Yu Xia

List of Publications by Year
in descending order

		101496	123376
107	4,276	36	61
papers	citations	h-index	g-index

116	116	116	3455
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lipid Desaturation Is a Metabolic Marker and Therapeutic Target of Ovarian Cancer Stem Cells. Cell Stem Cell, 2017, 20, 303-314.e5.	5.2	414
2	Pinpointing Double Bonds in Lipids by PaternÃ²â€BÃ¼chi Reactions and Mass Spectrometry. Angewandte Chemie - International Edition, 2014, 53, 2592-2596.	7.2	262
3	Identification and quantitation of lipid C=C location isomers: A shotgun lipidomics approach enabled by photochemical reaction. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2573-2578.	3.3	260
4	Online photochemical derivatization enables comprehensive mass spectrometric analysis of unsaturated phospholipid isomers. Nature Communications, 2019, 10, 79.	5.8	133
5	Implementation of Ion/Ion Reactions in a Quadrupole/Time-of-Flight Tandem Mass Spectrometer. Analytical Chemistry, 2006, 78, 4146-4154.	3.2	125
6	Large-scale lipid analysis with C=C location and sn-position isomer resolving power. Nature Communications, 2020, 11, 375.	5.8	117
7	Mutual storage mode ion/ion reactions in a hybrid linear ion trap. Journal of the American Society for Mass Spectrometry, 2005, 16, 71-81.	1.2	108
8	Alternately Pulsed Nanoelectrospray Ionization/Atmospheric Pressure Chemical Ionization for Ion/Ion Reactions in an Electrodynamic Ion Trap. Analytical Chemistry, 2006, 78, 3208-3212.	3.2	93
9	Rapid direct lipid profiling of bacteria using desorption electrospray ionization mass spectrometry. International Journal of Mass Spectrometry, 2011, 301, 37-44.	0.7	92
10	Pulsed dual electrospray ionization for In/In reactions. Journal of the American Society for Mass Spectrometry, 2005, 16, 1750-1756.	1.2	87
11	Photochemical Tagging for Quantitation of Unsaturated Fatty Acids by Mass Spectrometry. Analytical Chemistry, 2016, 88, 8931-8935.	3.2	82
12	Single-cell lipidomics with high structural specificity by mass spectrometry. Nature Communications, 2021, 12, 2869.	5.8	80
13	Ion Trap Collisional Activation of c and zâ€¢ Ions Formed via Gas-Phase Ion/Ion Electron-Transfer Dissociation. Journal of Proteome Research, 2007, 6, 3062-3069.	1.8	78
14	Effects of Cation Charge-Site Identity and Position on Electron-Transfer Dissociation of Polypeptide Cations. Journal of the American Chemical Society, 2007, 129, 12232-12243.	6.6	76
15	Birch Reduction of Benzene in a Lowâ€Temperature Plasma. Angewandte Chemie - International Edition, 2009, 48, 2017-2019.	7.2	74
16	Determining Double Bond Position in Lipids Using Online Ozonolysis Coupled to Liquid Chromatography and Ion Mobility-Mass Spectrometry. Analytical Chemistry, 2018, 90, 1915-1924.	3.2	69
17	Ambient Ionization and Miniature Mass Spectrometry Systems for Disease Diagnosis and Therapeutic Monitoring. Theranostics, 2017, 7, 2968-2981.	4.6	66
18	A method of coupling the PaternÃ²â€“BÃ¼chi reaction with direct infusion ESI-MS/MS for locating the Cî€€ bond in glycerophospholipids. Analyst, The, 2016, 141, 3696-3704.	1.7	65

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19	Electron transfer dissociation of multiply protonated and fixed charge disulfide linked polypeptides. International Journal of Mass Spectrometry, 2007, 265, 130-138.	0.7	64
20	Electron Transfer Dissociation (ETD) of Peptides Containing Intrachain Disulfide Bonds. Journal of the American Society for Mass Spectrometry, 2012, 23, 310-320.	1.2	63
21	Proposed nomenclature for peptide ion fragmentation. International Journal of Mass Spectrometry, 2015, 390, 24-27.	0.7	63
22	Study of Discontinuous Atmospheric Pressure Interfaces for Mass Spectrometry Instrumentation Development. Analytical Chemistry, 2010, 82, 6584-6592.	3.2	59
23	Peptide Fragmentation Assisted by Surfaces Treated with a Lowâ€Temperature Plasma in NanoESI. Angewandte Chemie - International Edition, 2008, 47, 8646-8649.	7.2	58
24	Activation of Intact Electron-Transfer Products of Polypeptides and Proteins in Cation Transmission Mode Ion/Ion Reactions. Analytical Chemistry, 2008, 80, 1111-1117.	3.2	58
25	A lipidomic workflow capable of resolving sn- and Cî€€ location isomers of phosphatidylcholines. Chemical Science, 2019, 10, 10740-10748.	3.7	55
26	Ion/Molecule Reactions of Cation Radicals Formed from Protonated Polypeptides via Gas-Phase Ion/Ion Electron Transfer. Journal of the American Chemical Society, 2006, 128, 11792-11798.	6.6	54
27	Plasma Induced Oxidative Cleavage of Disulfide Bonds in Polypeptides during Nanoelectrospray Ionization. Analytical Chemistry, 2010, 82, 2856-2864.	3.2	52
28	Rapid In Situ Profiling of Lipid Câ•€ Location Isomers in Tissue Using Ambient Mass Spectrometry with Photochemical Reactions. Analytical Chemistry, 2018, 90, 5612-5619.	3.2	50
29	Point-of-Care Tissue Analysis Using Miniature Mass Spectrometer. Analytical Chemistry, 2019, 91, 1157-1163.	3.2	44
30	Rapidly Alternating Transmission Mode Electron-Transfer Dissociation and Collisional Activation for the Characterization of Polypeptide Ions. Analytical Chemistry, 2008, 80, 3492-3497.	3.2	43
31	Next-Generation PaternÃ²â€“BÃ¼chi Reagents for Lipid Analysis by Mass Spectrometry. Analytical Chemistry, 2020, 92, 13470-13477.	3.2	43
32	Ion Trap versus Low-Energy Beam-Type Collision-Induced Dissociation of Protonated Ubiquitin Ions. Analytical Chemistry, 2006, 78, 1218-1227.	3.2	42
33	Analysis of Conjugated Fatty Acid Isomers by the PaternÃ²-BÃ¼chi Reaction and Trapped Ion Mobility Mass Spectrometry. Analytical Chemistry, 2019, 91, 7173-7180.	3.2	41
34	Expedient syntheses of N-heterocycles via intermolecular amphoteric diamination of allenes. Nature Communications, 2018, 9, 721.	5.8	40
35	Uncovering Structural Diversity of Unsaturated Fatty Acyls in Cholesteryl Esters via Photochemical Reaction and Tandem Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 1432-1441.	1.2	39
36	Evolution of instrumentation for the study of gas-phase ion/ion chemistry via mass spectrometry. Journal of the American Society for Mass Spectrometry, 2008, 19, 173-189.	1.2	38

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37	A pulsed triple ionization source for sequential ion/ion reactions in an electrodynamic ion trap. Journal of the American Society for Mass Spectrometry, 2007, 18, 369-376.	1.2	32
38	Visible-Light-Driven [2 + 2] Photocycloadditions between Benzophenone and Câ•€ Bonds in Unsaturated Lipids. Journal of the American Chemical Society, 2020, 142, 3499-3505.	6.6	31
39	Deep-lipidotyping by mass spectrometry: recent technical advances and applications. Journal of Lipid Research, 2022, 63, 100219.	2.0	31
40	Radical induced disulfide bond cleavage within peptides via ultraviolet irradiation of an electrospray plume. Analyst, The, 2013, 138, 2840.	1.7	30
41	A Polymer Coating Transfer Enrichment Method for Direct Mass Spectrometry Analysis of Lipids in Biofluid Samples. Angewandte Chemie - International Edition, 2019, 58, 6064-6069.	7.2	30
42	Profiling of Cholesteryl Esters by Coupling Charge-Tagging PaternÃ²â€“BÃ¼chi Reaction and Liquid Chromatographyâ€“Mass Spectrometry. Analytical Chemistry, 2020, 92, 8487-8496.	3.2	30
43	Positive Ion Transmission Mode Ion/Ion Reactions in a Hybrid Linear Ion Trap. Analytical Chemistry, 2004, 76, 5006-5015.	3.2	29
44	Enhanced Phospholipid Isomer Analysis by Online Photochemical Derivatization and RPLC-MS. Analytical Chemistry, 2020, 92, 6719-6726.	3.2	29
45	Transition metal complex cations as reagents for gas-phase transformation of multiply deprotonated polypeptides. Journal of the American Society for Mass Spectrometry, 2009, 20, 1718-1722.	1.2	26
46	Enabling High Structural Specificity to Lipidomics by Coupling Photochemical Derivatization with Tandem Mass Spectrometry. Accounts of Chemical Research, 2021, 54, 3873-3882.	7.6	26
47	Differentiation of the Stereochemistry and Anomeric Configuration for 1-3 Linked Disaccharides Via Tandem Mass Spectrometry and ¹⁸O-labeling. Journal of the American Society for Mass Spectrometry, 2012, 23, 347-358.	1.2	25
48	Resolving Modifications on Sphingoid Base and N-Acyl Chain of Sphingomyelin Lipids in Complex Lipid Extracts. Analytical Chemistry, 2020, 92, 14775-14782.	3.2	24
49	Assignment of the Stereochemistry and Anomeric Configuration of Sugars within Oligosaccharides Via Overlapping Disaccharide Ladders Using MSⁿ. Journal of the American Society for Mass Spectrometry, 2014, 25, 1441-1450.	1.2	23
50	Kaolin-based catalyst as a triglyceride FCC upgrading catalyst with high deoxygenation, mild cracking, and low dehydrogenation performances. Catalysis Today, 2019, 319, 164-171.	2.2	23
51	Beam-type collisional activation of polypeptide cations that survive ion/ion electron transfer. Rapid Communications in Mass Spectrometry, 2007, 21, 1567-1573.	0.7	22
52	Gas-Phase Peptide Sulfinyl Radical Ions: Formation and Unimolecular Dissociation. Journal of the American Society for Mass Spectrometry, 2012, 23, 2011-2019.	1.2	21
53	Competition of Charge- versus Radical-Directed Fragmentation of Gas-Phase Protonated Cysteine Sulfinyl Radicals. Journal of the American Chemical Society, 2013, 135, 6226-6233.	6.6	21
54	Bidirectional Ion Transfer between Quadrupole Arrays:Â MSnIon/Ion Reaction Experiments on a Quadrupole/Time-of-Flight Tandem Mass Spectrometer. Analytical Chemistry, 2007, 79, 8199-8206.	3.2	20

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55	Gas-phase ion/ion reactions of transition metal complex cations with multiply charged oligodeoxynucleotide anions. Journal of the American Society for Mass Spectrometry, 2008, 19, 281-293.	1.2	20
56	In-depth structural characterization of phospholipids by pairing solution photochemical reaction with charge inversion ion/ion chemistry. Analytical and Bioanalytical Chemistry, 2019, 411, 4739-4749.	1.9	20
57	Lipidome-wide characterization of phosphatidylinositols and phosphatidylglycerols on C C location level. Analytica Chimica Acta, 2020, 1128, 107-115.	2.6	20
58	Deep Structural Annotation of Glycerolipids by the Charge-Tagging Paternoâ€“BÃ¼chi Reaction and Supercritical Fluid Chromatographyâ€“Ion Mobility Mass Spectrometry. Analytical Chemistry, 2021, 93, 8345-8353.	3.2	20
59	Analysis of ether glycerophosphocholines at the level of Cî€€ locations from human plasma. Analyst, The, 2020, 145, 513-522.	1.7	19
60	Structural basis of leukotriene B4 receptor 1 activation. Nature Communications, 2022, 13, 1156.	5.8	19
61	Sonic Spray as a Dual Polarity Ion Source for Ion/Ion Reactions. Analytical Chemistry, 2005, 77, 3683-3689.	3.2	17
62	Gas-Phase Fragmentation of [M + nH + OH]^{nâ€¢+} Ions Formed from Peptides Containing Intra-Molecular Disulfide Bonds. Journal of the American Society for Mass Spectrometry, 2011, 22, 922-30.	1.2	17
63	Radical cascades in electron transfer dissociation (ETD) â€“ implications for characterizing peptide disulfide regio-isomers. Analyst, The, 2013, 138, 6759.	1.7	17
64	Two-step reaction mechanism reveals new antioxidant capability of cysteine disulfides against hydroxyl radical attack. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18216-18223.	3.3	17
65	A liquid chromatography-mass spectrometry workflow for in-depth quantitation of fatty acid double bond location isomers. Journal of Lipid Research, 2021, 62, 100110.	2.0	17
66	Multiplexed Four-Channel Rectilinear Ion Trap Mass Spectrometer. Analytical Chemistry, 2009, 81, 1570-1579.	3.2	16
67	Gas-Phase Reactivity of Peptide Thiyl (RSâ€¢), Perthiyl (RSSâ€¢), and Sulfinyl (RSOâ€¢) Radical Ions Formed from Atmospheric Pressure Ion/Radical Reactions. Journal of the American Society for Mass Spectrometry, 2013, 24, 534-542.	1.2	16
68	UV Lamp as a Facile Ozone Source for Structural Analysis of Unsaturated Lipids Via Electrospray Ionization-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 481-489.	1.2	16
69	A Mass Spectrometric Approach for Probing the Stability of Bioorganic Radicals. Angewandte Chemie - International Edition, 2014, 53, 1887-1890.	7.2	15
70	An Activatable Hostâ€“Guest Conjugate as a Nanocarrier for Effective Drug Release through Self-Inclusion. ACS Applied Materials & Interfaces, 2021, 13, 33962-33968.	4.0	15
71	Atmospheric pressure thermal dissociation of phospho- and sulfopeptides. Journal of the American Society for Mass Spectrometry, 2008, 19, 1897-1905.	1.2	14
72	Acetone/Isopropanol Photoinitiating System Enables Tunable Disulfide Reduction and Disulfide Mapping via Tandem Mass Spectrometry. Analytical Chemistry, 2018, 90, 13036-13043.	3.2	14

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73	Bio-inspired lanthanum-ortho-quinone catalysis for aerobic alcohol oxidation: semi-quinone anionic radical as redox ligand. Nature Communications, 2022, 13, 428.	5.8	14
74	Mapping the distribution of double bond location isomers in lipids across mouse tissues. Analyst, The, 2021, 146, 3899-3907.	1.7	13
75	Linkage Determination of Linear Oligosaccharides by MSⁿ (n > 2) Collision-Induced Dissociation of Z₁ Ions in the Negative Ion Mode. Journal of the American Society for Mass Spectrometry, 2014, 25, 248-257.	1.2	12
76	Mapping lipid C=C location isomers in organ tissues by coupling photochemical derivatization and rapid extractive mass spectrometry. International Journal of Mass Spectrometry, 2019, 445, 116206.	0.7	12
77	Coupling the PaternÃ²-BÃ¼chi (PB) Reaction With Mass Spectrometry to Study Unsaturated Fatty Acids in Mouse Model of Multiple Sclerosis. Frontiers in Chemistry, 2019, 7, 807.	1.8	12
78	Characterization of Fatty Acyl Modifications in Phosphatidylcholines and Lysophosphatidylcholines via Radical-Directed Dissociation. Journal of the American Society for Mass Spectrometry, 2021, 32, 560-568.	1.2	12
79	Shotgun Analysis of Diacylglycerols Enabled by Thiolâ€“ene Click Chemistry. Analytical Chemistry, 2018, 90, 5239-5246.	3.2	10
80	Structural elucidation of triacylglycerol using online acetone PaternÃ²â€“BÃ¼chi reaction coupled with reversed-phase liquid chromatography mass spectrometry. Analyst, The, 2020, 145, 6532-6540.	1.7	10
81	Tandem mass spectrometry (MSn) of peptide disulfide regio-isomers via collision-induced dissociation: Utility and limits in disulfide bond characterization. International Journal of Mass Spectrometry, 2013, 343-344, 50-57.	0.7	9
82	Intra-molecular reactions as a new approach to investigate bio-radical reactivity: a case study of cysteine sulfinyl radicals. Analyst, The, 2014, 139, 1327-1330.	1.7	9
83	Thiyl Radical-Based Charge Tagging Enables Sterol Quantitation via Mass Spectrometry. Analytical Chemistry, 2017, 89, 12631-12635.	3.2	9
84	Reactivity of hydropersulfides toward the hydroxyl radical unraveled: disulfide bond cleavage, hydrogen atom transfer, and proton-coupled electron transfer. Physical Chemistry Chemical Physics, 2018, 20, 4793-4804.	1.3	9
85	Localization of Intrachain Modifications in Bacterial Lipids Via Radical-Directed Dissociation. Journal of the American Society for Mass Spectrometry, 2022, 33, 714-721.	1.2	9
86	Deep Profiling of Aminophospholipids Reveals a Dysregulated Desaturation Pattern in Breast Cancer Cell Lines. Analytical Chemistry, 2022, 94, 820-828.	3.2	9
87	Peptide Fragmentation during Nanoelectrospray Ionization. Analytical Chemistry, 2010, 82, 6534-6541.	3.2	8
88	Gas-phase reactions of cyclopropenylidene with protonated alkyl amines. Analyst, The, 2016, 141, 2412-2417.	1.7	7
89	Power Normalization for Mass Spectrometry Data Analysis and Analytical Method Assessment. Analytical Chemistry, 2016, 88, 3156-3163.	3.2	7
90	Top-down analysis of disulfide-linked proteins using photoinduced radical reactions and ET-DDC. International Journal of Mass Spectrometry, 2019, 444, 116173.	0.7	7

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91	Coupling Headgroup and Alkene Specific Solution Modifications with Gas-Phase Ion/Ion Reactions for Sensitive Glycerophospholipid Identification and Characterization. Journal of the American Society for Mass Spectrometry, 2020, 31, 938-945.	1.2	7
92	Mapping Complex Disulfide Bonds via Implementing Photochemical Reduction Online with Liquid Chromatographyâ€“Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 307-314.	1.2	7
93	Reactions of Hydroxyalkyl Radicals with Cysteinyl Peptides in a NanoESI Plume. Journal of the American Society for Mass Spectrometry, 2014, 25, 1192-1201.	1.2	6
94	Heptamolybdate: a highly active sulfide oxygenation catalyst. Dalton Transactions, 2018, 47, 11882-11887.	1.6	6
95	Characterization of a DAPI-RIT-DAPI System for Gas-Phase Ion/Molecule and Ion/Ion Reactions. Journal of the American Society for Mass Spectrometry, 2014, 25, 48-56.	1.2	5
96	Intra-molecular reactions between cysteine sulfinyl radical and a disulfide bond within peptide ions. International Journal of Mass Spectrometry, 2015, 378, 246-254.	0.7	5
97	Gasâ€Phase Unimolecular Dissociation Reveals Dominant Base Property of Protonated Homocysteine Sulfinyl Radical Ions. Chemistry - A European Journal, 2016, 22, 934-940.	1.7	5
98	Assigning Peptide Disulfide Linkage Pattern Among Regio-Isomers via Methoxy Addition to Disulfide and Tandem Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 1099-1108.	1.2	5
99	Profiling of branched-chain fatty acids via nitroxide radical-directed dissociation integrated on an LC-MS/MS workflow. Analyst, The, 2022, 147, 2115-2123.	1.7	5
100	A Polymer Coating Transfer Enrichment Method for Direct Mass Spectrometry Analysis of Lipids in Biofluid Samples. Angewandte Chemie, 2019, 131, 6125-6130.	1.6	4
101	Site-Specific Photochemical Reaction for Improved C=C Location Analysis of Unsaturated Lipids by Ultraviolet Photodissociation. Research, 2022, 2022, 9783602.	2.8	3
102	Comprehensive Characterization of Phospholipid Isomers in Human Platelets. Journal of Analysis and Testing, 2020, 4, 210-216.	2.5	2
103	Comprehensive Structural Characterization of Lipids by Coupling PaternÃ²â€“BÃ¼chi Reaction and Tandem Mass Spectrometry. Methods in Molecular Biology, 2021, 2306, 53-60.	0.4	2
104	Photochemical Disulfideâ€“Ene Modification Enhances Protein Sequencing and Disulfide Mapping by Mass Spectrometry. Analytical Chemistry, 2021, 93, 15231-15235.	3.2	2
105	Pyridine Dicarbanion-bonded Ag13 Organometallic Nanoclusters: Synthesis and On-surface Oxidative Coupling Reaction. Chemical Science, 0, , .	3.7	2
106	Probing the Radical and Base Dual Properties of Peptide Sulfinyl Radicals via Mass Spectrometry. Journal of Physical Chemistry A, 2014, 118, 11828-11835.	1.1	1
107	Focus on Bio-Ion Chemistry: Interactions of Biological Ions with Ions, Molecules, Surfaces, Electrons, and Light, Honoring Scott A. McLuckey, Recipient of the 2016 ASMS Award for a Distinguished Contribution in Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 1250-1253.	1.2	0