Charles N Mcewen

List of Publications by Year in descending order

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77 papers 3,831 citations

35 h-index 60 g-index

79 all docs

79 docs citations

79 times ranked

2288 citing authors

#	Article	IF	CITATIONS
1	Analysis of Solids, Liquids, and Biological Tissues Using Solids Probe Introduction at Atmospheric Pressure on Commercial LC/MS Instruments. Analytical Chemistry, 2005, 77, 7826-7831.	6.5	540
2	C60 as a radical sponge. Journal of the American Chemical Society, 1992, 114, 4412-4414.	13.7	178
3	Laserspray Ionization, a New Atmospheric Pressure MALDI Method for Producing Highly Charged Gas-phase Ions of Peptides and Proteins Directly from Solid Solutions. Molecular and Cellular Proteomics, 2010, 9, 362-367.	3.8	127
4	The Limitations of MALDI-TOF Mass Spectrometry in the Analysis of Wide Polydisperse Polymers. Analytical Chemistry, 2000, 72, 4568-4576.	6.5	126
5	Solvent Assisted Inlet Ionization: An Ultrasensitive New Liquid Introduction Ionization Method for Mass Spectrometry. Analytical Chemistry, 2011, 83, 3981-3985.	6.5	121
6	Comparison of Most Probable Peak Values As Measured for Polymer Distributions by MALDI Mass Spectrometry and by Size Exclusion Chromatography. Analytical Chemistry, 1996, 68, 1303-1308.	6. 5	116
7	Determination of active hydrogen in organic compounds by chemical ionization mass spectrometry. Analytical Chemistry, 1972, 44, 1292-1294.	6.5	112
8	A Mechanism for Ionization of Nonvolatile Compounds in Mass Spectrometry: Considerations from MALDI and Inlet Ionization. Journal of the American Society for Mass Spectrometry, 2012, 23, 1644-1660.	2.8	110
9	Positive and negative chemical ionization mass spectrometry using a Townsend discharge ion source. Analytical Chemistry, 1975, 47, 1730-1734.	6.5	104
10	A combination atmospheric pressure LC/MS:GC/MS ion source: Advantages of dual AP-LC/MS:GC/MS instrumentation. Journal of the American Society for Mass Spectrometry, 2005, 16, 1730-1738.	2.8	99
11	New Paradigm in Ionization: Multiply Charged Ion Formation from a Solid Matrix without a Laser or Voltage. Analytical Chemistry, 2010, 82, 9164-9168.	6.5	94
12	Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Method for Selectively Producing Either Singly or Multiply Charged Molecular Ions. Analytical Chemistry, 2010, 82, 11-15.	6.5	92
13	Analysis of the Inhibition of the Ergosterol Pathway in Fungi Using the Atmospheric Solids Analysis Probe (ASAP) Method. Journal of the American Society for Mass Spectrometry, 2007, 18, 1274-1278.	2.8	91
14	Ionization mechanisms related to negative Ion APPI, APCI, and DART. Journal of the American Society for Mass Spectrometry, 2009, 20, 1518-1521.	2.8	91
15	Instrumental effects in the analysis of polymers of wide polydispersity by MALDI mass spectrometry. International Journal of Mass Spectrometry and Ion Processes, 1997, 160, 387-394.	1.8	87
16	The fundamentals of applying electrospray ionization mass spectrometry to low mass poly(methyl) Tj ETQq0 0 () rgBT/Ον	erlock 10 Tf 50
17	CaCl3- or Ca2Cl4 Complexing Cyclic Aromatic Amide. Template Effect on Cyclization. Journal of the American Chemical Society, 1996, 118, 1545-1546.	13.7	68
18	Chemical ionization mass spectrometry II. Diferentiation of primary, secondary, and tertiary amines. Tetrahedron Letters, 1971, 12, 4539-4542.	1.4	65

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19	Fundamentals of the application of matrix-assisted laser desorption-ionization mass spectrometry to low mass poly(methylmethacrylate) polymers. Journal of the American Society for Mass Spectrometry, 1996, 7, 287-292.	2.8	64
20	Mass Spectrometry of Synthetic Polymers. Analytical Chemistry, 2004, 76, 3417-3428.	6.5	61
21	Rapid methods of polymer and polymer additives identification: Multi-sample solvent-free MALDI, pyrolysis at atmospheric pressure, and atmospheric solids analysis probe mass spectrometry. Analytica Chimica Acta, 2009, 654, 20-25.	5.4	61
22	Laserspray Ionization, a New Method for Protein Analysis Directly from Tissue at Atmospheric Pressure with Ultrahigh Mass Resolution and Electron Transfer Dissociation. Molecular and Cellular Proteomics, 2011, 10, S1-S8.	3.8	59
23	Determining Affinity-Selected Ligands and Estimating Binding Affinities by Online Size Exclusion Chromatography/Liquid Chromatographyâ°'Mass Spectrometry. ACS Combinatorial Science, 1999, 1, 82-90.	3.3	57
24	Mass Spectrometry of Chemical Polymers. Analytical Chemistry, 2002, 74, 2743-2748.	6.5	57
25	Charge-remote fragmentation of lithiated fatty acids on a TOF-TOF instrument using matrix-ionization. Journal of the American Society for Mass Spectrometry, 2007, 18, 1967-1972.	2.8	57
26	Laserspray Ionization on a Commercial Atmospheric Pressure-MALDI Mass Spectrometer Ion Source: Selecting Singly or Multiply Charged Ions. Analytical Chemistry, 2010, 82, 4998-5001.	6. 5	57
27	Inlet Ionization: A New Highly Sensitive Approach for Liquid Chromatography/Mass Spectrometry of Small and Large Molecules. Analytical Chemistry, 2011, 83, 7591-7594.	6.5	55
28	Electrospray ionization on a high-performance magnetic-sector mass spectrometer. Rapid Communications in Mass Spectrometry, 1990, 4, 147-150.	1.5	51
29	An electrospray ion source for magnetic sector mass spectrometers. Journal of the American Society for Mass Spectrometry, 1991, 2, 205-211.	2.8	50
30	Fractionation and Solvent-Free MALDI-MS Analysis of Polymers Using Liquid Adsorption Chromatography at Critical Conditions in Combination with a Multisample On-Target Homogenization/Transfer Sample Preparation Method. Analytical Chemistry, 2007, 79, 7565-7570.	6. 5	49
31	A New Matrix Assisted Ionization Method for the Analysis of Volatile and Nonvolatile Compounds by Atmospheric Probe Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2013, 24, 1102-1107.	2.8	41
32	An alternative ionization paradigm for atmospheric pressure mass spectrometry: Flying elephants from Trojan horses. International Journal of Mass Spectrometry, 2011, 300, 167-172.	1.5	40
33	Carrier ampholyte-free solution isoelectric focusing as a prefractionation method for the proteomic analysis of complex protein mixtures. Electrophoresis, 2003, 24, 2359-2368.	2.4	39
34	GC/MS on an LC/MS instrument using atmospheric pressure photoionization. International Journal of Mass Spectrometry, 2007, 259, 57-64.	1.5	37
35	Multisample preparation methods for the solvent-free MALDI-MS analysis of synthetic polymers. Journal of the American Society for Mass Spectrometry, 2007, 18, 377-381.	2.8	36
36	Combination Atmospheric Pressure Solids Analysis Probe and Desorption Electrospray Ionization Mass Spectrometry Ion Source. Analytical Chemistry, 2009, 81, 9158-9162.	6.5	36

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37	Radicals in analytical mass spectrometry. Mass Spectrometry Reviews, 1986, 5, 521-547.	5.4	35
38	Dual Supermesityl Stabilization: A Roomâ€Temperatureâ€Stable 1,2,4â€Triphosphole Radical, Sigmatropic Hydrogen Rearrangements, and Tetraphospholide Anion. European Journal of Inorganic Chemistry, 2008, 2008, 2386-2390.	2.0	29
39	Fifty years of desorption ionization of nonvolatile compounds. International Journal of Mass Spectrometry, 2015, 377, 515-531.	1.5	26
40	Spontaneous Charge Separation and Sublimation Processes are Ubiquitous in Nature and in Ionization Processes in Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 304-315.	2.8	26
41	Improving the Sensitivity of Matrix-Assisted Ionization (MAI) Mass Spectrometry Using Ammonium Salts. Journal of the American Society for Mass Spectrometry, 2015, 26, 1649-1656.	2.8	25
42	High Sensitivity Analysis of Nanoliter Volumes of Volatile and Nonvolatile Compounds using Matrix Assisted Ionization (MAI) Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 1590-1596.	2.8	24
43	Aromatic 1 <i>H</i> -[1,2]Diphosphole with a Planar Tricoordinated Phosphorus, Plus η ² -Coordination Mode between Ruthenium(0) and a Phosphaalkene. Organometallics, 2007, 26, 5050-5058.	2.3	23
44	Rapid screening of chemical warfare nerve agent metabolites in urine by atmospheric solids analysis probeâ€mass spectroscopy (ASAPâ€MS). Drug Testing and Analysis, 2012, 4, 308-311.	2.6	23
45	Increasing the Sensitivity of Liquid Introduction Mass Spectrometry by Combining Electrospray Ionization and Solvent Assisted Inlet Ionization. Analytical Chemistry, 2012, 84, 6828-6832.	6.5	22
46	Simplifying the ion source for mass spectrometry. Rapid Communications in Mass Spectrometry, 2016, 30, 2568-2572.	1.5	22
47	High mass resolution tissue imaging at atmospheric pressure using laserspray ionization mass spectrometry. International Journal of Mass Spectrometry, 2013, 352, 65-69.	1.5	21
48	Source-mounted cesium ion gun for obtaining liquid matrix secondary ion mass spectra of organics. Analytical Chemistry, 1983, 55, 967-968.	6.5	20
49	Survival yield comparison between ESI and SAII: Mechanistic implications. International Journal of Mass Spectrometry, 2015, 378, 107-112.	1.5	20
50	Vacuum Matrix-Assisted Ionization Source Offering Simplicity, Sensitivity, and Exceptional Robustness in Mass Spectrometry. Analytical Chemistry, 2018, 90, 11188-11192.	6.5	20
51	Fluorescence-Based Peptide Labeling and Fractionation Strategies for Analysis of Cysteine-Containing Peptides. Analytical Chemistry, 2005, 77, 4495-4502.	6.5	19
52	Gas-Phase Ions Produced by Freezing Water or Methanol for Analysis Using Mass Spectrometry. Analytical Chemistry, 2014, 86, 7343-7350.	6.5	19
53	Sample preparation for high throughput accurate mass analysis by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. , 2000, 14, 1008-1013.		17
54	Highâ€throughput analysis of peptides and proteins by laserspray ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2011, 25, 247-250.	1.5	17

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55	High sensitivity steroid analysis using liquid chromatography/solventâ€assisted inlet ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2012, 26, 887-892.	1.5	17
56	Fundamental Studies of New Ionization Technologies and Insights from IMS-MS. Journal of the American Society for Mass Spectrometry, 2019, 30, 1133-1147.	2.8	17
57	Negative gold ion gun for liquid secondary ion mass spectrometry. Analytical Chemistry, 1985, 57, 890-892.	6.5	16
58	Laserspray Ionization Using an Atmospheric Solids Analysis Probe for Sample Introduction. Journal of the American Society for Mass Spectrometry, 2010, 21, 1889-92.	2.8	16
59	An LC/MS Method Providing Improved Sensitivity: Electrospray Ionization Inlet. Analytical Chemistry, 2017, 89, 4798-4802.	6.5	16
60	Unprecedented Ionization Processes in Mass Spectrometry Provide Missing Link between ESI and MALDI. ChemPhysChem, 2018, 19, 581-589.	2.1	16
61	Development of an easily adaptable, high sensitivity source for inlet ionization. Analytical Methods, 2017, 9, 4971-4978.	2.7	14
62	Highly Unsaturated Phosphorus Compounds: Generation and Reactions on Both Multiple Bonds of Vinyl Phosphaalkyne. Organometallics, 2009, 28, 2410-2416.	2.3	13
63	More inclusive or selective ionization for mass spectrometry using obstructive sonic spray ionization and voltage polarity switching. Rapid Communications in Mass Spectrometry, 2012, 26, 2763-2769.	1.5	13
64	Carbonation and Other Super Saturated Gases as Solution Modifiers for Improved Sensitivity in Solvent Assisted Ionization <i>Inlet</i> (SAII) and ESI. Journal of the American Society for Mass Spectrometry, 2013, 24, 186-192.	2.8	12
65	An overview of biological applications and fundamentals of new <i>inlet</i> and <i>vacuum</i> ionization technologies. Rapid Communications in Mass Spectrometry, 2021, 35, e8829.	1.5	9
66	Development of a robotics platform for automated multiâ€ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2021, 35, e8449.	1.5	9
67	Sublimation Driven Ionization for Use in Mass Spectrometry: Mechanistic Implications. Journal of the American Society for Mass Spectrometry, 2021, 32, 114-123.	2.8	9
68	Pyrolysis-photoionization mass spectrometry of ethylene-methyl acrylate copolymers. Journal of Analytical and Applied Pyrolysis, 2002, 64, 305-312.	5.5	8
69	Chemical and biological detection. Chemical Society Reviews, 2013, 42, 8581.	38.1	7
70	A Combination MAI and MALDI Vacuum Source Operational from Atmospheric Pressure for Fast, Robust, and Sensitive Analyses. Journal of the American Society for Mass Spectrometry, 2021, 32, 124-132.	2.8	6
71	The fate of thermally produced cyclohexyloxyl radicals as determined by mass spectrometry. Journal of the American Chemical Society, 1988, 110, 8579-8583.	13.7	5
72	Dual Supermesityl Stabilization: 1-Alkyl-1 <i>H</i> -[1,2,4]triphospholes, with Among the Most Planar and Least Sterically Hindered If ³ ,λ ³ -Phosphorus Atoms, and Novel C ₂ P ₃ S ₄ Folded Heterocycles. Organometallics, 2008, 27, 5118-5121.	2.3	5

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73	Electron impact induced fragmentation of triquinacene and related compounds—genesis and structure of C9H7+ ions in the gas phase. International Journal of Mass Spectrometry and Ion Physics, 1982, 44, 277-284.	1.3	3
74	New polyazaporphine chemistry for the origin of life. Origins of Life and Evolution of Biospheres, 1998, 28, 27-45.	1.9	2
75	Infrared atmospheric solids analysis probe (IR-ASAP) mass spectrometry for ambient analysis of volatile compounds without heated gas. Analytical Methods, 2017, 9, 5009-5014.	2.7	1
76	The Asilomar Conference on Fundamentals of Atmospheric Pressure Ionization Techniques, October 8–12, 2010. Journal of the American Society for Mass Spectrometry, 2011, 22, 2282-2286.	2.8	0
77	Unprecedented Ionization Processes in Mass Spectrometry Provide Missing Link between ESI and MALDI. ChemPhysChem, 2018, 19, 550-550.	2.1	0