Francisco Fernandez-Lima

List of Publications by Year
in descending order

55	950	471509 17	526287 27
papers	citations	h-index	g-index

56	56	56	988
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fast and Effective Ion Mobilityâ€“Mass Spectrometry Separation of <scp>d</scp>-Amino-Acid-Containing Peptides. Analytical Chemistry, 2017, 89, 11787-11794.	6.5	76
2	Effective Liquid Chromatographyâ€“Trapped Ion Mobility Spectrometryâ€“Mass Spectrometry Separation of Isomeric Lipid Species. Analytical Chemistry, 2019, 91, 5021-5027.	6.5	64
3	Recent advances in biological separations using trapped ion mobility spectrometry â€“ mass spectrometry. TrAC - Trends in Analytical Chemistry, 2019, 116, 308-315.	11.4	52
4	Analysis of Photoirradiated Water Accommodated Fractions of Crude Oils Using Tandem TIMS and FT-ICR MS. Environmental Science & Technology, 2017, 51, 5978-5988.	10.0	50
5	Linear and Differential Ion Mobility Separations of Middle-Down Proteoforms. Analytical Chemistry, 2018, 90, 2918-2925.	6.5	43
6	Characterization of Intramolecular Interactions of Cytochrome c Using Hydrogenâ€“Deuterium Exchange-Trapped Ion Mobility Spectrometryâ€“Mass Spectrometry and Molecular Dynamics. Analytical Chemistry, 2017, 89, 8757-8765.	6.5	35
7	Identification of Lasso Peptide Topologies Using Native Nanoelectrospray Ionization-Trapped Ion Mobility Spectrometryâ€“Mass Spectrometry. Analytical Chemistry, 2018, 90, 5139-5146.	6.5	34
8	Increasing Analytical Separation and Duty Cycle with Nonlinear Analytical Mobility Scan Functions in TIMS-FT-ICR MS. Analytical Chemistry, 2018, 90, 2446-2450.	6.5	33
9	Coupling trapped ion mobility spectrometry to mass spectrometry: trapped ion mobility spectrometryâ€“timeâ€ofâ€flight mass spectrometry versus trapped ion mobility spectrometryâ€“Fourier transform ion cyclotron resonance mass spectrometry. Rapid Communications in Mass Spectrometry, 2018, 32, 1287-1295.	1.5	33
10	Trapped Ion Mobility Spectrometry of Native Macromolecular Assemblies. Analytical Chemistry, 2021, 93, 2933-2941.	6.5	32
11	Towards Discovery and Targeted Peptide Biomarker Detection Using nanoESI-TIMS-TOF MS. Journal of the American Society for Mass Spectrometry, 2018, 29, 817-826.	2.8	31
12	Understanding the structural complexity of dissolved organic matter: isomeric diversity. Faraday Discussions, 2019, 218, 431-440.	3.2	30
13	Structural Characterization of Dissolved Organic Matter at the Chemical Formula Level Using TIMS-FT-ICR MS/MS. Analytical Chemistry, 2020, 92, 11960-11966.	6.5	25
14	LESA Cyclic Ion Mobility Mass Spectrometry of Intact Proteins from Thin Tissue Sections. Analytical Chemistry, 2020, 92, 6321-6326.	6.5	23
15	Three dimensional secondary ion mass spectrometry imaging (3D-SIMS) of Aedes aegypti ovarian follicles. Journal of Analytical Atomic Spectrometry, 2019, 34, 874-883.	3.0	22
16	Juvenile hormone controls ovarian development in female Anopheles albimanus mosquitoes. Scientific Reports, 2019, 9, 2127.	3.3	20
17	Comprehensive Screening of Polycyclic Aromatic Hydrocarbons and Similar Compounds Using GCâ€“APLIâ€“TIMSâ€“TOFMS/GCâ€“Eiâ€“MS. Analytical Chemistry, 2021, 93, 6080-6087.	6.5	19
18	Epoxidation of juvenile hormone was a key innovation improving insect reproductive fitness. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	19

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19	Substrate Sequence Controls Regioselectivity of Lanthionine Formation by ProcM. Journal of the American Chemical Society, 2021, 143, 18733-18743.	13.7	19
20	Proteoform Differentiation using Tandem Trapped Ion Mobility, Electron Capture Dissociation, and ToF Mass Spectrometry. Analytical Chemistry, 2021, 93, 9575-9582.	6.5	18
21	Peptide Sequence Influence on the Conformational Dynamics and DNA binding of the Intrinsically Disordered AT-Hook 3 Peptide. Scientific Reports, 2018, 8, 10783.	3.3	15
22	Insights from ion mobility-mass spectrometry, infrared spectroscopy, and molecular dynamics simulations on nicotinamide adenine dinucleotide structural dynamics: NAD⁺vs.NADH. Physical Chemistry Chemical Physics, 2018, 20, 7043-7052.	2.8	14
23	Measuring the Integrity of Gas-Phase Conformers of Sodiated 25-Hydroxyvitamin D3 by Drift Tube, Traveling Wave, Trapped, and High-Field Asymmetric Ion Mobility. Analytical Chemistry, 2019, 91, 4092-4099.	6.5	13
24	Metal ions induced secondary structure rearrangements: mechanically interlocked lassovs.unthreaded branched-cyclic topoisomers. Analyst, The, 2018, 143, 2323-2333.	3.5	12
25	Evidence of Cis/Trans-Isomerization at Pro7/Pro16 in the Lasso Peptide Microcin J25. Journal of the American Society for Mass Spectrometry, 2019, 30, 1038-1045.	2.8	12
26	Multimodal, in Situ Imaging of Ex Vivo Human Skin Reveals Decrease of Cholesterol Sulfate in the Neoepithelium during Acute Wound Healing. Analytical Chemistry, 2020, 92, 1386-1394.	6.5	12
27	Unsupervised Structural Classification of Dissolved Organic Matter Based on Fragmentation Pathways. Environmental Science & Technology, 2022, 56, 1458-1468.	10.0	12
28	Trapped Ion Mobility Spectrometry, Ultraviolet Photodissociation, and Time-of-Flight Mass Spectrometry for Gas-Phase Peptide Isobars/Isomers/Conformers Discrimination. Journal of the American Society for Mass Spectrometry, 2022, 33, 1267-1275.	2.8	12
29	JH biosynthesis and hemolymph titers in adult male Aedes aegypti mosquitoes. Insect Biochemistry and Molecular Biology, 2018, 95, 10-16.	2.7	11
30	Differentiating Parallel and Antiparallel DNA Duplexes in the Gas Phase Using Trapped Ion Mobility Spectrometry. Journal of Physical Chemistry B, 2018, 122, 6855-6861.	2.6	11
31	Following Structural Changes by Thermal Denaturation Using Trapped Ion Mobility Spectrometryâ€“Mass Spectrometry. Journal of Physical Chemistry B, 2020, 124, 6257-6265.	2.6	11
32	A Bifunctional Leader Peptidase/ABC Transporter Protein Is Involved in the Maturation of the Lasso Peptide Cochonodin I from Streptococcus suis. Journal of Natural Products, 2021, 84, 2683-2691.	3.0	11
33	The effects of solution additives and gasâ€phase modifiers on the molecular environment and conformational space of common heme proteins. Rapid Communications in Mass Spectrometry, 2019, 33, 399-404.	1.5	10
34	Microheterogeneity of Topoisomerase IA/IB and Their DNA-Bound States. ACS Omega, 2019, 4, 3619-3626.	3.5	9
35	Exploring structural signatures of the lanthipeptide prochlorosin 2.8 using tandem mass spectrometry and trapped ion mobility-mass spectrometry. Analytical and Bioanalytical Chemistry, 2021, 413, 4815-4824.	3.7	9
36	Characterization of Deasphalted Crude Oils Using Gas Chromatographyâ€“Atmospheric Pressure Laser Ionizationâ€“Trapped Ion Mobility Spectrometryâ€“Time-of-Flight Mass Spectrometry. Energy & Fuels, 2021, 35, 13722-13730.	5.1	9

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37	Tailoring peptide conformational space with organic gas modifiers in TIMS-MS. International Journal for Ion Mobility Spectrometry, 2018, 21, 43-48.	1.4	8
38	Structural Motif Descriptors as a Way To Elucidate the Agonistic or Antagonistic Activity of Growth Hormoneâ€“Releasing Hormone Peptide Analogues. ACS Omega, 2018, 3, 7432-7440.	3.5	8
39	Detection of firearm discharge residue from skin swabs using trapped ion mobility spectrometry coupled to mass spectrometry. Analytical Methods, 2018, 10, 4219-4224.	2.7	8
40	Exploring the Conformational Space of Growth-Hormone-Releasing Hormone Analogues Using Dopant Assisted Trapped Ion Mobility Spectrometryâ€“Mass Spectrometry. Journal of Physical Chemistry B, 2019, 123, 6169-6177.	2.6	8
41	Non-symbiotic hemoglobin conformational space dependence on the heme coordination using nESI-TIMS-TOF MS. International Journal of Mass Spectrometry, 2018, 430, 37-43.	1.5	7
42	Workflow for fast lipid tissue screening using LESA-FT-ICR-MS. Analytical Methods, 2019, 11, 2385-2395.	2.7	7
43	AT-hook peptides bind the major and minor groove of AT-rich DNA duplexes. Nucleic Acids Research, 2022, 50, 2431-2439.	14.5	6
44	Spatially Resolved Neuropeptide Characterization from Neuropathological Formalin-Fixed, Paraffin-Embedded Tissue Sections by a Combination of Imaging MALDI FT-ICR Mass Spectrometry Histochemistry and Liquid Extraction Surface Analysis-Trapped Ion Mobility Spectrometry-Tandem Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2022, 33, 681-687.	2.8	6
45	Nanomolar affinity of EF-hands in neuronal calcium sensor 1 for bivalent cations Pb2+, Mn2+, and Hg2+. Metallomics, 2022, 14, .	2.4	6
46	Structural Heterogeneity of Human Histone H2A.1. Journal of Physical Chemistry B, 2021, 125, 4977-4986.	2.6	5
47	Structural Insights from Tandem Mass Spectrometry, Ion Mobility-Mass Spectrometry, and Infrared/Ultraviolet Spectroscopy on Sphingonodin I: Lasso vs Branched-Cyclic Topoisomers. Journal of the American Society for Mass Spectrometry, 2021, 32, 1096-1104.	2.8	4
48	Exploring the Conformational and Binding Dynamics of HMGA2Â·DNA Complexes Using Trapped Ion Mobility Spectrometryâ€“Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2022, 33, 1103-1112.	2.8	4
49	Singleâ€stranded DNA structural diversity: TAGGGT from monomers to dimers to tetramer formation. Rapid Communications in Mass Spectrometry, 2019, 33, 60-65.	1.5	3
50	Mapping chemotherapeutic drug distribution in cancer cell spheroids using 2D-TOF-SIMS and LESA-TIMS-MS. Analyst, The, 2020, 145, 7056-7062.	3.5	2
51	Structural Characterization of Human Histone H4.1 by Tandem Nonlinear and Linear Ion Mobility Spectrometry Complemented with Molecular Dynamics Simulations. ACS Omega, 2021, 6, 29567-29576.	3.5	2
52	Coupling Stable Isotope Labeling and Liquid Chromatography-Trapped Ion Mobility Spectrometry-Time-of-Flight-Tandem Mass Spectrometry for De Novo Mosquito Ovarian Lipid Studies. Analytical Chemistry, 2022, 94, 6139-6145.	6.5	2
53	Exploring the Conformations and Binding Location of HMGA2Â·DNA Complexes Using Ion Mobility Spectrometry and 193 nm Ultraviolet Photodissociation Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2022, 33, 1092-1102.	2.8	2
54	Influence of gas modifiers on the TIMS analysis of familiar explosives. International Journal for Ion Mobility Spectrometry, 2019, 22, 71-76.	1.4	1

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55	Salt bridges govern the structural heterogeneity of heme protein interactions and porphyrin networks: microperoxidase-11. RSC Advances, 2020, 10, 33861-33867.	3.6	0