

Yehia M Ibrahim

List of Publications by Year in descending order

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81900

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times ranked

3027
citing authors

#	ARTICLE	IF	CITATIONS
1	A Preprocessing Tool for Enhanced Ion Mobility–Mass Spectrometry-Based Omics Workflows. <i>Journal of Proteome Research</i> , 2022, 21, 798-807.	3.7	44
2	Implementation of Ion Mobility Spectrometry-Based Separations in Structures for Lossless Ion Manipulations (SLIM). <i>Methods in Molecular Biology</i> , 2022, 2394, 453-469.	0.9	2
3	A Miniature Multilevel Structures for Lossless Ion Manipulations Ion Mobility Spectrometer with Wide Mobility Range Separation Capabilities. <i>Analytical Chemistry</i> , 2022, 94, 2180-2188.	6.5	5
4	DEIMoS: An Open-Source Tool for Processing High-Dimensional Mass Spectrometry Data. <i>Analytical Chemistry</i> , 2022, 94, 6130-6138.	6.5	14
5	Effect of Traveling Waveform Profiles on Collision Cross Section Measurements in Structures for Lossless Ion Manipulations. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, , .	2.8	3
6	Evaluation of Waveform Profiles for Traveling Wave Ion Mobility Separations in Structures for Lossless Ion Manipulations. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 225-236.	2.8	5
7	Dynamic Time-Warping Correction for Shifts in Ultrahigh Resolving Power Ion Mobility Spectrometry and Structures for Lossless Ion Manipulations. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 996-1007.	2.8	14
8	Optical Microscopy-Guided Laser Ablation Electrospray Ionization Ion Mobility Mass Spectrometry: Ambient Single Cell Metabolomics with Increased Confidence in Molecular Identification. <i>Metabolites</i> , 2021, 11, 200.	2.9	25
9	AutoCCS: automated collision cross-section calculation software for ion mobility spectrometry–mass spectrometry. <i>Bioinformatics</i> , 2021, 37, 4193-4201.	4.1	13
10	Improving Signal to Noise Ratios in Ion Mobility Spectrometry and Structures for Lossless Ion Manipulations (SLIM) using a High Dynamic Range Analog-to-Digital Converter. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 2698-2706.	2.8	1
11	Measurement and Theory of Gas-Phase Ion Mobility Shifts Resulting from Isotopomer Mass Distribution Changes. <i>Analytical Chemistry</i> , 2021, 93, 14966-14975.	6.5	15
12	A simulation study of the influence of the traveling wave patterns on ion mobility separations in structures for lossless ion manipulations. <i>Analyst, The</i> , 2020, 145, 240-248.	3.5	9
13	Assessing Collision Cross Section Calibration Strategies for Traveling Wave-Based Ion Mobility Separations in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2020, 92, 14976-14982.	6.5	23
14	Ion Mobility Spectrometry with High Ion Utilization Efficiency Using Traveling Wave-Based Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2020, 92, 14930-14938.	6.5	12
15	Ultra-High-Resolution Ion Mobility Separations Over Extended Path Lengths and Mobility Ranges Achieved using a Multilevel Structures for Lossless Ion Manipulations Module. <i>Analytical Chemistry</i> , 2020, 92, 7972-7979.	6.5	48
16	Rapid and Simultaneous Characterization of Drug Conjugation in Heavy and Light Chains of a Monoclonal Antibody Revealed by High-Resolution Ion Mobility Separations in SLIM. <i>Analytical Chemistry</i> , 2020, 92, 5004-5012.	6.5	21
17	Traveling-Wave-Based Electrodynamical Switch for Concurrent Dual-Polarity Ion Manipulations in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2019, 91, 14712-14718.	6.5	7
18	SLIM Ultrahigh Resolution Ion Mobility Spectrometry Separations of Isotopologues and Isotopomers Reveal Mobility Shifts due to Mass Distribution Changes. <i>Analytical Chemistry</i> , 2019, 91, 11952-11962.	6.5	76

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19	Towards resolving the spatial metabolome with unambiguous molecular annotations in complex biological systems by coupling mass spectrometry imaging with structures for lossless ion manipulations. Chemical Communications, 2019, 55, 306-309.	4.1	27
20	New mass spectrometry technologies contributing towards comprehensive and high throughput omics analyses of single cells. Analyst, The, 2019, 144, 794-807.	3.5	67
21	Opening new paths for biological applications of ion mobility - Mass spectrometry using structures for lossless ion manipulations. TrAC - Trends in Analytical Chemistry, 2019, 116, 300-307.	11.4	28
22	Dual Polarity Ion Confinement and Mobility Separations. Journal of the American Society for Mass Spectrometry, 2019, 30, 967-976.	2.8	5
23	Separation of β -Amyloid Tryptic Peptide Species with Isomerized and Racemized α -Aspartic Residues with Ion Mobility in Structures for Lossless Ion Manipulations. Analytical Chemistry, 2019, 91, 4374-4380.	6.5	37
24	Nanowell-mediated multidimensional separations combining nanoLC with SLIM IM-MS for rapid, high-peak-capacity proteomic analyses. Analytical and Bioanalytical Chemistry, 2019, 411, 5363-5372.	3.7	13
25	Isolation of Tryptanthrin and Reassessment of Evidence for Its Isobaric Isostere Wrightiadione in Plants of the Wrightia Genus. Journal of Natural Products, 2019, 82, 440-448.	3.0	13
26	A Hybrid Constant and Oscillatory Field Ion Mobility Analyzer Using Structures for Lossless Ion Manipulations. Journal of the American Society for Mass Spectrometry, 2018, 29, 342-351.	2.8	4
27	Characterization of applied fields for ion mobility separations in traveling wave based structures for lossless ion manipulations (SLIM). International Journal of Mass Spectrometry, 2018, 430, 8-13.	1.5	12
28	An algorithm to correct saturated mass spectrometry ion abundances for enhanced quantitation and mass accuracy in omic studies. International Journal of Mass Spectrometry, 2018, 427, 91-99.	1.5	25
29	Unraveling the isomeric heterogeneity of glycans: ion mobility separations in structures for lossless ion manipulations. Chemical Communications, 2018, 54, 11701-11704.	4.1	68
30	Distinguishing enantiomeric amino acids with chiral cyclodextrin adducts and structures for lossless ion manipulations. Electrophoresis, 2018, 39, 3148-3155.	2.4	35
31	Improved Sensitivity and Separations for Phosphopeptides using Online Liquid Chromatography Coupled with Structures for Lossless Ion Manipulations Ion Mobility-Mass Spectrometry. Analytical Chemistry, 2018, 90, 10889-10896.	6.5	38
32	Rapid Ion Mobility Separations of Bile Acid Isomers Using Cyclodextrin Adducts and Structures for Lossless Ion Manipulations. Analytical Chemistry, 2018, 90, 11086-11091.	6.5	44
33	Structural Elucidation of <i>cis</i> / <i>trans</i> Dicafeoylquinic Acid Photoisomerization Using Ion Mobility Spectrometry-Mass Spectrometry. Journal of Physical Chemistry Letters, 2017, 8, 1381-1388.	4.6	45
34	New frontiers for mass spectrometry based upon structures for lossless ion manipulations. Analyst, The, 2017, 142, 1010-1021.	3.5	95
35	Toward artifact-free data in Hadamard transform-based double multiplexing of ion mobility-Orbitrap mass spectrometry. Analyst, The, 2017, 142, 1735-1745.	3.5	16
36	Ion Elevators and Escalators in Multilevel Structures for Lossless Ion Manipulations. Analytical Chemistry, 2017, 89, 1972-1977.	6.5	22

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37	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.	6.5	42
38	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.	6.5	162
39	Isochromans and Related Constituents from the Endophytic Fungus <i>Annulohypoxyton truncatum</i> of <i>Zizania caduciflora</i> and Their Anti-Inflammatory Effects. <i>Journal of Natural Products</i> , 2017, 80, 205-209.	3.0	28
40	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.	1.5	31
41	Comprehensive computational design of ordered peptide macrocycles. <i>Science</i> , 2017, 358, 1461-1466.	12.6	146
42	Distinguishing <i>D</i> - and <i>L</i> -aspartic and isoaspartic acids in amyloid β peptides with ultrahigh resolution ion mobility spectrometry. <i>Chemical Communications</i> , 2017, 53, 7913-7916.	4.1	56
43	Design of a TW-SLIM Module for Dual Polarity Confinement, Transport, and Reactions. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 1442-1449.	2.8	9
44	Development of <i>L</i> -Tyrosine-Based Enzyme-Responsive Amphiphilic Poly(ester-urethane) Nanocarriers for Multiple Drug Delivery to Cancer Cells. <i>Biomacromolecules</i> , 2017, 18, 189-200.	5.4	47
45	A Modified Approach for in Situ Chemical Oxidation Coupled to Biodegradation Enhances Light Nonaqueous Phase Liquid Source-Zone Remediation. <i>Environmental Science & Technology</i> , 2017, 51, 463-472.	10.0	14
46	Lipid and Glycolipid Isomer Analyses Using Ultra-High Resolution Ion Mobility Spectrometry Separations. <i>International Journal of Molecular Sciences</i> , 2017, 18, 183.	4.1	86
47	Distinguishing between Mechanical and Electrostatic Interaction in Single Pass Multi Frequency Electrostatic Force Microscopy Measurements on a Molecular Material. <i>Langmuir</i> , 2016, 32, 13593-13599.	3.5	7
48	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.	6.5	37
49	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
50	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.	2.8	13
51	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.	2.8	16
52	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.	1.5	92
53	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.	3.8	29
54	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.	6.5	52

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55	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.	6.5	136
56	Development of an Ion Mobility Spectrometry-Orbitrap Mass Spectrometer Platform. <i>Analytical Chemistry</i> , 2016, 88, 12152-12160.	6.5	54
57	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.	6.5	25
58	Mobility-Selected Ion Trapping and Enrichment Using Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2016, 88, 1728-1733.	6.5	41
59	Uncovering biologically significant lipid isomers with liquid chromatography, ion mobility spectrometry and mass spectrometry. <i>Analyst, The</i> , 2016, 141, 1649-1659.	3.5	196
60	Improved ion optics for introduction of ions into a 9.4-T Fourier transform ion cyclotron resonance mass spectrometer. <i>Journal of Mass Spectrometry</i> , 2015, 50, 280-284.	1.6	11
61	Enhancing bottom-up and top-down proteomic measurements with ion mobility separations. <i>Proteomics</i> , 2015, 15, 2766-2776.	2.2	54
62	Ion Trapping, Storage, and Ejection in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 6010-6016.	6.5	48
63	Ion manipulations in structures for lossless ion manipulations (SLIM): computational evaluation of a 90° turn and a switch. <i>Analyst, The</i> , 2015, 140, 6845-6852.	3.5	40
64	Rectangular Ion Funnel: A New Ion Funnel Interface for Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 716-722.	6.5	22
65	Orthogonal Injection Ion Funnel Interface Providing Enhanced Performance for Selected Reaction Monitoring-Triple Quadrupole Mass Spectrometry. <i>Analytical Chemistry</i> , 2015, 87, 7326-7331.	6.5	14
66	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.	3.5	14
67	Design and performance of a high-flux electrospray ionization source for ion soft landing. <i>Analyst, The</i> , 2015, 140, 2957-2963.	3.5	44
68	Development of a new ion mobility time-of-flight mass spectrometer. <i>International Journal of Mass Spectrometry</i> , 2015, 377, 655-662.	1.5	92
69	Characterization of Traveling Wave Ion Mobility Separations in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 11301-11308.	6.5	67
70	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.	3.8	51
71	Differential Ion Mobility Separations in up to 100% Helium Using Microchips. <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 480-489.	2.8	28
72	Improving Ion Mobility Measurement Sensitivity by Utilizing Helium in an Ion Funnel Trap. <i>Analytical Chemistry</i> , 2014, 86, 5295-5299.	6.5	21

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73	Simulation of Electric Potentials and Ion Motion in Planar Electrode Structures for Lossless Ion Manipulations (SLIM). Journal of the American Society for Mass Spectrometry, 2014, 25, 1890-1896.	2.8	49
74	Mobility-Resolved Ion Selection in Uniform Drift Field Ion Mobility Spectrometry/Mass Spectrometry: Dynamic Switching in Structures for Lossless Ion Manipulations. Analytical Chemistry, 2014, 86, 9632-9637.	6.5	45
75	Characterization of Ion Dynamics in Structures for Lossless Ion Manipulations. Analytical Chemistry, 2014, 86, 9162-9168.	6.5	62
76	Implementation of Dipolar Resonant Excitation for Collision Induced Dissociation with Ion Mobility/Time-of-Flight MS. Journal of the American Society for Mass Spectrometry, 2014, 25, 563-571.	2.8	5
77	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
78	Experimental Evaluation and Optimization of Structures for Lossless Ion Manipulations for Ion Mobility Spectrometry with Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2014, 86, 9169-9176.	6.5	91
79	Mixed-Isotope Labeling with LC-IMS-MS for Characterization of Protein-Protein Interactions by Chemical Cross-Linking. Journal of the American Society for Mass Spectrometry, 2013, 24, 444-449.	2.8	24
80	LC-IMS-MS Feature Finder: detecting multidimensional liquid chromatography, ion mobility and mass spectrometry features in complex datasets. Bioinformatics, 2013, 29, 2804-2805.	4.1	32
81	Increasing confidence of LC-MS identifications by utilizing ion mobility spectrometry. International Journal of Mass Spectrometry, 2013, 354-355, 312-317.	1.5	27
82	Pulsed Multiple Reaction Monitoring Approach to Enhancing Sensitivity of a Tandem Quadrupole Mass Spectrometer. Analytical Chemistry, 2011, 83, 2162-2171.	6.5	15
83	Ultrasensitive Identification of Localization Variants of Modified Peptides Using Ion Mobility Spectrometry. Analytical Chemistry, 2011, 83, 5617-5623.	6.5	35
84	Characterization of an ion mobility-multiplexed collision-induced dissociation-tandem time-of-flight mass spectrometry approach. International Journal of Mass Spectrometry, 2010, 293, 34-44.	1.5	30
85	An LC-IMS-MS Platform Providing Increased Dynamic Range for High-Throughput Proteomic Studies. Journal of Proteome Research, 2010, 9, 997-1006.	3.7	120
86	Reactions between Aromatic Hydrocarbons and Heterocycles: Covalent and Proton-Bound Dimer Cations of Benzene/Pyridine. Journal of the American Chemical Society, 2009, 131, 10066-10076.	13.7	16
87	Enhanced Ion Utilization Efficiency Using an Electrodynamical Ion Funnel Trap as an Injection Mechanism for Ion Mobility Spectrometry. Analytical Chemistry, 2008, 80, 612-623.	6.5	104
88	Automated Gain Control Ion Funnel Trap for Orthogonal Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2008, 80, 5367-5376.	6.5	29
89	Pseudorandom Sequence Modifications for Ion Mobility Orthogonal Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2008, 80, 2464-2473.	6.5	46
90	Ion Mobility of Ground and Excited States of Laser-Generated Transition Metal Cations. Journal of Physical Chemistry A, 2008, 112, 1112-1124.	2.5	33

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91	Ion Funnel Trap Interface for Orthogonal Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2007, 79, 7845-7852.	6.5	72
92	Hydrogen Bonding Interactions of Pyridine ⁺ with Water: A Stepwise Solvation of Distonic Cations. Journal of Physical Chemistry A, 2007, 111, 1006-1014.	2.5	26
93	Associative Charge Transfer Reactions. Temperature Effects and Mechanism of the Gas-Phase Polymerization of Propene Initiated by a Benzene Radical Cation ⁺ . Journal of Physical Chemistry A, 2006, 110, 8585-8592.	2.5	6
94	Gas Phase Hydration and Deprotonation of the Cyclic C ₃ H ₃ ⁺ Cation. Solvation by Acetonitrile, and Comparison with the Benzene Radical Cation. Journal of Physical Chemistry A, 2006, 110, 7334-7344.	2.5	17
95	Clusters of the hydronium ion (H ₃ O ⁺) with H ₂ , N ₂ and CO molecules. Chemical Physics Letters, 2006, 424, 257-263.	2.6	4
96	Improving mass spectrometer sensitivity using a high-pressure electrodynamic ion funnel interface. Journal of the American Society for Mass Spectrometry, 2006, 17, 1299-1305.	2.8	88
97	Direct Evidence for the Gas Phase Thermal Polymerization of Styrene. Determination of the Initiation Mechanism and Structures of the Early Oligomers by Ion Mobility. Journal of the American Chemical Society, 2005, 127, 6164-6165.	13.7	15
98	Stepwise Hydration of Ionized Aromatics. Energies, Structures of the Hydrated Benzene Cation, and the Mechanism of Deprotonation Reactions. Journal of the American Chemical Society, 2005, 127, 7053-7064.	13.7	54
99	Evidence for Penning Ionization in the Generation of Electronically Excited States of Transition Metal Cations by Laser Vaporization. Journal of Physical Chemistry B, 2004, 108, 3959-3962.	2.6	9
100	Stepwise Hydration and Multibody Deprotonation with Steep Negative Temperature Dependence in the Benzene ⁺ +H ₂ O Water System. Journal of the American Chemical Society, 2004, 126, 12766-12767.	13.7	37
101	Separation of isomers by dimer formation: isomerically pure benzene ⁺ and toluene ⁺ ions, and their dimers: ab initio calculations on (benzene) ₂ ⁺ . Chemical Physics Letters, 2003, 380, 21-28.	2.6	13
102	Gas-Phase Ion Mobilities and Structures of Benzene Cluster Cations (C ₆ H ₆) _n ⁺ , n = 2-6. Journal of the American Chemical Society, 2003, 125, 12001-12013.	13.7	62
103	Mass-Selected Ion Mobility Studies of the Isomerization of the Benzene Radical Cation and Binding Energy of the Benzene Dimer Cation. Separation of Isomeric Ions by Dimer Formation. Journal of Physical Chemistry A, 2003, 107, 7656-7666.	2.5	53