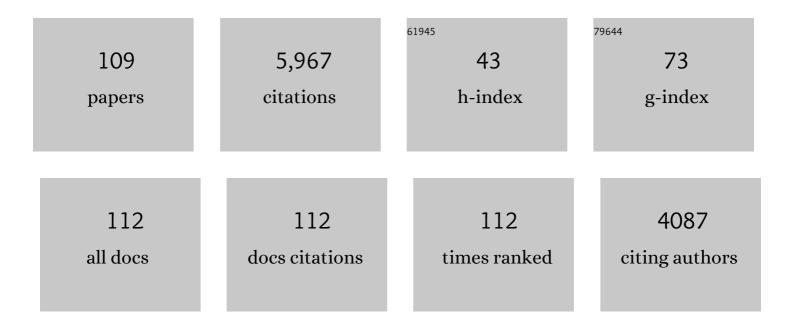
Klaus Dreisewerd

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The Desorption Process in MALDI. Chemical Reviews, 2003, 103, 395-426.	23.0	624
2	Mass spectrometry imaging with laser-induced postionization. Science, 2015, 348, 211-215.	6.0	268
3	Influence of the laser intensity and spot size on the desorption of molecules and ions in matrix-assisted laser desorption/ionization with a uniform beam profile. International Journal of Mass Spectrometry and Ion Processes, 1995, 141, 127-148.	1.9	264
4	Transmission-mode MALDI-2 mass spectrometry imaging of cells and tissues at subcellular resolution. Nature Methods, 2019, 16, 925-931.	9.0	239
5	Laser Desorption/Ionization Mass Spectrometry of Peptides and Proteins with Particle Suspension Matrixes. Analytical Chemistry, 1999, 71, 221-229.	3.2	185
6	A New Male Sex Pheromone and Novel Cuticular Cues for Chemical Communication in Drosophila. Current Biology, 2009, 19, 1245-1254.	1.8	156
7	An Onâ€Tissue Paternò–Büchi Reaction for Localization of Carbon–Carbon Double Bonds in Phospholipids and Glycolipids by Matrixâ€Assisted Laserâ€Desorption–Ionization Massâ€Spectrometry Imaging. Angewandte Chemie - International Edition, 2018, 57, 12092-12096.	7.2	133
8	ls the incorporation of analytes into matrix crystals a prerequisite for matrix-assisted laser desorption/ionization mass spectrometry? A study of five positional isomers of dihydroxybenzoic acid. International Journal of Mass Spectrometry, 1999, 185-187, 859-870.	0.7	132
9	Analysis of Gangliosides Directly from Thin-Layer Chromatography Plates by Infrared Matrix-Assisted Laser Desorption/Ionization Orthogonal Time-of-Flight Mass Spectrometry with a Glycerol Matrix. Analytical Chemistry, 2005, 77, 4098-4107.	3.2	127
10	Fundamentals of matrix-assisted laser desorption/ionization mass spectrometry with pulsed infrared lasers. International Journal of Mass Spectrometry, 2003, 226, 189-209.	0.7	108
11	Direct Mass Spectrometric Peptide Profiling and Sequencing of Single Neurons Reveals Differential Peptide Patterns in a Small Neuronal Network. Biochemistry, 1998, 37, 2070-2076.	1.2	105
12	Recent methodological advances in MALDI mass spectrometry. Analytical and Bioanalytical Chemistry, 2014, 406, 2261-2278.	1.9	104
13	Pheromonal and Behavioral Cues Trigger Male-to-Female Aggression in Drosophila. PLoS Biology, 2010, 8, e1000541.	2.6	90
14	Gas-phase cationization and protonation of neutrals generated by matrix-assisted laser desorption. Journal of the American Society for Mass Spectrometry, 1993, 4, 393-398.	1.2	89
15	IR-MALDI-MS Analysis of HPTLC-Separated Phospholipid Mixtures Directly from the TLC Plate. Analytical Chemistry, 2007, 79, 5793-5808.	3.2	88
16	Aging modulates cuticular hydrocarbons and sexual attractiveness in Drosophila melanogaster. Journal of Experimental Biology, 2012, 215, 814-821.	0.8	88
17	Mechanisms of energy deposition in infrared matrix-assisted laser desorption/ionization mass spectrometry. International Journal of Mass Spectrometry, 2001, 207, 73-96.	0.7	86
18	MALDI-2 on a Trapped Ion Mobility Quadrupole Time-of-Flight Instrument for Rapid Mass Spectrometry Imaging and Ion Mobility Separation of Complex Lipid Profiles. Analytical Chemistry, 2020, 92, 8697-8703.	3.2	84

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19	Laser post-ionisation combined with a high resolving power orbitrap mass spectrometer for enhanced MALDI-MS imaging of lipids. Chemical Communications, 2017, 53, 7246-7249.	2.2	79
20	Ion Yields in UV-MALDI Mass Spectrometry As a Function of Excitation Laser Wavelength and Optical and Physico-Chemical Properties of Classical and Halogen-Substituted MALDI Matrixes. Analytical Chemistry, 2012, 84, 6567-6576.	3.2	75
21	Insulin Signaling Mediates Sexual Attractiveness in Drosophila. PLoS Genetics, 2012, 8, e1002684.	1.5	73
22	Dietary Effects on Cuticular Hydrocarbons and Sexual Attractiveness in Drosophila. PLoS ONE, 2012, 7, e49799.	1.1	73
23	MALDI Mass Spectrometry Imaging of Bioactive Lipids in Mouse Brain with a Synapt G2-S Mass Spectrometer Operated at Elevated Pressure: Improving the Analytical Sensitivity and the Lateral Resolution to Ten Micrometers. Analytical Chemistry, 2014, 86, 7798-7805.	3.2	71
24	Shiga Toxin Receptor Gb3Cer/CD77: Tumor-Association and Promising Therapeutic Target in Pancreas and Colon Cancer. PLoS ONE, 2009, 4, e6813.	1.1	70
25	Matrix-assisted laser desorption/ionization with nitrogen lasers of different pulse widths. International Journal of Mass Spectrometry and Ion Processes, 1996, 154, 171-178.	1.9	69
26	Matching IR-MALDI-o-TOF Mass Spectrometry with the TLC Overlay Binding Assay and Its Clinical Application for Tracing Tumor-Associated Glycosphingolipids in Hepatocellular and Pancreatic Cancer. Analytical Chemistry, 2008, 80, 1835-1846.	3.2	67
27	Liquid APâ€UVâ€MALDI Enables Stable Ion Yields of Multiply Charged Peptide and Protein Ions for Sensitive Analysis by Mass Spectrometry. Angewandte Chemie - International Edition, 2013, 52, 2364-2367.	7.2	63
28	Pattern changes of pituitary peptides in rat after salt-loading as detected by means of direct, semiquantitative mass spectrometric profiling. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 9481-9486.	3.3	62
29	The influence of laser fluence on ion yield in matrix-assisted laser desorption ionization mass spectrometry. International Journal of Mass Spectrometry, 2002, 221, 67-81.	0.7	62
30	Cluster formation in UV laser ablation plumes of ZnSe and ZnO studied by time-of-flight mass spectrometry. Applied Physics A: Materials Science and Processing, 2004, 78, 641-644.	1.1	62
31	Analysis of native milk oligosaccharides directly from thin-layer chromatography plates by matrix-assisted laser desorption/ionization orthogonal-time-of-flight mass spectrometry with a glycerol matrix. Journal of the American Society for Mass Spectrometry, 2006, 17, 139-150.	1.2	62
32	Separation and Identification of Peptides in Single Neurons by Microcolumn Liquid Chromatographyâ	3.2	60
33	Shiga toxin glycosphingolipid receptors in microvascular and macrovascular endothelial cells: differential association with membrane lipid raft microdomains. Journal of Lipid Research, 2011, 52, 618-634.	2.0	60
34	Measurements of mean initial velocities of analyte and matrix ions in infrared matrix-assisted laser desorption ionization mass spectrometry. Journal of the American Society for Mass Spectrometry, 2002, 13, 209-220.	1.2	59
35	MALDI-2 for the Enhanced Analysis of <i>N</i> -Linked Glycans by Mass Spectrometry Imaging. Analytical Chemistry, 2020, 92, 13904-13911.	3.2	56
36	Investigations of 2,5-DHB and succinic acid as matrices for IR and UV MALDI. Part: I UV and IR laser ablation in the MALDI process. International Journal of Mass Spectrometry and Ion Processes, 1997, 169-170, 31-41.	1.9	54

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37	The role of the laser pulse duration in infrared matrix-assisted laser desorption/ionization mass spectrometry. Journal of the American Society for Mass Spectrometry, 2002, 13, 975-984.	1.2	53
38	Photoacoustic Analysis of Matrix-Assisted Laser Desorption/Ionization Processes with Pulsed Infrared Lasers. Journal of Physical Chemistry B, 2003, 107, 12275-12286.	1.2	53
39	Influence of the laser fluence in infrared matrix-assisted laser desorption/ionization with a 2.94 �m Er : YAG laser and a flat-top beam profile. Journal of Mass Spectrometry, 2000, 35, 1320-1328.	0.7	51
40	Imaging by Elemental and Molecular Mass Spectrometry Reveals the Uptake of an Arsenolipid in the Brain of <i>Drosophila melanogaster</i> . Analytical Chemistry, 2016, 88, 5258-5263.	3.2	51
41	Analysis of <i>Drosophila</i> Lipids by Matrix-Assisted Laser Desorption/Ionization Mass Spectrometric Imaging. Analytical Chemistry, 2014, 86, 11086-11092.	3.2	50
42	Direct Coupling of High-Performance Thin-Layer Chromatography with UV Spectroscopy and IR-MALDI Orthogonal TOF MS for the Analysis of Cyanobacterial Toxins. Analytical Chemistry, 2009, 81, 3858-3866.	3.2	47
43	Infrared Matrix-Assisted Laser Desorption/Ionization Orthogonal-Time-of-Flight Mass Spectrometry Employing a Cooling Stage and Water Ice As a Matrix. Analytical Chemistry, 2012, 84, 5669-5676.	3.2	43
44	Time-Resolved Imaging of the Plume Dynamics in Infrared Matrix-Assisted Laser Desorption/Ionization with a Glycerol Matrix. Journal of Physical Chemistry B, 2005, 109, 11661-11666.	1.2	41
45	Male-Specific Transfer and Fine Scale Spatial Differences of Newly Identified Cuticular Hydrocarbons and Triacylglycerides in a Drosophila Species Pair. PLoS ONE, 2011, 6, e16898.	1.1	41
46	Generation of Highly Charged Peptide and Protein Ions by Atmospheric Pressure Matrix-Assisted Infrared Laser Desorption/Ionization Ion Trap Mass Spectrometry. Analytical Chemistry, 2007, 79, 5484-5488.	3.2	40
47	Matrix-assisted Laser Desorption/Ionization in Transmission Geometry: Instrumental Implementation and Mechanistic Implications. Rapid Communications in Mass Spectrometry, 1996, 10, 1873-1880.	0.7	39
48	Effect of Gas Pressure and Gas Type on the Fragmentation of Peptide and Oligosaccharide Ions Generated in an Elevated Pressure UV/IR-MALDI Ion Source Coupled to an Orthogonal Time-of-Flight Mass Spectrometer. Analytical Chemistry, 2009, 81, 2921-2934.	3.2	39
49	On-Tissue Phospholipase C Digestion for Enhanced MALDI-MS Imaging of Neutral Glycosphingolipids. Analytical Chemistry, 2016, 88, 5595-5599.	3.2	38
50	Pleiotropic Effects of ebony and tan on Pigmentation and Cuticular Hydrocarbon Composition in Drosophila melanogaster. Frontiers in Physiology, 2019, 10, 518.	1.3	38
51	Ozonization of Tissue Sections for MALDI MS Imaging of Carbon–Carbon Double Bond Positional Isomers of Phospholipids. Analytical Chemistry, 2020, 92, 6245-6250.	3.2	37
52	Influence of the Laser Spot Size, Focal Beam Profile, and Tissue Type on the Lipid Signals Obtained by MALDI-MS Imaging in Oversampling Mode. Journal of the American Society for Mass Spectrometry, 2016, 27, 1952-1964.	1.2	36
53	Structural Profiling of Individual Glycosphingolipids in a Single Thin-Layer Chromatogram by Multiple Sequential Immunodetection Matched with Direct IR-MALDI-o-TOF Mass Spectrometry. Analytical Chemistry, 2009, 81, 9481-9492.	3.2	33
54	Matching the laser wavelength to the absorption properties of matrices increases the ion yield in UV-MALDI mass spectrometry. Analytical and Bioanalytical Chemistry, 2013, 405, 6925-6932.	1.9	33

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55	A sialylation study of mouse brain gangliosides by MALDI aâ€TOF and oâ€TOF mass spectrometry. Journal of Mass Spectrometry, 2008, 43, 716-725.	0.7	32
56	Molecular Profiling of Native and Matrix-Coated Tissue Slices from Rat Brain by Infrared and Ultraviolet Laser Desorption/Ionization Orthogonal Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2007, 79, 2463-2471.	3.2	31
57	Investigation of the Desorption Process in UV Matrix-Assisted Laser Desorption/Ionization with a Liquid 3-Nitrobenzyl Alcohol Matrix by Photoacoustic Analysis, Fast-Flash Imaging, and UV-Laser Postionization. Journal of Physical Chemistry C, 2010, 114, 5367-5381.	1.5	31
58	Direct Laser Desorption Ionization of Endogenous and Exogenous Compounds from Insect Cuticles: Practical and Methodologic Aspects. Journal of the American Society for Mass Spectrometry, 2011, 22, 1273-84.	1.2	31
59	MALDI-2 Mass Spectrometry and Immunohistochemistry Imaging of Gb3Cer, Gb4Cer, and Further Glycosphingolipids in Human Colorectal Cancer Tissue. Analytical Chemistry, 2020, 92, 7096-7105.	3.2	31
60	New Insights into the Glycosylation of the Surface Layer Protein SgsE from Geobacillus stearothermophilus NRS 2004/3a. Journal of Bacteriology, 2006, 188, 7914-7921.	1.0	30
61	Differences in CD75s- and iso-CD75s-ganglioside content and altered mRNA expression of sialyltransferases ST6GAL1 and ST3GAL6 in human hepatocellular carcinomas and nontumoral liver tissues. Glycobiology, 2011, 21, 584-594.	1.3	30
62	Color Matters—Material Ejection and Ion Yields in UV-MALDI Mass Spectrometry as a Function of Laser Wavelength and Laser Fluence. Journal of the American Society for Mass Spectrometry, 2013, 24, 1477-1488.	1.2	30
63	Molecular Analysis of Native Tissue and Whole Oils by Infrared Laser Mass Spectrometry. Analytical Chemistry, 2007, 79, 4514-4520.	3.2	29
64	3D ToF-SIMS Analysis of Peptide Incorporation into MALDI Matrix Crystals with Sub-micrometer Resolution. Journal of the American Society for Mass Spectrometry, 2016, 27, 277-284.	1.2	29
65	Transmission-Mode MALDI Mass Spectrometry Imaging of Single Cells: Optimizing Sample Preparation Protocols. Analytical Chemistry, 2021, 93, 4513-4520.	3.2	29
66	Tumor-associated CD75s- and iso-CD75s-gangliosides are potential targets for adjuvant therapy in pancreatic cancer. Molecular Cancer Therapeutics, 2008, 7, 2464-2475.	1.9	28
67	New Insights into the Wavelength Dependence of MALDI Mass Spectrometry. Analytical Chemistry, 2017, 89, 7734-7741.	3.2	28
68	Structural Elucidation of a Peptide from a Single Neuron by Matrix-Assisted Laser Desorption/Ionization Employing a Tandem Double-Focusing Magnetic-Orthogonal Acceleration Time-of-Flight Mass Spectrometer. Analytical Chemistry, 1997, 69, 563-565.	3.2	27
69	Influence of the sample temperature on the desorption of matrix molecules and ions in matrix-assisted laser desorption ionization. International Journal of Mass Spectrometry and Ion Processes, 1998, 172, 89-94.	1.9	27
70	Cyanogen Bromide Peptides of the Fibrillar Collagens I, III, and V and Their Mass Spectrometric Characterization:  Detection of Linear Peptides, Peptide Glycosylation, and Cross-Linking Peptides Involved in Formation of Homo- and Heterotypic Fibrils. Journal of Proteome Research, 2007, 6, 4269-4289.	1.8	27
71	Rapid metabolic profiling of Nicotiana tabacum defence responses against Phytophthora nicotianae using direct infrared laser desorption ionization mass spectrometry and principal component analysis. Plant Methods, 2010, 6, 14.	1.9	27
72	Advanced Methods for MALDI-MS Imaging of the Chemical Communication in Microbial Communities. Analytical Chemistry, 2019, 91, 15081-15089.	3.2	27

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73	Characterization of Whole Fibril-Forming Collagen Proteins of Types I, III, and V from Fetal Calf Skin by Infrared Matrix-Assisted Laser Desorption Ionization Mass Spectrometry. Analytical Chemistry, 2004, 76, 3482-3491.	3.2	26
74	Discrimination of Isobaric Leucine and Isoleucine Residues and Analysis of Post-Translational Modifications in Peptides by MALDI In-Source Decay Mass Spectrometry Combined with Collisional Cooling. Analytical Chemistry, 2010, 82, 5628-5635.	3.2	25
75	A binary matrix of 2,5â€dihydroxybenzoic acid and glycerol produces homogenous sample preparations for matrixâ€assisted laser desorption/ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2008, 22, 59-66.	0.7	24
76	Mass spectrometry imaging to explore molecular heterogeneity in cell culture. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	24
77	Direct mass spectrometric peptide profiling and sequencing of nervous tissues to identify peptides involved in male copulatory behavior in Lymnaea stagnalis. International Journal of Mass Spectrometry and Ion Processes, 1997, 169-170, 291-299.	1.9	23
78	Normal silica gel and reversed phase thin-layer chromatography coupled with UV spectroscopy and IR-MALDI-o-TOF-MS for the detection of tetracycline antibiotics. Analytical and Bioanalytical Chemistry, 2010, 398, 2821-2831.	1.9	22
79	Mass spectrometry imaging goes three dimensional. Nature Methods, 2017, 14, 1139-1140.	9.0	22
80	Molecular insights into symbiosis—mapping sterols in a marine flatworm-algae-system using high spatial resolution MALDI-2-MS imaging with ion mobility separation. Analytical and Bioanalytical Chemistry, 2021, 413, 2767-2777.	1.9	22
81	Application of thinâ€layer chromatography/infrared matrixâ€assisted laser desorption/ionization orthogonal timeâ€ofâ€flight mass spectrometry to structural analysis of bacteriaâ€binding glycosphingolipids selected by affinity detection. Rapid Communications in Mass Spectrometry, 2010, 24. 1032-1038.	0.7	21
82	An Onâ€Tissue Paternò–Büchi Reaction for Localization of Carbon–Carbon Double Bonds in Phospholipids and Glycolipids by Matrixâ€Assisted Laserâ€Đesorption–Ionization Massâ€&pectrometry Imaging. Angewandte Chemie, 2018, 130, 12268-12272.	1.6	21
83	Detailed Characterization of the Postionization Efficiencies in MALDI-2 as a Function of Relevant Input Parameters. Journal of the American Society for Mass Spectrometry, 2020, 31, 1844-1853.	1.2	21
84	Progress in Detection and Structural Characterization of Glycosphingolipids in Crude Lipid Extracts by Enzymatic Phospholipid Disintegration Combined with Thin-Layer Chromatography Immunodetection and IR-MALDI Mass Spectrometry. Analytical Chemistry, 2014, 86, 1215-1222.	3.2	20
85	Enterohaemorrhagic <i>Escherichia coli</i> haemolysin is cleaved and inactivated by serine protease EspPα. Environmental Microbiology, 2011, 13, 1327-1341.	1.8	19
86	Analysis of Free Fatty Acids by Ultraviolet Laser Desorption Ionization Mass Spectrometry Using Insect Wings as Hydrophobic Sample Substrates. Analytical Chemistry, 2014, 86, 10763-10771.	3.2	19
87	Analysis of Noncovalent Chitinase-Chito-Oligosaccharide Complexes by Infrared-Matrix Assisted Laser Desorption Ionization and Nanoelectrospray Ionization Mass Spectrometry. Analytical Chemistry, 2011, 83, 4030-4036.	3.2	16
88	Mass Spectrometry Imaging Techniques Enabling Visualization of Lipid Isomers in Biological Tissues. Analytical Chemistry, 2022, 94, 4889-4900.	3.2	16
89	Laser desorption/ionization mass spectrometry of lipids using etched silver substrates. Methods, 2016, 104, 194-203.	1.9	15
90	Generation of multiply charged peptides and proteins from glycerol-based matrices using lasers with ultraviolet, visible and near-infrared wavelengths and an atmospheric pressure ion source.	0.7	14

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91	Detection of very long-chain hydrocarbons by laser mass spectrometry reveals novel species-, sex-, and age-dependent differences in the cuticular profiles of three Nasonia species. Analytical and Bioanalytical Chemistry, 2019, 411, 2981-2993.	1.9	14
92	Intracellular Degradation of C-Peptides in Molluscan Neurons Producing Insulin-Related Hormones. Peptides, 1997, 18, 765-770.	1.2	13
93	Infrared MALDI Mass Spectrometry with Laser-Induced Postionization for Imaging of Bacterial Colonies. Journal of the American Society for Mass Spectrometry, 2021, 32, 1053-1064.	1.2	13
94	A New Mint1 Isoform, but Not the Conventional Mint1, Interacts with the Small GTPase Rab6. PLoS ONE, 2013, 8, e64149.	1.1	12
95	Singleâ€Photonâ€Induced Postâ€Ionization to Boost Ion Yields in MALDI Mass Spectrometry Imaging**. Angewandte Chemie - International Edition, 2022, 61, .	7.2	12
96	Field-based ion generation from microscale emitters on natural and artificial objects for atmospheric pressure mass spectrometry. Analytical and Bioanalytical Chemistry, 2010, 397, 3311-3316.	1.9	10
97	Water Ice is a Soft Matrix for the Structural Characterization of Glycosaminoglycans by Infrared Matrix-Assisted Laser Desorption/Ionization. Analytical Chemistry, 2014, 86, 6439-6446.	3.2	10
98	MALDI-2 and t-MALDI-2 Mass Spectrometry Imaging. Methods in Molecular Biology, 2022, 2437, 21-40.	0.4	10
99	An ultraviolet/infrared matrixâ€assisted laser desorption ionization sample stage integrating scanning knifeâ€edge and slit devices for laser beam analysis. Rapid Communications in Mass Spectrometry, 2011, 25, 1266-1270.	0.7	9
100	Changes in the molecular ion yield and fragmentation of peptides under various primary ions in ToF-SIMS and matrix-enhanced ToF-SIMS. Biointerphases, 2016, 11, 02A318.	0.6	9
101	Localization of ergot alkaloids in sclerotia of Claviceps purpurea by matrix-assisted laser desorption/ionization mass spectrometry imaging. Analytical and Bioanalytical Chemistry, 2017, 409, 1221-1230.	1.9	9
102	Infrared MALDI mass spectrometry imaging of TLC-separated glycosphingolipids with emphasis on Shiga toxin receptors isolated from human colon epithelial cells. International Journal of Mass Spectrometry, 2017, 416, 53-60.	0.7	8
103	Ultraviolet laser desorption/ionization mass spectrometry of single-core and multi-core polyaromatic hydrocarbons under variable conditions of collisional cooling: insights into the generation of molecular ions, fragments and oligomers. Journal of Mass Spectrometry, 2014, 49, 1127-1138.	0.7	7
104	Singleâ€Photonâ€Induced Postâ€Ionization to Boost Ion Yields in MALDI Mass Spectrometry Imaging**. Angewandte Chemie, 2022, 134, .	1.6	5
105	Lowâ€Pressure Photoionization in a Dualâ€Ion Funnel Injector Coupled to an Orbitrap Mass Spectrometer for Direct Analysis of Human Breath and Headâ€5pace Sampled Coffee Roasts. ChemPlusChem, 2020, 85, 1559-1563.	1.3	4
106	Spatial distribution of isobaric androgens in target tissues using chemical derivatization and MALDI-2 on a trapped ion mobility quadrupole time-of-flight instrument. RSC Advances, 2021, 11, 33916-33925.	1.7	3
107	Effect of the Laser Pulse Width in MALDI-2: A Comparative Study of Picosecond versus Nanosecond Wide Pulses for Laser Postionization. Journal of the American Society for Mass Spectrometry, 2022, 33, 315-321.	1.2	3
108	Interactive Visual Analysis of Mass Spectrometry Imaging Data Using Linear and Non-Linear Embeddings. Information (Switzerland), 2020, 11, 575.	1.7	1

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109	Infrared laser post-ionization of large biomolecules from an IR-MALD(I) plume. Journal of the American Society for Mass Spectrometry, 2004, 15, 934-941.	1.2	1