

# Zoltan Takats

## List of Publications by Year in descending order

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167  
papers

14,846  
citations

30070

54  
h-index

19190

118  
g-index

173  
all docs

173  
docs citations

173  
times ranked

11819  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mass Spectrometry Sampling Under Ambient Conditions with Desorption Electrospray Ionization. <i>Science</i> , 2004, 306, 471-473.	12.6	2,886
2	Ambient Mass Spectrometry. <i>Science</i> , 2006, 311, 1566-1570.	12.6	1,291
3	Ambient mass spectrometry using desorption electrospray ionization (DESI): instrumentation, mechanisms and applications in forensics, chemistry, and biology. <i>Journal of Mass Spectrometry</i> , 2005, 40, 1261-1275.	1.6	773
4	Intraoperative Tissue Identification Using Rapid Evaporative Ionization Mass Spectrometry. <i>Science Translational Medicine</i> , 2013, 5, 194ra93.	12.4	488
5	Metabolic phenotyping in clinical and surgical environments. <i>Nature</i> , 2012, 491, 384-392.	27.8	450
6	Direct, trace level detection of explosives on ambient surfaces by desorption electrospray ionization mass spectrometry. <i>Chemical Communications</i> , 2005, , 1950-1952.	4.1	382
7	Desorption Electrospray Ionization of Explosives on Surfaces: A Sensitivity and Selectivity Enhancement by Reactive Desorption Electrospray Ionization. <i>Analytical Chemistry</i> , 2005, 77, 6755-6764.	6.5	332
8	Desorption Electrospray Ionization Mass Spectrometry for High-Throughput Analysis of Pharmaceutical Samples in the Ambient Environment. <i>Analytical Chemistry</i> , 2005, 77, 6915-6927.	6.5	326
9	Clinical validation of cutoff target ranges in newborn screening of metabolic disorders by tandem mass spectrometry: A worldwide collaborative project. <i>Genetics in Medicine</i> , 2011, 13, 230-254.	2.4	308
10	Preparing Protein Microarrays by Soft-Landing of Mass-Selected Ions. <i>Science</i> , 2003, 301, 1351-1354.	12.6	261
11	In Vivo, In Situ Tissue Analysis Using Rapid Evaporative Ionization Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8240-8242.	13.8	261
12	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. <i>Analytical Chemistry</i> , 2004, 76, 4050-4058.	6.5	250
13	Rapid in situ detection of alkaloids in plant tissue under ambient conditions using desorption electrospray ionization. <i>Analyst</i> , 2005, 130, 1624.	3.5	193
14	Identification of Biological Tissues by Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2010, 82, 7343-7350.	6.5	186
15	Histology by Mass Spectrometry: Label-Free Tissue Characterization Obtained from High-Accuracy Bioanalytical Imaging. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 3834-3838.	13.8	184
16	Diagnostic Accuracy of Intraoperative Techniques for Margin Assessment in Breast Cancer Surgery. <i>Annals of Surgery</i> , 2017, 265, 300-310.	4.2	180
17	Aurora kinase inhibitor nanoparticles target tumors with favorable therapeutic index in vivo. <i>Science Translational Medicine</i> , 2016, 8, 325ra17.	12.4	171
18	Rapid evaporative ionisation mass spectrometry of electrosurgical vapours for the identification of breast pathology: towards an intelligent knife for breast cancer surgery. <i>Breast Cancer Research</i> , 2017, 19, 59.	5.0	157

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19	Amino Acid Clusters Formed by Sonic Spray Ionization. <i>Analytical Chemistry</i> , 2003, 75, 1514-1523.	6.5	137
20	Spatially Resolved Metabolic Phenotyping of Breast Cancer by Desorption Electrospray Ionization Mass Spectrometry. <i>Cancer Research</i> , 2015, 75, 1828-1837.	0.9	134
21	Mass spectrometry imaging with high resolution in mass and space (HR2 MSI) for reliable investigation of drug compound distributions on the cellular level. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 65-73.	3.7	133
22	Optimization of MALDI-TOF MS for strain level differentiation of <i>Arthrobacter</i> isolates. <i>Journal of Microbiological Methods</i> , 2006, 66, 399-409.	1.6	121
23	Identification of the Species of Origin for Meat Products by Rapid Evaporative Ionization Mass Spectrometry. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 4793-4800.	5.2	121
24	Chemo-informatic strategy for imaging mass spectrometry-based hyperspectral profiling of lipid signatures in colorectal cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 1216-1221.	7.1	120
25	Deep learning and 3D-DESI imaging reveal the hidden metabolic heterogeneity of cancer. <i>Chemical Science</i> , 2017, 8, 3500-3511.	7.4	117
26	Coupling Desorption Electrospray Ionization with Ion Mobility/Mass Spectrometry for Analysis of Protein Structure: A Evidence for Desorption of Folded and Denatured States. <i>Journal of Physical Chemistry B</i> , 2006, 110, 5045-5051.	2.6	116
27	The surgical intelligent knife distinguishes normal, borderline and malignant gynaecological tissues using rapid evaporative ionisation mass spectrometry (REIMS). <i>British Journal of Cancer</i> , 2018, 118, 1349-1358.	6.4	115
28	<i>Pseudomonas aeruginosa</i> infection in cystic fibrosis: pathophysiological mechanisms and therapeutic approaches. <i>Expert Review of Respiratory Medicine</i> , 2016, 10, 685-697.	2.5	114
29	The amino acid transporter SLC7A5 is required for efficient growth of KRAS-mutant colorectal cancer. <i>Nature Genetics</i> , 2021, 53, 16-26.	21.4	114
30	Development and Application of Ultra-Performance Liquid Chromatography-TOF MS for Precision Large Scale Urinary Metabolic Phenotyping. <i>Analytical Chemistry</i> , 2016, 88, 9004-9013.	6.5	113
31	Characterisation of in-hospital complications associated with COVID-19 using the ISARIC WHO Clinical Characterisation Protocol UK: a prospective, multicentre cohort study. <i>Lancet, The</i> , 2021, 398, 223-237.	13.7	110
32	Serine Octamer Reactions: Indicators of Prebiotic Relevance. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 3521-3523.	13.8	100
33	In Vivo Endoscopic Tissue Identification by Rapid Evaporative Ionization Mass Spectrometry (REIMS). <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11059-11062.	13.8	97
34	Real Time Analysis of Brain Tissue by Direct Combination of Ultrasonic Surgical Aspiration and Sonic Spray Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 7729-7735.	6.5	95
35	Ion soft-landing into liquids: Protein identification, separation, and purification with retention of biological activity. <i>Journal of the American Society for Mass Spectrometry</i> , 2004, 15, 1874-1884.	2.8	93
36	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. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2017, 31, 1361-1370.	2.4	92

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37	Analysis of colorectal adenocarcinoma tissue by desorption electrospray ionization mass spectrometric imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 2315-2325.	3.7	88
38	Characterization and Identification of Clinically Relevant Microorganisms Using Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 6555-6562.	6.5	85
39	Rapid Evaporative Ionization Mass Spectrometry Imaging Platform for Direct Mapping from Bulk Tissue and Bacterial Growth Media. <i>Analytical Chemistry</i> , 2015, 87, 2527-2534.	6.5	85
40	Current and future therapies for <i>Pseudomonas aeruginosa</i> infection in patients with cystic fibrosis. <i>FEMS Microbiology Letters</i> , 2017, 364, .	1.8	85
41	Faster, More Reproducible DESI-MS for Biological Tissue Imaging. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 2090-2098.	2.8	84
42	In Situ, Real-Time Identification of Biological Tissues by Ultraviolet and Infrared Laser Desorption Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 1632-1640.	6.5	83
43	Mass Spectrometry Imaging of Cassette-Dosed Drugs for Higher Throughput Pharmacokinetic and Biodistribution Analysis. <i>Analytical Chemistry</i> , 2014, 86, 8473-8480.	6.5	82
44	A real time metabolomic profiling approach to detecting fish fraud using rapid evaporative ionisation mass spectrometry. <i>Metabolomics</i> , 2017, 13, 153.	3.0	80
45	Rapid evaporative ionization mass spectrometry for high-throughput screening in food analysis: The case of boar taint. <i>Talanta</i> , 2017, 169, 30-36.	5.5	79
46	Metabolic Fingerprinting Links Oncogenic PIK3CA with Enhanced Arachidonic Acid-Derived Eicosanoids. <i>Cell</i> , 2020, 181, 1596-1611.e27.	28.9	77
47	Metabonomics of Newborn Screening Dried Blood Spot Samples: A Novel Approach in the Screening and Diagnostics of Inborn Errors of Metabolism. <i>Analytical Chemistry</i> , 2012, 84, 10113-10120.	6.5	72
48	Unique metabolites protect earthworms against plant polyphenols. <i>Nature Communications</i> , 2015, 6, 7869.	12.8	71
49	Real-Time Molecular Diagnosis of Tumors Using Water-Assisted Laser Desorption/Ionization Mass Spectrometry Technology. <i>Cancer Cell</i> , 2018, 34, 840-851.e4.	16.8	71
50	Preparative Linear Ion Trap Mass Spectrometer for Separation and Collection of Purified Proteins and Peptides in Arrays Using Ion Soft Landing. <i>Analytical Chemistry</i> , 2004, 76, 6293-6305.	6.5	70
51	Epithelial ovarian carcinoma diagnosis by desorption electrospray ionization mass spectrometry imaging. <i>Scientific Reports</i> , 2016, 6, 39219.	3.3	67
52	Automated High-Throughput Identification and Characterization of Clinically Important Bacteria and Fungi using Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 9419-9426.	6.5	66
53	Universal Sample Preparation Unlocking Multimodal Molecular Tissue Imaging. <i>Analytical Chemistry</i> , 2020, 92, 11080-11088.	6.5	64
54	Chiral enrichment of serine via formation, dissociation, and soft-landing of octameric cluster ions. <i>Journal of the American Society for Mass Spectrometry</i> , 2004, 15, 1360-1365.	2.8	63

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55	Analysis of intact bacteria using rapid evaporative ionisation mass spectrometry. <i>Chemical Communications</i> , 2013, 49, 6188.	4.1	61
56	The intelligent knife (iKnife) and its intraoperative diagnostic advantage for the treatment of cervical disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 7338-7346.	7.1	59
57	Analysis of Biological Fluids by Direct Combination of Solid Phase Extraction and Desorption Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2009, 81, 1669-1675.	6.5	55
58	Analysis of triglycerides in food items by desorption electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2010, 24, 2186-2192.	1.5	54
59	Repeatability and reproducibility of desorption electrospray ionization-mass spectrometry (DESI-MS) for the imaging analysis of human cancer tissue: a gateway for clinical applications. <i>Analytical Methods</i> , 2015, 7, 71-80.	2.7	54
60	Direct tandem mass spectrometric analysis of amino acids in dried blood spots without chemical derivatization for neonatal screening. <i>Rapid Communications in Mass Spectrometry</i> , 2003, 17, 983-990.	1.5	53
61	Atmospheric Pressure Gas-Phase H/D Exchange of Serine Octamers. <i>Analytical Chemistry</i> , 2003, 75, 6147-6154.	6.5	53
62	Benchmark datasets for 3D MALDI- and DESI-imaging mass spectrometry. <i>GigaScience</i> , 2015, 4, 20.	6.4	53
63	Analysis of wastewater samples by direct combination of thin-film microextraction and desorption electrospray ionization mass spectrometry. <i>Analyst, The</i> , 2012, 137, 4037.	3.5	51
64	Degradation of atrazine in a laboratory scale model system with Danube river sediment. <i>Water Research</i> , 2005, 39, 1560-1568.	11.3	48
65	Rapid Evaporative Ionisation Mass Spectrometry (REIMS) Provides Accurate Direct from Culture Species Identification within the Genus <i>Candida</i> . <i>Scientific Reports</i> , 2016, 6, 36788.	3.3	48
66	Direct Characterization of Enzyme-Substrate Complexes by Using Electrosonic Spray Ionization Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 913-916.	13.8	46
67	Correlated Heterospectral Lipidomics for Biomolecular Profiling of Remyelination in Multiple Sclerosis. <i>ACS Central Science</i> , 2018, 4, 39-51.	11.3	44
68	Atmospheric pressure chemical ionization mass spectrometry of aldehydes in biological matrices. <i>Rapid Communications in Mass Spectrometry</i> , 2004, 18, 2473-2478.	1.5	43
69	A Critical and Concise Review of Mass Spectrometry Applied to Imaging in Drug Discovery. <i>SLAS Discovery</i> , 2020, 25, 963-976.	2.7	42
70	Water-assisted laser desorption/ionization mass spectrometry for minimally invasive in vivo and real-time surface analysis using SpiderMass. <i>Nature Protocols</i> , 2019, 14, 3162-3182.	12.0	41
71	Single-sided membrane introduction mass spectrometry for on-line determination of semi-volatile organic compounds in air. <i>Analyst, The</i> , 2001, 126, 1980-1984.	3.5	38
72	Rapid detection and specific identification of offals within minced beef samples utilising ambient mass spectrometry. <i>Scientific Reports</i> , 2019, 9, 6295.	3.3	38

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73	Rapid evaporative ionisation mass spectrometry and chemometrics for high-throughput screening of growth promoters in meat producing animals. <i>Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment</i> , 2018, 35, 900-910.	2.3	37
74	Matrix Assisted Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 9784-9791.	6.5	37
75	Hepcidin concentrations and iron homeostasis in preeclampsia. <i>Clinical Chemistry and Laboratory Medicine</i> , 2010, 48, 1423-1426.	2.3	36
76	Antibody binding shift assay for rapid screening of drug interactions with the human ABCG2 multidrug transporter. <i>European Journal of Pharmaceutical Sciences</i> , 2012, 45, 101-109.	4.0	35
77	Shotgun Lipidomic Profiling of the NCI60 Cell Line Panel Using Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 7507-7514.	6.5	34
78	Organic Chloramine Analysis and Free Chlorine Quantification by Electrospray and Atmospheric Pressure Chemical Ionization Tandem Mass Spectrometry. <i>Analytical Chemistry</i> , 2001, 73, 4522-4529.	6.5	33
79	Direct on-swab metabolic profiling of vaginal microbiome host interactions during pregnancy and preterm birth. <i>Nature Communications</i> , 2021, 12, 5967.	12.8	33
80	Thermal formation of serine octamer ions. <i>Chemical Communications</i> , 2004, , 444-445.	4.1	32
81	Intraoperative tissue identification by mass spectrometric technologies. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 85, 2-9.	11.4	32
82	Endocannabinoid-mediated modulation of Gq/11 protein-coupled receptor signaling-induced vasoconstriction and hypertension. <i>Molecular and Cellular Endocrinology</i> , 2015, 403, 46-56.	3.2	31
83	Medical Swab Analysis Using Desorption Electrospray Ionization Mass Spectrometry: A Noninvasive Approach for Mucosal Diagnostics. <i>Analytical Chemistry</i> , 2017, 89, 1540-1550.	6.5	31
84	Deep Learning-Based Annotation Transfer between Molecular Imaging Modalities: An Automated Workflow for Multimodal Data Integration. <i>Analytical Chemistry</i> , 2021, 93, 3061-3071.	6.5	31
85	BASIS: High-performance bioinformatics platform for processing of large-scale mass spectrometry imaging data in chemically augmented histology. <i>Scientific Reports</i> , 2018, 8, 4053.	3.3	30
86	Imaging of Esophageal Lymph Node Metastases by Desorption Electrospray Ionization Mass Spectrometry. <i>Cancer Research</i> , 2016, 76, 5647-5656.	0.9	29
87	Laser-assisted rapid evaporative ionisation mass spectrometry (LA-REIMS) as a metabolomics platform in cervical cancer screening. <i>EBioMedicine</i> , 2020, 60, 103017.	6.1	29
88	Characterization of DESI-FTICR mass spectrometry from ECD to accurate mass tissue analysis. <i>Journal of Mass Spectrometry</i> , 2008, 43, 196-203.	1.6	27
89	A comprehensive high-resolution mass spectrometry approach for characterization of metabolites by combination of ambient ionization, chromatography and imaging methods. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 1779-1791.	1.5	27
90	Feasibility of Formation of Hot Ions in Electrospray. <i>Analytical Chemistry</i> , 2002, 74, 6427-6429.	6.5	26

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91	Representing the Metabolome with High Fidelity: Range and Response as Quality Control Factors in LC-MS-Based Global Profiling. <i>Analytical Chemistry</i> , 2021, 93, 1924-1933.	6.5	26
92	Enhanced triacylglycerol catabolism by carboxylesterase 1 promotes aggressive colorectal carcinoma. <i>Journal of Clinical Investigation</i> , 2021, 131, .	8.2	25
93	High surface area membrane introduction mass spectrometry for analysis of volatile and semi-volatile organic compounds in air. <i>Rapid Communications in Mass Spectrometry</i> , 2001, 15, 1520-1524.	1.5	23
94	Luminal cholinergic signalling in airway lining fluid: a novel mechanism for activating chloride secretion via Ca <sup>2+</sup> -dependent Cl <sup>-</sup> and K <sup>+</sup> channels. <i>British Journal of Pharmacology</i> , 2012, 166, 1388-1402.	5.4	23
95	Investigation of the Impact of Desorption Electrospray Ionization Sprayer Geometry on Its Performance in Imaging of Biological Tissue. <i>Analytical Chemistry</i> , 2016, 88, 4808-4816.	6.5	23
96	Utilisation of Ambient Laser Desorption Ionisation Mass Spectrometry (ALDI-MS) Improves Lipid-Based Microbial Species Level Identification. <i>Scientific Reports</i> , 2019, 9, 3006.	3.3	23
97	Construction and testing of an atmospheric-pressure transmission-mode matrix assisted laser desorption ionisation mass spectrometry imaging ion source with plasma ionisation enhancement. <i>Analytica Chimica Acta</i> , 2019, 1051, 110-119.	5.4	23
98	<i>De Novo</i> Lipogenesis Alters the Phospholipidome of Esophageal Adenocarcinoma. <i>Cancer Research</i> , 2020, 80, 2764-2774.	0.9	23
99	Formation of solvated ions in the atmospheric interface of an electrospray ionization triple-quadrupole mass spectrometer. <i>Journal of Mass Spectrometry</i> , 2003, 38, 1245-1251.	1.6	22
100	Hydrogen/deuterium exchange of electrosprayed ions in the atmospheric interface of a commercial triple-quadrupole mass spectrometer. <i>International Journal of Mass Spectrometry</i> , 2003, 228, 729-741.	1.5	22
101	Metabolic Phenotyping and Strain Characterisation of <i>Pseudomonas aeruginosa</i> Isolates from Cystic Fibrosis Patients Using Rapid Evaporative Ionisation Mass Spectrometry. <i>Scientific Reports</i> , 2018, 8, 10952.	3.3	22
102	Evaluation of Direct from Sample Metabolomics of Human Feces Using Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 13448-13457.	6.5	22
103	Mass spectrometry approaches to metabolic profiling of microbial communities within the human gastrointestinal tract. <i>Methods</i> , 2018, 149, 13-24.	3.8	21
104	High-Throughput Mass Spectrometer Using Atmospheric Pressure Ionization and a Cylindrical Ion Trap Array. <i>Analytical Chemistry</i> , 2005, 77, 459-470.	6.5	20
105	Assessment of microbiota: host interactions at the vaginal mucosa interface. <i>Methods</i> , 2018, 149, 74-84.	3.8	20
106	Effect of Electrode Geometry on the Classification Performance of Rapid Evaporative Ionization Mass Spectrometric (REIMS) Bacterial Identification. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 26-33.	2.8	20
107	SPUTNIK: an R package for filtering of spatially related peaks in mass spectrometry imaging data. <i>Bioinformatics</i> , 2019, 35, 178-180.	4.1	20
108	Endogenous aldehyde accumulation generates genotoxicity and exhaled biomarkers in esophageal adenocarcinoma. <i>Nature Communications</i> , 2021, 12, 1454.	12.8	20

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109	Method To Visualize the Intratumor Distribution and Impact of Gemcitabine in Pancreatic Ductal Adenocarcinoma by Multimodal Imaging. <i>Analytical Chemistry</i> , 2022, 94, 1795-1803.	6.5	20
110	Implementation of corticosteroids in treatment of COVID-19 in the ISARIC WHO Clinical Characterisation Protocol UK: prospective, cohort study. <i>The Lancet Digital Health</i> , 2022, 4, e220-e234.	12.3	20
111	Intact skin analysis by desorption electrospray ionization mass spectrometry. <i>Analyst</i> , 2011, 136, 835-840.	3.5	19
112	Electrospray Post-Ionization Mass Spectrometry of Electrosurgical Aerosols. <i>Journal of the American Society for Mass Spectrometry</i> , 2011, 22, 2082-9.	2.8	18
113	Carboxypeptidase-M is regulated by lipids and CSFs in macrophages and dendritic cells and expressed selectively in tissue granulomas and foam cells. <i>Laboratory Investigation</i> , 2012, 92, 345-361.	3.7	18
114	Implications of Peak Selection in the Interpretation of Unsupervised Mass Spectrometry Imaging Data Analyses. <i>Analytical Chemistry</i> , 2021, 93, 2309-2316.	6.5	18
115	Off-Colony Screening of Biosynthetic Libraries by Rapid Laser-Enabled Mass Spectrometry. <i>ACS Synthetic Biology</i> , 2019, 8, 2566-2575.	3.8	17
116	Colocalization Features for Classification of Tumors Using Desorption Electrospray Ionization Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2019, 91, 6530-6540.	6.5	17
117	Optical Technologies for Endoscopic Real-Time Histologic Assessment of Colorectal Polyps: A Meta-Analysis. <i>American Journal of Gastroenterology</i> , 2019, 114, 1219-1230.	0.4	17
118	Rapid LA-REIMS and comprehensive UHPLC-HRMS for metabolic phenotyping of feces. <i>Talanta</i> , 2020, 217, 121043.	5.5	16
119	Sample Preparation Free Mass Spectrometry Using Laser-Assisted Rapid Evaporative Ionization Mass Spectrometry: Applications to Microbiology, Metabolic Biofluid Phenotyping, and Food Authenticity. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1393-1401.	2.8	16
120	Investigation of atrazine metabolism in river sediment by high-performance liquid chromatography/mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2001, 15, 1735-1742.	1.5	14
121	Identifying the margin: a new method to distinguish between cancerous and noncancerous tissue during surgery. <i>Future Oncology</i> , 2012, 8, 113-116.	2.4	14
122	Metabolic Biomarkers of Ageing in C57BL/6J Wild-Type and Flavin-Containing Monooxygenase 5 (FMO5)-Knockout Mice. <i>Frontiers in Molecular Biosciences</i> , 2018, 5, 28.	3.5	14
123	Mass spectrometry transanal minimally invasive surgery (MS-TAMIS) to promote organ preservation in rectal cancer. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2020, 34, 3618-3625.	2.4	13
124	Validation of Ultrasonic Harmonic Scalpel for Real-Time Tissue Identification Using Rapid Evaporative Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2021, 93, 5906-5916.	6.5	13
125	Antiviral metabolite 3'-deoxy-4'-didehydro-cytidine is detectable in serum and identifies acute viral infections including COVID-19. <i>Med</i> , 2022, 3, 204-215.e6.	4.4	12
126	High Resolution Ambient MS Imaging of Biological Samples by Desorption Electro-Flow Focussing Ionization. <i>Analytical Chemistry</i> , 2022, 94, 10035-10044.	6.5	12



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127	Systematic Isolation and Structure Elucidation of Urinary Metabolites Optimized for the Analytical-Scale Molecular Profiling Laboratory. <i>Analytical Chemistry</i> , 2019, 91, 8873-8882.	6.5	11
128	Rapid ex vivo molecular fingerprinting of biofluids using laser-assisted rapid evaporative ionization mass spectrometry. <i>Nature Protocols</i> , 2021, 16, 4327-4354.	12.0	10
129	Reducing the Margins of Error During Breast-Conserving Surgery. <i>JAMA Surgery</i> , 2017, 152, 517.	4.3	9
130	Comparison of <sup>13</sup> C MRI of hyperpolarized [ <sup>13</sup> C]pyruvate and lactate with the corresponding mass spectrometry images in a murine lymphoma model. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 3027-3035.	3.0	9
131	Direct Water-Assisted Laser Desorption/Ionization Mass Spectrometry Lipidomic Analysis and Classification of Formalin-Fixed Paraffin-Embedded Sarcoma Tissues without Dewaxing. <i>Clinical Chemistry</i> , 2021, 67, 1513-1523.	3.2	9
132	Verification of Skin Autofluorescence Values by Mass Spectrometry in Adolescents with Type 1 Diabetes: Brief Report. <i>Diabetes Technology and Therapeutics</i> , 2013, 15, 269-272.	4.4	8
133	Development of nanoelectrospray high resolution isotope dilution mass spectrometry for targeted quantitative analysis of urinary metabolites: application to population profiling and clinical studies. <i>Analytical Methods</i> , 2015, 7, 5122-5133.	2.7	8
134	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. <i>Journal of Mass Spectrometry and Advances in the Clinical Lab</i> , 2021, 22, 50-55.	2.4	8
135	Translational utility of a hierarchical classification strategy in biomolecular data analytics. <i>Scientific Reports</i> , 2017, 7, 14981.	3.3	7
136	Network Mapping of Molecular Biomarkers Influencing Radiation Response in Rectal Cancer. <i>Clinical Colorectal Cancer</i> , 2019, 18, e210-e222.	2.3	7
137	Selective detection of specific protein-ligand complexes by electrosonic spray-precursor ion scan tandem mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2009, 20, 227-237.	2.8	6
138	Surgical systems biology and personalized longitudinal phenotyping in critical care. <i>Personalized Medicine</i> , 2012, 9, 593-608.	1.5	6
139	Analysis of dried blood spot samples by high resolution mass spectrometry – From newborn screening to cancer diagnostics. <i>Clinical Biochemistry</i> , 2014, 47, 699.	1.9	6
140	Lactate dehydrogenase activity staining demonstrates time-dependent immune cell infiltration in human ex-vivo burn-injured skin. <i>Scientific Reports</i> , 2021, 11, 21249.	3.3	6
141	Holistic Characterization of a <i>Salmonella</i> Typhimurium Infection Model Using Integrated Molecular Imaging. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 2791-2802.	2.8	6
142	Diagnostic Accuracy of Nipple Aspirate Fluid Cytology in Asymptomatic Patients: A Meta-analysis and Systematic Review of the Literature. <i>Annals of Surgical Oncology</i> , 2021, 28, 3751-3760.	1.5	5
143	Diagnostic Accuracy of Nipple Discharge Fluid Cytology: A Meta-Analysis and Systematic Review of the Literature. <i>Annals of Surgical Oncology</i> , 2022, 29, 1774-1786.	1.5	5
144	Atmospheric-Pressure Infrared Laser-Ablation Plasma-Postionization Mass Spectrometry Imaging of Formalin-Fixed Paraffin-Embedded (FFPE) and Fresh-Frozen Tissue Sections with No Sample Preparation. <i>Analytical Chemistry</i> , 2022, 94, 9970-9974.	6.5	5

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145	Mass spectrometric analysis of combinatorial peptide libraries derived from the tandem repeat unit of MUC2 mucin. <i>Journal of Peptide Science</i> , 2003, 9, 361-374.	1.4	4
146	Quantitative Analytical Method for the Determination of Biotinidase Activity in Dried Blood Spot Samples. <i>Analytical Chemistry</i> , 2015, 87, 10573-10578.	6.5	4
147	Breast health screening: a UK-wide questionnaire. <i>BMJ Nutrition, Prevention and Health</i> , 2021, 4, 206-212.	3.7	4
148	Spatially resolved profiling of colorectal cancer lipid biochemistry via DESI imaging mass spectrometry to reveal morphology-dependent alterations in fatty acid metabolism.. <i>Journal of Clinical Oncology</i> , 2016, 34, e15104-e15104.	1.6	4
149	Modality Agnostic Model for Spatial Resolution in Mass Spectrometry Imaging: Application to MALDI MSI Data. <i>Analytical Chemistry</i> , 2021, 93, 15295-15305.	6.5	4
150	Correlating Mass Spectrometry Imaging and Liquid Chromatography-Tandem Mass Spectrometry for Tissue-Based Pharmacokinetic Studies. <i>Metabolites</i> , 2022, 12, 261.	2.9	4
151	Electrospray and atmospheric pressure chemical ionisation of aromatic compounds in dichloromethane solvent. <i>European Journal of Mass Spectrometry</i> , 1998, 4, 365.	0.7	3
152	Direct Characterization of Enzyme-Substrate Complexes by Using Electrosonic Spray Ionization Mass Spectrometry. <i>Angewandte Chemie</i> , 2005, 117, 935-938.	2.0	3
153	Real time intraoperative classification of breast tissue with the intelligent knife. <i>European Journal of Surgical Oncology</i> , 2016, 42, S25.	1.0	3
154	Mass recalibration for desorption electrospray ionization mass spectrometry imaging using endogenous reference ions. <i>BMC Bioinformatics</i> , 2022, 23, 133.	2.6	3
155	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. <i>Annals of Surgical Oncology</i> , 2021, 28, 3761-3762.	1.5	2
156	Evaluation of UV-C Decontamination of Clinical Tissue Sections for Spatially Resolved Analysis by Mass Spectrometry Imaging (MSI). <i>Analytical Chemistry</i> , 2021, 93, 2767-2775.	6.5	2
157	Antagonistic reactions of arginine and lysine against formaldehyde and their relation to cell proliferation, apoptosis, folate cycle and photosynthesis. <i>Molecular and Cellular Biochemistry</i> , 2003, 244, 167-76.	3.1	2
158	<sup>1</sup> H NMR Signals from Urine Excreted Protein Are a Source of Bias in Probabilistic Quotient Normalization. <i>Analytical Chemistry</i> , 2022, 94, 6919-6923.	6.5	2
159	Tu1477 Near Real Time Characterisation of Colorectal Cancer and Adenomatous Polyps Using Rapid Evaporative Ionisation Mass Spectrometry (Reims). <i>Gastrointestinal Endoscopy</i> , 2014, 79, AB554.	1.0	1
160	11. Intra-operative Rapid Evaporative Ionisation Mass Spectrometry: A future intelligent knife (iKnife) for oncological margin control?. <i>European Journal of Surgical Oncology</i> , 2015, 41, S20.	1.0	1
161	Pragmatic and rapid analysis of carbonyl, oxidation and chlorination nucleoside-adducts in murine tissue by UPLC-ESI-MS/MS. <i>Talanta</i> , 2018, 190, 436-442.	5.5	1
162	Novel data processing and image co-registration algorithm for region-specific lipid profiling in colorectal cancer tissue using DESI imaging mass spectrometry.. <i>Journal of Clinical Oncology</i> , 2013, 31, e14620-e14620.	1.6	1

#	ARTICLE	IF	CITATIONS
163	Cover Picture: Serine Octamer Reactions: Indicators of Prebiotic Relevance (Angew. Chem. Int. Ed.) Tj ETQq1 1 0.784314 rgBT <sub>0</sub> /Overlock	13.8	0
164	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.	13.8	0
165	Rapid Evaporative Ionisation Mass Spectrometry of surgical vapours towards an intelligent knife for precision breast surgery. European Journal of Surgical Oncology, 2017, 43, S6.	1.0	0
166	Application of novel solid phase extraction-NMR protocols for metabolic profiling of human urine. Faraday Discussions, 2019, 218, 395-416.	3.2	0
167	Automated Cancer Diagnostics via Analysis of Optical and Chemical Images by Deep and Shallow Learning. Metabolites, 2022, 12, 455.	2.9	0