

Kermit King Murray

List of Publications by Year in descending order

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136
papers

4,415
citations

126907

33
h-index

128289

60
g-index

554
all docs

554
docs citations

554
times ranked

3357
citing authors

#	ARTICLE	IF	CITATIONS
1	Definitions of terms relating to mass spectrometry (IUPAC Recommendations 2013). Pure and Applied Chemistry, 2013, 85, 1515-1609.	1.9	305
2	Methylene: A study of the $X^1\Sigma^+$ and $a^1\Pi$ states by photoelectron spectroscopy of CH_2 and CD_2 . Journal of Chemical Physics, 1985, 83, 4849-4865.	3.0	289
3	Threshold photodetachment of H^- . Physical Review A, 1991, 43, 6104-6107.	2.5	226
4	Photoelectron spectroscopy of the halocarbene anions HCF_2^- , $HCCl_2^-$, $H CBr_2^-$, HCl_2^- , CF_2^- , and CCL_2^- . Journal of Chemical Physics, 1988, 89, 5442-5453.	3.0	156
5	DNA Sequencing by Mass Spectrometry. Journal of Mass Spectrometry, 1996, 31, 1203-1215.	1.6	145
6	Microfluidic chips for mass spectrometry-based proteomics. Journal of Mass Spectrometry, 2009, 44, 579-593.	1.6	119
7	Infrared laser-assisted desorption electrospray ionization mass spectrometry. Analyst, The, 2008, 133, 226-232.	3.5	115
8	Coupling matrix-assisted laser desorption/ionization to liquid separations. , 1997, 16, 283-299.		113
9	Laser photoelectron spectroscopy of the formyl anion. Journal of Chemical Physics, 1986, 84, 2520-2525.	3.0	108
10	Intact and top-down characterization of biomolecules and direct analysis using infrared matrix-assisted laser desorption electrospray ionization coupled to FT-ICR mass spectrometry. Journal of the American Society for Mass Spectrometry, 2009, 20, 667-673.	2.8	101
11	Small Molecule Ambient Mass Spectrometry Imaging by Infrared Laser Ablation Metastable-Induced Chemical Ionization. Analytical Chemistry, 2010, 82, 2178-2181.	6.5	101
12	The visible photoabsorption spectrum of Ar^+ . Journal of Chemical Physics, 1988, 89, 71-74.	3.0	98
13	Liquid sample introduction for matrix-assisted laser desorption ionization. Analytical Chemistry, 1993, 65, 2534-2537.	6.5	94
14	Reproducibility and quantitation of matrix-assisted laser desorption ionization mass spectrometry: Effects of nitrocellulose on peptide ion yields. Biological Mass Spectrometry, 1993, 22, 544-550.	0.5	86
15	Electron affinities of the alkali halides and the structure of their negative ions. Journal of Chemical Physics, 1986, 85, 2368-2375.	3.0	82
16	A Rotating Ball Inlet for On-Line MALDI Mass Spectrometry. Analytical Chemistry, 2000, 72, 251-254.	6.5	72
17	Aerosol Matrix-Assisted Laser Desorption Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 1994, 5, 1-9.	2.8	65
18	On-Line Coupling of Gel Permeation Chromatography with MALDI Mass Spectrometry. Analytical Chemistry, 1996, 68, 3555-3560.	6.5	64

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19	Online CE ⁺ MALDI-TOF MS Using a Rotating Ball Interface. <i>Analytical Chemistry</i> , 2004, 76, 5968-5973.	6.5	61
20	Aerosol MALDI with a Reflectron Time-of-Flight Mass Spectrometer. <i>Analytical Chemistry</i> , 1996, 68, 1143-1147.	6.5	57
21	Microfluidics with MALDI analysis for proteomics ⁺ A review. <i>Analytica Chimica Acta</i> , 2009, 649, 180-190.	5.4	57
22	Direct coupling of polymer-based microchip electrophoresis to online MALDI-MS using a rotating ball inlet. <i>Electrophoresis</i> , 2005, 26, 4703-4710.	2.4	56
23	Autodetachment dynamics of acetaldehyde enolate anion, CH ₂ CHO ⁻ . <i>The Journal of Physical Chemistry</i> , 1993, 97, 10281-10286.	2.9	52
24	Infrared Laser Ablation Sample Transfer for MALDI and Electrospray. <i>Journal of the American Society for Mass Spectrometry</i> , 2011, 22, 1352-1362.	2.8	52
25	Development of an automated digestion and droplet deposition microfluidic chip for MALDI-TOF MS. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 964-972.	2.8	51
26	Infrared laser ablation sample transfer for on ⁺ line liquid chromatography electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2012, 47, 1322-1326.	1.6	44
27	Aerosol Matrix-Assisted Laser Desorption Ionization for Liquid Chromatography/Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 1994, 66, 1601-1609.	6.5	43
28	Matrix-assisted laser desorption/ionization with a tunable mid-infrared optical parametric oscillator. <i>Journal of Mass Spectrometry</i> , 1997, 32, 1374-1377.	1.6	43
29	Infrared Laser Desorption/Ionization on Silicon. <i>Analytical Chemistry</i> , 2002, 74, 2228-2231.	6.5	42
30	High resolution laser mass spectrometry bioimaging. <i>Methods</i> , 2016, 104, 118-126.	3.8	41
31	Autodetachment spectroscopy of vibrationally excited acetaldehyde enolate anion, CH ₂ CHO ⁺ . <i>Chemical Physics</i> , 1992, 166, 207-213.	1.9	39
32	Laser Capture Microdissection MALDI for Direct Analysis of Archival Tissue. <i>Journal of Proteome Research</i> , 2003, 2, 95-98.	3.7	38
33	Matrix-free infrared soft laser desorption/ionization. <i>Journal of Mass Spectrometry</i> , 2004, 39, 1182-1189.	1.6	36
34	Wavelength Dependence of Soft Infrared Laser Desorption and Ionization. <i>Journal of Physical Chemistry C</i> , 2007, 111, 1412-1416.	3.1	36
35	Acetylene combustion reactions. Rate constant measurements of HCCO with O ₂ and C ₂ H ₂ . <i>Chemical Physics Letters</i> , 1992, 192, 512-516.	2.6	33
36	Matrix-assisted laser desorption/ionization mass spectrometry of collected bioaerosol particles. <i>Rapid Communications in Mass Spectrometry</i> , 2005, 19, 1725-1729.	1.5	33

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37	Infrared Laser Ablation Sample Transfer for MALDI Imaging. <i>Analytical Chemistry</i> , 2012, 84, 3240-3245.	6.5	33
38	Ambient laser ablation sampling for capillary electrophoresis mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2013, 27, 1673-1680.	1.5	33
39	Infrared spectroscopy of jet-cooled transient molecules. <i>Chemical Physics Letters</i> , 1989, 161, 98-102.	2.6	32
40	Development of an efficient on-chip digestion system for protein analysis using MALDI-TOF MS. <i>Analyst</i> , 2009, 134, 2426.	3.5	32
41	Matrix-assisted laser desorption ionization mass spectrometry for identification of shrimp. <i>Analytica Chimica Acta</i> , 2013, 794, 55-59.	5.4	32
42	Mid-infrared matrix assisted laser desorption ionization with a water/glycerol matrix. <i>Applied Surface Science</i> , 1998, 127-129, 242-247.	6.1	31
43	IR ⁺ MALDI ⁺ LDI Combined with Ion Mobility Orthogonal Time-of-Flight Mass Spectrometry. <i>Journal of Proteome Research</i> , 2006, 5, 1484-1487.	3.7	31
44	Infrared matrix-assisted laser desorption/ionization using OH, NH and CH vibrational absorption. <i>Rapid Communications in Mass Spectrometry</i> , 1998, 12, 1685-1690.	1.5	30
45	Interfacing capillary gel microfluidic chips with infrared laser desorption mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2006, 17, 469-474.	2.8	30
46	Characterization of Coarse Particles Formed by Laser Ablation of MALDI Matrixes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 13106-13110.	2.6	29
47	Particle Formation in Ambient MALDI Plumes. <i>Analytical Chemistry</i> , 2011, 83, 6601-6608.	6.5	28
48	Particle formation by infrared laser ablation of glycerol: implications for ion formation. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 1299-1304.	1.5	27
49	Affinity labeling the dopamine transporter ligand binding site. <i>Journal of Neuroscience Methods</i> , 2005, 143, 33-40.	2.5	26
50	Aerosol Matrix-Assisted Laser Desorption Ionization: Effects of Analyte Concentration and Matrix-to-Analyte Ratio. <i>Analytical Chemistry</i> , 1995, 67, 1981-1986.	6.5	25
51	Matrix Addition by Condensation for Matrix-Assisted Laser Desorption/Ionization of Collected Aerosol Particles. <i>Analytical Chemistry</i> , 2002, 74, 4841-4844.	6.5	25
52	Infrared laser wavelength dependence of particles ablated from glycerol. <i>Applied Surface Science</i> , 2008, 255, 1699-1704.	6.1	25
53	Laser ablation sample transfer for localized LC ⁻ MS/MS proteomic analysis of tissue. <i>Journal of Mass Spectrometry</i> , 2016, 51, 261-268.	1.6	25
54	Direct from Polyacrylamide Gel Infrared Laser Desorption/Ionization. <i>Analytical Chemistry</i> , 2004, 76, 1078-1082.	6.5	24

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55	Molecular weight sensing properties of ionic liquid-polymer composite films: theory and experiment. <i>Journal of Materials Chemistry C</i> , 2014, 2, 4867-4878.	5.5	24
56	Two-laser infrared and ultraviolet matrix-assisted laser desorption/ionization. <i>Journal of Mass Spectrometry</i> , 2003, 38, 772-777.	1.6	23
57	On-line laser desorption/ionization mass spectrometry of matrix-coated aerosols. <i>Rapid Communications in Mass Spectrometry</i> , 2004, 18, 2041-2045.	1.5	23
58	On-line single droplet deposition for MALDI mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2004, 15, 1471-1477.	2.8	23
59	337 nm Matrix-assisted laser desorption/ionization of single aerosol particles. , 1999, 34, 909-914.		22
60	Particle Production in Reflection and Transmission Mode Laser Ablation: Implications for Laserspray Ionization. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 1108-1115.	2.8	22
61	Matrix-Assisted Laser Desorption Ionization Imaging and Laser Ablation Sampling for Analysis of Fungicide Distribution in Apples. <i>Analytical Chemistry</i> , 2019, 91, 6051-6056.	6.5	21
62	Continuous flow infrared matrix-assisted laser desorption/ionization with a solvent matrix. , 2000, 14, 129-134.		19
63	Desorption electrospray ionization of aerosol particles. <i>Rapid Communications in Mass Spectrometry</i> , 2007, 21, 3995-4000.	1.5	19
64	Wavelength and Time-Resolved Imaging of Material Ejection in Infrared Matrix-Assisted Laser Desorption. <i>Journal of Physical Chemistry A</i> , 2010, 114, 1492-1497.	2.5	19
65	Size distributions of ambient shock-generated particles: implications for inlet ionization. <i>Rapid Communications in Mass Spectrometry</i> , 2013, 27, 1283-1286.	1.5	18
66	The OH stretching fundamental of methanol. <i>Journal of Molecular Structure</i> , 1990, 223, 171-184.	3.6	17
67	Tip-Enhanced Laser Ablation Sample Transfer for Biomolecule Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2015, 26, 63-70.	2.8	17
68	Infrared matrix-assisted laser desorption/ionization using a frozen alcohol matrix. , 2000, 35, 95-97.		16
69	GUMBOS matrices of variable hydrophobicity for matrix-assisted laser desorption/ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 2307-2314.	1.5	16
70	Laser Ablation with Vacuum Capture for MALDI Mass Spectrometry of Tissue. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 108-116.	2.8	16
71	Fragmentation of vitamin B12 in aerosol matrix-assisted laser desorption ionization. <i>Journal of the American Society for Mass Spectrometry</i> , 1997, 8, 140-147.	2.8	15
72	Glossary of terms for separations coupled to mass spectrometry. <i>Journal of Chromatography A</i> , 2010, 1217, 3922-3928.	3.7	15

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73	Ultra sensitive affinity chromatography on avidin-functionalized PMMA microchip for low abundant post-translational modified protein enrichment. <i>Biomedical Microdevices</i> , 2012, 14, 67-81.	2.8	15
74	Spectroscopy and autodetachment dynamics of PtN ⁺ . <i>Physical Review A</i> , 1987, 36, 699-704.	2.5	14
75	Continuous flow infrared matrix-assisted laser desorption electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2010, 24, 2799-2804.	1.5	14
76	Infrared laser ablation sampling coupled with data independent high resolution UPLC-IM-MS/MS for tissue analysis. <i>Analytica Chimica Acta</i> , 2018, 1034, 102-109.	5.4	14
77	Characterization of Infrared Matrix-Assisted Laser Desorption Ionization Samples by Fourier Transform Infrared Attenuated Total Reflection Spectroscopy. <i>Applied Spectroscopy</i> , 2004, 58, 451-456.	2.2	13
78	Matrix-assisted laser desorption ionization of infrared laser ablated particles. <i>International Journal of Mass Spectrometry</i> , 2008, 274, 21-24.	1.5	13
79	A solid-phase bioreactor with continuous sample deposition for matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 693-699.	1.5	13
80	Pulsed valve matrix-assisted ionization. <i>Analyst, The</i> , 2017, 142, 1672-1675.	3.5	13
81	Vibrational relaxation of acetylene produced by the photolysis of vinyl bromide. <i>Journal of Chemical Physics</i> , 1992, 96, 5047-5053.	3.0	12
82	Infrared matrix-assisted laser desorption/ionization of polycyclic aromatic hydrocarbons with a sulfolane matrix. <i>Rapid Communications in Mass Spectrometry</i> , 2001, 15, 1448-1452.	1.5	12
83	Wavelength dependent atomic force microscope tip-enhanced laser ablation. <i>Applied Surface Science</i> , 2018, 447, 437-441.	6.1	11
84	Infrared laser ablation and capture of enzymes with conserved activity. <i>Analytica Chimica Acta</i> , 2018, 1027, 41-46.	5.4	11
85	Deep-ultraviolet laser ablation electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2019, 54, 281-287.	1.6	11
86	On-target digestion of collected bacteria for MALDI mass spectrometry. <i>Analytica Chimica Acta</i> , 2008, 627, 154-161.	5.4	10
87	UV laser irradiation of IR laser generated particles ablated from nitrobenzyl alcohol. <i>Applied Surface Science</i> , 2009, 255, 6297-6302.	6.1	10
88	Proteome analysis of the leukocytes from the American alligator (<i>Alligator mississippiensis</i>) using mass spectrometry. <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2010, 5, 308-316.	1.0	10
89	Infrared laser ablation sample transfer of tissue DNA for genomic analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 4119-4126.	3.7	10
90	Particle size measurement from infrared laser ablation of tissue. <i>Analyst, The</i> , 2016, 141, 183-190.	3.5	9

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91	Honey Bee Proteome Responses to Plant and Cyanobacteria (blue-green algae) Diets. <i>ACS Food Science & Technology</i> , 2021, 1, 17-26.	2.7	9
92	A Laminar Flow Nebulizer for Aerosol MALDI. <i>Analytical Chemistry</i> , 1997, 69, 3613-3616.	6.5	8
93	Internet resources for mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1999, 34, 1-9.	1.6	8
94	Particle formation by infrared laser ablation of MALDI matrix compounds. <i>Journal of Mass Spectrometry</i> , 2014, 49, 543-549.	1.6	8
95	Spatially resolved analysis of <i>Pseudomonas aeruginosa</i> biofilm proteomes measured by laser ablation sample transfer. <i>PLoS ONE</i> , 2021, 16, e0250911.	2.5	8
96	Multimodal Label-Free Monitoring of Adipogenic Stem Cell Differentiation Using Endogenous Optical Biomarkers. <i>Advanced Functional Materials</i> , 2021, 31, 2103955.	14.9	8
97	A mixed liquid matrix for infrared matrix-assisted laser desorption/ionization of oligonucleotides. <i>Rapid Communications in Mass Spectrometry</i> , 2002, 16, 1248-1250.	1.5	7
98	Isolation and determination of the primary structure of a lectin protein from the serum of the American alligator (<i>Alligator mississippiensis</i>). <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2012, 161, 161-169.	1.6	7
99	Infrared Laser Ablation with Vacuum Capture for Fingerprint Sampling. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 1958-1964.	2.8	7
100	Broadband ion mobility deconvolution for rapid analysis of complex mixtures. <i>Analyst, The</i> , 2018, 143, 2574-2586.	3.5	7
101	Label-free lipidome study of paraventricular thalamic nucleus (PVT) of rat brain with post-traumatic stress injury by Raman imaging. <i>Analyst, The</i> , 2021, 146, 170-183.	3.5	7
102	Infrared Laser Ablation Microsampling with a Reflective Objective. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 463-470.	2.8	7
103	Two-laser mid-infrared and ultraviolet matrix-assisted laser desorption/ionization. <i>International Journal of Mass Spectrometry</i> , 2007, 261, 140-145.	1.5	6
104	Ambient laser ablation sample transfer with nanostructure-assisted laser desorption ionization mass spectrometry for bacteria analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 2382-2384.	1.5	6
105	Deep-ultraviolet laser ablation sampling for proteomic analysis of tissue. <i>Analytica Chimica Acta</i> , 2021, 1184, 339021.	5.4	6
106	Mass spectrometry and Web 2.0. <i>Journal of Mass Spectrometry</i> , 2007, 42, 1263-1271.	1.6	5
107	Systematic assessment of surfactants for matrix-assisted laser desorption/ionization mass spectrometry imaging. <i>Analytica Chimica Acta</i> , 2017, 963, 76-82.	5.4	5
108	RNA sampling from tissue sections using infrared laser ablation. <i>Analytica Chimica Acta</i> , 2019, 1063, 91-98.	5.4	5

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109	MALDI imaging directed laser ablation tissue microsampling for data independent acquisition proteomics. <i>Journal of Mass Spectrometry</i> , 2020, 55, e4475.	1.6	5
110	Finite element simulation of infrared laser ablation for mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2012, 26, 2145-2150.	1.5	4
111	Laser desorption sample transfer for gas chromatography/mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 89-94.	1.5	4
112	Comment on: "Nominal Mass" by Athula B. Attygalle and Julius Pavlov, <i>J. Am. Soc. Mass Spectrom.</i> 28, 1737-1738 (2017). <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 2724-2725.	2.8	4
113	A nanoparticle co-matrix for multiple charging in matrix-assisted laser desorption ionization imaging of tissue. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e8424.	1.5	4
114	A nitrocellulose matrix for infrared matrix-assisted laser desorption/ionization of polycyclic aromatic hydrocarbons. <i>Rapid Communications in Mass Spectrometry</i> , 2004, 18, 228-230.	1.5	3
115	Matrix-assisted laser desorption/ionization with untreated silicon targets. <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 203-205.	1.5	3
116	Matrix Assisted Laser Desorption Ionization Ion Mobility Time-of-Flight Mass Spectrometry of Bacteria. <i>ACS Symposium Series</i> , 2011, , 143-160.	0.5	3
117	Tip-enhanced laser ablation and capture of DNA. <i>Applied Surface Science</i> , 2019, 476, 658-662.	6.1	3
118	Piezoelectric matrix-assisted ionization. <i>European Journal of Mass Spectrometry</i> , 2019, 25, 202-207.	1.0	3
119	Wavelength-Dependent Tip-Enhanced Laser Ablation of Organic Dyes. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1918-1922.	3.1	3
120	Lasers for matrix-assisted laser desorption ionization. <i>Journal of Mass Spectrometry</i> , 2021, 56, e4664.	1.6	3
121	Laser Ablation Sample Transfer for Mass Spectrometry Imaging. <i>Methods in Molecular Biology</i> , 2015, 1203, 129-139.	0.9	3
122	Tip Enhanced Laser Ablation Sample Transfer for Mass Spectrometry. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1754, 87-95.	0.1	2
123	Electrospray Photochemical Oxidation of Proteins. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2196-2199.	2.8	2
124	Sublimation Electrification of Organic Compounds. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 888-893.	2.8	2
125	DNA Sequencing by Mass Spectrometry. <i>Journal of Mass Spectrometry</i> , 1996, 31, 1203-1215.	1.6	2
126	The term "multiple reaction monitoring" is recommended. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 1926-1928.	1.5	1

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127	In defense of the quasimolecular ion. <i>Journal of Mass Spectrometry</i> , 2021, 56, e4700.	1.6	1
128	Infrared Laser Ablation Microsampling for Small Volume Proteomics. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, , .	2.8	1
129	MALDI-MS Application for Food Control. , 2022, , 17-21.		1
130	Matrix-assisted laser desorption ionization of aerosols: The ionization mechanism. <i>AIP Conference Proceedings</i> , 1993, , .	0.4	0
131	AC WebWorks: MS/MS: Multimedia shopping for a mass spec.. <i>Analytical Chemistry</i> , 2000, 72, 225 A-229 A.	6.5	0
132	Elements of mass spectrometry style. <i>Trends in Biotechnology</i> , 2001, 19, 155.	9.3	0
133	A mass spectrometry approach for the study of deglycosylated proteins. <i>Microchemical Journal</i> , 2011, 99, 309-311.	4.5	0
134	Single molecule mass measurements and mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 2671-2672.	1.5	0
135	Chapter 10. On-line and Off-line MALDI from a Microfluidic Device. , 2008, , 239-255.		0
136	Internet resources for mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1999, 34, 1.	1.6	0