Zoltan Takats

List of Publications by Citations

163 papers	12,064 citations	50 h-index	108 g-index
173 ext. papers	13,580 ext. citations	8.2 avg, IF	6.2 L-index

#	Paper	IF	Citations
163	Mass spectrometry sampling under ambient conditions with desorption electrospray ionization. *Science*, **2004**, 306, 471-3	33.3	2550
162	Detection Technologies. Ambient mass spectrometry. *Science*, **2006**, 311, 1566-70	33.3	1151
161	Ambient mass spectrometry using desorption electrospray ionization (DESI): instrumentation, mechanisms and applications in forensics, chemistry, and biology. *Journal of Mass Spectrometry*, **2005**, 40, 1261-75	2.2	691
160	Intraoperative tissue identification using rapid evaporative ionization mass spectrometry. *Science Translational Medicine*, **2013**, 5, 194ra93	17.5	384
159	Metabolic phenotyping in clinical and surgical environments. *Nature*, **2012**, 491, 384-92	50.4	364
158	Direct, trace level detection of explosives on ambient surfaces by desorption electrospray ionization mass spectrometry. *Chemical Communications*, **2005**, 1950-2	5.8	351
157	Desorption electrospray ionization of explosives on surfaces: sensitivity and selectivity enhancement by reactive desorption electrospray ionization. *Analytical Chemistry*, **2005**, 77, 6755-64	7.8	305
156	Desorption electrospray ionization mass spectrometry for high-throughput analysis of pharmaceutical samples in the ambient environment. *Analytical Chemistry*, **2005**, 77, 6915-27	7.8	297
155	Clinical validation of cutoff target ranges in newborn screening of metabolic disorders by tandem mass spectrometry: a worldwide collaborative project. *Genetics in Medicine*, **2011**, 13, 230-54	8.1	250
154	Preparing protein microarrays by soft-landing of mass-selected ions. *Science*, **2003**, 301, 1351-4	33.3	241
153	Electrosonic spray ionization. A gentle technique for generating folded proteins and protein complexes in the gas phase and for studying ion-molecule reactions at atmospheric pressure. *Analytical Chemistry*, **2004**, 76, 4050-8	7.8	228
152	In vivo, in situ tissue analysis using rapid evaporative ionization mass spectrometry. *Angewandte Chemie - International Edition*, **2009**, 48, 8240-2	16.4	200
151	Rapid in situ detection of alkaloids in plant tissue under ambient conditions using desorption electrospray ionization. *Analyst, The*, **2005**, 130, 1624-33	5	176
150	Histology by mass spectrometry: label-free tissue characterization obtained from high-accuracy bioanalytical imaging. *Angewandte Chemie - International Edition*, **2010**, 49, 3834-8	16.4	169
149	Identification of biological tissues by rapid evaporative ionization mass spectrometry. *Analytical Chemistry*, **2010**, 82, 7343-50	7.8	159
148	Aurora kinase inhibitor nanoparticles target tumors with favorable therapeutic index in vivo. *Science Translational Medicine*, **2016**, 8, 325ra17	17.5	140
147	Amino acid clusters formed by sonic spray ionization. *Analytical Chemistry*, **2003**, 75, 1514-23	7.8	131

146	Mass spectrometry imaging with high resolution in mass and space (HR(2) MSI) for reliable investigation of drug compound distributions on the cellular level. *Analytical and Bioanalytical Chemistry*, **2011**, 401, 65-73	4.4	123
145	Diagnostic Accuracy of Intraoperative Techniques for Margin Assessment in Breast Cancer Surgery: A Meta-analysis. *Annals of Surgery*, **2017**, 265, 300-310	7.8	122
144	Optimization of MALDI-TOF MS for strain level differentiation of Arthrobacter isolates. *Journal of Microbiological Methods*, **2006**, 66, 399-409	2.8	106
143	Spatially resolved metabolic phenotyping of breast cancer by desorption electrospray ionization mass spectrometry. *Cancer Research*, **2015**, 75, 1828-37	10.1	105
142	Rapid evaporative ionisation mass spectrometry of electrosurgical vapours for the identification of breast pathology: towards an intelligent knife for breast cancer surgery. *Breast Cancer Research*, **2017**, 19, 59	8.3	104
141	Chemo-informatic strategy for imaging mass spectrometry-based hyperspectral profiling of lipid signatures in colorectal cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 1216-21	11.5	99
140	Coupling desorption electrospray ionization with ion mobility/mass spectrometry for analysis of protein structure: evidence for desorption of folded and denatured States. *Journal of Physical Chemistry B*, **2006**, 110, 5045-51	3.4	98
139	Identification of the Species of Origin for Meat Products by Rapid Evaporative Ionization Mass Spectrometry. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 4793-800	5.7	93
138	Serine octamer reactions: indicators of prebiotic relevance. *Angewandte Chemie - International Edition*, **2003**, 42, 3521-3	16.4	93
137	Ion soft-landing into liquids: Protein identification, separation, and purification with retention of biological activity. *Journal of the American Society for Mass Spectrometry*, **2004**, 15, 1874-84	3.5	86
136	In vivo endoscopic tissue identification by rapid evaporative ionization mass spectrometry (REIMS). *Angewandte Chemie - International Edition*, **2015**, 54, 11059-62	16.4	84
135	Deep learning and 3D-DESI imaging reveal the hidden metabolic heterogeneity of cancer. *Chemical Science*, **2017**, 8, 3500-3511	9.4	83
134	The surgical intelligent knife distinguishes normal, borderline and malignant gynaecological tissues using rapid evaporative ionisation mass spectrometry (REIMS). *British Journal of Cancer*, **2018**, 118, 1349-1358	8.7	80
133	Analysis of colorectal adenocarcinoma tissue by desorption electrospray ionization mass spectrometric imaging. *Analytical and Bioanalytical Chemistry*, **2012**, 403, 2315-25	4.4	78
132	Rapid evaporative ionization mass spectrometry imaging platform for direct mapping from bulk tissue and bacterial growth media. *Analytical Chemistry*, **2015**, 87, 2527-34	7.8	74
131	Pseudomonas aeruginosa infection in cystic fibrosis: pathophysiological mechanisms and therapeutic approaches. *Expert Review of Respiratory Medicine*, **2016**, 10, 685-97	3.8	74
130	A novel methodology for in vivo endoscopic phenotyping of colorectal cancer based on real-time analysis of the mucosal lipidome: a prospective observational study of the iKnife. *Surgical Endoscopy and Other Interventional Techniques*, **2017**, 31, 1361-1370	5.2	73
129	Characterization and identification of clinically relevant microorganisms using rapid evaporative ionization mass spectrometry. *Analytical Chemistry*, **2014**, 86, 6555-62	7.8	72

128	In situ, real-time identification of biological tissues by ultraviolet and infrared laser desorption ionization mass spectrometry. *Analytical Chemistry*, **2011**, 83, 1632-40	7.8	72
127	Development and Application of Ultra-Performance Liquid Chromatography-TOF MS for Precision Large Scale Urinary Metabolic Phenotyping. *Analytical Chemistry*, **2016**, 88, 9004-13	7.8	71
126	Mass spectrometry imaging of cassette-dosed drugs for higher throughput pharmacokinetic and biodistribution analysis. *Analytical Chemistry*, **2014**, 86, 8473-80	7.8	70
125	Real time analysis of brain tissue by direct combination of ultrasonic surgical aspiration and sonic spray mass spectrometry. *Analytical Chemistry*, **2011**, 83, 7729-35	7.8	70
124	Preparative linear ion trap mass spectrometer for separation and collection of purified proteins and peptides in arrays using ion soft landing. *Analytical Chemistry*, **2004**, 76, 6293-305	7.8	62
123	Rapid evaporative ionization mass spectrometry for high-throughput screening in food analysis: The case of boar taint. *Talanta*, **2017**, 169, 30-36	6.2	61
122	Current and future therapies for Pseudomonas aeruginosa infection in patients with cystic fibrosis. *FEMS Microbiology Letters*, **2017**, 364,	2.9	60
121	Metabonomics of newborn screening dried blood spot samples: a novel approach in the screening and diagnostics of inborn errors of metabolism. *Analytical Chemistry*, **2012**, 84, 10113-20	7.8	60
120	Faster, More Reproducible DESI-MS for Biological Tissue Imaging. *Journal of the American Society for Mass Spectrometry*, **2017**, 28, 2090-2098	3.5	59
119	Chiral enrichment of serine via formation, dissociation, and soft-landing of octameric cluster ions. *Journal of the American Society for Mass Spectrometry*, **2004**, 15, 1360-5	3.5	59
118	A real time metabolomic profiling approach to detecting fish fraud using rapid evaporative ionisation mass spectrometry. *Metabolomics*, **2017**, 13, 153	4.7	56
117	Unique metabolites protect earthworms against plant polyphenols. *Nature Communications*, **2015**, 6, 7869	17.4	53
116	Automated High-Throughput Identification and Characterization of Clinically Important Bacteria and Fungi using Rapid Evaporative Ionization Mass Spectrometry. *Analytical Chemistry*, **2016**, 88, 9419-9426	7.8	53
115	Analysis of biological fluids by direct combination of solid phase extraction and desorption electrospray ionization mass spectrometry. *Analytical Chemistry*, **2009**, 81, 1669-75	7.8	52
114	Epithelial ovarian carcinoma diagnosis by desorption electrospray ionization mass spectrometry imaging. *Scientific Reports*, **2016**, 6, 39219	4.9	52
113	Atmospheric pressure gas-phase H/D exchange of serine octamers. *Analytical Chemistry*, **2003**, 75, 6147-54	7.8	50
112	Analysis of wastewater samples by direct combination of thin-film microextraction and desorption electrospray ionization mass spectrometry. *Analyst, The*, **2012**, 137, 4037-44	5	48
111	Direct tandem mass spectrometric analysis of amino acids in dried blood spots without chemical derivatization for neonatal screening. *Rapid Communications in Mass Spectrometry*, **2003**, 17, 983-90	2.2	48

110	Real-Time Molecular Diagnosis of Tumors Using Water-Assisted Laser Desorption/Ionization Mass Spectrometry Technology. *Cancer Cell*, **2018**, 34, 840-851.e4	24.3	48
109	Analysis of intact bacteria using rapid evaporative ionisation mass spectrometry. *Chemical Communications*, **2013**, 49, 6188-90	5.8	46
108	Analysis of triglycerides in food items by desorption electrospray ionization mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2010**, 24, 2186-92	2.2	46
107	Benchmark datasets for 3D MALDI- and DESI-imaging mass spectrometry. *GigaScience*, **2015**, 4, 20	7.6	45
106	Direct characterization of enzyme-substrate complexes by using electrosonic spray ionization mass spectrometry. *Angewandte Chemie - International Edition*, **2005**, 44, 913-6	16.4	44
105	Repeatability and reproducibility of desorption electrospray ionization-mass spectrometry (DESI-MS) for the imaging analysis of human cancer tissue: a gateway for clinical applications. *Analytical Methods*, **2015**, 7, 71-80	3.2	41
104	Degradation of atrazine in a laboratory scale model system with Danube river sediment. *Water Research*, **2005**, 39, 1560-8	12.5	41
103	Metabolic Fingerprinting Links Oncogenic PIK3CA with Enhanced Arachidonic Acid-Derived Eicosanoids. *Cell*, **2020**, 181, 1596-1611.e27	56.2	39
102	Atmospheric pressure chemical ionization mass spectrometry of aldehydes in biological matrices. *Rapid Communications in Mass Spectrometry*, **2004**, 18, 2473-8	2.2	39
101	Characterisation of in-hospital complications associated with COVID-19 using the ISARIC WHO Clinical Characterisation Protocol UK: a prospective, multicentre cohort study. *Lancet, The*, **2021**, 398, 223-237	40	39
100	Rapid Evaporative Ionisation Mass Spectrometry (REIMS) Provides Accurate Direct from Culture Species Identification within the Genus Candida. *Scientific Reports*, **2016**, 6, 36788	4.9	36
99	Single-sided membrane introduction mass spectrometry for on-line determination of semi-volatile organic compounds in air. *Analyst, The*, **2001**, 126, 1980-4	5	34
98	Thermal formation of serine octamer ions. *Chemical Communications*, **2004**, 444-5	5.8	31
97	The amino acid transporter SLC7A5 is required for efficient growth of KRAS-mutant colorectal cancer. *Nature Genetics*, **2021**, 53, 16-26	36.3	31
96	Antibody binding shift assay for rapid screening of drug interactions with the human ABCG2 multidrug transporter. *European Journal of Pharmaceutical Sciences*, **2012**, 45, 101-9	5.1	29
95	Universal Sample Preparation Unlocking Multimodal Molecular Tissue Imaging. *Analytical Chemistry* , **2020**, 92, 11080-11088	7.8	28
94	Organic chloramine analysis and free chlorine quantification by electrospray and atmospheric pressure chemical ionization tandem mass spectrometry. *Analytical Chemistry*, **2001**, 73, 4522-9	7.8	28
93	Shotgun Lipidomic Profiling of the NCI60 Cell Line Panel Using Rapid Evaporative Ionization Mass Spectrometry. *Analytical Chemistry*, **2016**, 88, 7507-14	7.8	28

92	Correlated Heterospectral Lipidomics for Biomolecular Profiling of Remyelination in Multiple Sclerosis. *ACS Central Science*, **2018**, 4, 39-51	16.8	27
91	Intraoperative tissue identification by mass spectrometric technologies. *TrAC - Trends in Analytical Chemistry*, **2016**, 85, 2-9	14.6	27
90	Endocannabinoid-mediated modulation of Gq/11 protein-coupled receptor signaling-induced vasoconstriction and hypertension. *Molecular and Cellular Endocrinology*, **2015**, 403, 46-56	4.4	26
89	The intelligent knife (iKnife) and its intraoperative diagnostic advantage for the treatment of cervical disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7338-7346	11.5	26
88	A comprehensive high-resolution mass spectrometry approach for characterization of metabolites by combination of ambient ionization, chromatography and imaging methods. *Rapid Communications in Mass Spectrometry*, **2014**, 28, 1779-91	2.2	25
87	Feasibility of formation of hot ions in electrospray. *Analytical Chemistry*, **2002**, 74, 6427-9	7.8	25
86	Imaging of Esophageal Lymph Node Metastases by Desorption Electrospray Ionization Mass Spectrometry. *Cancer Research*, **2016**, 76, 5647-5656	10.1	25
85	Medical Swab Analysis Using Desorption Electrospray Ionization Mass Spectrometry: A Noninvasive Approach for Mucosal Diagnostics. *Analytical Chemistry*, **2017**, 89, 1540-1550	7.8	24
84	Rapid detection and specific identification of offals within minced beef samples utilising ambient mass spectrometry. *Scientific Reports*, **2019**, 9, 6295	4.9	24
83	Rapid evaporative ionisation mass spectrometry and chemometrics for high-throughput screening of growth promoters in meat producing animals. *Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment*, **2018**, 35, 900-910	3.2	24
82	Hepcidin concentrations and iron homeostasis in preeclampsia. *Clinical Chemistry and Laboratory Medicine*, **2010**, 48, 1423-6	5.9	24
81	Characterization of DESI-FTICR mass spectrometry - from ECD to accurate mass tissue analysis. *Journal of Mass Spectrometry*, **2008**, 43, 196-203	2.2	24
80	Water-assisted laser desorption/ionization mass spectrometry for minimally invasive in vivo and real-time surface analysis using SpiderMass. *Nature Protocols*, **2019**, 14, 3162-3182	18.8	22
79	Mass Spectrometric Profiling of Intact Biological Tissue by Using Desorption Electrospray Ionization. *Angewandte Chemie*, **2005**, 117, 7256-7259	3.6	21
78	Hydrogen/deuterium exchange of electrosprayed ions in the atmospheric interface of a commercial triple□quadrupole mass spectrometer. *International Journal of Mass Spectrometry*, **2003**, 228, 729-741	1.9	20
77	BASIS: High-performance bioinformatics platform for processing of large-scale mass spectrometry imaging data in chemically augmented histology. *Scientific Reports*, **2018**, 8, 4053	4.9	19
76	High-throughput mass spectrometer using atmospheric pressure ionization and a cylindrical ion trap array. *Analytical Chemistry*, **2005**, 77, 459-70	7.8	19
75	High surface area membrane introduction mass spectrometry for analysis of volatile and semi-volatile organic compounds in air. *Rapid Communications in Mass Spectrometry*, **2001**, 15, 1520-1524	2.2	19

74	Matrix Assisted Rapid Evaporative Ionization Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 9784-9788	7.8	18
73	Electrospray post-ionization mass spectrometry of electrosurgical aerosols. *Journal of the American Society for Mass Spectrometry*, **2011**, 22, 2082-9	3.5	18
72	Investigation of the Impact of Desorption Electrospray Ionization Sprayer Geometry on Its Performance in Imaging of Biological Tissue. *Analytical Chemistry*, **2016**, 88, 4808-16	7.8	17
71	Luminal cholinergic signalling in airway lining fluid: a novel mechanism for activating chloride secretion via Ca□+-dependent Cl? and K+ channels. *British Journal of Pharmacology*, **2012**, 166, 1388-402	8.6	17
70	Intact skin analysis by desorption electrospray ionization mass spectrometry. *Analyst, The*, **2011**, 136, 835-40	5	17
69	Formation of solvated ions in the atmospheric interface of an electrospray ionization triple-quadrupole mass spectrometer. *Journal of Mass Spectrometry*, **2003**, 38, 1245-51	2.2	17
68	A Critical and Concise Review of Mass Spectrometry Applied to Imaging in Drug Discovery. *SLAS Discovery*, **2020**, 25, 963-976	3.4	17
67	Evaluation of Direct from Sample Metabolomics of Human Feces Using Rapid Evaporative Ionization Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 13448-13457	7.8	14
66	Construction and testing of an atmospheric-pressure transmission-mode matrix assisted laser desorption ionisation mass spectrometry imaging ion source with plasma ionisation enhancement. *Analytica Chimica Acta*, **2019**, 1051, 110-119	6.6	14
65	Mass spectrometry approaches to metabolic profiling of microbial communities within the human gastrointestinal tract. *Methods*, **2018**, 149, 13-24	4.6	13
64	Metabolic Phenotyping and Strain Characterisation of Pseudomonas aeruginosa Isolates from Cystic Fibrosis Patients Using Rapid Evaporative Ionisation Mass Spectrometry. *Scientific Reports*, **2018**, 8, 10952	4.9	13
63	Carboxypeptidase-M is regulated by lipids and CSFs in macrophages and dendritic cells and expressed selectively in tissue granulomas and foam cells. *Laboratory Investigation*, **2012**, 92, 345-61	5.9	13
62	Investigation of atrazine metabolism in river sediment by high-performance liquid chromatography/mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2001**, 15, 1735-42	2.2	13
61	Utilisation of Ambient Laser Desorption Ionisation Mass Spectrometry (ALDI-MS) Improves Lipid-Based Microbial Species Level Identification. *Scientific Reports*, **2019**, 9, 3006	4.9	12
60	Off-Colony Screening of Biosynthetic Libraries by Rapid Laser-Enabled Mass Spectrometry. *ACS Synthetic Biology*, **2019**, 8, 2566-2575	5.7	12
59	Assessment of microbiota:host interactions at the vaginal mucosa interface. *Methods*, **2018**, 149, 74-84	4.6	11
58	Effect of Electrode Geometry on the Classification Performance of Rapid Evaporative Ionization Mass Spectrometric (REIMS) Bacterial Identification. *Journal of the American Society for Mass Spectrometry*, **2018**, 29, 26-33	3.5	11
57	Colocalization Features for Classification of Tumors Using Desorption Electrospray Ionization Mass Spectrometry Imaging. *Analytical Chemistry*, **2019**, 91, 6530-6540	7.8	10

56	Laser-assisted rapid evaporative ionisation mass spectrometry (LA-REIMS) as a metabolomics platform in cervical cancer screening. *EBioMedicine*, **2020**, 60, 103017	8.8	10
55	Deep Learning-Based Annotation Transfer between Molecular Imaging Modalities: An Automated Workflow for Multimodal Data Integration. *Analytical Chemistry*, **2021**, 93, 3061-3071	7.8	10
54	SPUTNIK: an R package for filtering of spatially related peaks in mass spectrometry imaging data. *Bioinformatics*, **2019**, 35, 178-180	7.2	9
53	Development of nanoelectrospray high resolution isotope dilution mass spectrometry for targeted quantitative analysis of urinary metabolites: application to population profiling and clinical studies. *Analytical Methods*, **2015**, 7, 5122-5133	3.2	8
52	Lipogenesis Alters the Phospholipidome of Esophageal Adenocarcinoma. *Cancer Research*, **2020**, 80, 2764-2774	10.1	8
51	Mass spectrometry transanal minimally invasive surgery (MS-TAMIS) to promote organ preservation in rectal cancer. *Surgical Endoscopy and Other Interventional Techniques*, **2020**, 34, 3618-3625	5.2	8
50	Reducing the Margins of Error During Breast-Conserving Surgery: Disruptive Technologies or Traditional Disruptions?. *JAMA Surgery*, **2017**, 152, 517-518	5.4	7
49	Metabolic Biomarkers of Ageing in C57BL/6J Wild-Type and Flavin-Containing Monooxygenase 5 (FMO5)-Knockout Mice. *Frontiers in Molecular Biosciences*, **2018**, 5, 28	5.6	7
48	In Vivo Endoscopic Tissue Identification by Rapid Evaporative Ionization Mass Spectrometry (REIMS). *Angewandte Chemie*, **2015**, 127, 11211-11214	3.6	7
47	Sample Preparation Free Mass Spectrometry Using Laser-Assisted Rapid Evaporative Ionization Mass Spectrometry: Applications to Microbiology, Metabolic Biofluid Phenotyping, and Food Authenticity. *Journal of the American Society for Mass Spectrometry*, **2021**, 32, 1393-1401	3.5	7
46	Optical Technologies for Endoscopic Real-Time Histologic Assessment of Colorectal Polyps: A Meta-Analysis. *American Journal of Gastroenterology*, **2019**, 114, 1219-1230	0.7	7
45	Representing the Metabolome with High Fidelity: Range and Response as Quality Control Factors in LC-MS-Based Global Profiling. *Analytical Chemistry*, **2021**, 93, 1924-1933	7.8	7
44	Systematic Isolation and Structure Elucidation of Urinary Metabolites Optimized for the Analytical-Scale Molecular Profiling Laboratory. *Analytical Chemistry*, **2019**, 91, 8873-8882	7.8	6
43	Rapid LA-REIMS and comprehensive UHPLC-HRMS for metabolic phenotyping of feces. *Talanta*, **2020**, 217, 121043	6.2	6
42	Analysis of dried blood spot samples by high resolution mass spectrometry - from newborn screening to cancer diagnostics. *Clinical Biochemistry*, **2014**, 47, 699	3.5	6
41	Verification of skin autofluorescence values by mass spectrometry in adolescents with type 1 diabetes: brief report. *Diabetes Technology and Therapeutics*, **2013**, 15, 269-72	8.1	6
40	Direct on-swab metabolic profiling of vaginal microbiome host interactions during pregnancy and preterm birth. *Nature Communications*, **2021**, 12, 5967	17.4	6
39	Validation of Ultrasonic Harmonic Scalpel for Real-Time Tissue Identification Using Rapid Evaporative Ionization Mass Spectrometry. *Analytical Chemistry*, **2021**, 93, 5906-5916	7.8	6

38	Translational utility of a hierarchical classification strategy in biomolecular data analytics. *Scientific Reports*, **2017**, 7, 14981	4.9	5
37	Surgical systems biology and personalized longitudinal phenotyping in critical care. *Personalized Medicine*, **2012**, 9, 593-608	2.2	5
36	Selective detection of specific protein-ligand complexes by electrosonic spray-precursor ion scan tandem mass spectrometry. *Journal of the American Society for Mass Spectrometry*, **2009**, 20, 227-37	3.5	5
35	Endogenous aldehyde accumulation generates genotoxicity and exhaled biomarkers in esophageal adenocarcinoma. *Nature Communications*, **2021**, 12, 1454	17.4	5
34	Enhanced triacylglycerol catabolism by carboxylesterase 1 promotes aggressive colorectal carcinoma. *Journal of Clinical Investigation*, **2021**, 131,	15.9	5
33	Implications of Peak Selection in the Interpretation of Unsupervised Mass Spectrometry Imaging Data Analyses. *Analytical Chemistry*, **2021**, 93, 2309-2316	7.8	5
32	Diagnostic Accuracy of Nipple Aspirate Fluid Cytology in Asymptomatic Patients: A Meta-analysis and Systematic Review of the Literature. *Annals of Surgical Oncology*, **2021**, 28, 3751-3760	3.1	4
31	Network Mapping of Molecular Biomarkers Influencing Radiation Response in Rectal Cancer. *Clinical Colorectal Cancer*, **2019**, 18, e210-e222	3.8	3
30	Direct Characterization of Enzyme–Substrate Complexes by Using Electrosonic Spray Ionization Mass Spectrometry. *Angewandte Chemie*, **2005**, 117, 935-938	3.6	3
29	Electrospray and atmospheric pressure chemical ionisation of aromatic compounds in dichloromethane solvent. *European Journal of Mass Spectrometry*, **1998**, 4, 365		3
28	Comparison of C MRI of hyperpolarized [1- C]pyruvate and lactate with the corresponding mass spectrometry images in a murine lymphoma model. *Magnetic Resonance in Medicine*, **2021**, 85, 3027-3035	4.4	3
27	Quantitative Analytical Method for the Determination of Biotinidase Activity in Dried Blood Spot Samples. *Analytical Chemistry*, **2015**, 87, 10573-8	7.8	2
26	Real time intraoperative classification of breast tissue with the intelligent knife. *European Journal of Surgical Oncology*, **2016**, 42, S25	3.6	2
25	Spatially resolved profiling of colorectal cancer lipid biochemistry via DESI imaging mass spectrometry to reveal morphology-dependent alterations in fatty acid metabolism.. *Journal of Clinical Oncology*, **2016**, 34, e15104-e15104	2.2	2
24	Modality Agnostic Model for Spatial Resolution in Mass Spectrometry Imaging: Application to MALDI MSI Data. *Analytical Chemistry*, **2021**, 93, 15295-15305	7.8	2
23	The effect of sample age on the metabolic information extracted from formalin-fixed and paraffin embedded tissue samples using desorption electrospray ionization mass spectrometry imaging.. *Journal of Mass Spectrometry and Advances in the Clinical Lab*, **2021**, 22, 50-55		2
22	Network analysis of mass spectrometry imaging data from colorectal cancer identifies key metabolites common to metastatic development		2
21	Rapid ex vivo molecular fingerprinting of biofluids using laser-assisted rapid evaporative ionization mass spectrometry. *Nature Protocols*, **2021**, 16, 4327-4354	18.8	2

20	Direct Water-Assisted Laser Desorption/Ionization Mass Spectrometry Lipidomic Analysis and Classification of Formalin-Fixed Paraffin-Embedded Sarcoma Tissues without Dewaxing. *Clinical Chemistry*, **2021**, 67, 1513-1523	5.5	2
19	Antagonistic reactions of arginine and lysine against formaldehyde and their relation to cell proliferation, apoptosis, folate cycle and photosynthesis. *Molecular and Cellular Biochemistry*, **2003**, 244, 167-76	4.2	2
18	Pragmatic and rapid analysis of carbonyl, oxidation and chlorination nucleoside-adducts in murine tissue by UPLC-ESI-MS/MS. *Talanta*, **2018**, 190, 436-442	6.2	1
17	Mass spectrometric analysis of combinatorial peptide libraries derived from the tandem repeat unit of MUC2 mucin. *Journal of Peptide Science*, **2003**, 9, 361-74	2.1	1
16	Novel data processing and image co-registration algorithm for region-specific lipid profiling in colorectal cancer tissue using DESI imaging mass spectrometry.. *Journal of Clinical Oncology*, **2013**, 31, e14620-e14620	2.2	1
15	Diagnostic Accuracy of Nipple Discharge Fluid Cytology: A Meta-Analysis and Systematic Review of the Literature. *Annals of Surgical Oncology*, **2021**, 1	3.1	1
14	Lactate dehydrogenase activity staining demonstrates time-dependent immune cell infiltration in human ex-vivo burn-injured skin. *Scientific Reports*, **2021**, 11, 21249	4.9	1
13	ASO Author Reflections: Diagnostic Accuracy of Nipple Aspirate Fluid Cytology in Asymptomatic Patients and Its Predictive Validity on Future Risk of Breast Cancer: A Meta-Analysis and Systematic Review of the Literature. *Annals of Surgical Oncology*, **2021**, 28, 3761-3762	3.1	1
12	Evaluation of UV-C Decontamination of Clinical Tissue Sections for Spatially Resolved Analysis by Mass Spectrometry Imaging (MSI). *Analytical Chemistry*, **2021**, 93, 2767-2775	7.8	1
11	Correlating Mass Spectrometry Imaging and Liquid Chromatography-Tandem Mass Spectrometry for Tissue-Based Pharmacokinetic Studies.. *Metabolites*, **2022**, 12,	5.6	1
10	Implementation of corticosteroids in treatment of COVID-19 in the ISARIC WHO Clinical Characterisation Protocol UK: prospective, cohort study.. *The Lancet Digital Health*, **2022**, 4, e220-e234	14.4	1
9	Holistic Characterization of a Typhimurium Infection Model Using Integrated Molecular Imaging. *Journal of the American Society for Mass Spectrometry*, **2021**, 32, 2791-2802	3.5	0
8	Breast health screening: a UK-wide questionnaire. *BMJ Nutrition, Prevention and Health*, **2021**, 4, 206-212	6.7	0
7	Cover Picture: Serine Octamer Reactions: Indicators of Prebiotic Relevance (Angew. Chem. Int. Ed. 30/2003). *Angewandte Chemie - International Edition*, **2003**, 42, 3443-3443	16.4	
6	Cover Picture: Mass Spectrometric Profiling of Intact Biological Tissue by Using Desorption Electrospray Ionization (Angew. Chem. Int. Ed. 43/2005). *Angewandte Chemie - International Edition*, **2005**, 44, 6967-6967	16.4	
5	Titelbild: Mass Spectrometric Profiling of Intact Biological Tissue by Using Desorption Electrospray Ionization (Angew. Chem. 43/2005). *Angewandte Chemie*, **2005**, 117, 7127-7127	3.6	
4	Application of novel solid phase extraction-NMR protocols for metabolic profiling of human urine. *Faraday Discussions*, **2019**, 218, 395-416	3.6	
3	Mass recalibration for desorption electrospray ionization mass spectrometry imaging using endogenous reference ions.. *BMC Bioinformatics*, **2022**, 23, 133	3.6	

2	H NMR Signals from Urine Excreted Protein Are a Source of Bias in Probabilistic Quotient Normalization.. *Analytical Chemistry*, **2022**, 94, 6919-6923	7.8
1	Automated Cancer Diagnostics via Analysis of Optical and Chemical Images by Deep and Shallow Learning. *Metabolites*, **2022**, 12, 455	5.6