Jeffrey M Spraggins

List of Publications by Year
in descending order

80	3,733	182225 30	169272 56
papers	citations	h-index	g-index

163	163	163	4452
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rapid Multivariate Analysis Approach to Explore Differential Spatial Protein Profiles in Tissue. Journal of Proteome Research, 2023, 22, 1394-1405.	1.8	4
2	Highly multiplexed immunofluorescence of the human kidney using co-detection by indexing. Kidney International, 2022, 101, 137-143.	2.6	27
3	Spatial mapping of protein composition and tissue organization: a primer for multiplexed antibody-based imaging. Nature Methods, 2022, 19, 284-295.	9.0	156
4	High Spatial Resolution MALDI Imaging Mass Spectrometry of Fresh-Frozen Bone. Analytical Chemistry, 2022, 94, 3165-3172.	3.2	20
5	Uncovering Molecular Heterogeneity in the Kidney With Spatially Targeted Mass Spectrometry. Frontiers in Physiology, 2022, 13, 837773.	1.3	6
6	Referenced Kendrick Mass Defect Annotation and Class-Based Filtering of Imaging MS Lipidomics Experiments. Analytical Chemistry, 2022, 94, 5504-5513.	3.2	4
7	Multimodal Imaging Mass Spectrometry of Murine Gastrointestinal Tract with Retained Luminal Content. Journal of the American Society for Mass Spectrometry, 2022, 33, 1073-1076.	1.2	2
8	Viv: multiscale visualization of high-resolution multiplexed bioimaging data on the web. Nature Methods, 2022, 19, 515-516.	9.0	21
9	Multi-contrast computed tomography healthy kidney atlas. Computers in Biology and Medicine, 2022, 146, 105555.	3.9	4
10	Zn-regulated GTPase metalloprotein activator 1 modulates vertebrate zinc homeostasis. Cell, 2022, 185, 2148-2163.e27.	13.5	39
11	New Views of Old Proteins: Clarifying the Enigmatic Proteome. Molecular and Cellular Proteomics, 2022, 21, 100254.	2.5	16
12	Visualizing Staphylococcus aureus pathogenic membrane modification within the host infection environment by multimodal imaging mass spectrometry. Cell Chemical Biology, 2022, 29, 1209-1217.e4.	2.5	4
13	Spatially Targeted Proteomics of the Hostâ€“Pathogen Interface during Staphylococcal Abscess Formation. ACS Infectious Diseases, 2021, 7, 101-113.	1.8	17
14	Construction of a multi-phase contrast computed tomography kidney atlas. , 2021, 11596, .		1
15	Renal cortex, medulla and pelvicaliceal system segmentation on arterial phase CT images with random patch-based networks. , 2021, 11596, .		3
16	Molecular Mapping of Neutral Lipids Using Silicon Nanopost Arrays and TIMS Imaging Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 2519-2527.	1.2	5
17	Î±-Cyano-4-hydroxycinnamic Acid and Tri-Potassium Citrate Salt Pre-Coated Silicon Nanopost Array Provides Enhanced Lipid Detection for High Spatial Resolution MALDI Imaging Mass Spectrometry. Analytical Chemistry, 2021, 93, 12243-12249.	3.2	9
18	Automated biomarker candidate discovery in imaging mass spectrometry data through spatially localized Shapley additive explanations. Analytica Chimica Acta, 2021, 1177, 338522.	2.6	20

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19	Enhancement of Tryptic Peptide Signals from Tissue Sections Using MALDI IMS Postionization (MALDI-2). Journal of the American Society for Mass Spectrometry, 2021, 32, 2583-2591.	1.2	14
20	Clostridioides difficile infection induces a rapid influx of bile acids into the gut during colonization of the host. Cell Reports, 2021, 36, 109683.	2.9	16
21	Cadherin-11, Sparc-related modular calcium binding protein-2, and Pigment epithelium-derived factor are promising non-invasive biomarkers of kidney fibrosis. Kidney International, 2021, 100, 672-683.	2.6	21
22	Protocol for multimodal analysis of human kidney tissue by imaging mass spectrometry and CODEX multiplexed immunofluorescence. STAR Protocols, 2021, 2, 100747.	0.5	14
23	Uncovering matrix effects on lipid analyses in MALDI imaging mass spectrometry experiments. Journal of Mass Spectrometry, 2020, 55, e4491.	0.7	48
24	Modulating Isoprenoid Biosynthesis Increases Lipooligosaccharides and Restores Acinetobacter baumannii Resistance to Host and Antibiotic Stress. Cell Reports, 2020, 32, 108129.	2.9	14
25	Spatial Metabolomics of the Human Kidney using MALDI Trapped Ion Mobility Imaging Mass Spectrometry. Analytical Chemistry, 2020, 92, 13084-13091.	3.2	49
26	Methyltransferase Contingencies in the Pathway of Everninomicin D Antibiotics and Analogues. ChemBioChem, 2020, 21, 3349-3358.	1.3	4
27	35th ASMS Asilomar Conference on Mass Spectrometry. Mass Spectrometry Imaging: New Developments and Applications. Journal of the American Society for Mass Spectrometry, 2020, 31, 2390-2391.	1.2	0
28	Multimodal Imaging Mass Spectrometry: Next Generation Molecular Mapping in Biology and Medicine. Journal of the American Society for Mass Spectrometry, 2020, 31, 2401-2415.	1.2	68
29	Bifunctional Nitrone-Conjugated Secondary Metabolite Targeting the Ribosome. Journal of the American Chemical Society, 2020, 142, 18369-18377.	6.6	7
30	Accumulation of long-chain fatty acids in the tumor microenvironment drives dysfunction in intrapancreatic CD8+ T cells. Journal of Experimental Medicine, 2020, 217, .	4.2	142
31	Dynamic Range Expansion by Gas-Phase Ion Fractionation and Enrichment for Imaging Mass Spectrometry. Analytical Chemistry, 2020, 92, 13092-13100.	3.2	17
32	Resolving the Complexity of Spatial Lipidomics Using MALDI TIMS Imaging Mass Spectrometry. Analytical Chemistry, 2020, 92, 13290-13297.	3.2	70
33	Use of Single-Cell -Omic Technologies to Study the Gastrointestinal Tract and Diseases, From Single Cell Identities to Patient Features. Gastroenterology, 2020, 159, 453-466.e1.	0.6	17
34	Lipid Landscape of the Human Retina and Supporting Tissues Revealed by High-Resolution Imaging Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 2426-2436.	1.2	28
35	Integrating ion mobility and imaging mass spectrometry for comprehensive analysis of biological tissues: A brief review and perspective. Journal of Mass Spectrometry, 2020, 55, e4614.	0.7	31
36	Integrated molecular imaging technologies for investigation of metals in biological systems: A brief review. Current Opinion in Chemical Biology, 2020, 55, 127-135.	2.8	17

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37	Discovering New Lipidomic Features Using Cell Type Specific Fluorophore Expression to Provide Spatial and Biological Specificity in a Multimodal Workflow with MALDI Imaging Mass Spectrometry. Analytical Chemistry, 2020, 92, 7079-7086.	3.2	26
38	Effect of MALDI matrices on lipid analyses of biological tissues using MALDIâ€2 postionization mass spectrometry. Journal of Mass Spectrometry, 2020, 55, e4663.	0.7	29
39	High-Performance Molecular Imaging with MALDI Trapped Ion-Mobility Time-of-Flight (timsTOF) Mass Spectrometry. Analytical Chemistry, 2019, 91, 14552-14560.	3.2	148
40	Staphylococcus aureus exhibits heterogeneous siderophore production within the vertebrate host. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21980-21982.	3.3	62
41	Combining MALDIâ€2 and transmission geometry laser optics to achieve high sensitivity for ultraâ€high spatial resolution surface analysis. Journal of Mass Spectrometry, 2019, 54, 366-370.	0.7	35
42	Two Specific Sulfatide Species Are Dysregulated during Renal Development in a Mouse Model of Alport Syndrome. Lipids, 2019, 54, 411-418.	0.7	10
43	The importance of clinical tissue imaging. Clinical Mass Spectrometry, 2019, 12, 47-49.	1.9	6
44	MicroLESA: Integrating Autofluorescence Microscopy, In Situ Micro-Digestions, and Liquid Extraction Surface Analysis for High Spatial Resolution Targeted Proteomic Studies. Analytical Chemistry, 2019, 91, 7578-7585.	3.2	51
45	Imaging mass spectrometry enables molecular profiling of mouse and human pancreatic tissue. Diabetologia, 2019, 62, 1036-1047.	2.9	33
46	Protein identification strategies in MALDI imaging mass spectrometry: a brief review. Current Opinion in Chemical Biology, 2019, 48, 64-72.	2.8	121
47	Enhanced Ion Transmission Efficiency up to m/z 24â€¯000 for MALDI Protein Imaging Mass Spectrometry. Analytical Chemistry, 2018, 90, 5090-5099.	3.2	41
48	Protein identification in imaging mass spectrometry through spatially targeted liquid microâ€extractions. Rapid Communications in Mass Spectrometry, 2018, 32, 442-450.	0.7	27
49	Regional differences in brain glucose metabolism determined by imaging mass spectrometry. Molecular Metabolism, 2018, 12, 113-121.	3.0	40
50	Integrated molecular imaging reveals tissue heterogeneity driving host-pathogen interactions. Science Translational Medicine, 2018, 10, .	5.8	58
51	Viewing the Future of IR through Molecular Histology: An Overview of Imaging Mass Spectrometry. Journal of Vascular and Interventional Radiology, 2018, 29, 1543-1546.e1.	0.2	2
52	Response of Secondary Metabolism of Hypogean Actinobacterial Genera to Chemical and Biological Stimuli. Applied and Environmental Microbiology, 2018, 84, .	1.4	26
53	Integrated, High-Throughput, Multiomics Platform Enables Data-Driven Construction of Cellular Responses and Reveals Global Drug Mechanisms of Action. Journal of Proteome Research, 2017, 16, 1364-1375.	1.8	34
54	Connecting imaging mass spectrometry and magnetic resonance imaging-based anatomical atlases for automated anatomical interpretation and differential analysis. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 967-977.	1.1	44

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55	Bis(monoacylglycero)phosphate lipids in the retinal pigment epithelium implicate lysosomal/endosomal dysfunction in a model of Stargardt disease and human retinas. Scientific Reports, 2017, 7, 17352.	1.6	37
56	Spatial distributions of glutathione and its endogenous conjugates in normal bovine lens and a model of lens aging. Experimental Eye Research, 2017, 154, 70-78.	1.2	30
57	Trypsin and MALDI matrix preâ€coated targets simplify sample preparation for mapping proteomic distributions within biological tissues by imaging mass spectrometry. Journal of Mass Spectrometry, 2016, 51, 1168-1179.	0.7	19
58	Nextâ€generation technologies for spatial proteomics: Integrating ultraâ€high speed MALDIâ€TOF and high mass resolution MALDI FTICR imaging mass spectrometry for protein analysis. Proteomics, 2016, 16, 1678-1689.	1.3	123
59	Phospholipid profiling identifies acyl chain elongation as a ubiquitous trait and potential target for the treatment of lung squamous cell carcinoma. Oncotarget, 2016, 7, 12582-12597.	0.8	58
60	Decellularization of intact tissue enables MALDI imaging mass spectrometry analysis of the extracellular matrix. Journal of Mass Spectrometry, 2015, 50, 1288-1293.	0.7	32
61	MALDI imaging reveals lipid changes in the skin of leprosy patients before and after multidrug therapy (MDT). Journal of Mass Spectrometry, 2015, 50, 1374-1385.	0.7	18
62	MALDI Imaging Mass Spectrometry Spatially Maps Age-Related Deamidation and Truncation of Human Lens Aquaporin-0. , 2015, 56, 7398.		42
63	MALDI FTICR IMS of Intact Proteins: Using Mass Accuracy to Link Protein Images with Proteomics Data. Journal of the American Society for Mass Spectrometry, 2015, 26, 974-985.	1.2	95
64	EXIMS: an improved data analysis pipeline based on a new peak picking method for EXploring Imaging Mass Spectrometry data. Bioinformatics, 2015, 31, 3198-3206.	1.8	31
65	Image fusion of mass spectrometry and microscopy: a multimodality paradigm for molecular tissue mapping. Nature Methods, 2015, 12, 366-372.	9.0	240
66	High Spatial Resolution Imaging Mass Spectrometry of Human Optic Nerve Lipids and Proteins. Journal of the American Society for Mass Spectrometry, 2015, 26, 940-947.	1.2	32
67	Nonâ€small cell lung cancer is characterized by dramatic changes in phospholipid profiles. International Journal of Cancer, 2015, 137, 1539-1548.	2.3	143
68	Determination of N-retinylidene-N-retinylethanolamine (A2E) levels in central and peripheral areas of human retinal pigment epithelium. Photochemical and Photobiological Sciences, 2015, 14, 1983-1990.	1.6	26
69	The utilization of fluorescence to identify the components of lipofuscin by imaging mass spectrometry. Proteomics, 2014, 14, 936-944.	1.3	24
70	A derivatization and validation strategy for determining the spatial localization of endogenous amine metabolites in tissues using MALDI imaging mass spectrometry. Journal of Mass Spectrometry, 2014, 49, 665-673.	0.7	81
71	High Resolution MALDI Imaging Mass Spectrometry of Retinal Tissue Lipids. Journal of the American Society for Mass Spectrometry, 2014, 25, 1394-1403.	1.2	92
72	Diabetic nephropathy induces alterations in the glomerular and tubule lipid profiles. Journal of Lipid Research, 2014, 55, 1375-1385.	2.0	95

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73	High-resolution matrix-assisted laser desorption ionization-imaging mass spectrometry of lipids in rodent optic nerve tissue. Molecular Vision, 2013, 19, 581-92.	1.1	27
74	Targeted Multiplex Imaging Mass Spectrometry with Single Chain Fragment Variable (scfv) Recombinant Antibodies. Journal of the American Society for Mass Spectrometry, 2012, 23, 1689-1696.	1.2	23
75	Enhanced Sensitivity for High Spatial Resolution Lipid Analysis by Negative Ion Mode Matrix Assisted Laser Desorption Ionization Imaging Mass Spectrometry. Analytical Chemistry, 2012, 84, 1557-1564.	3.2	194
76	MALDI Imaging of Lipid Biochemistry in Tissues by Mass Spectrometry. Chemical Reviews, 2011, 111, 6491-6512.	23.0	320
77	High-Speed MALDI-TOF Imaging Mass Spectrometry: Rapid Ion Image Acquisition and Considerations for Next Generation Instrumentation. Journal of the American Society for Mass Spectrometry, 2011, 22, 1022-1031.	1.2	137
78	Fragmentation mechanisms of oxidized peptides elucidated by SID, RRKM modeling, and molecular dynamics. Journal of the American Society for Mass Spectrometry, 2009, 20, 1579-1592.	1.2	10
79	Peptide ozonolysis: Product structures and relative reactivities for oxidation of tyrosine and histidine residues. Journal of the American Society for Mass Spectrometry, 2006, 17, 1289-1298.	1.2	22
80	Is It Necessary To Dry Primary Standards before Analysis?. Journal of Chemical Education, 2005, 82, 311.	1.1	1