

Livia S Eberlin

List of Publications by Year in descending order

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85
papers

6,941
citations

47006

47
h-index

60623

81
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90
all docs

90
docs citations

90
times ranked

5733
citing authors

#	ARTICLE	IF	CITATIONS
1	Reduced Hemoglobin Signal and Improved Detection of Endogenous Proteins in Blood-Rich Tissues for MALDI Mass Spectrometry Imaging. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 296-303.	2.8	7
2	MASS SPECTROMETRY TECHNOLOGIES TO ADVANCE CARE FOR CANCER PATIENTS IN CLINICAL AND INTRAOPERATIVE USE. <i>Mass Spectrometry Reviews</i> , 2021, 40, 692-720.	5.4	25
3	Rapid Analysis and Authentication of Meat Using the MasSpec Pen Technology. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 3527-3536.	5.2	15
4	Metabotype analysis of Mthfd11-null mouse embryos using desorption electrospray ionization mass spectrometry imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 3573-3582.	3.7	7
5	Integrating the MasSpec Pen with Sub-Atmospheric Pressure Chemical Ionization for Rapid Chemical Analysis and Forensic Applications. <i>Analytical Chemistry</i> , 2021, 93, 7549-7556.	6.5	6
6	Clinical Translation and Evaluation of a Handheld and Biocompatible Mass Spectrometry Probe for Surgical Use. <i>Clinical Chemistry</i> , 2021, 67, 1271-1280.	3.2	10
7	Rapid diagnosis and tumor margin assessment during pancreatic cancer surgery with the MasSpec Pen technology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	33
8	Rapid Screening of COVID-19 Directly from Clinical Nasopharyngeal Swabs Using the MasSpec Pen. <i>Analytical Chemistry</i> , 2021, 93, 12582-12593.	6.5	12
9	Relative Quantitation of Unsaturated Phosphatidylcholines Using 193 nm Ultraviolet Photodissociation Parallel Reaction Monitoring Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2021, 143, 14622-14634.	13.7	15
10	Integrating the MasSpec Pen to the da Vinci Surgical System for <i>In Vivo</i> Tissue Analysis during a Robotic Assisted Porcine Surgery. <i>Analytical Chemistry</i> , 2020, 92, 11535-11542.	6.5	47
11	Distinguishing Non-Small Cell Lung Cancer Subtypes in Fine Needle Aspiration Biopsies by Desorption Electrospray Ionization Mass Spectrometry Imaging. <i>Clinical Chemistry</i> , 2020, 66, 1424-1433.	3.2	19
12	Double Bond Characterization of Free Fatty Acids Directly from Biological Tissues by Ultraviolet Photodissociation. <i>Analytical Chemistry</i> , 2020, 92, 8386-8395.	6.5	38
13	Multiplatform Investigation of Plasma and Tissue Lipid Signatures of Breast Cancer Using Mass Spectrometry Tools. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3611.	4.1	16
14	Mass Spectrometry Imaging Enables Discrimination of Renal Oncocytoma from Renal Cell Cancer Subtypes and Normal Kidney Tissues. <i>Cancer Research</i> , 2020, 80, 689-698.	0.9	37
15	Spatially Controlled Molecular Analysis of Biological Samples Using Nanodroplet Arrays and Direct Droplet Aspiration. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 418-428.	2.8	5
16	Mammalian ovarian lipid distributions by desorption electrospray ionization mass spectrometry (DESI-MS) imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 1251-1262.	3.7	16
17	DESI-MSI and METASPACE indicates lipid abnormalities and altered mitochondrial membrane components in diabetic renal proximal tubules. <i>Metabolomics</i> , 2020, 16, 11.	3.0	34
18	Electrochemical monitoring of the impact of polymicrobial infections on <i>Pseudomonas aeruginosa</i> and growth dependent medium. <i>Biosensors and Bioelectronics</i> , 2019, 142, 111538.	10.1	36

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19	Molecular Imaging of Endometriosis Tissues using Desorption Electrospray Ionization Mass Spectrometry. <i>Scientific Reports</i> , 2019, 9, 15690.	3.3	20
20	Hybrid 193 nm Ultraviolet Photodissociation Mass Spectrometry Localizes Cardiolipin Unsaturation. <i>Analytical Chemistry</i> , 2019, 91, 12509-12516.	6.5	27
21	Preoperative metabolic classification of thyroid nodules using mass spectrometry imaging of fine-needle aspiration biopsies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 21401-21408.	7.1	35
22	The importance of clinical tissue imaging. <i>Clinical Mass Spectrometry</i> , 2019, 12, 47-49.	1.9	6
23	Metabolites and Lipids Associated with Fetal Swine Anatomy via Desorption Electrospray Ionization Mass Spectrometry Imaging. <i>Scientific Reports</i> , 2019, 9, 7247.	3.3	24
24	Performance of the MasSpec Pen for Rapid Diagnosis of Ovarian Cancer. <i>Clinical Chemistry</i> , 2019, 65, 674-683.	3.2	77
25	Ambient Ionization Mass Spectrometry: Recent Developments and Applications. <i>Analytical Chemistry</i> , 2019, 91, 4266-4290.	6.5	313
26	DESI Spray Stability in the Negative Ion Mode Is Dependent on Relative Humidity. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 376-380.	2.8	8
27	Real-Time Electrochemical Detection of <i>Pseudomonas aeruginosa</i> Phenazine Metabolites Using Transparent Carbon Ultramicroelectrode Arrays. <i>ACS Sensors</i> , 2019, 4, 170-179.	7.8	61
28	Advances in mass spectrometry imaging coupled to ion mobility spectrometry for enhanced imaging of biological tissues. <i>Current Opinion in Chemical Biology</i> , 2018, 42, 138-146.	6.1	85
29	Multicenter Study Using Desorption-Electrospray-Ionization-Mass-Spectrometry Imaging for Breast-Cancer Diagnosis. <i>Analytical Chemistry</i> , 2018, 90, 11324-11332.	6.5	70
30	Desorption Electrospray Ionization Mass Spectrometry Imaging of Proteins Directly from Biological Tissue Sections. <i>Analytical Chemistry</i> , 2018, 90, 7785-7789.	6.5	104
31	FABP4 as a key determinant of metastatic potential of ovarian cancer. <i>Nature Communications</i> , 2018, 9, 2923.	12.8	151
32	Desorption Electrospray Ionization Coupled with Ultraviolet Photodissociation for Characterization of Phospholipid Isomers in Tissue Sections. <i>Analytical Chemistry</i> , 2018, 90, 10100-10104.	6.5	79
33	Detection of Metastatic Breast and Thyroid Cancer in Lymph Nodes by Desorption Electrospray Ionization Mass Spectrometry Imaging. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 1166-1174.	2.8	49
34	Oncogene KRAS activates fatty acid synthase, resulting in specific ERK and lipid signatures associated with lung adenocarcinoma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4300-4305.	7.1	110
35	Metabolic Markers and Statistical Prediction of Serous Ovarian Cancer Aggressiveness by Ambient Ionization Mass Spectrometry Imaging. <i>Cancer Research</i> , 2017, 77, 2903-2913.	0.9	106
36	Nondestructive tissue analysis for ex vivo and in vivo cancer diagnosis using a handheld mass spectrometry system. <i>Science Translational Medicine</i> , 2017, 9, .	12.4	286

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37	Will Ambient Ionization Mass Spectrometry Become an Integral Technology in the Operating Room of the Future?. <i>Clinical Chemistry</i> , 2016, 62, 1172-1174.	3.2	19
38	Cardiolipins Are Biomarkers of Mitochondria-Rich Thyroid Oncocytic Tumors. <i>Cancer Research</i> , 2016, 76, 6588-6597.	0.9	63
39	Ambient Ionization and FAIMS Mass Spectrometry for Enhanced Imaging of Multiply Charged Molecular Ions in Biological Tissues. <i>Analytical Chemistry</i> , 2016, 88, 11533-11541.	6.5	93
40	Probabilistic Segmentation of Mass Spectrometry (MS) Images Helps Select Important Ions and Characterize Confidence in the Resulting Segments. <i>Molecular and Cellular Proteomics</i> , 2016, 15, 1761-1772.	3.8	54
41	Forensic Chemistry and Ambient Mass Spectrometry: A Perfect Couple Destined for a Happy Marriage?. <i>Analytical Chemistry</i> , 2016, 88, 2515-2526.	6.5	74
42	Ambient Ionization Mass Spectrometry for Cancer Diagnosis and Surgical Margin Evaluation. <i>Clinical Chemistry</i> , 2016, 62, 111-123.	3.2	143
43	Pancreatic Cancer Surgical Resection Margins: Molecular Assessment by Mass Spectrometry Imaging. <i>PLoS Medicine</i> , 2016, 13, e1002108.	8.4	79
44	Protein Analysis by Ambient Ionization Mass Spectrometry Using Trypsin-Immobilized Organosiloxane Polymer Surfaces. <i>Analytical Chemistry</i> , 2015, 87, 12324-12330.	6.5	12
45	<i>Cardinal</i> : an R package for statistical analysis of mass spectrometry-based imaging experiments. <i>Bioinformatics</i> , 2015, 31, 2418-2420.	4.1	203
46	The Role of Abcb5 Alleles in Susceptibility to Haloperidol-Induced Toxicity in Mice and Humans. <i>PLoS Medicine</i> , 2015, 12, e1001782.	8.4	23
47	MYC oncogene overexpression drives renal cell carcinoma in a mouse model through glutamine metabolism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6539-6544.	7.1	211
48	Molecular assessment of surgical-resection margins of gastric cancer by mass-spectrometric imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2436-2441.	7.1	185
49	Imaging of whole zebra fish (<i>Danio rerio</i>) by desorption electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 2084-2088.	1.5	19
50	Visualizing Dermal Permeation of Sodium Channel Modulators by Mass Spectrometric Imaging. <i>Journal of the American Chemical Society</i> , 2014, 136, 6401-6405.	13.7	31
51	Alteration of the lipid profile in lymphomas induced by MYC overexpression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10450-10455.	7.1	118
52	Intraoperative mass spectrometry mapping of an onco-metabolite to guide brain tumor surgery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11121-11126.	7.1	230
53	DESI-MS Imaging of Lipids and Metabolites from Biological Samples. <i>Methods in Molecular Biology</i> , 2014, 1198, 299-311.	0.9	32
54	A Statistical Modeling Approach for Tumor-Type Identification in Surgical Neuropathology Using Tissue Mass Spectrometry Imaging. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2013, 17, 734-744.	6.3	11

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55	Ambient mass spectrometry for the intraoperative molecular diagnosis of human brain tumors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 1611-1616.	7.1	251
56	Chemical Aspects of the Extractive Methods of Ambient Ionization Mass Spectrometry. <i>Annual Review of Physical Chemistry</i> , 2013, 64, 481-505.	10.8	107
57	Mass spectrometry imaging under ambient conditions. <i>Mass Spectrometry Reviews</i> , 2013, 32, 218-243.	5.4	406
58	Mass spectrometry imaging as a tool for surgical decision-making. <i>Journal of Mass Spectrometry</i> , 2013, 48, 1178-1187.	1.6	85
59	Desorption Electrospray Ionization Mass Spectrometry Reveals Lipid Metabolism of Individual Oocytes and Embryos. <i>PLoS ONE</i> , 2013, 8, e74981.	2.5	70
60	Classifying Human Brain Tumors by Lipid Imaging with Mass Spectrometry. <i>Cancer Research</i> , 2012, 72, 645-654.	0.9	273
61	Interactive hyperspectral approach for exploring and interpreting DESI-MS images of cancerous and normal tissue sections. <i>Analyst</i> , 2012, 137, 2374.	3.5	53
62	Developmental phases of individual mouse preimplantation embryos characterized by lipid signatures using desorption electrospray ionization mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 2915-2926.	3.7	54
63	Improved spatial resolution in the imaging of biological tissue using desorption electrospray ionization. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 389-398.	3.7	126
64	Data Processing for 3D Mass Spectrometry Imaging. <i>Journal of the American Society for Mass Spectrometry</i> , 2012, 23, 1147-1156.	2.8	44
65	Tissue imprint imaging by desorption electrospray ionization mass spectrometry. <i>Analytical Methods</i> , 2011, 3, 1910.	2.7	48
66	Desorption Electrospray Ionization then MALDI Mass Spectrometry Imaging of Lipid and Protein Distributions in Single Tissue Sections. <i>Analytical Chemistry</i> , 2011, 83, 8366-8371.	6.5	142
67	Perspectives in imaging using mass spectrometry. <i>Chemical Communications</i> , 2011, 47, 2741-2746.	4.1	63
68	New ionization methods and miniature mass spectrometers for biomedicine: DESI imaging for cancer diagnostics and paper spray ionization for therapeutic drug monitoring. <i>Faraday Discussions</i> , 2011, 149, 247-267.	3.2	110
69	Desorption electrospray ionization mass spectrometry for lipid characterization and biological tissue imaging. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2011, 1811, 946-960.	2.4	210
70	Data quality in tissue analysis using desorption electrospray ionization. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 1949-1961.	3.7	52
71	Distinctive Glycerophospholipid Profiles of Human Seminoma and Adjacent Normal Tissues by Desorption Electrospray Ionization Imaging Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2011, 22, 1326-1333.	2.8	49
72	Multivariate Statistical Identification of Human Bladder Carcinomas Using Ambient Ionization Imaging Mass Spectrometry. <i>Chemistry - A European Journal</i> , 2011, 17, 2897-2902.	3.3	99

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73	Nondestructive, Histologically Compatible Tissue Imaging by Desorption Electrospray Ionization Mass Spectrometry. <i>ChemBioChem</i> , 2011, 12, 2129-2132.	2.6	125
74	Multivariate statistical differentiation of renal cell carcinomas based on lipidomic analysis by ambient ionization imaging mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 2969-2978.	3.7	137
75	Three-Dimensional Visualization of Mouse Brain by Lipid Analysis Using Ambient Ionization Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 873-876.	13.8	170
76	Discrimination of Human Astrocytoma Subtypes by Lipid Analysis Using Desorption Electrospray Ionization Imaging Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5953-5956.	13.8	116
77	Instantaneous chemical profiles of banknotes by ambient mass spectrometry. <i>Analyst, The</i> , 2010, 135, 2533.	3.5	84
78	Cholesterol Sulfate Imaging in Human Prostate Cancer Tissue by Desorption Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2010, 82, 3430-3434.	6.5	170
79	Analysis of biodiesel and biodiesel-petrodiesel blends by high performance thin layer chromatography combined with easy ambient sonic-spray ionization mass spectrometry. <i>Analyst, The</i> , 2009, 134, 1652.	3.5	67
80	Organic Reactions of Ionic Intermediates Promoted by Atmospheric Pressure Thermal Activation. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 3422-3425.	13.8	64
81	Atmospheric pressure thermal dissociation of phospho- and sulfopeptides. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 1897-1905.	2.8	14
82	Recognition of Cyclic, Acyclic, Exocyclic, and Spiro Acetals via Structurally Diagnostic Ion/Molecule Reactions with the (CH ₃) ₂ N-C ⁺ ≡O Acylium Ion. <i>Journal of Organic Chemistry</i> , 2008, 73, 5549-5557.	3.2	2
83	Single-Shot Biodiesel Analysis: Nearly Instantaneous Typification and Quality Control Solely by Ambient Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 7882-7886.	6.5	52
84	Neutral Fragment Mass Spectra via Ambient Thermal Dissociation of Peptide and Protein Ions. <i>Journal of the American Chemical Society</i> , 2007, 129, 5880-5886.	13.7	52
85	Ambient Eberlin reactions via desorption electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2006, 41, 1242-1246.	1.6	33