

Yehia M Ibrahim

List of Publications by Year in descending order

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103
papers

4,080
citations

81839

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106
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.	1.8	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.	0.4	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.	3.2	5
4	DEIMoS: An Open-Source Tool for Processing High-Dimensional Mass Spectrometry Data. <i>Analytical Chemistry</i> , 2022, 94, 6130-6138.	3.2	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, , .	1.2	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.	1.2	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.	1.2	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.	1.3	25
9	AutoCCS: automated collision cross-section calculation software for ion mobility spectrometry–mass spectrometry. <i>Bioinformatics</i> , 2021, 37, 4193-4201.	1.8	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.	1.2	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.	3.2	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.	1.7	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.	3.2	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.	3.2	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.	3.2	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.	3.2	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.	3.2	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.	3.2	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. <i>Chemical Communications</i> , 2019, 55, 306-309.	2.2	27
20	New mass spectrometry technologies contributing towards comprehensive and high throughput omics analyses of single cells. <i>Analyst, The</i> , 2019, 144, 794-807.	1.7	67
21	Opening new paths for biological applications of ion mobility - Mass spectrometry using structures for lossless ion manipulations. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 116, 300-307.	5.8	28
22	Dual Polarity Ion Confinement and Mobility Separations. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 967-976.	1.2	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. <i>Analytical Chemistry</i> , 2019, 91, 4374-4380.	3.2	37
24	Nanowell-mediated multidimensional separations combining nanoLC with SLIM IM-MS for rapid, high-peak-capacity proteomic analyses. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 5363-5372.	1.9	13
25	Isolation of Tryptanthrin and Reassessment of Evidence for Its Isobaric Isostere Wrightiadione in Plants of the <i>Wrightia</i> Genus. <i>Journal of Natural Products</i> , 2019, 82, 440-448.	1.5	13
26	A Hybrid Constant and Oscillatory Field Ion Mobility Analyzer Using Structures for Lossless Ion Manipulations. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 342-351.	1.2	4
27	Characterization of applied fields for ion mobility separations in traveling wave based structures for lossless ion manipulations (SLIM). <i>International Journal of Mass Spectrometry</i> , 2018, 430, 8-13.	0.7	12
28	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
29	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
30	Distinguishing enantiomeric amino acids with chiral cyclodextrin adducts and structures for lossless ion manipulations. <i>Electrophoresis</i> , 2018, 39, 3148-3155.	1.3	35
31	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
32	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
33	Structural Elucidation of <i>cis</i> / <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
34	New frontiers for mass spectrometry based upon structures for lossless ion manipulations. <i>Analyst, The</i> , 2017, 142, 1010-1021.	1.7	95
35	Toward artifact-free data in Hadamard transform-based double multiplexing of ion mobility-Orbitrap mass spectrometry. <i>Analyst, The</i> , 2017, 142, 1735-1745.	1.7	16
36	Ion Elevators and Escalators in Multilevel Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2017, 89, 1972-1977.	3.2	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.	3.2	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.	3.2	162
39	Isochromans and Related Constituents from the Endophytic Fungus <i>Annulohyphoxylon truncatum</i> of <i>Zizania caduciflora</i> and Their Anti-Inflammatory Effects. <i>Journal of Natural Products</i> , 2017, 80, 205-209.	1.5	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.	0.7	31
41	Comprehensive computational design of ordered peptide macrocycles. <i>Science</i> , 2017, 358, 1461-1466.	6.0	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.	2.2	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.	1.2	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.	2.6	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.	4.6	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.	1.8	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.	1.6	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.	3.2	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.	1.2	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.	1.2	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.	0.7	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.	2.5	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.	3.2	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.	3.2	136
56	Development of an Ion Mobility Spectrometry-Orbitrap Mass Spectrometer Platform. <i>Analytical Chemistry</i> , 2016, 88, 12152-12160.	3.2	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.	3.2	25
58	Mobility-Selected Ion Trapping and Enrichment Using Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2016, 88, 1728-1733.	3.2	41
59	Uncovering biologically significant lipid isomers with liquid chromatography, ion mobility spectrometry and mass spectrometry. <i>Analyst, The</i> , 2016, 141, 1649-1659.	1.7	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.	0.7	11
61	Enhancing bottom-up and top-down proteomic measurements with ion mobility separations. <i>Proteomics</i> , 2015, 15, 2766-2776.	1.3	54
62	Ion Trapping, Storage, and Ejection in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 6010-6016.	3.2	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.	1.7	40
64	Rectangular Ion Funnel: A New Ion Funnel Interface for Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 716-722.	3.2	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.	3.2	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.	1.7	14
67	Design and performance of a high-flux electrospray ionization source for ion soft landing. <i>Analyst, The</i> , 2015, 140, 2957-2963.	1.7	44
68	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
69	Characterization of Traveling Wave Ion Mobility Separations in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2015, 87, 11301-11308.	3.2	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.	2.5	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.	1.2	28
72	Improving Ion Mobility Measurement Sensitivity by Utilizing Helium in an Ion Funnel Trap. <i>Analytical Chemistry</i> , 2014, 86, 5295-5299.	3.2	21

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73	Simulation of Electric Potentials and Ion Motion in Planar Electrode Structures for Lossless Ion Manipulations (SLIM). <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 1890-1896.	1.2	49
74	Mobility-Resolved Ion Selection in Uniform Drift Field Ion Mobility Spectrometry/Mass Spectrometry: Dynamic Switching in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2014, 86, 9632-9637.	3.2	45
75	Characterization of Ion Dynamics in Structures for Lossless Ion Manipulations. <i>Analytical Chemistry</i> , 2014, 86, 9162-9168.	3.2	62
76	Implementation of Dipolar Resonant Excitation for Collision Induced Dissociation with Ion Mobility/Time-of-Flight MS. <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 563-571.	1.2	5
77	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
78	Experimental Evaluation and Optimization of Structures for Lossless Ion Manipulations for Ion Mobility Spectrometry with Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 9169-9176.	3.2	91
79	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
80	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
81	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
82	Pulsed Multiple Reaction Monitoring Approach to Enhancing Sensitivity of a Tandem Quadrupole Mass Spectrometer. <i>Analytical Chemistry</i> , 2011, 83, 2162-2171.	3.2	15
83	Ultrasensitive Identification of Localization Variants of Modified Peptides Using Ion Mobility Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 5617-5623.	3.2	35
84	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
85	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
86	Reactions between Aromatic Hydrocarbons and Heterocycles: Covalent and Proton-Bound Dimer Cations of Benzene/Pyridine. <i>Journal of the American Chemical Society</i> , 2009, 131, 10066-10076.	6.6	16
87	Enhanced Ion Utilization Efficiency Using an Electrodynamical Ion Funnel Trap as an Injection Mechanism for Ion Mobility Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 612-623.	3.2	104
88	Automated Gain Control Ion Funnel Trap for Orthogonal Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 5367-5376.	3.2	29
89	Pseudorandom Sequence Modifications for Ion Mobility Orthogonal Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 2464-2473.	3.2	46
90	Ion Mobility of Ground and Excited States of Laser-Generated Transition Metal Cations. <i>Journal of Physical Chemistry A</i> , 2008, 112, 1112-1124.	1.1	33

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91	Ion Funnel Trap Interface for Orthogonal Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 2007, 79, 7845-7852.	3.2	72
92	Hydrogen Bonding Interactions of Pyridine ⁺ with Water: A Stepwise Solvation of Distonic Cations. <i>Journal of Physical Chemistry A</i> , 2007, 111, 1006-1014.	1.1	26
93	Associative Charge Transfer Reactions. Temperature Effects and Mechanism of the Gas-Phase Polymerization of Propene Initiated by a Benzene Radical Cation ⁺ . <i>Journal of Physical Chemistry A</i> , 2006, 110, 8585-8592.	1.1	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. <i>Journal of Physical Chemistry A</i> , 2006, 110, 7334-7344.	1.1	17
95	Clusters of the hydronium ion (H ₃ O ⁺) with H ₂ , N ₂ and CO molecules. <i>Chemical Physics Letters</i> , 2006, 424, 257-263.	1.2	4
96	Improving mass spectrometer sensitivity using a high-pressure electrodynamic ion funnel interface. <i>Journal of the American Society for Mass Spectrometry</i> , 2006, 17, 1299-1305.	1.2	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. <i>Journal of the American Chemical Society</i> , 2005, 127, 6164-6165.	6.6	15
98	Stepwise Hydration of Ionized Aromatics. Energies, Structures of the Hydrated Benzene Cation, and the Mechanism of Deprotonation Reactions. <i>Journal of the American Chemical Society</i> , 2005, 127, 7053-7064.	6.6	54
99	Evidence for Penning Ionization in the Generation of Electronically Excited States of Transition Metal Cations by Laser Vaporization. <i>Journal of Physical Chemistry B</i> , 2004, 108, 3959-3962.	1.2	9
100	Stepwise Hydration and Multibody Deprotonation with Steep Negative Temperature Dependence in the Benzene ⁺ Water System. <i>Journal of the American Chemical Society</i> , 2004, 126, 12766-12767.	6.6	37
101	Separation of isomers by dimer formation: isomerically pure benzene ⁺ and toluene ⁺ ions, and their dimers: ab initio calculations on (benzene) ₂ ⁺ . <i>Chemical Physics Letters</i> , 2003, 380, 21-28.	1.2	13
102	Gas-Phase Ion Mobilities and Structures of Benzene Cluster Cations (C ₆ H ₆) _n ⁺ , n = 2-6. <i>Journal of the American Chemical Society</i> , 2003, 125, 12001-12013.	6.6	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. <i>Journal of Physical Chemistry A</i> , 2003, 107, 7656-7666.	1.1	53