, 210-211, 203-214.	0.7	32
120	Detection of four oxidation sites in viral prolyl-4-hydroxylase by top-down mass spectrometry. <i>Protein Science</i> , 2009, 12, 2320-2326.	3.1	32
121	Protonated ethanol and its neutral counterparts. <i>Journal of the American Society for Mass Spectrometry</i> , 1991, 2, 459-463.	1.2	31
122	Comparative Evaluations of Mass Spectral Data Bases. <i>Journal of the American Society for Mass Spectrometry</i> , 1991, 2, 438-440.	1.2	31
123	Dissimilarity in the Reductive Unfolding Pathways of Two Ribonuclease Homologues. <i>Journal of Molecular Biology</i> , 2004, 338, 795-809.	2.0	31
124	An improved tandem double-focusing mass spectrometer for neutralization/reionization and collisional activation studies. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1988, 86, 95-107.	1.9	30
125	Electron impact excitation of ions from larger organic molecules. <i>Organic Mass Spectrometry</i> , 1990, 25, 554-556.	1.3	30
126	193 nm Laser photoionization and photodissociation for isomer differentiation in Fourier-transform mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 1990, 1, 361-365.	1.2	30

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127	Electrospray mass spectra from protein electroeluted from sodium dodecylsulfate polyacrylamide gel electrophoresis gels. <i>Journal of the American Society for Mass Spectrometry</i> , 1999, 10, 453-455.	1.2	30
128	Polypeptide sequencing by liquid chromatography mass spectrometry. <i>Biomedical Mass Spectrometry</i> , 1978, 5, 1-6.	1.8	28
129	Isotopic Assignment in Large-Molecule Mass Spectra by Fragmentation of a Selected Isotopic Peak. <i>Analytical Chemistry</i> , 1996, 68, 542-545.	3.2	28
130	Isomeric characterization via ion neutralization and dissociation. Experimental variables. <i>Organic Mass Spectrometry</i> , 1989, 24, 663-668.	1.3	27
131	Unimolecular reactions of ionized methyl acetate and its hydrogen-rearranged isomers. <i>Organic Mass Spectrometry</i> , 1985, 20, 98-103.	1.3	26
132	Sampling Error in Small-bore Sheathless Capillary Electrophoresis/Electrospray-ionization Mass Spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1996, 10, 825-828.	0.7	26
133	Small carbon clusters (C _n 0, C _n ⁺ , C _n ⁺) from acyclic and cyclic precursors. <i>International Journal of Mass Spectrometry</i> , 2002, 217, 81-96.	0.7	26
134	Adding forward searching capabilities to a reverse search algorithm for unknown mass spectra. <i>Analytical Chemistry</i> , 1985, 57, 771-773.	3.2	25
135	Mass and charge assignment for electrospray ions by cation adduction. <i>Journal of the American Society for Mass Spectrometry</i> , 1993, 4, 828-830.	1.2	25
136	Distinguishing N- and C-terminus ions for mass spectrometry sequencing of proteins without prior degradation. <i>Rapid Communications in Mass Spectrometry</i> , 1995, 9, 871-876.	0.7	25
137	DNA sequencing with blackbody infrared radiative dissociation of electrosprayed ions. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 167-168, 705-712.	1.9	24
138	Targeted class analysis of β -lactam antibiotics by tandem mass spectrometry. <i>Biomedical Mass Spectrometry</i> , 1983, 10, 258-261.	1.8	22
139	Tandem mass spectrometry: structural and stereochemical information from steroids. <i>Journal of the American Chemical Society</i> , 1983, 105, 1510-1513.	6.6	22
140	Simplest chloronium radical. A neutralization-reionization mass spectrometry study. <i>Journal of the American Chemical Society</i> , 1986, 108, 5656-5657.	6.6	22
141	Neutralization-reionization study of C ₆ H ₆ O isomers. <i>Organic Mass Spectrometry</i> , 1989, 24, 669-672.	1.3	22
142	Angle-resolved neutralization-reionization mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 1991, 2, 492-496.	1.2	21
143	Double stranded DNA sequencing by tandem mass spectrometry. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 165-166, 457-466.	1.9	21
144	Charge Site Mass Spectra: Conformation-Sensitive Components of the Electron Capture Dissociation Spectrum of a Protein. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 807-810.	1.2	21

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145	Energy independence of the collisional activation mass spectra of benzoyl ions. <i>International Journal of Mass Spectrometry and Ion Physics</i> , 1980, 35, 299-303.	1.3	20
146	Collisional activation mass spectra of ions containing polyisotopic elements. <i>Organic Mass Spectrometry</i> , 1982, 17, 79-80.	1.3	20
147	High Resolution and Tandem Fourier-Transform Mass Spectrometry with Californium-252 Plasma Desorption. <i>Journal of the American Society for Mass Spectrometry</i> , 1990, 1, 427-430.	1.2	20
148	Neutralization-reionization and ab initio study of the $\text{CH}_2^+ \rightarrow \text{CHSOH}^+$, $\text{CH}_3\text{CH}_2^+ \rightarrow \text{Si}^+ \rightarrow \text{O}$ rearrangement. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1990, 101, 283-300.	1.9	19
149	Mass spectrometry across the sciences. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 18088-18089.	3.3	19
150	Relative stabilities of the methyltropylium and I^+ -phenylethyl cations. <i>Organic Mass Spectrometry</i> , 1982, 17, 640-642.	1.3	18
151	Organic neutralization agents for neutralization-reionization mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 1992, 3, 108-112.	1.2	18
152	Billionfold data increase from mass spectrometry instrumentation. <i>Journal of the American Society for Mass Spectrometry</i> , 1997, 8, 1-7.	1.2	17
153	Simultaneous Kinetic Characterization of Multiple Protein Forms by Top Down Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2005, 16, 1052-1059.	1.2	17
154	Weighted file ordering for fast matching of mass spectra against a comprehensive data base. <i>Analytical Chemistry</i> , 1981, 53, 1938-1939.	3.2	16
155	Tandem mass spectrometry in trace toxicant analysis. <i>Biological Mass Spectrometry</i> , 1981, 8, 446-448.	0.5	16
156	Tandem mass spectrometry: From infancy to maturity in twenty-five years. <i>Organic Mass Spectrometry</i> , 1993, 28, 1403-1406.	1.3	16
157	IgE Receptor-Mediated Alteration of Membrane Cytoskeleton Interactions Revealed by Mass Spectrometric Analysis of Detergent-Resistant Membranes. <i>Biochemistry</i> , 2009, 48, 6540-6550.	1.2	16
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