Brian H Clowers

List of Publications by Year
in descending order

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99	4,783	109321	102487
papers	citations	35 h-index	66 g-index

100	100	100	4152
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synchronized Stepped Frequency Modulation for Multiplexed Ion Mobility Measurements. Journal of the American Society for Mass Spectrometry, 2022, 33, 557-564.	2.8	6
2	Accelerating prototyping experiments for traveling wave structures for lossless ion manipulations. Talanta, 2022, 244, 123446.	5.5	5
3	Condensable Vapor Sorption by Low Charge State Protein Ions. Analytical Chemistry, 2022, 94, 7050-7059.	6.5	1
4	Metabolomic signatures of Naegleria fowleri colonization in drinking water distribution systems in rural Western Australia. , 2022, , 323-336.		0
5	Separation and Collision Cross Section Measurements of Protein Complexes Afforded by a Modular Drift Tube Coupled to an Orbitrap Mass Spectrometer. Analytical Chemistry, 2022, 94, 9434-9441.	6.5	4
6	Optical and mass spectral characterization of the electrospray ionization/corona discharge ionization interface. Talanta, 2021, 224, 121870.	5.5	1
7	Non-contact detection of thiodiglycol vapors and associated degradation products using atmospheric flow tube mass spectrometry. Analyst, The, 2021, 146, 3263-3272.	3.5	1
8	Reevaluating the Role of Polarizability in Ion Mobility Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 618-627.	2.8	7
9	Ion Mobility Spectrometry Characterization of the Intermediate Hydrogen-Containing Gold Cluster Au₇(PPh₃)₇H₅²⁺. Journal of Physical Chemistry Letters, 2021, 12, 2502-2508.	4.6	11
10	Masked Multiplexed Separations to Enhance Duty Cycle for Structures for Lossless Ion Manipulations. Analytical Chemistry, 2021, 93, 5727-5734.	6.5	10
11	Absorption Mode Fourier Transform Ion Mobility Mass Spectrometry Multiplexing Combined with Half-Window Apodization Windows Improves Resolution and Shortens Acquisition Times. Analytical Chemistry, 2021, 93, 9513-9520.	6.5	12
12	Implications of Blancâ€™s Law for Use in Trapped Ion Mobility Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 2241-2250.	2.8	0
13	Separations of Carbohydrates with Noncovalent Shift Reagents by Frequency-Modulated Ion Mobility-Orbitrap Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 2472-2480.	2.8	7
14	Assessing the Impact of Drift Gas Polarizability in Polyatomic Ion Mobility Experiments. Analytical Chemistry, 2020, 92, 4226-4234.	6.5	16
15	Probing Gas-Phase-Clustering Thermodynamics with Ion Mobilityâ€“Mass Spectrometry: Association Energies of Phenylalanine Ions with Gas-Phase Alcohols. Journal of the American Society for Mass Spectrometry, 2020, 31, 1803-1814.	2.8	7
16	Non-contact vapor detection of illicit drugs via atmospheric flow tube-mass spectrometry. Analyst, The, 2020, 145, 6485-6492.	3.5	10
17	Enabling resolution of isomeric peptides using tri-state ion gating and Fourier-transform ion mobility spectrometry. International Journal for Ion Mobility Spectrometry, 2020, 23, 133-142.	1.4	4
18	Evaluation of Trapped Ion Mobility Spectrometry Source Conditions Using Benzylammonium Thermometer Ions. Journal of the American Society for Mass Spectrometry, 2020, 31, 1593-1602.	2.8	14

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19	Vaporized Cannabis Extracts Have Reinforcing Properties and Support Conditioned Drug-Seeking Behavior in Rats. Journal of Neuroscience, 2020, 40, 1897-1908.	3.6	83
20	Validation of Calibration Parameters for Trapped Ion Mobility Spectrometry. Journal of the American Society for Mass Spectrometry, 2019, 30, 2152-2162.	2.8	25
21	Fundamentals and applications of incorporating chromatographic separations with ion mobility-mass spectrometry. TrAC - Trends in Analytical Chemistry, 2019, 119, 115625.	11.4	22
22	Recommendations for reporting ion mobility Mass Spectrometry measurements. Mass Spectrometry Reviews, 2019, 38, 291-320.	5.4	315
23	Determination of Gas-Phase Ion Mobility Coefficients Using Voltage Sweep Multiplexing. Journal of the American Society for Mass Spectrometry, 2019, 30, 977-986.	2.8	19
24	Interrogating Proton Affinities of Organophosphonate Species Via Atmospheric Flow Tube Mass Spectrometry and Computational Methods. Journal of the American Society for Mass Spectrometry, 2019, 30, 1308-1320.	2.8	3
25	Ion multiplexing: Maximizing throughput and signal to noise ratio for ion mobility spectrometry. TrAC - Trends in Analytical Chemistry, 2019, 116, 340-345.	11.4	28
26	Deducing Proton-Bound Heterodimer Association Energies from Shifts in Ion Mobility Arrival Time Distributions. Journal of Physical Chemistry A, 2019, 123, 2957-2965.	2.5	15
27	Increased ion throughput using tristate ion-gate multiplexing. Analyst, The, 2019, 144, 6660-6670.	3.5	24
28	Optimized Reconstruction Techniques for Multiplexed Dual-Gate Ion Mobility Mass Spectrometry Experiments. Analytical Chemistry, 2019, 91, 1432-1440.	6.5	10
29	Ambient vapor sampling and selective cluster formation for the trace detection of tributyl phosphate via atmospheric flow tube mass spectrometry. Talanta, 2019, 195, 683-690.	5.5	5
30	Age-related differences in Î”â¹-tetrahydrocannabinol-induced antinociception in female and male rats.. Experimental and Clinical Psychopharmacology, 2019, 27, 338-347.	1.8	20
31	Leveraging spectral sparsity to realize enhanced separation of gas-phase ion populations. International Journal of Mass Spectrometry, 2018, 427, 141-150.	1.5	8
32	Contemporary glycomic approaches using ion mobilityâ€“mass spectrometry. Current Opinion in Chemical Biology, 2018, 42, 119-129.	6.1	28
33	Stabilization of gas-phase uranyl complexes enables rapid speciation using electrospray ionization and ion mobility-mass spectrometry. Talanta, 2018, 176, 140-150.	5.5	8
34	Digital mass filter analysis in stability zones A and B. Journal of Mass Spectrometry, 2018, 53, 1155-1168.	1.6	15
35	Cannabidiol modulation of antinociceptive tolerance to Î”9-tetrahydrocannabinol. Psychopharmacology, 2018, 235, 3289-3302.	3.1	24
36	Impact of injection potential on measured ion response for digitally driven mass filters. International Journal of Mass Spectrometry, 2018, 434, 1-6.	1.5	5

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37	Application of untargeted metabolomics for the detection of pathogenic Naegleria fowleri in an operational drinking water distribution system. Water Research, 2018, 145, 678-686.	11.3	4
38	Characterization of alkylphosphonic acid vapors using atmospheric flow tubeâ€“ion trap mass spectrometry. Rapid Communications in Mass Spectrometry, 2018, 32, 1363-1371.	1.5	4
39	Assessment of Dimeric Metal-Glycan Adducts via Isotopic Labeling and Ion Mobility-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 1638-1649.	2.8	8
40	Implementation of a flexible, open-source platform for ion mobility spectrometry. HardwareX, 2018, 4, e00030.	2.2	47
41	Comparative metabolite profiling of a metastatic and primary melanoma cell line using untargeted metabolomics: A case study. Clinical Mass Spectrometry, 2018, 10, 16-24.	1.9	4
42	Using Digital Waveforms to Mitigate Solvent Clustering During Mass Filter Analysis of Proteins. Journal of the American Society for Mass Spectrometry, 2018, 29, 2081-2085.	2.8	6
43	Fourier Transform-Ion Mobility-Orbitrap Mass Spectrometer: A Next-Generation Instrument for Native Mass Spectrometry. Analytical Chemistry, 2018, 90, 10472-10478.	6.5	59
44	A comparison based digital waveform generator for high resolution duty cycle. Review of Scientific Instruments, 2018, 89, 084101.	1.3	14
45	Ambient Pressure Inverse Ion Mobility Spectrometry Coupled to Mass Spectrometry. Analytical Chemistry, 2017, 89, 2800-2806.	6.5	11
46	Cannabidiol-Î” 9 -tetrahydrocannabinol interactions on acute pain and locomotor activity. Drug and Alcohol Dependence, 2017, 175, 187-197.	3.2	62
47	Differential Fragmentation of Mobility-Selected Glycans via Ultraviolet Photodissociation and Ion Mobility-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 1236-1241.	2.8	27
48	Development of Untargeted Metabolomics Methods for the Rapid Detection of PathogenicNaegleria fowleri. Environmental Science & Technology, 2017, 51, 4210-4219.	10.0	10
49	Correlation ion mobility spectrometry. Analyst, The, 2017, 142, 292-301.	3.5	29
50	Acceleration of metalâ€“ligand complexation kinetics by electrospray ionization. Analyst, The, 2017, 142, 4468-4475.	3.5	3
51	Atmospheric Pressure Drift Tube Ion Mobilityâ€“Orbitrap Mass Spectrometry: Initial Performance Characterization. Analytical Chemistry, 2017, 89, 11301-11309.	6.5	30
52	An open source ion gate pulser for ion mobility spectrometry. International Journal for Ion Mobility Spectrometry, 2017, 20, 87-93.	1.4	25
53	Tuning Mobility Separation Factors of Chemical Warfare Agent Degradation Products via Selective Ion-Neutral Clustering. Analytical Chemistry, 2017, 89, 12416-12424.	6.5	25
54	Enhanced Mixture Separations of Metal Adducted Tetrasaccharides Using Frequency Encoded Ion Mobility Separations and Tandem Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 664-677.	2.8	24

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55	Augmenting Ion Trap Mass Spectrometers Using a Frequency Modulated Drift Tube Ion Mobility Spectrometer. Analytical Chemistry, 2016, 88, 3121-3129.	6.5	52
56	Second-Generation Tunable pH-Sensitive Phosphoramidate-Based Linkers for Controlled Release. Bioconjugate Chemistry, 2016, 27, 2206-2213.	3.6	35
57	Investigation of Yersinia pestis Laboratory Adaptation through a Combined Genomics and Proteomics Approach. PLoS ONE, 2015, 10, e0142997.	2.5	17
58	Effects of bacterial inactivation methods on downstream proteomic analysis. Journal of Microbiological Methods, 2015, 112, 3-10.	1.6	7
59	A two-phase approach to fourier transform ion mobility time-of-flight mass spectrometry. Analyst, The, 2015, 140, 6862-6870.	3.5	23
60	Detecting and Removing Data Artifacts in Hadamard Transform Ion Mobility-Mass Spectrometry Measurements. Journal of the American Society for Mass Spectrometry, 2014, 25, 2020-2027.	2.8	42
61	Direct Real-Time Detection of Vapors from Explosive Compounds. Analytical Chemistry, 2013, 85, 10977-10983.	6.5	33
62	Forensic proteomics of poxvirus production. Analyst, The, 2013, 138, 6385.	3.5	6
63	Direct Real-Time Detection of RDX Vapors Under Ambient Conditions. Analytical Chemistry, 2013, 85, 389-397.	6.5	61
64	Characterization of Residual Medium Peptides fromYersinia pestisCultures. Analytical Chemistry, 2013, 85, 3933-3939.	6.5	15
65	Nano-LCâ€“MS/MS of Glycopeptides Produced by Nonspecific Proteolysis Enables Rapid and Extensive Site-Specific Glycosylation Determination. Analytical Chemistry, 2011, 83, 5541-5547.	6.5	46
66	Comprehensive software suite for the operation, maintenance, and evaluation of an ion mobility spectrometer. International Journal for Ion Mobility Spectrometry, 2011, 14, 117.	1.4	8
67	An efficient data format for mass spectrometry-based proteomics. Journal of the American Society for Mass Spectrometry, 2010, 21, 1784-1788.	2.8	16
68	Signature-Discovery Approach for Sample Matching of a Nerve-Agent Precursor Using Liquid Chromatographyâ^'Mass Spectrometry, XCMS, and Chemometrics. Analytical Chemistry, 2010, 82, 4165-4173.	6.5	300
69	Ion mobility-mass spectrometry analysis of isomeric carbohydrate precursor ions. Analytical and Bioanalytical Chemistry, 2009, 394, 1853-1867.	3.7	99
70	Profile of native Nâ€linked glycan structures from human serum using high performance liquid chromatography on a microfluidic chip and timeâ€ofâ€flight mass spectrometry. Proteomics, 2009, 9, 1939-1951.	2.2	131
71	Coulombic Effects in Ion Mobility Spectrometry. Analytical Chemistry, 2009, 81, 4778-4787.	6.5	44
72	The Infrared Spectra of Bacillus Bacteria Part I: Vegetative Bacillus versus Sporulated Cells and the Contributions of Phospholipids to Vegetative Infrared Spectra. Applied Spectroscopy, 2009, 63, 899-907.	2.2	15

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73	Analytical Performance of Immobilized Pronase for Glycopeptide Footprinting and Implications for Surpassing Reductionist Glycoproteomics. Journal of Proteome Research, 2009, 8, 502-512.	3.7	65
74	Systematic characterization of high mass accuracy influence on false discovery and probability scoring in peptide mass fingerprinting. Analytical Biochemistry, 2008, 372, 156-166.	2.4	18
75	Dual polarity accurate mass calibration for electrospray ionization and matrix-assisted laser desorption/ionization mass spectrometry using maltooligosaccharides. Analytical Biochemistry, 2008, 381, 205-213.	2.4	36
76	On-line Digestion System for Protein Characterization and Proteome Analysis. Analytical Chemistry, 2008, 80, 8930-8936.	6.5	49
77	Enhanced Ion Utilization Efficiency Using an Electrodynamic Ion Funnel Trap as an Injection Mechanism for Ion Mobility Spectrometry. Analytical Chemistry, 2008, 80, 612-623.	6.5	104
78	Dynamically Multiplexed Ion Mobility Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2008, 80, 5873-5883.	6.5	70
79	Pseudorandom Sequence Modifications for Ion Mobility Orthogonal Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2008, 80, 2464-2473.	6.5	46
80	Factors That Influence Fragmentation Behavior of N-Linked Glycopeptide Ions. Analytical Chemistry, 2008, 80, 3684-3692.	6.5	74
81	A Serum Glycomics Approach to Breast Cancer Biomarkers. Molecular and Cellular Proteomics, 2007, 6, 43-55.	3.8	207
82	Site Determination of Protein Glycosylation Based on Digestion with Immobilized Nonspecific Proteases and Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Journal of Proteome Research, 2007, 6, 4032-4040.	3.7	64
83	Ion mobility spectrometryâ€"mass spectrometry performance using electrodynamic ion funnels and elevated drift gas pressures. Journal of the American Society for Mass Spectrometry, 2007, 18, 1176-1187.	2.8	128
84	Rapid resolution of carbohydrate isomers by electrospray ionization ambient pressure ion mobility spectrometry-time-of-flight mass spectrometry (ESI-APIMS-TOFMS). Journal of the American Society for Mass Spectrometry, 2007, 18, 1163-1175.	2.8	160
85	Gas-Phase Chiral Separations by Ion Mobility Spectrometry. Analytical Chemistry, 2006, 78, 8200-8206.	6.5	246
86	A Strategy for Annotating the Human Milk Glycome. Journal of Agricultural and Food Chemistry, 2006, 54, 7471-7480.	5.2	427
87	Hadamard Transform Ion Mobility Spectrometry. Analytical Chemistry, 2006, 78, 44-51.	6.5	125
88	Influence of cation adduction on the separation characteristics of flavonoid diglycoside isomers using dual gate-ion mobility-quadrupole ion trap mass spectrometry. Journal of Mass Spectrometry, 2006, 41, 339-351.	1.6	49
89	Separation of sodiated isobaric disaccharides and trisaccharides using electrospray ionization-atmospheric pressure ion mobility-time of flight mass spectrometry. Journal of the American Society for Mass Spectrometry, 2005, 16, 660-669.	2.8	158
90	Mass Analysis of Mobility-Selected Ion Populations Using Dual Gate, Ion Mobility, Quadrupole Ion Trap Mass Spectrometry. Analytical Chemistry, 2005, 77, 5877-5885.	6.5	79

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91	Detection of a Chemical Warfare Agent Simulant in Various Aerosol Matrixes by Ion Mobility Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2005, 77, 4792-4799.	6.5	201
92	Atmospheric pressure matrix-assisted laser desorption/ionization with analysis by ion mobility time-of-flight mass spectrometry. Rapid Communications in Mass Spectrometry, 2004, 18, 882-888.	1.5	45
93	Rapid separation of phenylthiohydantoin amino acids: ambient pressure ion-mobility mass spectrometry (IMMS). Analytical and Bioanalytical Chemistry, 2003, 375, 99-102.	3.7	11
94	Secondary Ionization of Chemical Warfare Agent Simulants:â€‰ Atmospheric Pressure Ion Mobility Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2003, 75, 6068-6076.	6.5	103
95	Rapid Screening of Aqueous Chemical Warfare Agent Degradation Products:â€‰ Ambient Pressure Ion Mobility Mass Spectrometry. Analytical Chemistry, 2002, 74, 4343-4352.	6.5	97
96	Evaluation of micro-electrospray ionization with ion mobility spectrometry/mass spectrometry. International Journal of Mass Spectrometry, 2002, 213, 191-202.	1.5	8
97	Electrospray ionization with ambient pressure ion mobility separation and mass analysis by orthogonal time-of-flight mass spectrometry. Rapid Communications in Mass Spectrometry, 2001, 15, 2221-2226.	1.5	66
98	Evaluation of sulfonylurea herbicides using high resolution electrospray ionization ion mobility quadrupole mass spectrometry. Field Analytical Chemistry and Technology, 2001, 5, 302-312.	0.8	23
99	Liquid-sheath-flow electrospray ionization feasibility study of direct water analysis with the use of high-resolution ion-mobility spectrometry. Field Analytical Chemistry and Technology, 2001, 5, 91-96.	0.8	8