

# Akos Vertes

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

190  
papers

8,147  
citations

50  
h-index

82  
g-index

199  
ext. papers

8,852  
ext. citations

5.3  
avg, IF

6.38  
L-index

#	Paper	IF	Citations
190	Laser ablation electrospray ionization for atmospheric pressure, in vivo, and imaging mass spectrometry. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 8098-106	7.8	669
189	Laser ablation for analytical sampling: what can we learn from modeling?. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , <b>2003</b> , 58, 1867-1893	3.1	347
188	Desorption/ionization on silicon nanowires. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 1641-6	7.8	229
187	In situ metabolic profiling of single cells by laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 8265-71	7.8	224
186	Ambient molecular imaging and depth profiling of live tissue by infrared laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 4575-82	7.8	206
185	Three-dimensional imaging of metabolites in tissues under ambient conditions by laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 6668-75	7.8	191
184	Simultaneous imaging of small metabolites and lipids in rat brain tissues at atmospheric pressure by laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2010</b> , 82, 982-8	7.8	185
183	Atmospheric pressure molecular imaging by infrared MALDI mass spectrometry. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 523-32	7.8	163
182	Single-Cell Mass Spectrometry Approaches to Explore Cellular Heterogeneity. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 4466-4477	16.4	158
181	Atmospheric pressure infrared MALDI imaging mass spectrometry for plant metabolomics. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 407-20	7.8	147
180	In situ cell-by-cell imaging and analysis of small cell populations by mass spectrometry. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 2947-55	7.8	127
179	Spraying mode effect on droplet formation and ion chemistry in electrosprays. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 3105-16	7.8	127
178	Internal energy of ions generated by matrix-assisted laser desorption/ionization. <i>Analytical Chemistry</i> , <b>2002</b> , 74, 6185-90	7.8	126
177	Ambient mass spectrometry for in vivo local analysis and in situ molecular tissue imaging. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2012</b> , 34, 22-34	14.6	118
176	Human T-lymphotropic virus type 1-infected cells secrete exosomes that contain Tax protein. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 22284-305	5.4	110
175	Hydrodynamic model of matrix-assisted laser desorption mass spectrometry. <i>Analytical Chemistry</i> , <b>1993</b> , 65, 2389-2393	7.8	93
174	Analytical challenges of microbial biofilms on medical devices. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 3858-66	7.8	92

173	Flexing the electrified meniscus: the birth of a jet in electrosprays. <i>Analytical Chemistry</i> , <b>2004</b> , 76, 4202-7.8	92
172	Laser-nanostructure interactions for ion production. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 8453-7.6	89
171	The effect of the matrix on film properties in matrix-assisted pulsed laser evaporation. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 2055-2058	2.5 89
170	Observation of subcellular metabolite gradients in single cells by laser ablation electrospray ionization mass spectrometry. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 10386-9	16.4 87
169	Expansion of laser-generated plumes near the plasma ignition threshold. <i>Analytical Chemistry</i> , <b>1991</b> , 63, 314-320	7.8 86
168	Adjustable fragmentation in laser desorption/ionization from laser-induced silicon microcolumn arrays. <i>Analytical Chemistry</i> , <b>2006</b> , 78, 5835-44	7.8 84
167	Solvated Ion Evaporation from Charged Water Nanodroplets. <i>Journal of Physical Chemistry A</i> , <b>2003</b> , 107, 7406-7412	2.8 84
166	Direct analysis of lipids and small metabolites in mouse brain tissue by AP IR-MALDI and reactive LAESI mass spectrometry. <i>Analyst, The</i> , <b>2010</b> , 135, 751-8	5 81
165	Homogeneous bottleneck model of matrix-assisted ultraviolet laser desorption of large molecules. <i>Rapid Communications in Mass Spectrometry</i> , <b>1990</b> , 4, 228-233	2.2 80
164	Direct detection of diverse metabolic changes in virally transformed and Tax-expressing cells by mass spectrometry. <i>Retrovirology</i> , <b>2011</b> , 8, A179	3.6 78
163	Tailored Silicon Nanopost Arrays for Resonant Nanophotonic Ion Production. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 4835-4840	3.8 75
162	Nanophotonic ionization for ultratrace and single-cell analysis by mass spectrometry. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 7756-62	7.8 74
161	Molecular Imaging of Biological Samples on Nanophotonic Laser Desorption Ionization Platforms. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 4482-6	16.4 73
160	Surface modification and laser pulse length effects on internal energy transfer in DIOS. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 24450-6	3.4 73
159	Internal energy transfer in laser desorption/ionization from silicon nanowires. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 13381-6	3.4 72
158	Droplet Dynamics Changes in Electrostatic Sprays of Methanol/Water Mixtures. <i>Journal of Physical Chemistry A</i> , <b>1998</b> , 102, 9154-9160	2.8 71
157	Total yield measurements in matrix-assisted laser desorption using a quartz crystal microbalance. <i>Rapid Communications in Mass Spectrometry</i> , <b>1994</b> , 8, 149-154	2.2 70
156	Protein profile of tax-associated complexes. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 495-508	5.4 68

155	In situ metabolic analysis of single plant cells by capillary microsampling and electrospray ionization mass spectrometry with ion mobility separation. <i>Analyst, The</i> , <b>2014</b> , 139, 5079-85	5	65
154	Sublimation versus fragmentation in matrix-assisted laser desorption. <i>Chemical Physics Letters</i> , <b>1990</b> , 171, 284-290	2.5	64
153	Energy Charge, Redox State, and Metabolite Turnover in Single Human Hepatocytes Revealed by Capillary Microsampling Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 10397-405	7.8	62
152	Infrared laser ablation atmospheric pressure photoionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 1630-6	7.8	60
151	Atmospheric pressure matrix-assisted laser desorption/ionization in transmission geometry. <i>Analytical Chemistry</i> , <b>2002</b> , 74, 1891-5	7.8	59
150	Resonant infrared pulsed-laser deposition of polymer films using a free-electron laser. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2001</b> , 19, 2698-2702	2.9	56
149	Mass spectrometry imaging based on laser desorption ionization from inorganic and nanophotonic platforms. <i>View</i> , <b>2020</b> , 1, 20200063	7.8	56
148	Quantification of plant surface metabolites by matrix-assisted laser desorption-ionization mass spectrometry imaging: glucosinolates on Arabidopsis thaliana leaves. <i>Plant Journal</i> , <b>2015</b> , 81, 961-72	6.9	55
147	Noncovalent protein-oligonucleotide interactions monitored by matrix-assisted laser desorption/ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>1995</b> , 67, 4542-8	7.8	55
146	Astable regime in electrosprays. <i>Physical Review E</i> , <b>2007</b> , 76, 026320	2.4	54
145	Order-chaos-order transitions in electrosprays: the electrified dripping faucet. <i>Physical Review Letters</i> , <b>2006</b> , 97, 064502	7.4	54
144	Time-delayed 2-Pulse Studies of MALDI Matrix Ionization Mechanisms. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 5406-5410	3.4	54
143	Metabolic differences in microbial cell populations revealed by nanophotonic ionization. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 3650-3	16.4	53
142	Vapor deposition of intact polyethylene glycol thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 73, 121-123	2.6	52
141	High-throughput cell and tissue analysis with enhanced molecular coverage by laser ablation electrospray ionization mass spectrometry using ion mobility separation. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 4308-15	7.8	51
140	Nanophotonic ion production from silicon microcolumn arrays. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 1669-72	16.4	47
139	Identifying the membrane proteome of HIV-1 latently infected cells. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 8207-18	5.4	47
138	Ambient molecular imaging by laser ablation electrospray ionization mass spectrometry with ion mobility separation. <i>International Journal of Mass Spectrometry</i> , <b>2015</b> , 377, 681-689	1.9	46

137	Crystallite size dependence of volatilization in matrix-assisted laser desorption ionization. <i>Applied Surface Science</i> , <b>1998</b> , 127-129, 226-234	6.7	46
136	Toward single-cell analysis by plume collimation in laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 3592-8	7.8	45
135	New matrices and accelerating voltage effects in matrix-assisted laser desorption/ionization of synthetic polymers. <i>Rapid Communications in Mass Spectrometry</i> , <b>1995</b> , 9, 1141-1147	2.2	45
134	Molecular Dynamics of Matrix-Assisted Laser Desorption of Leucine Enkephalin Guest Molecules from Nicotinic Acid Host Crystal. <i>Journal of Physical Chemistry B</i> , <b>1998</b> , 102, 4770-4778	3.4	44
133	Modeling the thermal-to-plasma transitions for Cu photoablation. <i>IBM Journal of Research and Development</i> , <b>1994</b> , 38, 3-10	2.5	44
132	Hydrodynamic modelling of laser plasma ionization processes. <i>International Journal of Mass Spectrometry and Ion Processes</i> , <b>1989</b> , 94, 63-85		43
131	In vitro analysis of metabolites from the untreated tissue of <i>Torpedo californica</i> electric organ by mid-infrared laser ablation electrospray ionization mass spectrometry. <i>Metabolomics</i> , <b>2009</b> , 5, 263-276	4.7	41
130	How much charge is there on a pulsating Taylor cone?. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 064104	3.4	41
129	Threshold conditions of plasma ignition in laser ionization mass spectrometry of solids. <i>Analytical Chemistry</i> , <b>1989</b> , 61, 1029-1035	7.8	41
128	Internal energy deposition and ion fragmentation in atmospheric-pressure mid-infrared laser ablation electrospray ionization. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 2501-7	3.6	40
127	Conformation Changes, Complexation, and Phase Transition in Matrix-Assisted Laser Desorption. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 2578-2587	3.4	40
126	Amino acid composition and wavelength effects in matrix-assisted laser desorption/ionization. <i>Rapid Communications in Mass Spectrometry</i> , <b>1995</b> , 9, 744-752	2.2	40
125	Molecular Imaging of Growth, Metabolism, and Antibiotic Inhibition in Bacterial Colonies by Laser Ablation Electrospray Ionization Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 15035-15039	16.4	39
124	Laser-ablation electrospray ionization mass spectrometry with ion mobility separation reveals metabolites in the symbiotic interactions of soybean roots and rhizobia. <i>Plant Journal</i> , <b>2017</b> , 91, 340-354	6.9	38
123	Molecular imaging by Mid-IR laser ablation mass spectrometry. <i>Applied Physics A: Materials Science and Processing</i> , <b>2008</b> , 93, 885-891	2.6	38
122	Early plume expansion in atmospheric pressure midinfrared laser ablation of water-rich targets. <i>Physical Review E</i> , <b>2008</b> , 77, 036316	2.4	36
121	Direct analysis of phycobilisomal antenna proteins and metabolites in small cyanobacterial populations by laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 34-8	7.8	35
120	Electrospray diagnostics by Fourier analysis of current oscillations and fast imaging. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 3908-15	7.8	35

119	Single-Cell Mass Spectrometry of Subpopulations Selected by Fluorescence Microscopy. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 4626-4634	7.8	33
118	Large-Scale Metabolite Analysis of Standards and Human Serum by Laser Desorption Ionization Mass Spectrometry from Silicon Nanopost Arrays. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 8989-96	7.8	33
117	Ablation and analysis of small cell populations and single cells by consecutive laser pulses. <i>Applied Physics A: Materials Science and Processing</i> , <b>2010</b> , 101, 121-126	2.6	33
116	Matrix-Assisted Energy Transfer in Matrix-assisted Laser Desorption <b>1997</b> , 11, 679-682		32
115	Influence of axial and radial diffusion processes on the analytical performance of a glow discharge cell. <i>Analytical Chemistry</i> , <b>1992</b> , 64, 1855-1863	7.8	32
114	Conformational and noncovalent complexation changes in proteins during electrospray ionization. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 387-95	7.8	31
113	Detection and quantitation of beta-2-microglobulin glycosylated end products in human serum by matrix-assisted laser desorption/ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>1996</b> , 68, 3740-5	7.8	31
112	Concentration-dependent diffusivity: Hydrogen percolation in WO <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>1983</b> , 54, 199-203	2.5	31
111	Compact tunable Cr:LiSAF laser for infrared matrix-assisted laser desorption/ionization. <i>Rapid Communications in Mass Spectrometry</i> , <b>1997</b> , 11, 393-7	2.2	30
110	Laser desorption ionization (LDI) silicon nanopost array chips fabricated using deep UV projection lithography and deep reactive ion etching. <i>RSC Advances</i> , <b>2015</b> , 5, 72051-72057	3.7	29
109	Inorganic mass spectrometry of solid samples. <i>Fresenius Journal of Analytical Chemistry</i> , <b>1990</b> , 337, 638-647		29
108	Subcellular metabolite and lipid analysis of <i>Xenopus laevis</i> eggs by LAESI mass spectrometry. <i>PLoS ONE</i> , <b>2014</b> , 9, e115173	3.7	29
107	Ambient Metabolic Profiling and Imaging of Biological Samples with Ultrahigh Molecular Resolution Using Laser Ablation Electrospray Ionization 21 Tesla FTICR Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 5028-5035	7.8	28
106	Direct detection of diverse metabolic changes in virally transformed and tax-expressing cells by mass spectrometry. <i>PLoS ONE</i> , <b>2010</b> , 5, e12590	3.7	28
105	Dynamics of hydrogen bonding and energy transfer in matrix-assisted laser desorption. <i>Chemical Physics Letters</i> , <b>1995</b> , 247, 142-148	2.5	28
104	Observed metabolic asymmetry within soybean root nodules reflects unexpected complexity in rhizobacteria-legume metabolite exchange. <i>ISME Journal</i> , <b>2018</b> , 12, 2335-2338	11.9	27
103	Laser ablation electrospray ionization for atmospheric pressure molecular imaging mass spectrometry. <i>Methods in Molecular Biology</i> , <b>2010</b> , 656, 159-71	1.4	27
102	High Throughput Complementary Analysis and Quantitation of Metabolites by MALDI- and Silicon Nanopost Array-Laser Desorption/Ionization-Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 3951-3958	7.8	27

101	Rapid assessment of human amylin aggregation and its inhibition by copper(II) ions by laser ablation electrospray ionization mass spectrometry with ion mobility separation. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 9829-9837	7.8	26
100	Phase explosion in atmospheric pressure infrared laser ablation from water-rich targets. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 041503	3.4	26
99	Molecular Dynamics Study of Vibrational Excitation Dynamics and Desorption in Solid O <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , <b>1999</b> , 103, 2925-2933	2.8	26
98	An inductive detector for time-of-flight mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , <b>1994</b> , 8, 317-322	2.2	26
97	Trace Analysis and Reaction Monitoring by Nanophotonic Ionization Mass Spectrometry from Elevated Bowtie and Silicon Nanopost Arrays. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1801730	15.6	26
96	In Situ Analysis of Small Populations of Adherent Mammalian Cells Using Laser Ablation Electrospray Ionization Mass Spectrometry in Transmission Geometry. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 12130-6	7.8	25
95	Simultaneous detection of nonpolar and polar compounds by heat-assisted laser ablation electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 177-84	7.8	25
94	The Molecular Composition of Soot. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 4484-4490	16.4	25
93	Laser ablation atmospheric pressure photoionization mass spectrometry imaging of phytochemicals from sage leaves. <i>Rapid Communications in Mass Spectrometry</i> , <b>2014</b> , 28, 2490-6	2.2	24
92	Quantitative characterization of individual particle surfaces by fractal analysis of scanning electron microscope images. <i>Fresenius Journal of Analytical Chemistry</i> , <b>1994</b> , 350, 440-447		24
91	Sample erosion studies and modeling in a glow discharge ionization cell. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , <b>1991</b> , 46, 283-290	3.1	24
90	Matrix-assisted laser desorption of peptides in transmission geometry. <i>Rapid Communications in Mass Spectrometry</i> , <b>1990</b> , 4, 263-266	2.2	24
89	Metabolic Noise and Distinct Subpopulations Observed by Single Cell LAESI Mass Spectrometry of Plant Cells. <i>Frontiers in Plant Science</i> , <b>2018</b> , 9, 1646	6.2	24
88	Remote laser ablation electrospray ionization mass spectrometry for non-proximate analysis of biological tissues. <i>Rapid Communications in Mass Spectrometry</i> , <b>2015</b> , 29, 67-73	2.2	23
87	Comparative local analysis of metabolites, lipids and proteins in intact fish tissues by LAESI mass spectrometry. <i>Analyst, The</i> , <b>2013</b> , 138, 3444-9	5	23
86	Matrix-assisted Laser Desorption/Ionization by Two Collinear Subthreshold Laser Pulses. <i>Rapid Communications in Mass Spectrometry</i> , <b>1997</b> , 11, 484-488	2.2	23
85	Charge reduction in electrosprays: slender nanojets as intermediates. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 6397-404	3.4	23
84	Einzelzell-Massenspektrometrie zur Untersuchung zellulärer Heterogenität. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 4554-4566	3.6	22

83	Laser microprobe mass spectrometry of quaternary phosphonium salts: Direct versus matrix-assisted laser desorption. <i>Journal of the American Society for Mass Spectrometry</i> , <b>1993</b> , 4, 798-812 <sup>3,5</sup>		22
82	Mass Spectrometry Imaging of Lipids in Human Skin Disease Model Hidradenitis Suppurativa by Laser Desorption Ionization from Silicon Nanopost Arrays. <i>Scientific Reports</i> , <b>2019</b> , 9, 17508	4.9	21
81	Laser pulse length dependence of internal energy transfer in UV-MALDI-MS. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 79, 823-825	2.6	20
80	Rapid analysis of pharmaceuticals and excreted xenobiotic and endogenous metabolites with atmospheric pressure infrared MALDI mass spectrometry. <i>Metabolomics</i> , <b>2008</b> , 4, 297-311	4.7	19
79	Single-Cell Metabolic Profiling: Metabolite Formulas from Isotopic Fine Structures in Heterogeneous Plant Cell Populations. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 7289-7298	7.8	18
78	Rapid, non-targeted discovery of biochemical transformation and biomarker candidates in oncovirus-infected cell lines using LAESI mass spectrometry. <i>Chemical Communications</i> , <b>2012</b> , 48, 3700-2 <sup>5,8</sup>		18
77	Laser desorption/ionization from nanostructured surfaces: nanowires, nanoparticle films and silicon microcolumn arrays. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 59, 548-544	0.3	18
76	Pumping Rate and Surface Morphology Dependence of Ionization Processes in Matrix-Assisted Laser Desorption Ionization. <i>Journal of Physical Chemistry A</i> , <b>2003</b> , 107, 9754-9761	2.8	18
75	Fast Dynamics of Ionization in Ultraviolet Matrix-Assisted Laser Desorption Ionization of Biomolecules. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 3301-3306	3.4	17
74	Matrix-free mass spectrometry imaging of mouse brain tissue sections on silicon nanopost arrays. <i>Journal of Comparative Neurology</i> , <b>2019</b> , 527, 2101-2121	3.4	17
73	Subcellular Peptide Localization in Single Identified Neurons by Capillary Microsampling Mass Spectrometry. <i>Scientific Reports</i> , <b>2018</b> , 8, 12227	4.9	16
72	The proteome survey of an electricity-generating organ (Torpedo californica electric organ). <i>Proteomics</i> , <b>2007</b> , 7, 617-627	4.8	16
71	Protonation of Glyn Homologues in Matrix-Assisted Laser Desorption Ionization. <i>Journal of Physical Chemistry B</i> , <b>1998</b> , 102, 6118-6122	3.4	16
70	Diagnostics and modeling of plasma processes in ion sources. <i>Mass Spectrometry Reviews</i> , <b>1990</b> , 9, 71-113 <sup>1</sup>		16
69	In-Situ Metabolomic Analysis of Roots Colonized by Beneficial Endophytic Bacteria. <i>Molecular Plant-Microbe Interactions</i> , <b>2020</b> , 33, 272-283	3.6	16
68	Laser microprobe mass spectrometry: Possibilities and limitations. <i>Mikrochimica Acta</i> , <b>1990</b> , 102, 283-303 <sup>3,8</sup>		15
67	Molecular Imaging of Biological Samples on Nanophotonic Laser Desorption Ionization Platforms. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 4558-4562	3.6	15
66	Minimally invasive monitoring of cellulose degradation by desorption electrospray ionization and laser ablation electrospray ionization mass spectrometry. <i>Analyst, The</i> , <b>2010</b> , 135, 2434-44	5	14



65	Polarization dependent fragmentation of ions produced by laser desorption from nanopost arrays. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 9140-6	3.6	14
64	Kinetic energy distribution of ions generated by laser ionization sources. <i>International Journal of Mass Spectrometry and Ion Processes</i> , <b>1988</b> , 83, 45-70		14
63	Automated cell-by-cell tissue imaging and single-cell analysis for targeted morphologies by laser ablation electrospray ionization mass spectrometry. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1203, 117-27	1.4	14
62	Metabolomic profiling of wild-type and mutant soybean root nodules using laser-ablation electrospray ionization mass spectrometry reveals altered metabolism. <i>Plant Journal</i> , <b>2020</b> , 103, 1937-1958	6.9	13
61	High-Energy Fragmentation in Nanophotonic Ion Production by Laser-Induced Silicon Microcolumn Arrays. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 5574-5581	3.8	13
60	Atmospheric-pressure molecular imaging of biological tissues and biofilms by LAESI mass spectrometry. <i>Journal of Visualized Experiments</i> , <b>2010</b> ,	1.6	13
59	Development and Characterization of Gas Chromatographic Columns for the Analysis of Prebiological Molecules in Titan's Atmosphere. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 689-697	7.8	13
58	Competing ion decomposition channels in matrix-assisted laser desorption ionization. <i>Journal of Physical Chemistry B</i> , <b>2008</b> , 112, 6952-6	3.4	13
57	Mass spectrometry imaging of triglycerides in biological tissues by laser desorption ionization from silicon nanopost arrays. <i>Journal of Mass Spectrometry</i> , <b>2020</b> , 55, e4443	2.2	13
56	The Molecular Composition of Soot. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 4514-4520	3.6	12
55	Metabolic transformation of microalgae due to light acclimation and genetic modifications followed by laser ablation electrospray ionization mass spectrometry with ion mobility separation. <i>Analyst, The</i> , <b>2014</b> , 139, 5945-53	5	12
54	Effect of progesterone and its synthetic analogs on reproduction and embryonic development of a freshwater invertebrate model. <i>Aquatic Toxicology</i> , <b>2017</b> , 190, 94-103	5.1	12
53	Observation of Subcellular Metabolite Gradients in Single Cells by Laser Ablation Electrospray Ionization Mass Spectrometry. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 10532-10535	3.6	12
52	Modeling the cluster formation during infrared and ultraviolet matrix-assisted laser desorption ionization of oligonucleotides in succinic acid matrix with molecular mechanics. <i>Theoretical Chemistry Accounts</i> , <b>2002</b> , 107, 319-325	1.9	12
51	Multimodal imaging of biological tissues using combined MALDI and NAPA-LDI mass spectrometry for enhanced molecular coverage. <i>Analyst, The</i> , <b>2020</b> , 145, 6910-6918	5	12
50	Metabolic Differences in Microbial Cell Populations Revealed by Nanophotonic Ionization. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 3738-3741	3.6	11
49	Velocity Compression in Cylindrical Capacitor Electrospray of Methanol/Water Mixtures. <i>Analytical Chemistry</i> , <b>1999</b> , 71, 4111-4113	7.8	11
48	Turnover rates in microorganisms by laser ablation electrospray ionization mass spectrometry and pulse-chase analysis. <i>Analytica Chimica Acta</i> , <b>2016</b> , 902, 1-7	6.6	10

47	Assessment of laser-induced thermal load on silicon nanostructures based on ion desorption yields. <i>Applied Physics A: Materials Science and Processing</i> , <b>2010</b> , 101, 539-544	2.6	10
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