

Erin Shammel Baker

List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	An Interlaboratory Evaluation of Drift Tube Ion Mobilityâ€“Mass Spectrometry Collision Cross Section Measurements. <i>Analytical Chemistry</i> , 2017, 89, 9048-9055.	3.2	361
2	Mass spectrometry-based proteomics: existing capabilities and future directions. <i>Chemical Society Reviews</i> , 2012, 41, 3912.	18.7	351
3	G-Quadruplex DNA Assemblies: Loop Length, Cation Identity, and Multimer Formation. <i>Journal of the American Chemical Society</i> , 2008, 130, 10208-10216.	6.6	246
4	Ion Mobility Spectrometry: Fundamental Concepts, Instrumentation, Applications, and the Road Ahead. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2185-2195.	1.2	244
5	Uncovering biologically significant lipid isomers with liquid chromatography, ion mobility spectrometry and mass spectrometry. <i>Analyst</i> , The, 2016, 141, 1649-1659.	1.7	196
6	Serpentine Ultralong Path with Extended Routing (SUPER) High Resolution Traveling Wave Ion Mobility-MS using Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2017, 89, 4628-4634.	3.2	162
7	A structural examination and collision cross section database for over 500 metabolites and xenobiotics using drift tube ion mobility spectrometry. <i>Chemical Science</i> , 2017, 8, 7724-7736.	3.7	156
8	Stabilization and Structure of Telomeric and c-myc Region Intramolecular G-Quadruplexes:Â The Role of Central Cations and Small Planar Ligands. <i>Journal of the American Chemical Society</i> , 2007, 129, 895-904.	6.6	143
9	Ultra-High Resolution Ion Mobility Separations Utilizing Traveling Waves in a 13 m Serpentine Path Length Structures for Lossless Ion Manipulations Module. <i>Analytical Chemistry</i> , 2016, 88, 8957-8964.	3.2	136
10	Ion mobility spectrometryâ€”mass spectrometry performance using electrodynamic ion funnels and elevated drift gas pressures. <i>Journal of the American Society for Mass Spectrometry</i> , 2007, 18, 1176-1187.	1.2	128
11	Predicting Ion Mobility Collision Cross-Sections Using a Deep Neural Network: DeepCCS. <i>Analytical Chemistry</i> , 2019, 91, 5191-5199.	3.2	121
12	An LC-IMS-MS Platform Providing Increased Dynamic Range for High-Throughput Proteomic Studies. <i>Journal of Proteome Research</i> , 2010, 9, 997-1006.	1.8	120
13	Duplex Formation and the Onset of Helicity in Poly d(CG) _n Oligonucleotides in a Solvent-Free Environment. <i>Journal of the American Chemical Society</i> , 2004, 126, 15132-15140.	6.6	119
14	Online Ozonolysis Combined with Ion Mobility-Mass Spectrometry Provides a New Platform for Lipid Isomer Analyses. <i>Analytical Chemistry</i> , 2018, 90, 1292-1300.	3.2	114
15	A multi-omic future for microbiome studies. <i>Nature Microbiology</i> , 2016, 1, 16049.	5.9	112
16	Structural motifs of DNA complexes in the gas phase. <i>International Journal of Mass Spectrometry</i> , 2005, 240, 183-193.	0.7	101
17	New frontiers for mass spectrometry based upon structures for lossless ion manipulations. <i>Analyst</i> , The, 2017, 142, 1010-1021.	1.7	95
18	Development of a new ion mobility time-of-flight mass spectrometer. <i>International Journal of Mass Spectrometry</i> , 2015, 377, 655-662.	0.7	92

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19	Ion Mobility Separations of Isomers based upon Long Path Length Structures for Lossless Ion Manipulations Combined with Mass Spectrometry. <i>ChemistrySelect</i> , 2016, 1, 2396-2399.	0.7	92
20	Optimization of Algorithms for Ion Mobility Calculations. <i>Journal of Physical Chemistry A</i> , 2007, 111, 2002-2010.	1.1	91
21	Cyclo[n]pyrroles: Size and Site-Specific Binding to G-Quadruplexes. <i>Journal of the American Chemical Society</i> , 2006, 128, 2641-2648.	6.6	86
22	Lipid and Glycolipid Isomer Analyses Using Ultra-High Resolution Ion Mobility Spectrometry Separations. <i>International Journal of Molecular Sciences</i> , 2017, 18, 183.	1.8	86
23	Recommendations for good practice in MS-based lipidomics. <i>Journal of Lipid Research</i> , 2021, 62, 100138.	2.0	85
24	Coupling Front-End Separations, Ion Mobility Spectrometry, and Mass Spectrometry For Enhanced Multidimensional Biological and Environmental Analyses. <i>Annual Review of Analytical Chemistry</i> , 2017, 10, 71-92.	2.8	84
25	PNA/dsDNA Complexes: Site Specific Binding and dsDNA Biosensor Applications. <i>Journal of the American Chemical Society</i> , 2006, 128, 8484-8492.	6.6	82
26	G-quadruplexes in telomeric repeats are conserved in a solvent-free environment. <i>International Journal of Mass Spectrometry</i> , 2006, 253, 225-237.	0.7	80
27	Enhancing glycan isomer separations with metal ions and positive and negative polarity ion mobility spectrometry-mass spectrometry analyses. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 467-476.	1.9	78
28	Microstructural and conformational studies of polyether copolymers. <i>International Journal of Mass Spectrometry</i> , 2004, 238, 287-297.	0.7	71
29	Mass spectrometry for translational proteomics: progress and clinical implications. <i>Genome Medicine</i> , 2012, 4, 63.	3.6	71
30	Ion mobility spectrometry and the omics: Distinguishing isomers, molecular classes and contaminant ions in complex samples. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 116, 292-299.	5.8	71
31	Rapid Characterization of Per- and Polyfluoroalkyl Substances (PFAS) by Ion Mobility Spectrometry-Mass Spectrometry (IMS-MS). <i>Analytical Chemistry</i> , 2020, 92, 4427-4435.	3.2	71
32	Unraveling the isomeric heterogeneity of glycans: ion mobility separations in structures for lossless ion manipulations. <i>Chemical Communications</i> , 2018, 54, 11701-11704.	2.2	68
33	Integrating ion mobility spectrometry into mass spectrometry-based exposome measurements: what can it add and how far can it go?. <i>Bioanalysis</i> , 2017, 9, 81-98.	0.6	66
34	Recent advances in lipid separations and structural elucidation using mass spectrometry combined with ion mobility spectrometry, ion-molecule reactions and fragmentation approaches. <i>Current Opinion in Chemical Biology</i> , 2018, 42, 111-118.	2.8	64
35	Structural characterization of G-quadruplexes in deoxyguanosine clusters using ion mobility mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2005, 16, 989-997.	1.2	63
36	SPE-IMS-MS: An automated platform for sub-sixty second surveillance of endogenous metabolites and xenobiotics in biofluids. <i>Clinical Mass Spectrometry</i> , 2016, 2, 1-10.	1.9	63

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37	The past, present and future of microbiome analyses. <i>Nature Protocols</i> , 2016, 11, 2049-2053.	5.5	59
38	Utilizing ion mobility spectrometry and mass spectrometry for the analysis of polycyclic aromatic hydrocarbons, polychlorinated biphenyls, polybrominated diphenyl ethers and their metabolites. <i>Analytica Chimica Acta</i> , 2018, 1037, 265-273.	2.6	59
39	Distinguishing <i>d</i> - and <i>l</i> -aspartic and isoaspartic acids in amyloid β^2 peptides with ultrahigh resolution ion mobility spectrometry. <i>Chemical Communications</i> , 2017, 53, 7913-7916.	2.2	56
40	Comparing residential contamination in a Houston environmental justice neighborhood before and after Hurricane Harvey. <i>PLoS ONE</i> , 2018, 13, e0192660.	1.1	56
41	Using Skyline to Analyze Data-Containing Liquid Chromatography, Ion Mobility Spectrometry, and Mass Spectrometry Dimensions. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 2182-2188.	1.2	55
42	Challenges in Identifying the Dark Molecules of Life. <i>Annual Review of Analytical Chemistry</i> , 2019, 12, 177-199.	2.8	55
43	Enhancing bottom-up and top-down proteomic measurements with ion mobility separations. <i>Proteomics</i> , 2015, 15, 2766-2776.	1.3	54
44	Development of an Ion Mobility Spectrometry-Orbitrap Mass Spectrometer Platform. <i>Analytical Chemistry</i> , 2016, 88, 12152-12160.	3.2	54
45	B-DNA Helix Stability in a Solvent-Free Environment. <i>Journal of the American Society for Mass Spectrometry</i> , 2007, 18, 1188-1195.	1.2	53
46	Biases in ion transmission through an electrospray ionization-mass spectrometry capillary inlet. <i>Journal of the American Society for Mass Spectrometry</i> , 2009, 20, 2265-2272.	1.2	52
47	Achieving High Resolution Ion Mobility Separations Using Traveling Waves in Compact Multiturn Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2016, 88, 8949-8956.	3.2	52
48	Profiling microbial lignocellulose degradation and utilization by emergent omics technologies. <i>Critical Reviews in Biotechnology</i> , 2017, 37, 626-640.	5.1	52
49	Advancing the High Throughput Identification of Liver Fibrosis Protein Signatures Using Multiplexed Ion Mobility Spectrometry. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 1119-1127.	2.5	51
50	Ion Trapping, Storage, and Ejection in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 6010-6016.	3.2	48
51	Application of ion mobility to the gas-phase conformational analysis of polyhedral oligomeric silsesquioxanes (POSS). <i>International Journal of Mass Spectrometry</i> , 2003, 222, 63-73.	0.7	47
52	Isomeric Structural Characterization of Polyhedral Oligomeric Silsesquioxanes (POSS) with Styryl and Epoxy Phenyl Capping Agents. <i>Nano Letters</i> , 2004, 4, 779-785.	4.5	45
53	A multi-pronged search for a common structural motif in the secretion signal of <i>Salmonella enterica</i> serovar Typhimurium type III effector proteins. <i>Molecular BioSystems</i> , 2010, 6, 2448.	2.9	45
54	Structural Elucidation of <i>cis</i> - and <i>trans</i> -Dicafeoylquinic Acid Photoisomerization Using Ion Mobility Spectrometry-Mass Spectrometry. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1381-1388.	2.1	45

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55	Rapid Ion Mobility Separations of Bile Acid Isomers Using Cyclodextrin Adducts and Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2018, 90, 11086-11091.	3.2	44
56	A Preprocessing Tool for Enhanced Ion Mobility–Mass Spectrometry-Based Omics Workflows. <i>Journal of Proteome Research</i> , 2022, 21, 798-807.	1.8	44
57	Simultaneous fragmentation of multiple ions using IMS drift time dependent collision energies. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 411-419.	1.2	43
58	Detecting and Removing Data Artifacts in Hadamard Transform Ion Mobility-Mass Spectrometry Measurements. <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 2020-2027.	1.2	42
59	Compression Ratio Ion Mobility Programming (CRIMP) Accumulation and Compression of Billions of Ions for Ion Mobility-Mass Spectrometry Using Traveling Waves in Structures for Lossless Ion Manipulations (SLIM). <i>Analytical Chemistry</i> , 2017, 89, 6432-6439.	3.2	42
60	High-resolution separations and improved ion production and transmission in metabolomics. <i>TrAC - Trends in Analytical Chemistry</i> , 2008, 27, 205-214.	5.8	41
61	Mobility-Selected Ion Trapping and Enrichment Using Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2016, 88, 1728-1733.	3.2	41
62	Ion manipulations in structures for lossless ion manipulations (SLIM): computational evaluation of a 90° turn and a switch. <i>Analyst</i> , 2015, 140, 6845-6852.	1.7	40
63	Improved Sensitivity and Separations for Phosphopeptides using Online Liquid Chromatography Coupled with Structures for Lossless Ion Manipulations Ion Mobility–Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 10889-10896.	3.2	38
64	3-Dimensional structural characterization of cationized polyhedral oligomeric silsesquioxanes (POSS) with styryl and phenylethyl capping agents. <i>International Journal of Mass Spectrometry</i> , 2003, 227, 205-216.	0.7	37
65	DNA Hairpin, Pseudoknot, and Cruciform Stability in a Solvent-Free Environment. <i>Journal of Physical Chemistry B</i> , 2009, 113, 1722-1727.	1.2	37
66	Machine learning based prediction for peptide drift times in ion mobility spectrometry. <i>Bioinformatics</i> , 2010, 26, 1601-1607.	1.8	37
67	Squeezing of Ion Populations and Peaks in Traveling Wave Ion Mobility Separations and Structures for Lossless Ion Manipulations Using Compression Ratio Ion Mobility Programming. <i>Analytical Chemistry</i> , 2016, 88, 11877-11885.	3.2	37
68	The fungal cultivar of leaf-cutter ants produces specific enzymes in response to different plant substrates. <i>Molecular Ecology</i> , 2016, 25, 5795-5805.	2.0	37
69	Distinguishing enantiomeric amino acids with chiral cyclodextrin adducts and structures for lossless ion manipulations. <i>Electrophoresis</i> , 2018, 39, 3148-3155.	1.3	35
70	Rapid Characterization of Emerging Per- and Polyfluoroalkyl Substances in Aqueous Film-Forming Foams Using Ion Mobility Spectrometry–Mass Spectrometry. <i>Environmental Science & Technology</i> , 2020, 54, 15024-15034.	4.6	35
71	Uncovering PFAS and Other Xenobiotics in the Dark Metabolome Using Ion Mobility Spectrometry, Mass Defect Analysis, and Machine Learning. <i>Environmental Science & Technology</i> , 2022, 56, 9133-9143.	4.6	34
72	Structure of Hybrid Polyhedral Oligomeric Silsesquioxane Propyl Methacrylate Oligomers Using Ion Mobility Mass Spectrometry and Molecular Mechanics. <i>Chemistry of Materials</i> , 2005, 17, 2537-2545.	3.2	33

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73	Uterine Deletion of Trp53 Compromises Antioxidant Responses in the Mouse Decidua. <i>Endocrinology</i> , 2012, 153, 4568-4579.	1.4	32
74	LC-IMS-MS Feature Finder: detecting multidimensional liquid chromatography, ion mobility and mass spectrometry features in complex datasets. <i>Bioinformatics</i> , 2013, 29, 2804-2805.	1.8	32
75	Ligand induced structural isomerism in phosphine coordinated gold clusters revealed by ion mobility mass spectrometry. <i>Chemical Communications</i> , 2017, 53, 7389-7392.	2.2	31
76	Comparing identified and statistically significant lipids and polar metabolites in 15-year old serum and dried blood spot samples for longitudinal studies. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 447-456.	0.7	31
77	Towards Discovery and Targeted Peptide Biomarker Detection Using nanoESI-TIMS-TOF MS. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 817-826.	1.2	31
78	Cell type-resolved human lung lipidome reveals cellular cooperation in lung function. <i>Scientific Reports</i> , 2018, 8, 13455.	1.6	31
79	Characterization of an ion mobility-multiplexed collision-induced dissociation-tandem time-of-flight mass spectrometry approach. <i>International Journal of Mass Spectrometry</i> , 2010, 293, 34-44.	0.7	30
80	Identification of Hip BMD Loss and Fracture Risk Markers Through Population-Based Serum Proteomics. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 1559-1567.	3.1	30
81	Simultaneous Proteomic Discovery and Targeted Monitoring using Liquid Chromatography, Ion Mobility Spectrometry, and Mass Spectrometry. <i>Molecular and Cellular Proteomics</i> , 2016, 15, 3694-3705.	2.5	29
82	Increasing confidence of LC-MS identifications by utilizing ion mobility spectrometry. <i>International Journal of Mass Spectrometry</i> , 2013, 354-355, 312-317.	0.7	27
83	Evaluation of SDS depletion using an affinity spin column and IMS-MS detection. <i>Proteomics</i> , 2012, 12, 3138-3142.	1.3	26
84	Utilizing Pine Needles to Temporally and Spatially Profile Per- and Polyfluoroalkyl Substances (PFAS). <i>Environmental Science & Technology</i> , 2022, 56, 3441-3451.	4.6	26
85	Greatly Increasing Trapped Ion Populations for Mobility Separations Using Traveling Waves in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2016, 88, 10143-10150.	3.2	25
86	An algorithm to correct saturated mass spectrometry ion abundances for enhanced quantitation and mass accuracy in omic studies. <i>International Journal of Mass Spectrometry</i> , 2018, 427, 91-99.	0.7	25
87	Mixed-Isotope Labeling with LC-IMS-MS for Characterization of Protein-Protein Interactions by Chemical Cross-Linking. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 444-449.	1.2	24
88	Sodium stabilization of dinucleotide multiplexes in the gas phase. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 2786.	1.3	23
89	Probing Shapes of Bichromophoric Metal-Organic Complexes Using Ion Mobility Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2005, 127, 18222-18228.	6.6	23
90	Temporal and spatial analysis of per and polyfluoroalkyl substances in surface waters of Houston ship channel following a large-scale industrial fire incident. <i>Environmental Pollution</i> , 2020, 265, 115009.	3.7	23

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91	Utilizing Skyline to analyze lipidomics data containing liquid chromatography, ion mobility spectrometry and mass spectrometry dimensions. <i>Nature Protocols</i> , 2022, 17, 2415-2430.	5.5	23
92	Evaluating lipid mediator structural complexity using ion mobility spectrometry combined with mass spectrometry. <i>Bioanalysis</i> , 2018, 10, 279-289.	0.6	22
93	Coupling IR-MALDESI with Drift Tube Ion Mobility-Mass Spectrometry for High-Throughput Screening and Imaging Applications. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 642-650.	1.2	22
94	Structural Analysis of Metal Interactions with the Dinucleotide Duplex, dCGÂ-dCG, Using Ion Mobility Mass Spectrometry. <i>Journal of Physical Chemistry B</i> , 2005, 109, 4808-4810.	1.2	21
95	Improving Ion Mobility Measurement Sensitivity by Utilizing Helium in an Ion Funnel Trap. <i>Analytical Chemistry</i> , 2014, 86, 5295-5299.	3.2	21
96	From Pesticides to Per- and Polyfluoroalkyl Substances: An Evaluation of Recent Targeted and Untargeted Mass Spectrometry Methods for Xenobiotics. <i>Analytical Chemistry</i> , 2021, 93, 641-656.	3.2	21
97	Improving the Speed and Selectivity of Newborn Screening Using Ion Mobility Spectrometryâ€“Mass Spectrometry. <i>Analytical Chemistry</i> , 2021, 93, 17094-17102.	3.2	21
98	Redox states of <i>Desulfovibrio vulgaris</i> DsrC, a key protein in dissimilatory sulfite reduction. <i>Biochemical and Biophysical Research Communications</i> , 2013, 441, 732-736.	1.0	20
99	Characterizing the lipid and metabolite changes associated with placental function and pregnancy complications using ion mobility spectrometry-mass spectrometry and mass spectrometry imaging. <i>Placenta</i> , 2017, 60, S67-S72.	0.7	20
100	Application of multiplexed ion mobility spectrometry towards the identification of host protein signatures of treatment effect in pulmonary tuberculosis. <i>Tuberculosis</i> , 2018, 112, 52-61.	0.8	20
101	Highâ€“throughput serum proteomics for the identification of protein biomarkers of mortality in older men. <i>Aging Cell</i> , 2018, 17, e12717.	3.0	19
102	The MPLEx Protocol for Multi-omic Analyses of Soil Samples. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	19
103	Diastereomer Assignment of an Olefin-Linked Bis-paracyclophane by Ion Mobility Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2004, 126, 6255-6257.	6.6	18
104	Muscle Segment Homeobox Genes Direct Embryonic Diapause by Limiting Inflammation in the Uterus*. <i>Journal of Biological Chemistry</i> , 2015, 290, 15337-15349.	1.6	18
105	Folding and Assembly of Short Î±, Î², Î³-Hybrid Peptides: Minor Variations in Sequence and Drastic Differences in Higher-Level Structures. <i>Journal of the American Chemical Society</i> , 2019, 141, 14239-14248.	6.6	18
106	Multiomic Big Data Analysis Challenges: Increasing Confidence in the Interpretation of Artificial Intelligence Assessments. <i>Analytical Chemistry</i> , 2021, 93, 7763-7773.	3.2	18
107	Development and Application of Multidimensional Lipid Libraries to Investigate Lipidomic Dysregulation Related to Smoke Inhalation Injury Severity. <i>Journal of Proteome Research</i> , 2022, 21, 232-242.	1.8	18
108	A Structures for Lossless Ion Manipulations (SLIM) Module for Collision Induced Dissociation. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 1285-1288.	1.2	16

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109	Perspectives on Data Analysis in Metabolomics: Points of Agreement and Disagreement from the 2018 ASMS Fall Workshop. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2031-2036.	1.2	16
110	Evaluating the structural complexity of isomeric bile acids with ion mobility spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 4673-4682.	1.9	16
111	Structural-based connectivity and omic phenotype evaluations (SCOPE): a cheminformatics toolbox for investigating lipidomic changes in complex systems. <i>Analyst, The</i> , 2020, 145, 7197-7209.	1.7	16
112	Unveiling molecular signatures of preeclampsia and gestational diabetes mellitus with multi-omics and innovative cheminformatics visualization tools. <i>Molecular Omics</i> , 2020, 16, 521-532.	1.4	16
113	Analysis of per- and polyfluoroalkyl substances in Houston Ship Channel and Galveston Bay following a large-scale industrial fire using ion-mobility-spectrometry-mass spectrometry. <i>Journal of Environmental Sciences</i> , 2022, 115, 350-362.	3.2	16
114	Ion Mobility-Mass Spectrometry in Metabolomic, Lipidomic, and Proteomic Analyses. <i>Comprehensive Analytical Chemistry</i> , 2019, , 123-159.	0.7	15
115	Enhancing biological analyses with three dimensional field asymmetric ion mobility, low field drift tube ion mobility and mass spectrometry (1/4FAIMS/IMS-MS) separations. <i>Analyst, The</i> , 2015, 140, 6955-6963.	1.7	14
116	Mass spectrometry-based monitoring of millisecond protein-ligand binding dynamics using an automated microfluidic platform. <i>Lab on A Chip</i> , 2016, 16, 1544-1548.	3.1	14
117	Sequence dependent conformations of glycidyl methacrylate/butyl methacrylate copolymers in the gas phase. <i>International Journal of Mass Spectrometry</i> , 2004, 238, 279-286.	0.7	13
118	Spatial Ion Peak Compression and its Utility in Ion Mobility Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 1128-1135.	1.2	13
119	Proteomic assessment of serum biomarkers of longevity in older men. <i>Aging Cell</i> , 2020, 19, e13253.	3.0	12
120	Per- and polyfluoroalkyl substances (PFAS) contaminants of emerging concern. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 1187-1188.	1.9	12
121	High-Resolution Demultiplexing (HRdm) Ion Mobility Spectrometry-Mass Spectrometry for Aspartic and Isoaspartic Acid Determination and Screening. <i>Analytical Chemistry</i> , 2022, 94, 6191-6199.	3.2	12
122	A Customizable Flow Injection System for Automated, High Throughput, and Time Sensitive Ion Mobility Spectrometry and Mass Spectrometry Measurements. <i>Analytical Chemistry</i> , 2018, 90, 737-744.	3.2	11
123	Enhanced protocol for quantitative N-linked glycomics analysis using Individuality Normalization when Labeling with Isotopic Glycan Hydrazide Tags (INLIGHT). <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 7569-7579.	1.9	11
124	A Comparative Analysis of Analytical Techniques for Rapid Oil Spill Identification. <i>Environmental Toxicology and Chemistry</i> , 2021, 40, 1034-1049.	2.2	11
125	Ion Mobility Spectrometry Characterization of the Intermediate Hydrogen-Containing Gold Cluster Au ₇ (PPh ₃) ₃ 7H ₅ ²⁺ . <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2502-2508.	2.1	11
126	From Plants to Ants: Fungal Modification of Leaf Lipids for Nutrition and Communication in the Leaf-Cutter Ant Fungal Garden Ecosystem. <i>MSystems</i> , 2021, 6, .	1.7	11

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127	PIXIE: an algorithm for automated ion mobility arrival time extraction and collision cross section calculation using global data association. <i>Bioinformatics</i> , 2017, 33, 2715-2722.	1.8	10
128	Utilizing Ion Mobility-Mass Spectrometry to Investigate the Unfolding Pathway of Cu/Zn Superoxide Dismutase. <i>Frontiers in Chemistry</i> , 2021, 9, 614595.	1.8	10
129	Utilizing Drift Tube Ion Mobility Spectrometry for the Evaluation of Metabolites and Xenobiotics. <i>Methods in Molecular Biology</i> , 2020, 2084, 35-54.	0.4	10
130	Combining Micropunch Histology and Multidimensional Lipidomic Measurements for In-Depth Tissue Mapping. <i>ACS Measurement Science Au</i> , 2022, 2, 67-75.	1.9	10
131	Data Processing Workflow to Identify Structurally Related Compounds in Petroleum Substances Using Ion Mobility Spectrometry–Mass Spectrometry. <i>Energy & Fuels</i> , 2021, 35, 10529-10539.	2.5	9
132	Utilizing ion mobility spectrometry-mass spectrometry for the characterization and detection of persistent organic pollutants and their metabolites. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 1245-1258.	1.9	9
133	Relationships between constituents of energy drinks and beating parameters in human induced pluripotent stem cell (iPSC)-Derived cardiomyocytes. <i>Food and Chemical Toxicology</i> , 2021, 149, 111979.	1.8	8
134	In situ imaging reveals disparity between prostaglandin localization and abundance of prostaglandin synthases. <i>Communications Biology</i> , 2021, 4, 966.	2.0	8
135	From Prevention to Disease Perturbations: A Multi-Omic Assessment of Exercise and Myocardial Infarctions. <i>Biomolecules</i> , 2021, 11, 40.	1.8	8
136	Characterization of compositional variability in petroleum substances. <i>Fuel</i> , 2022, 317, 123547.	3.4	8
137	Surface Modified Nano-Electrospray Needles Improve Sensitivity for Native Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 1031-1037.	1.2	8
138	Utilizing liquid chromatography, ion mobility spectrometry, and mass spectrometry to assess INLIGHT [®] , [®] derivatized N-linked glycans in biological samples. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 623-637.	1.9	6
139	A <i>Histoplasma capsulatum</i> Lipid Metabolic Map Identifies Antifungal Targets. <i>MBio</i> , 2021, 12, e0297221.	1.8	6
140	Combining Isotopologue Workflows and Simultaneous Multidimensional Separations to Detect, Identify, and Validate Metabolites in Untargeted Analyses. <i>Analytical Chemistry</i> , 2022, 94, 2527-2535.	3.2	6
141	Spatial Distribution of Polycyclic Aromatic Hydrocarbon Contaminants after Hurricane Harvey in a Houston Neighborhood. <i>Journal of Health and Pollution</i> , 2021, 11, 210308.	1.8	5
142	Aminoglycoside antibiotics: A-site specific binding to 16S. <i>International Journal of Mass Spectrometry</i> , 2009, 283, 105-111.	0.7	4
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