J Larry Campbell

List of Publications by Year
in descending order

66 papers	2,689 citations	172457 29 h-index	189892 50 g-index
67 all docs	67 docs citations	67 times ranked	2408 citing authors

#	Article	IF	Citations
1	Recommendations for reporting ion mobility Mass Spectrometry measurements. Mass Spectrometry Reviews, 2019, 38, 291-320.	5.4	315
2	Differential Mobility Spectrometry-Driven Shotgun Lipidomics. Analytical Chemistry, 2014, 86, 9662-9669.	6.5	136
3	Near-Complete Structural Characterization of Phosphatidylcholines Using Electron Impact Excitation of Ions from Organics. Analytical Chemistry, 2015, 87, 5837-5845.	6.5	127
4	Ozone-induced dissociation on a modified tandem linear ion-trap: Observations of different reactivity for isomeric lipids. Journal of the American Society for Mass Spectrometry, 2010, 21, 1989-1999.	2.8	124
5	Structural characterization of glycerophospholipids by combinations of ozone- and collision-induced dissociation mass spectrometry: the next step towards â€œtop-downâ€•lipidomics. Analyst, The, 2014, 139, 204-214.	3.5	119
6	Characterization of acyl chain position in unsaturated phosphatidylcholines using differential mobility-mass spectrometry. Journal of Lipid Research, 2014, 55, 1668-1677.	4.2	100
7	Probing Electrospray Ionization Dynamics Using Differential Mobility Spectrometry: The Curious Case of 4-Aminobenzoic Acid. Analytical Chemistry, 2012, 84, 7857-7864.	6.5	94
8	Three-dimensional enhanced lipidomics analysis combining UPLC, differential ion mobility spectrometry, and mass spectrometric separation strategies. Journal of Lipid Research, 2014, 55, 2432-2442.	4.2	90
9	An Enhanced Mass Spectrometry Approach Reveals Human Embryonic Stem Cell Growth Factors in Culture. Molecular and Cellular Proteomics, 2009, 8, 421-432.	3.8	80
10	Ion-Molecule Clustering in Differential Mobility Spectrometry: Lessons Learned from Tetraalkylammonium Cations and their Isomers. Journal of the American Society for Mass Spectrometry, 2014, 25, 1583-1591.	2.8	71
11	Laser-Induced Acoustic Desorption/Fourier Transform Ion Cyclotron Resonance Mass Spectrometry for Petroleum Distillate Analysis. Analytical Chemistry, 2005, 77, 7916-7923.	6.5	67
12	Studying Gas-Phase Interconversion of Tautomers Using Differential Mobility Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 1277-1284.	2.8	64
13	Ozone-Induced Dissociation of Conjugated Lipids Reveals Significant Reaction Rate Enhancements and Characteristic Odd-Electron Product Ions. Journal of the American Society for Mass Spectrometry, 2013, 24, 286-296.	2.8	61
14	Distinguishing Cis and Trans Isomers in Intact Complex Lipids Using Electron Impact Excitation of Ions from Organics Mass Spectrometry. Analytical Chemistry, 2017, 89, 7307-7315.	6.5	59
15	Quantitative structural multiclass lipidomics using differential mobility: electron impact excitation of ions from organics (EIEIO) mass spectrometry. Journal of Lipid Research, 2018, 59, 910-919.	4.2	57
16	A parallelized molecular collision cross section package with optimized accuracy and efficiency. Analyst, The, 2019, 144, 1660-1670.	3.5	57
17	Analysis of Saturated Hydrocarbons by Using Chemical Ionization Combined with Laser-Induced Acoustic Desorption/Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Analytical Chemistry, 2004, 76, 959-963.	6.5	55
18	Structural identification of triacylglycerol isomers using electron impact excitation of ions from organics (EIEIO). Journal of Lipid Research, 2016, 57, 2015-2027.	4.2	53

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19	Determination of triacylglycerol regioisomers using differential mobility spectrometry. Rapid Communications in Mass Spectrometry, 2016, 30, 256-264.	1.5	52
20	Using differential mobility spectrometry to measure ion solvation: an examination of the roles of solvents and ionic structures in separating quinoline-based drugs. Analyst, The, 2015, 140, 6897-6903.	3.5	51
21	Electron Capture Dissociation in a Branched Radio-Frequency Ion Trap. Analytical Chemistry, 2015, 87, 785-792.	6.5	45
22	In-depth sphingomyelin characterization using electron impact excitation of ions from organics and mass spectrometry. Journal of Lipid Research, 2016, 57, 858-867.	4.2	44
23	Analysis of Polyethylene by Using Cyclopentadienyl Cobalt Chemical Ionization Combined with Laser-Induced Acoustic Desorption/Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Analytical Chemistry, 2005, 77, 4020-4026.	6.5	42
24	Characterization of Laser-Induced Acoustic Desorption Coupled with a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer. Analytical Chemistry, 2006, 78, 6133-6139.	6.5	41
25	Assessing Physicochemical Properties of Drug Molecules via Microsolvation Measurements with Differential Mobility Spectrometry. ACS Central Science, 2017, 3, 101-109.	11.3	37
26	Peptide and protein drug analysis by MS: challenges and opportunities for the discovery environment. Bioanalysis, 2011, 3, 645-657.	1.5	36
27	Rapid Characterization of Naphthenic Acids Using Differential Mobility Spectrometry and Mass Spectrometry. Environmental Science & Technology, 2014, 48, 10264-10272.	10.0	34
28	Using high-resolution quadrupole TOF technology in DMPK analyses. Bioanalysis, 2012, 4, 487-500.	1.5	33
29	Differential mobility spectrometry: a valuable technology for analyzing challenging biological samples. Bioanalysis, 2015, 7, 853-856.	1.5	32
30	Separating and probing tautomers of protonated nucleobases using differential mobility spectrometry. International Journal of Mass Spectrometry, 2018, 429, 174-181.	1.5	32
31	Characterizing the Tautomers of Protonated Aniline Using Differential Mobility Spectrometry and Mass Spectrometry. Journal of Physical Chemistry A, 2018, 122, 3858-3865.	2.5	31
32	Determining molecular properties with differential mobility spectrometry and machine learning. Nature Communications, 2018, 9, 5096.	12.8	30
33	Separation of Sialylated Glycan Isomers by Differential Mobility Spectrometry. Analytical Chemistry, 2019, 91, 9916-9924.	6.5	30
34	Combining liquid chromatography with ozone-induced dissociation for the separation and identification of phosphatidylcholine double bond isomers. Analytical and Bioanalytical Chemistry, 2015, 407, 5053-5064.	3.7	29
35	Analyzing Glycopeptide Isomers by Combining Differential Mobility Spectrometry with Electron- and Collision-Based Tandem Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 1374-1381.	2.8	29
36	Combining Charge-Switch Derivatization with Ozone-Induced Dissociation for Fatty Acid Analysis. Journal of the American Society for Mass Spectrometry, 2019, 30, 2135-2143.	2.8	28

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37	On performing simultaneous electron transfer dissociation and collision-induced dissociation on multiply protonated peptides in a linear ion trap. Journal of the American Society for Mass Spectrometry, 2009, 20, 1672-1683.	2.8	25
38	How Hot Are Your Ions in Differential Mobility Spectrometry?. Journal of the American Society for Mass Spectrometry, 2020, 31, 582-593.	2.8	21
39	Direct Interface between Digital Microfluidics and High Performance Liquid Chromatographyâ€“Mass Spectrometry. Analytical Chemistry, 2015, 87, 11967-11972.	6.5	20
40	Differential Mobility Spectrometry-Hydrogen Deuterium Exchange (DMS-HDX) as a Probe of Protein Conformation in Solution. Journal of the American Society for Mass Spectrometry, 2016, 27, 991-999.	2.8	20
41	Predicting differential ion mobility behaviour in silico using machine learning. Analyst, The, 2021, 146, 4737-4743.	3.5	19
42	Targeted ion parking for the quantitation of biotherapeutic proteins: Concepts and preliminary data. Journal of the American Society for Mass Spectrometry, 2010, 21, 2011-2022.	2.8	17
43	Experimental and Theoretical Characterization of the 3,5-Didehydrobenzoate Anion:Â A Negatively Chargedmeta-Benzyne. Journal of the American Chemical Society, 2003, 125, 131-140.	13.7	16
44	Separating Isomers, Conformers, and Analogues of Cyclosporin using Differential Mobility Spectroscopy, Mass Spectrometry, and Hydrogenâ€“Deuterium Exchange. Analytical Chemistry, 2020, 92, 11053-11061.	6.5	15
45	Measuring Electronic Spectra of Differential Mobility-Selected Ions in the Gas Phase. Journal of the American Society for Mass Spectrometry, 2020, 31, 405-410.	2.8	13
46	The Charge-State and Structural Stability of Peptides Conferred by Microsolvating Environments in Differential Mobility Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 956-968.	2.8	12
47	Preferential Ion Microsolvation in Mixed-Modifier Environments Observed Using Differential Mobility Spectrometry. Journal of the American Society for Mass Spectrometry, 2019, 30, 2222-2227.	2.8	11
48	Determining Collision Cross Sections from Differential Ion Mobility Spectrometry. Analytical Chemistry, 2021, 93, 8937-8944.	6.5	11
49	Synthesis and Characterization of a Distonic Nitrene Ion:Â Gas-Phase Reactivity of Singlet and TripletN-Phenyl-3-Nitrenopyridinium Ion. Journal of the American Chemical Society, 2001, 123, 7923-7924.	13.7	10
50	Performance and Attributes of Liquid Chromatographyâ€“Mass Spectrometry with Targeted Charge Separation in Quantitative Analysis of Therapeutic Peptides. Journal of the American Society for Mass Spectrometry, 2011, 22, 67-74.	2.8	10
51	Separating chiral isomers of amphetamine and methamphetamine using chemical derivatization and differential mobility spectrometry. Analytical Science Advances, 2020, 1, 233-244.	2.8	10
52	Identifying Fenton-Reacted Trimethoprim Transformation Products Using Differential Mobility Spectrometry. Analytical Chemistry, 2018, 90, 5352-5357.	6.5	8
53	UVPD spectroscopy of differential mobility-selected prototropic isomers of protonated adenine. Physical Chemistry Chemical Physics, 2021, 23, 19892-19900.	2.8	8
54	Electronic spectroscopy of differential mobility-selected prototropic isomers of protonated para-aminobenzoic acid. Physical Chemistry Chemical Physics, 2021, 23, 20607-20614.	2.8	8

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55	Direct Evidence for the Origin of Bisâ€Gold Intermediates: Probing Gold Catalysis with Mass Spectrometry. Chemistry - A European Journal, 2018, 24, 2144-2150.	3.3	7
56	Unravelling the factors that drive separation in differential mobility spectrometry: A case study of regioisomeric phosphatidylcholine adducts. International Journal of Mass Spectrometry, 2019, 444, 116182.	1.5	7
57	Probing the Reactivity and Radical Nature of Oxidized Transition Metal-Thiolate Complexes by Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2013, 24, 502-512.	2.8	6
58	Capturing Polyradical Protein Cations after an Electron Capture Event: Evidence for their Stable Distonic Structures in the Gas Phase. Journal of the American Society for Mass Spectrometry, 2015, 26, 1695-1701.	2.8	5
59	UVPD Spectroscopy of Differential Mobility-Selected Prototropic Isomers of Rivaroxaban. Journal of Physical Chemistry A, 2021, 125, 8187-8195.	2.5	5
60	Rapid separation of cannabinoid isomer sets using differential mobility spectrometry and mass spectrometry. Analyst, The, 2022, 147, 2198-2206.	3.5	5
61	Using a dual inlet atmospheric pressure ionization source as a dynamic reaction vessel. Rapid Communications in Mass Spectrometry, 2010, 24, 3527-3530.	1.5	4
62	Recognizing the potential benefits and pitfalls of high-resolution MS. Bioanalysis, 2013, 5, 1157-1160.	1.5	4
63	A novel MS³ experiment for quantifying ions with a linear ion trap. Canadian Journal of Chemistry, 2018, 96, 653-663.	1.1	4
64	Creating an evanescent ion/ion reaction region within a low-pressure linear ion trap. International Journal of Mass Spectrometry, 2012, 323-324, 14-20.	1.5	3
65	Applying Advanced Mass Spectrometry Techniques to Emerging Pollutant Detection: Differential Mobility Spectrometry. ACS Symposium Series, 2015, , 187-204.	0.5	0
66	Themed issue on â€˜emerging technologies in mass spectrometryâ€™. Bioanalysis, 2017, 9, 1617-1618.	1.5	0