

Richard M Caprioli

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/411265/richard-m-caprioli-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

376
papers

27,626
citations

88
h-index

155
g-index

414
ext. papers

30,335
ext. citations

6.6
avg. IF

7.28
L-index

#	Paper	IF	Citations
376	Pyridine nucleotide redox potential in coronary smooth muscle couples myocardial blood flow to cardiac metabolism.. <i>Nature Communications</i> , 2022 , 13, 2051	17.4	0
375	Fundamental aspects of long-acting tenofovir alafenamide delivery from subdermal implants for HIV prophylaxis.. <i>Scientific Reports</i> , 2022 , 12, 8224	4.9	1
374	Zn-regulated GTPase metalloprotein activator 1 modulates vertebrate zinc homeostasis.. <i>Cell</i> , 2022 ,	56.2	5
373	Spatial mapping of protein composition and tissue organization: a primer for multiplexed antibody-based imaging. <i>Nature Methods</i> , 2021 ,	21.6	6
372	Highly multiplexed immunofluorescence of the human kidney using co-detection by indexing. <i>Kidney International</i> , 2021 ,	9.9	4
371	Impact of temperature-dependent phage expression on <i>Pseudomonas aeruginosa</i> biofilm formation. <i>Npj Biofilms and Microbiomes</i> , 2021 , 7, 22	8.2	5
370	An orthogonal methods assessment of topical drug concentrations in skin and the impact for risk assessment in the viable epidermis. <i>Regulatory Toxicology and Pharmacology</i> , 2021 , 123, 104934	3.4	1
369	Spatially Targeted Proteomics of the Host-Pathogen Interface during Staphylococcal Abscess Formation. <i>ACS Infectious Diseases</i> , 2021 , 7, 101-113	5.5	5
368	Diagnosis of melanoma by imaging mass spectrometry: Development and validation of a melanoma prediction model. <i>Journal of Cutaneous Pathology</i> , 2021 , 48, 1455-1462	1.7	3
367	Molecular Mapping of Neutral Lipids Using Silicon Nanopost Arrays and TIMS Imaging Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2021 , 32, 2519-2527	3.5	2
366	5-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. <i>Analytical Chemistry</i> , 2021 , 93, 12243-12249	7.8	3
365	Automated biomarker candidate discovery in imaging mass spectrometry data through spatially localized Shapley additive explanations. <i>Analytica Chimica Acta</i> , 2021 , 1177, 338522	6.6	4
364	Enhancement of Tryptic Peptide Signals from Tissue Sections Using MALDI IMS Postionization (MALDI-2). <i>Journal of the American Society for Mass Spectrometry</i> , 2021 , 32, 2583-2591	3.5	2
363	<i>Clostridioides difficile</i> infection induces a rapid influx of bile acids into the gut during colonization of the host. <i>Cell Reports</i> , 2021 , 36, 109683	10.6	2
362	Protocol for multimodal analysis of human kidney tissue by imaging mass spectrometry and CODEX multiplexed immunofluorescence. <i>STAR Protocols</i> , 2021 , 2, 100747	1.4	2
361	Brain delivery and activity of a lysosomal enzyme using a blood-brain barrier transport vehicle in mice. <i>Science Translational Medicine</i> , 2020 , 12,	17.5	57
360	Lipid Landscape of the Human Retina and Supporting Tissues Revealed by High-Resolution Imaging Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020 , 31, 2426-2436	3.5	12

359	Integrating ion mobility and imaging mass spectrometry for comprehensive analysis of biological tissues: A brief review and perspective. <i>Journal of Mass Spectrometry</i> , 2020 , 55, e4614	2.2	15
358	Histopathologic, immunophenotypic, and proteomics characteristics of low-grade phyllodes tumor and fibroadenoma: more similarities than differences. <i>Npj Breast Cancer</i> , 2020 , 6, 27	7.8	7
357	Integrated molecular imaging technologies for investigation of metals in biological systems: A brief review. <i>Current Opinion in Chemical Biology</i> , 2020 , 55, 127-135	9.7	8
356	Combined Src/EGFR Inhibition Targets STAT3 Signaling and Induces Stromal Remodeling to Improve Survival in Pancreatic Cancer. <i>Molecular Cancer Research</i> , 2020 , 18, 623-631	6.6	17
355	Matrix-Assisted Laser Desorption/Ionization Imaging Mass Spectrometry: Technology and Applications. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2020 , 109-128	0.1	
354	Sample Preparation and Analysis of Single Cells Using High Performance MALDI FTICR Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2020 , 2064, 125-134	1.4	6
353	Unsupervised machine learning for exploratory data analysis in imaging mass spectrometry. <i>Mass Spectrometry Reviews</i> , 2020 , 39, 245-291	11	64
352	Uncovering matrix effects on lipid analyses in MALDI imaging mass spectrometry experiments. <i>Journal of Mass Spectrometry</i> , 2020 , 55, e4491	2.2	26
351	Modulating Isoprenoid Biosynthesis Increases Lipooligosaccharides and Restores <i>Acinetobacter baumannii</i> Resistance to Host and Antibiotic Stress. <i>Cell Reports</i> , 2020 , 32, 108129	10.6	2
350	Spatial Metabolomics of the Human Kidney using MALDI Trapped Ion Mobility Imaging Mass Spectrometry. <i>Analytical Chemistry</i> , 2020 , 92, 13084-13091	7.8	21
349	Multimodal Imaging Mass Spectrometry: Next Generation Molecular Mapping in Biology and Medicine. <i>Journal of the American Society for Mass Spectrometry</i> , 2020 , 31, 2401-2415	3.5	19
348	Accumulation of long-chain fatty acids in the tumor microenvironment drives dysfunction in intrapancreatic CD8+ T cells. <i>Journal of Experimental Medicine</i> , 2020 , 217,	16.6	37
347	Dynamic Range Expansion by Gas-Phase Ion Fractionation and Enrichment for Imaging Mass Spectrometry. <i>Analytical Chemistry</i> , 2020 , 92, 13092-13100	7.8	4
346	Resolving the Complexity of Spatial Lipidomics Using MALDI TIMS Imaging Mass Spectrometry. <i>Analytical Chemistry</i> , 2020 , 92, 13290-13297	7.8	21
345	Probiotics Modulate a Novel Amphibian Skin Defense Peptide That Is Antifungal and Facilitates Growth of Antifungal Bacteria. <i>Microbial Ecology</i> , 2020 , 79, 192-202	4.4	14
344	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. <i>Analytical Chemistry</i> , 2020 , 92, 7079-7086	7.8	15
343	Effect of MALDI matrices on lipid analyses of biological tissues using MALDI-2 postionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2020 , 55, e4663	2.2	5
342	Combining Salt Doping and Matrix Sublimation for High Spatial Resolution MALDI Imaging Mass Spectrometry of Neutral Lipids. <i>Analytical Chemistry</i> , 2019 , 91, 12928-12934	7.8	22

341	Combining MALDI-2 and transmission geometry laser optics to achieve high sensitivity for ultra-high spatial resolution surface analysis. <i>Journal of Mass Spectrometry</i> , 2019 , 54, 366-370	2.2	21
340	Two Specific Sulfatide Species Are Dysregulated during Renal Development in a Mouse Model of Alport Syndrome. <i>Lipids</i> , 2019 , 54, 411-418	1.6	1
339	MicroLESA: Integrating Autofluorescence Microscopy, In Situ Micro-Digestions, and Liquid Extraction Surface Analysis for High Spatial Resolution Targeted Proteomic Studies. <i>Analytical Chemistry</i> , 2019 , 91, 7578-7585	7.8	29
338	Zinc intoxication induces ferroptosis in A549 human lung cells. <i>Metallomics</i> , 2019 , 11, 982-993	4.5	15
337	Imaging Mass Spectrometry: A Perspective. <i>Journal of Biomolecular Techniques</i> , 2019 , 30, 7-11	1.1	13
336	Imaging mass spectrometry enables molecular profiling of mouse and human pancreatic tissue. <i>Diabetologia</i> , 2019 , 62, 1036-1047	10.3	23
335	Multiple TOF/TOF Events in a Single Laser Shot for Multiplexed Lipid Identifications in MALDI Imaging Mass Spectrometry. <i>International Journal of Mass Spectrometry</i> , 2019 , 437, 30-37	1.9	8
334	A recommended and verified procedure for in situ tryptic digestion of formalin-fixed paraffin-embedded tissues for analysis by matrix-assisted laser desorption/ionization imaging mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2019 , 54, 716-727	2.2	19
333	High-Performance Molecular Imaging with MALDI Trapped Ion-Mobility Time-of-Flight (timsTOF) Mass Spectrometry. <i>Analytical Chemistry</i> , 2019 , 91, 14552-14560	7.8	67
332	exhibits heterogeneous siderophore production within the vertebrate host. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 21980-21982	11.5	36
331	Precision Medicine in Pancreatic Disease-Knowledge Gaps and Research Opportunities: Summary of a National Institute of Diabetes and Digestive and Kidney Diseases Workshop. <i>Pancreas</i> , 2019 , 48, 1250-1258	2.6	6
330	Protein identification strategies in MALDI imaging mass spectrometry: a brief review. <i>Current Opinion in Chemical Biology</i> , 2019 , 48, 64-72	9.7	71
329	Discerning the Primary Carcinoma in Malignant Peritoneal and Pleural Effusions Using Imaging Mass Spectrometry-A Feasibility Study. <i>Proteomics - Clinical Applications</i> , 2019 , 13, e1800064	3.1	5
328	Enhanced Ion Transmission Efficiency up to m/z 24 000 for MALDI Protein Imaging Mass Spectrometry. <i>Analytical Chemistry</i> , 2018 , 90, 5090-5099	7.8	26
327	Protein identification in imaging mass spectrometry through spatially targeted liquid micro-extractions. <i>Rapid Communications in Mass Spectrometry</i> , 2018 , 32, 442-450	2.2	22
326	Pyruvate induces torpor in obese mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 810-815	11.5	11
325	Regional differences in brain glucose metabolism determined by imaging mass spectrometry. <i>Molecular Metabolism</i> , 2018 , 12, 113-121	8.8	26
324	Integrated molecular imaging reveals tissue heterogeneity driving host-pathogen interactions. <i>Science Translational Medicine</i> , 2018 , 10,	17.5	39

323	Single-Cell Mass Spectrometry Reveals Changes in Lipid and Metabolite Expression in RAW 264.7 Cells upon Lipopolysaccharide Stimulation. <i>Journal of the American Society for Mass Spectrometry</i> , 2018 , 29, 1012-1020	3.5	18
322	Optic Nerve Regeneration After Crush Remodels the Injury Site: Molecular Insights From Imaging Mass Spectrometry 2018 , 59, 212-222		11
321	Micro-Data-Independent Acquisition for High-Throughput Proteomics and Sensitive Peptide Mass Spectrum Identification. <i>Analytical Chemistry</i> , 2018 , 90, 8905-8911	7.8	12
320	An Integrated, High-Throughput Strategy for Multiomic Systems Level Analysis. <i>Journal of Proteome Research</i> , 2018 , 17, 3396-3408	5.6	21
319	Novel vacuum stable ketone-based matrices for high spatial resolution MALDI imaging mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2018 , 53, 1005-1012	2.2	13
318	Beyond the H&E: Advanced Technologies for in situ Tissue Biomarker Imaging. <i>ILAR Journal</i> , 2018 , 59, 51-65	1.7	6
317	Heme sensing and detoxification by HatRT contributes to pathogenesis during Clostridium difficile infection. <i>PLoS Pathogens</i> , 2018 , 14, e1007486	7.6	17
316	Advanced Registration and Analysis of MALDI Imaging Mass Spectrometry Measurements through Autofluorescence Microscopy. <i>Analytical Chemistry</i> , 2018 , 90, 12395-12403	7.8	45
315	Next Generation Histology-Directed Imaging Mass Spectrometry Driven by Autofluorescence Microscopy. <i>Analytical Chemistry</i> , 2018 , 90, 12404-12413	7.8	30
314	Imaging mass spectrometry reveals direct albumin fragmentation within the diabetic kidney. <i>Kidney International</i> , 2018 , 94, 292-302	9.9	5
313	Integrated, High-Throughput, Multiomics Platform Enables Data-Driven Construction of Cellular Responses and Reveals Global Drug Mechanisms of Action. <i>Journal of Proteome Research</i> , 2017 , 16, 1364-1375	5.6	25
312	Connecting imaging mass spectrometry and magnetic resonance imaging-based anatomical atlases for automated anatomical interpretation and differential analysis. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017 , 1865, 967-977	4	31
311	Enhanced Spatially Resolved Proteomics Using On-Tissue Hydrogel-Mediated Protein Digestion. <i>Analytical Chemistry</i> , 2017 , 89, 2948-2955	7.8	22
310	Mass Spectrometry Imaging Can Distinguish on a Proteomic Level Between Proliferative Nodules Within a Benign Congenital Nevus and Malignant Melanoma. <i>American Journal of Dermatopathology</i> , 2017 , 39, 689-695	0.9	13
309	Imaging MS of Rodent Ocular Tissues and the Optic Nerve. <i>Methods in Molecular Biology</i> , 2017 , 1618, 15-27	1.4	4
308	Dietary Manganese Promotes Staphylococcal Infection of the Heart. <i>Cell Host and Microbe</i> , 2017 , 22, 531-542.e8	23.4	37
307	Label-free molecular imaging of the kidney. <i>Kidney International</i> , 2017 , 92, 580-598	9.9	16
306	Bis(monoacylglycero)phosphate lipids in the retinal pigment epithelium implicate lysosomal/endosomal dysfunction in a model of Stargardt disease and human retinas. <i>Scientific Reports</i> , 2017 , 7, 17352	4.9	25

305	The Use of Multiple Fragmentation Events in a Single Laser Shot for Improved Drug Quantification by MALDI TOF/TOF Mass Spectrometry. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2017 , 269-276	0.1	
304	Imaging Mass Spectrometry [Molecular Microscopy for Biological and Clinical Research. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2017 , 115-132	0.1	2
303	Spatial distributions of glutathione and its endogenous conjugates in normal bovine lens and a model of lens aging. <i>Experimental Eye Research</i> , 2017 , 154, 70-78	3.7	21
302	Absolute Quantification of Rifampicin by MALDI Imaging Mass Spectrometry Using Multiple TOF/TOF Events in a Single Laser Shot. <i>Journal of the American Society for Mass Spectrometry</i> , 2017 , 28, 136-144	3.5	44
301	Imaging mass spectrometry assists in the classification of diagnostically challenging atypical Spitzoid neoplasms. <i>Journal of the American Academy of Dermatology</i> , 2016 , 75, 1176-1186.e4	4.5	36
300	The innate immune protein calprotectin promotes <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus aureus</i> interaction. <i>Nature Communications</i> , 2016 , 7, 11951	17.4	70
299	Next-generation technologies for spatial proteomics: Integrating ultra-high speed MALDI-TOF and high mass resolution MALDI FTICR imaging mass spectrometry for protein analysis. <i>Proteomics</i> , 2016 , 16, 1678-89	4.8	97
298	3-D imaging mass spectrometry of protein distributions in mouse Neurofibromatosis 1 (NF1)-associated optic glioma. <i>Journal of Proteomics</i> , 2016 , 149, 77-84	3.9	14
297	Imaging mass spectrometry: Molecular microscopy for the new age of biology and medicine. <i>Proteomics</i> , 2016 , 16, 1607-12	4.8	43
296	Absolute Quantitative MALDI Imaging Mass Spectrometry: A Case of Rifampicin in Liver Tissues. <i>Analytical Chemistry</i> , 2016 , 88, 2392-8	7.8	115
295	The Need for Speed in Matrix-Assisted Laser Desorption/Ionization Imaging Mass Spectrometry. <i>Postdoc Journal</i> , 2016 , 4, 3-13		11
294	Phospholipid profiling identifies acyl chain elongation as a ubiquitous trait and potential target for the treatment of lung squamous cell carcinoma. <i>Oncotarget</i> , 2016 , 7, 12582-97	3.3	45
293	Pathology interface for the molecular analysis of tissue by mass spectrometry. <i>Journal of Pathology Informatics</i> , 2016 , 7, 13	4.4	9
292	Histology-guided protein digestion/extraction from formalin-fixed and paraffin-embedded pressure ulcer biopsies. <i>Experimental Dermatology</i> , 2016 , 25, 143-6	4	15
291	Imaging mass spectrometry for accessing molecular changes during burn wound healing. <i>Wound Repair and Regeneration</i> , 2016 , 24, 775-785	3.6	8
290	Pragmatic pharmacology: population pharmacokinetic analysis of fentanyl using remnant samples from children after cardiac surgery. <i>British Journal of Clinical Pharmacology</i> , 2016 , 81, 1165-74	3.8	15
289	The Development of Imaging Mass Spectrometry 2016 , 285-304		3
288	Potential of MALDI imaging for the toxicological evaluation of environmental pollutants. <i>Journal of Proteomics</i> , 2016 , 144, 133-9	3.9	24

287	Multiple Time-of-Flight/Time-of-Flight Events in a Single Laser Shot for Improved Matrix-Assisted Laser Desorption/Ionization Tandem Mass Spectrometry Quantification. <i>Analytical Chemistry</i> , 2016 , 88, 9780-9788	7.8	10
286	Dietary zinc alters the microbiota and decreases resistance to <i>Clostridium difficile</i> infection. <i>Nature Medicine</i> , 2016 , 22, 1330-1334	50.5	136
285	Life history linked to immune investment in developing amphibians 2016 , 4, cow025		20
284	Trypsin and MALDI matrix pre-coated targets simplify sample preparation for mapping proteomic distributions within biological tissues by imaging mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2016 , 51, 1168-1179	2.2	12
283	Standard Reticle Slide To Objectively Evaluate Spatial Resolution and Instrument Performance in Imaging Mass Spectrometry. <i>Analytical Chemistry</i> , 2016 , 88, 7302-11	7.8	7
282	MALDI Imaging Mass Spectrometry as a Lipidomic Approach to Heart Valve Research. <i>Journal of Heart Valve Disease</i> , 2016 , 25, 240-252		12
281	Image fusion of mass spectrometry and microscopy: a multimodality paradigm for molecular tissue mapping. <i>Nature Methods</i> , 2015 , 12, 366-72	21.6	167
280	Tissue protein imaging at 1 μ m laser spot diameter for high spatial resolution and high imaging speed using transmission geometry MALDI TOF MS. <i>Analytical and Bioanalytical Chemistry</i> , 2015 , 407, 2337-42	4.4	115
279	Peptide spectra in Wilms tumor that associate with adverse outcomes. <i>Journal of Surgical Research</i> , 2015 , 196, 332-8	2.5	4
278	Histology-directed and imaging mass spectrometry: An emerging technology in ectopic calcification. <i>Bone</i> , 2015 , 74, 83-94	4.7	22
277	Adhesive fiber stratification in uropathogenic <i>Escherichia coli</i> biofilms unveils oxygen-mediated control of type 1 pili. <i>PLoS Pathogens</i> , 2015 , 11, e1004697	7.6	52
276	Non-small cell lung cancer is characterized by dramatic changes in phospholipid profiles. <i>International Journal of Cancer</i> , 2015 , 137, 1539-48	7.5	116
275	High spatial resolution proteomic comparison of the brain in humans and chimpanzees. <i>Journal of Comparative Neurology</i> , 2015 , 523, 2043-61	3.4	16
274	Imaging mass spectrometry: enabling a new age of discovery in biology and medicine through molecular microscopy. <i>Journal of the American Society for Mass Spectrometry</i> , 2015 , 26, 850-2	3.5	24
273	High-speed MALDI MS/MS imaging mass spectrometry using continuous raster sampling. <i>Journal of Mass Spectrometry</i> , 2015 , 50, 703-10	2.2	59
272	Are clear cell carcinomas of the ovary and endometrium phenotypically identical? A proteomic analysis. <i>Human Pathology</i> , 2015 , 46, 1427-36	3.7	10
271	Signal Transducer and Activator of Transcription 3, Mediated Remodeling of the Tumor Microenvironment Results in Enhanced Tumor Drug Delivery in a Mouse Model of Pancreatic Cancer. <i>Gastroenterology</i> , 2015 , 149, 1932-1943.e9	13.3	107
270	Imaging mass spectrometry for assessing cutaneous wound healing: analysis of pressure ulcers. <i>Journal of Proteome Research</i> , 2015 , 14, 986-96	5.6	32

269	Decellularization of intact tissue enables MALDI imaging mass spectrometry analysis of the extracellular matrix. <i>Journal of Mass Spectrometry</i> , 2015 , 50, 1288-93	2.2	29
268	Congenital nevi versus metastatic melanoma in a newborn to a mother with malignant melanoma—diagnosis supported by sex chromosome analysis and Imaging Mass Spectrometry. <i>Journal of Cutaneous Pathology</i> , 2015 , 42, 757-64	1.7	19
267	MALDI FTICR IMS of Intact Proteins: Using Mass Accuracy to Link Protein Images with Proteomics Data. <i>Journal of the American Society for Mass Spectrometry</i> , 2015 , 26, 974-85	3.5	75
266	EXIMS: an improved data analysis pipeline based on a new peak picking method for EXploring Imaging Mass Spectrometry data. <i>Bioinformatics</i> , 2015 , 31, 3198-206	7.2	22
265	Histology-directed microwave assisted enzymatic protein digestion for MALDI MS analysis of mammalian tissue. <i>Analytical Chemistry</i> , 2015 , 87, 670-6	7.8	25
264	David Rittenberg 2015 , 177		
263	Matrix pre-coated targets for high throughput MALDI imaging of proteins. <i>Journal of Mass Spectrometry</i> , 2014 , 49, 417-22	2.2	20
262	Acyl-coenzyme A-binding protein regulates Beta-oxidation required for growth and survival of non-small cell lung cancer. <i>Cancer Prevention Research</i> , 2014 , 7, 748-57	3.2	26
261	Automated anatomical interpretation of ion distributions in tissue: linking imaging mass spectrometry to curated atlases. <i>Analytical Chemistry</i> , 2014 , 86, 8974-82	7.8	32
260	A derivatization and validation strategy for determining the spatial localization of endogenous amine metabolites in tissues using MALDI imaging mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2014 , 49, 665-73	2.2	65
259	Advanced mass spectrometry technologies for the study of microbial pathogenesis. <i>Current Opinion in Microbiology</i> , 2014 , 19, 45-51	7.9	25
258	Implementation of a Gaussian beam laser and aspheric optics for high spatial resolution MALDI imaging MS. <i>Journal of the American Society for Mass Spectrometry</i> , 2014 , 25, 1079-82	3.5	35
257	High resolution MALDI imaging mass spectrometry of retinal tissue lipids. <i>Journal of the American Society for Mass Spectrometry</i> , 2014 , 25, 1394-403	3.5	74
256	Diabetic nephropathy induces alterations in the glomerular and tubule lipid profiles. <i>Journal of Lipid Research</i> , 2014 , 55, 1375-85	6.3	67
255	Towards automated discrimination of lipids versus peptides from full scan mass spectra. <i>EuPA Open Proteomics</i> , 2014 , 4, 87-100	0.1	5
254	Race disparities in peptide profiles of North American and Kenyan Wilms tumor specimens. <i>Journal of the American College of Surgeons</i> , 2014 , 218, 707-20	4.4	19
253	Co-registration of multi-modality imaging allows for comprehensive analysis of tumor-induced bone disease. <i>Bone</i> , 2014 , 61, 208-16	4.7	22
252	Imaging mass spectrometry for assessing temporal proteomics: analysis of calprotectin in <i>Acinetobacter baumannii</i> pulmonary infection. <i>Proteomics</i> , 2014 , 14, 820-828	4.8	39

251	Imaging mass spectrometry: molecular microscopy for enabling a new age of discovery. <i>Proteomics</i> , 2014 , 14, 807-9	4.8	20
250	MALDI imaging mass spectrometry: spatial molecular analysis to enable a new age of discovery. <i>Journal of Proteomics</i> , 2014 , 107, 71-82	3.9	198
249	MALDI Imaging Mass Spectrometry. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2014 , 99-113	0.1	
248	Targeted multiplex imaging mass spectrometry in transmission geometry for subcellular spatial resolution. <i>Journal of the American Society for Mass Spectrometry</i> , 2013 , 24, 609-14	3.5	38
247	MALDI imaging and in situ identification of integral membrane proteins from rat brain tissue sections. <i>Analytical Chemistry</i> , 2013 , 85, 7191-6	7.8	37
246	Imaging mass spectrometry: a new tool for pathology in a molecular age. <i>Proteomics - Clinical Applications</i> , 2013 , 7, 733-8	3.1	57
245	An LC-MS assay for the screening of cardiovascular medications in human samples. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2013 , 937, 44-53	3.2	32
244	Imaging the clear cell renal cell carcinoma proteome. <i>Journal of Urology</i> , 2013 , 189, 1097-103	2.5	36
243	Imaging Mass Spectrometry of Intact Biomolecules in Tissue Sections 2013 , 393-406		
242	Matrix-assisted laser desorption ionization imaging mass spectrometry: in situ molecular mapping. <i>Biochemistry</i> , 2013 , 52, 3818-28	3.2	101
241	Analysis of tissue specimens by matrix-assisted laser desorption/ionization imaging mass spectrometry in biological and clinical research. <i>Chemical Reviews</i> , 2013 , 113, 2309-42	68.1	468
240	Identification of promethazine as an amyloid-binding molecule using a fluorescence high-throughput assay and MALDI imaging mass spectrometry. <i>NeuroImage: Clinical</i> , 2013 , 2, 620-9	5.3	17
239	Imaging Mass Spectrometry of Proteins and Peptides 2013 , 277-302		
238	Localized in situ hydrogel-mediated protein digestion and extraction technique for on-tissue analysis. <i>Analytical Chemistry</i> , 2013 , 85, 2717-23	7.8	39
237	Matrix precoated targets for direct lipid analysis and imaging of tissue. <i>Analytical Chemistry</i> , 2013 , 85, 2907-12	7.8	39
236	Imaging mass spectrometry of intact biomolecules in tissue sections 2013 , 339-352		
235	Laser beam filtration for high spatial resolution MALDI imaging mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2013 , 24, 1153-6	3.5	63
234	MntABC and MntH contribute to systemic <i>Staphylococcus aureus</i> infection by competing with calprotectin for nutrient manganese. <i>Infection and Immunity</i> , 2013 , 81, 3395-405	3.7	143

233	Activation of heme biosynthesis by a small molecule that is toxic to fermenting <i>Staphylococcus aureus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 8206-115	34
232	Proteomic patterns of colonic mucosal tissues delineate Crohn's colitis and ulcerative colitis. <i>Proteomics - Clinical Applications</i> , 2013 , 7, 541-9	3.1 42
231	Differential intrahepatic phospholipid zonation in simple steatosis and nonalcoholic steatohepatitis. <i>PLoS ONE</i> , 2013 , 8, e57165	3.7 43
230	Cell-autonomous and non-cell-autonomous roles for IRF6 during development of the tongue. <i>PLoS ONE</i> , 2013 , 8, e56270	3.7 13
229	Targeted multiplex imaging mass spectrometry with single chain fragment variable (scfv) recombinant antibodies. <i>Journal of the American Society for Mass Spectrometry</i> , 2012 , 23, 1689-96	3.5 21
228	Activity-based probes linked with laser-cleavable mass tags for signal amplification in imaging mass spectrometry: analysis of serine hydrolase enzymes in mammalian tissue. <i>Analytical Chemistry</i> , 2012 , 84, 3689-95	7.8 29
227	Monitoring the inflammatory response to infection through the integration of MALDI IMS and MRI. <i>Cell Host and Microbe</i> , 2012 , 11, 664-73	23.4 62
226	Enhanced sensitivity for high spatial resolution lipid analysis by negative ion mode matrix assisted laser desorption ionization imaging mass spectrometry. <i>Analytical Chemistry</i> , 2012 , 84, 1557-64	7.8 164
225	Dual analysis for mycobacteria and propionibacteria in sarcoidosis BAL. <i>Journal of Clinical Immunology</i> , 2012 , 32, 1129-40	5.7 60
224	3D imaging by mass spectrometry: a new frontier. <i>Analytical Chemistry</i> , 2012 , 84, 2105-10	7.8 118
223	Molecular characterization of Wilms' tumor from a resource-constrained region of sub-Saharan Africa. <i>International Journal of Cancer</i> , 2012 , 131, E983-94	7.5 21
222	Identification of an <i>Acinetobacter baumannii</i> zinc acquisition system that facilitates resistance to calprotectin-mediated zinc sequestration. <i>PLoS Pathogens</i> , 2012 , 8, e1003068	7.6 184
221	Direct imaging of single cells and tissue at sub-cellular spatial resolution using transmission geometry MALDI MS. <i>Journal of Mass Spectrometry</i> , 2012 , 47, 1473-81	2.2 160
220	Altered expression of nuclear and cytoplasmic histone H1 in pulmonary artery and pulmonary artery smooth muscle cells in patients with IPAH. <i>Pulmonary Circulation</i> , 2012 , 2, 340-51	2.7 8
219	Direct imaging of single cells and tissue at sub-cellular spatial resolution using transmission geometry MALDI MS. <i>Journal of Mass Spectrometry</i> , 2012 , 47, i	2.2 23
218	Imaging mass spectrometry--a new and promising method to differentiate Spitz nevi from Spitzoid malignant melanomas. <i>American Journal of Dermatopathology</i> , 2012 , 34, 82-90	0.9 91
217	Proteomic analysis of formalin-fixed paraffin-embedded tissue by MALDI imaging mass spectrometry. <i>Nature Protocols</i> , 2011 , 6, 1695-709	18.8 207
216	Comparative Proteomics by Direct Tissue Analysis Using Imaging Mass Spectrometry 2011 , 129-138	

215	MALDI imaging of lipid biochemistry in tissues by mass spectrometry. <i>Chemical Reviews</i> , 2011 , 111, 6491-6512	15.2	258
214	In situ mass spectrometry of autoimmune liver diseases. <i>Cellular and Molecular Immunology</i> , 2011 , 8, 237-42	15.4	10
213	Lung cancer diagnosis from proteomic analysis of preinvasive lesions. <i>Cancer Research</i> , 2011 , 71, 3009-17	10.1	55
212	Race disparities in Wilms tumor incidence and biology. <i>Journal of Surgical Research</i> , 2011 , 170, 112-9	2.5	32
211	High-speed MALDI-TOF imaging mass spectrometry: rapid ion image acquisition and considerations for next generation instrumentation. <i>Journal of the American Society for Mass Spectrometry</i> , 2011 , 22, 1022-31	3.5	117
210	Multiplexed molecular descriptors of pressure ulcers defined by imaging mass spectrometry. <i>Wound Repair and Regeneration</i> , 2011 , 19, 734-44	3.6	21
209	Spatial mapping by imaging mass spectrometry offers advancements for rapid definition of human skin proteomic signatures. <i>Experimental Dermatology</i> , 2011 , 20, 642-7	4	22
208	From proteomic multimarker profiling to interesting proteins: thymosin- β 4 and kininogen-1 as new potential biomarkers for inflammatory hepatic lesions. <i>Journal of Cellular and Molecular Medicine</i> , 2011 , 15, 2176-88	5.6	16
207	MALDI imaging mass spectrometry of human tissue: method challenges and clinical perspectives. <i>Trends in Biotechnology</i> , 2011 , 29, 136-43	15.1	150
206	Matrix pre-coated MALDI MS targets for small molecule imaging in tissues. <i>Journal of the American Society for Mass Spectrometry</i> , 2011 , 22, 192-5	3.5	51
205	Reagent precoated targets for rapid in-tissue derivatization of the anti-tuberculosis drug isoniazid followed by MALDI imaging mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2011 , 22, 1409-19	3.5	62
204	Detergent enhancement of on-tissue protein analysis by matrix-assisted laser desorption/ionization imaging mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2011 , 25, 199-204	2.2	22
203	High spatial resolution imaging mass spectrometry and classical histology on a single tissue section. <i>Journal of Mass Spectrometry</i> , 2011 , 46, 568-71	2.2	84
202	On-tissue chemical derivatization of 3-methoxysalicylamine for MALDI-imaging mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2011 , 46, 840-6	2.2	49
201	Proteomic profiling of mucosal and submucosal colonic tissues yields protein signatures that differentiate the inflammatory colitides. <i>Inflammatory Bowel Diseases</i> , 2011 , 17, 875-83	4.5	52
200	Networked-based characterization of extracellular matrix proteins from adult mouse pulmonary and aortic valves. <i>Journal of Proteome Research</i> , 2011 , 10, 812-23	5.6	33
199	ScanRanker: Quality assessment of tandem mass spectra via sequence tagging. <i>Journal of Proteome Research</i> , 2011 , 10, 2896-904	5.6	23
198	High-throughput quantification of bioactive lipids by MALDI mass spectrometry: application to prostaglandins. <i>Analytical Chemistry</i> , 2011 , 83, 6683-8	7.8	18

197	Matrix sublimation/recrystallization for imaging proteins by mass spectrometry at high spatial resolution. <i>Analytical Chemistry</i> , 2011 , 83, 5728-34	7.8	280
196	Protein signatures for survival and recurrence in metastatic melanoma. <i>Journal of Proteomics</i> , 2011 , 74, 1002-14	3.9	94
195	Imaging of intact tissue sections: moving beyond the microscope. <i>Journal of Biological Chemistry</i> , 2011 , 286, 25459-66	5.4	93
194	From whole-body sections down to cellular level, multiscale imaging of phospholipids by MALDI mass spectrometry. <i>Molecular and Cellular Proteomics</i> , 2011 , 10, O110.004259	7.6	100
193	Imaging Mass Spectrometry. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2011 , 267-283	0.1	1
192	Proteomic analysis of osteogenic sarcoma: association of tumour necrosis factor with poor prognosis. <i>International Journal of Experimental Pathology</i> , 2010 , 91, 335-49	2.8	8
191	The pros and cons of peptide-centric proteomics. <i>Nature Biotechnology</i> , 2010 , 28, 659-64	44.5	105
190	Molecular imaging by mass spectrometry--looking beyond classical histology. <i>Nature Reviews Cancer</i> , 2010 , 10, 639-46	31.3	273
189	The anti-tumorigenic properties of peroxisomal proliferator-activated receptor alpha are arachidonic acid epoxygenase-mediated. <i>Journal of Biological Chemistry</i> , 2010 , 285, 12840-50	5.4	66
188	Uterine FK506-binding protein 52 (FKBP52)-peroxiredoxin-6 (PRDX6) signaling protects pregnancy from overt oxidative stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 15577-82	11.5	53
187	Detection of tumor epidermal growth factor receptor pathway dependence by serum mass spectrometry in cancer patients. <i>Cancer Epidemiology Biomarkers and Prevention</i> , 2010 , 19, 358-65	4	48
186	Identification of markers of taxane sensitivity using proteomic and genomic analyses of breast tumors from patients receiving neoadjuvant paclitaxel and radiation. <i>Clinical Cancer Research</i> , 2010 , 16, 681-90	12.9	143
185	Imaging mass spectrometry: viewing the future. <i>Methods in Molecular Biology</i> , 2010 , 656, 3-19	1.4	28
184	MALDI imaging mass spectrometry--painting molecular pictures. <i>Molecular Oncology</i> , 2010 , 4, 529-38	7.9	98
183	Gastric cancer-specific protein profile identified using endoscopic biopsy samples via MALDI mass spectrometry. <i>Journal of Proteome Research</i> , 2010 , 9, 4123-30	5.6	68
182	Structural characterization of phospholipids and peptides directly from tissue sections by MALDI traveling-wave ion mobility-mass spectrometry. <i>Analytical Chemistry</i> , 2010 , 82, 1881-9	7.8	78
181	Molecular analysis of tumor margins by MALDI mass spectrometry in renal carcinoma. <i>Journal of Proteome Research</i> , 2010 , 9, 2182-90	5.6	133
180	Direct molecular analysis of whole-body animal tissue sections by MALDI imaging mass spectrometry. <i>Methods in Molecular Biology</i> , 2010 , 656, 285-301	1.4	37

179	Profiling and Imaging of Tissues by Imaging Ion Mobility Mass Spectrometry 2010 , 269-286		
178	Identification of early intestinal neoplasia protein biomarkers using laser capture microdissection and MALDI MS. <i>Molecular and Cellular Proteomics</i> , 2009 , 8, 936-45	7.6	22
177	Spatial and temporal alterations of phospholipids determined by mass spectrometry during mouse embryo implantation. <i>Journal of Lipid Research</i> , 2009 , 50, 2290-8	6.3	124
176	Liquid chromatography-tandem and MALDI imaging mass spectrometry analyses of RCL2/CS100-fixed, paraffin-embedded tissues: proteomics evaluation of an alternate fixative for biomarker discovery. <i>Journal of Proteome Research</i> , 2009 , 8, 5619-28	5.6	44
175	MALDI imaging mass spectrometry of integral membrane proteins from ocular lens and retinal tissue. <i>Journal of Proteome Research</i> , 2009 , 8, 3278-83	5.6	91
174	Variations in the expressed antimicrobial peptide repertoire of northern leopard frog (<i>Rana pipiens</i>) populations suggest intraspecies differences in resistance to pathogens. <i>Developmental and Comparative Immunology</i> , 2009 , 33, 1247-57	3.2	70
173	Indomethacin amides as a novel molecular scaffold for targeting <i>Trypanosoma cruzi</i> sterol 14 α -demethylase. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 2846-53	8.3	35
172	MALDI Imaging and Profiling Mass Spectrometry in Neuroproteomics. <i>Frontiers in Neuroscience</i> , 2009 , 115-134		
171	High-throughput profiling of formalin-fixed paraffin-embedded tissue using parallel electrophoresis and matrix-assisted laser desorption ionization mass spectrometry. <i>Analytical Chemistry</i> , 2009 , 81, 7490-5	7.8	15
170	MALDI IMS for Proteins and Biomarkers 2009 , 355-375		
169	Imaging mass spectrometry of proteins and peptides: 3D volume reconstruction. <i>Nature Methods</i> , 2008 , 5, 101-8	21.6	201
168	Integrating spatially resolved three-dimensional MALDI IMS with in vivo magnetic resonance imaging. <i>Nature Methods</i> , 2008 , 5, 57-9	21.6	132
167	Tissue profiling MALDI mass spectrometry reveals prominent calcium-binding proteins in the proteome of regenerative MRL mouse wounds. <i>Wound Repair and Regeneration</i> , 2008 , 16, 442-9	3.6	29
166	Differentiating proteomic biomarkers in breast cancer by laser capture microdissection and MALDI MS. <i>Journal of Proteome Research</i> , 2008 , 7, 1500-7	5.6	53
165	Matrix-assisted laser desorption/ionization imaging mass spectrometry for the investigation of proteins and peptides. <i>Annual Review of Analytical Chemistry</i> , 2008 , 1, 689-705	12.5	78
164	Metal chelation and inhibition of bacterial growth in tissue abscesses. <i>Science</i> , 2008 , 319, 962-5	33.3	627
163	MALDI-FTICR imaging mass spectrometry of drugs and metabolites in tissue. <i>Analytical Chemistry</i> , 2008 , 80, 5648-53	7.8	290
162	In situ molecular imaging of proteins in tissues using mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2008 , 391, 899-903	4.4	34

161	Imaging mass spectrometry of intact proteins from alcohol-preserved tissue specimens: bypassing formalin fixation. <i>Journal of Proteome Research</i> , 2008 , 7, 3543-55	5.6	61
160	Molecular imaging of proteins in tissues by mass spectrometry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 18126-31	11.5	237
159	Monitoring mouse prostate development by profiling and imaging mass spectrometry. <i>Molecular and Cellular Proteomics</i> , 2008 , 7, 411-23	7.6	64
158	Imaging mass spectrometry reveals unique protein profiles during embryo implantation. <i>Endocrinology</i> , 2008 , 149, 3274-8	4.8	58
157	Molecular imaging by mass spectrometry 2008 , 533-554		2
156	Mass Spectrometry in Cancer Biology 2008 , 293-307		
155	Solvent-free matrix dry-coating for MALDI imaging of phospholipids. <i>Journal of the American Society for Mass Spectrometry</i> , 2008 , 19, 882-6	3.5	198
154	Enhancement of protein sensitivity for MALDI imaging mass spectrometry after chemical treatment of tissue sections. <i>Journal of the American Society for Mass Spectrometry</i> , 2008 , 19, 1069-77	3.5	223
153	High-throughput proteomic analysis of formalin-fixed paraffin-embedded tissue microarrays using MALDI imaging mass spectrometry. <i>Proteomics</i> , 2008 , 8, 3715-24	4.8	252
152	Imaging mass spectrometry: Towards clinical diagnostics. <i>Proteomics - Clinical Applications</i> , 2008 , 2, 1435-43	3.43	32
151	MALDI-MS derived prognostic protein markers for resected non-small cell lung cancer. <i>Proteomics - Clinical Applications</i> , 2008 , 2, 1508-17	3.1	20
150	Identification of dimethyldioctadecylammonium ion (m/z 550.6) and related species (m/z 522.6, 494.6) as a source of contamination in mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2008 , 19, 666-70	3.5	23
149	Differential efficacy of combined therapy with radiation and AEE788 in high and low EGFR-expressing androgen-independent prostate tumor models. <i>International Journal of Radiation Oncology Biology Physics</i> , 2008 , 71, 237-46	4	14
148	Increased striatal mRNA and protein levels of the immunophilin FKBP-12 in experimental Parkinson's disease and identification of FKBP-12-binding proteins. <i>Journal of Proteome Research</i> , 2007 , 6, 3952-61	5.6	28
147	Direct tissue analysis by matrix-assisted laser desorption ionization mass spectrometry: application to kidney biology. <i>Seminars in Nephrology</i> , 2007 , 27, 597-608	4.8	58
146	Identification of proteins directly from tissue: in situ tryptic digestions coupled with imaging mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2007 , 42, 254-62	2.2	310
145	Instrument design and characterization for high resolution MALDI-MS imaging of tissue sections. <i>Journal of Mass Spectrometry</i> , 2007 , 42, 476-89	2.2	114
144	Profiling and imaging of tissues by imaging ion mobility-mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2007 , 42, 1099-105	2.2	188

143	MALDI-MS-based imaging of small molecules and proteins in tissues. <i>Current Opinion in Chemical Biology</i> , 2007 , 11, 29-35	9.7	191
142	MALDI imaging mass spectrometry: molecular snapshots of biochemical systems. <i>Nature Methods</i> , 2007 , 4, 828-33	21.6	670
141	Epididymis-specific lipocalin promoters. <i>Asian Journal of Andrology</i> , 2007 , 9, 515-21	2.8	19
140	Processing MALDI Mass Spectra to Improve Mass Spectral Direct Tissue Analysis. <i>International Journal of Mass Spectrometry</i> , 2007 , 260, 212-221	1.9	172
139	Mass spectrometry to classify non-small-cell lung cancer patients for clinical outcome after treatment with epidermal growth factor receptor tyrosine kinase inhibitors: a multicohort cross-institutional study. <i>Journal of the National Cancer Institute</i> , 2007 , 99, 838-46	9.7	258
138	Multivariable difference gel electrophoresis and mass spectrometry: a case study on transforming growth factor-beta and ERBB2 signaling. <i>Molecular and Cellular Proteomics</i> , 2007 , 6, 150-69	7.6	32
137	Diagnostic accuracy of MALDI mass spectrometric analysis of unfractionated serum in lung cancer. <i>Journal of Thoracic Oncology</i> , 2007 , 2, 893-901	8.9	101
136	Alterations in the diabetic myocardial proteome coupled with increased myocardial oxidative stress underlies diabetic cardiomyopathy. <i>Journal of Molecular and Cellular Cardiology</i> , 2007 , 42, 884-95	5.8	98
135	Detection of pre-neoplastic and neoplastic prostate disease by MALDI profiling of urine. <i>Biochemical and Biophysical Research Communications</i> , 2007 , 353, 829-34	3.4	85
134	Molecular imaging of thin mammalian tissue sections by mass spectrometry. <i>Current Opinion in Biotechnology</i> , 2006 , 17, 431-6	11.4	95
133	Biomarker discovery by imaging mass spectrometry: transthyretin is a biomarker for gentamicin-induced nephrotoxicity in rat. <i>Molecular and Cellular Proteomics</i> , 2006 , 5, 1876-86	7.6	117
132	Selective profiling of proteins in lung cancer cells from fine-needle aspirates by matrix-assisted laser desorption ionization time-of-flight mass spectrometry. <i>Clinical Cancer Research</i> , 2006 , 12, 5142-50 ^{12.9}		45
131	A novel histology-directed strategy for MALDI-MS tissue profiling that improves throughput and cellular specificity in human breast cancer. <i>Molecular and Cellular Proteomics</i> , 2006 , 5, 1975-83	7.6	162
130	Identification of phosphorylation sites in glycine N-methyltransferase from rat liver. <i>Protein Science</i> , 2006 , 15, 785-94	6.3	16
129	Direct molecular analysis of whole-body animal tissue sections by imaging MALDI mass spectrometry. <i>Analytical Chemistry</i> , 2006 , 78, 6448-56	7.8	443
128	Decreased striatal levels of PEP-19 following MPTP lesion in the mouse. <i>Journal of Proteome Research</i> , 2006 , 5, 262-9	5.6	104
127	Automated acoustic matrix deposition for MALDI sample preparation. <i>Analytical Chemistry</i> , 2006 , 78, 827-34	7.8	296
126	Epididymis-specific promoter-driven gene targeting: a transcription factor which regulates epididymis-specific gene expression. <i>Molecular and Cellular Endocrinology</i> , 2006 , 250, 184-9	4.4	12

125	Chapter 3.2 Microdialysis coupled with liquid chromatography/mass spectrometry. <i>Handbook of Behavioral Neuroscience</i> , 2006 , 16, 251-266	0.7	
124	Proteomic Strategies for the Characterization and the Early Detection of Lung Cancer. <i>Journal of Thoracic Oncology</i> , 2006 , 1, 1027-1039	8.9	7
123	Proteomics in diagnostic neuropathology. <i>Journal of Neuropathology and Experimental Neurology</i> , 2006 , 65, 837-45	3.1	20
122	New developments in profiling and imaging of proteins from tissue sections by MALDI mass spectrometry. <i>Journal of Proteome Research</i> , 2006 , 5, 2889-900	5.6	235
121	Proteomic Strategies for the Characterization and the Early Detection of Lung Cancer. <i>Journal of Thoracic Oncology</i> , 2006 , 1, 1027-1039	8.9	17
120	Proteomic strategies for the characterization and the early detection of lung cancer. <i>Journal of Thoracic Oncology</i> , 2006 , 1, 1027-39	8.9	8
119	Imaging mass spectrometry: principles and potentials. <i>Toxicologic Pathology</i> , 2005 , 33, 92-101	2.1	154
118	Tissue profiling by mass spectrometry: a review of methodology and applications. <i>Molecular and Cellular Proteomics</i> , 2005 , 4, 394-401	7.6	205
117	Identification of protein fragments as pattern features in MALDI-MS analyses of serum. <i>Journal of Proteome Research</i> , 2005 , 4, 1672-80	5.6	18
116	Genomic and proteomic analysis of mammary tumors arising in transgenic mice. <i>Journal of Proteome Research</i> , 2005 , 4, 2088-98	5.6	12
115	Combination detergent/MALDI matrix: functional cleavable detergents for mass spectrometry. <i>Analytical Chemistry</i> , 2005 , 77, 5036-40	7.8	28
114	Increased levels of ubiquitin in the 6-OHDA-lesioned striatum of rats. <i>Journal of Proteome Research</i> , 2005 , 4, 223-6	5.6	35
113	Perspective: a program to improve protein biomarker discovery for cancer. <i>Journal of Proteome Research</i> , 2005 , 4, 1104-9	5.6	125
112	MALDI mass spectrometry for direct tissue analysis: a new tool for biomarker discovery. <i>Journal of Proteome Research</i> , 2005 , 4, 1138-42	5.6	94
111	Three-dimensional visualization of protein expression in mouse brain structures using imaging mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2005 , 16, 1093-9	3.5	136
110	Mass spectrometric profiling of intact biological tissue by using desorption electrospray ionization. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 7094-7	16.4	209
109	Cover Picture: Mass Spectrometric Profiling of Intact Biological Tissue by Using Desorption Electrospray Ionization (Angew. Chem. Int. Ed. 43/2005). <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 6967-6967	16.4	
108	Mass Spectrometric Profiling of Intact Biological Tissue by Using Desorption Electrospray Ionization. <i>Angewandte Chemie</i> , 2005 , 117, 7256-7259	3.6	21

107	Titelbild: Mass Spectrometric Profiling of Intact Biological Tissue by Using Desorption Electrospray Ionization (Angew. Chem. 43/2005). <i>Angewandte Chemie</i> , 2005 , 117, 7127-7127	3.6	
106	Mass spectrometric determination of selenenylsulfide linkages in rat selenoprotein P. <i>Journal of Mass Spectrometry</i> , 2005 , 40, 400-4	2.2	18
105	Nonacid cleavable detergents applied to MALDI mass spectrometry profiling of whole cells. <i>Journal of Mass Spectrometry</i> , 2005 , 40, 1319-26	2.2	14
104	Direct profiling of the cerebellum by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry: A methodological study in postnatal and adult mouse. <i>Journal of Neuroscience Research</i> , 2005 , 81, 613-21	4.4	14
103	Proteomic patterns of preinvasive bronchial lesions. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2005 , 172, 1556-62	10.2	78
102	Deciphering protein molecular signatures in cancer tissues to aid in diagnosis, prognosis, and therapy. <i>Cancer Research</i> , 2005 , 65, 10642-5	10.1	58
101	Proteomic-based prognosis of brain tumor patients using direct-tissue matrix-assisted laser desorption ionization mass spectrometry. <i>Cancer Research</i> , 2005 , 65, 7674-81	10.1	200
100	Proteomic exploration of pancreatic islets in mice null for the alpha2A adrenergic receptor. <i>Journal of Molecular Endocrinology</i> , 2005 , 35, 73-88	4.5	23
99	Proteomic patterns and prediction of glomerulosclerosis and its mechanisms. <i>Journal of the American Society of Nephrology: JASN</i> , 2005 , 16, 2967-75	12.7	82
98	Tissue Profiling by MALDI Mass Spectrometry Distinguishes Clinical Grades of Soft Tissue Sarcomas. <i>Cancer Genomics and Proteomics</i> , 2005 , 2, 333-345	3.3	3
97	Protein profiling in brain tumors using mass spectrometry: feasibility of a new technique for the analysis of protein expression. <i>Clinical Cancer Research</i> , 2004 , 10, 981-7	12.9	183
96	Proteome analysis of human colon cancer by two-dimensional difference gel electrophoresis and mass spectrometry. <i>Proteomics</i> , 2004 , 4, 793-811	4.8	325
95	Molecular profiling of experimental Parkinson's disease: direct analysis of peptides and proteins on brain tissue sections by MALDI mass spectrometry. <i>Journal of Proteome Research</i> , 2004 , 3, 289-95	5.6	152
94	Early changes in protein expression detected by mass spectrometry predict tumor response to molecular therapeutics. <i>Cancer Research</i> , 2004 , 64, 9093-100	10.1	132
93	Integrating histology and imaging mass spectrometry. <i>Analytical Chemistry</i> , 2004 , 76, 1145-55	7.8	307
92	Peer Reviewed: Profiling and Imaging Proteins in Tissue Sections by MS. <i>Analytical Chemistry</i> , 2004 , 76, 86 A-93 A	7.8	72
91	Assessing protein patterns in disease using imaging mass spectrometry. <i>Journal of Proteome Research</i> , 2004 , 3, 245-52	5.6	142
90	Proteomics in diagnostic pathology: profiling and imaging proteins directly in tissue sections. <i>American Journal of Pathology</i> , 2004 , 165, 1057-68	5.8	233

89	Mass spectrometry in the exploration of Mars. <i>Journal of Mass Spectrometry</i> , 2003 , 38, 1-10	2.2	8
88	Direct tissue analysis using matrix-assisted laser desorption/ionization mass spectrometry: practical aspects of sample preparation. <i>Journal of Mass Spectrometry</i> , 2003 , 38, 699-708	2.2	538
87	Direct analysis of drug candidates in tissue by matrix-assisted laser desorption/ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2003 , 38, 1081-92	2.2	325
86	Loss of selenium from selenoproteins: conversion of selenocysteine to dehydroalanine in vitro. <i>Journal of the American Society for Mass Spectrometry</i> , 2003 , 14, 593-600	3.5	79
85	Profiling and imaging proteins in the mouse epididymis by imaging mass spectrometry. <i>Proteomics</i> , 2003 , 3, 2221-39	4.8	124
84	In vivo processing of LVV-hemorphin-7 in rat brain and blood utilizing microdialysis combined with electrospray mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2003 , 17, 838-44	2.2	23
83	Molecular fingerprinting in human lung cancer. <i>Clinical Lung Cancer</i> , 2003 , 5, 113-8	4.9	23
82	Mass spectrometry of intracellular and membrane proteins using cleavable detergents. <i>Analytical Chemistry</i> , 2003 , 75, 6642-7	7.8	65
81	Proteomic patterns of tumour subsets in non-small-cell lung cancer. <i>Lancet, The</i> , 2003 , 362, 433-9	4.0	539
80	Functional analysis of the molecular determinants of cyclooxygenase-2 acetylation by 2-acetoxyphenylhept-2-ynyl sulfide. <i>Archives of Biochemistry and Biophysics</i> , 2003 , 409, 127-33	4.1	7
79	Mass spectrometric characterization of full-length rat selenoprotein P and three isoforms shortened at the C terminus. Evidence that three UGA codons in the mRNA open reading frame have alternative functions of specifying selenocysteine insertion or translation termination. <i>Journal of Biological Chemistry</i> , 2002 , 277, 12749-54	5.4	83
78	Direct profiling and imaging of peptides and proteins from mammalian cells and tissue sections by mass spectrometry. <i>Electrophoresis</i> , 2002 , 23, 3125-35	3.6	194
77	Imaging mass spectrometry: a new tool to investigate the spatial organization of peptides and proteins in mammalian tissue sections. <i>Current Opinion in Chemical Biology</i> , 2002 , 6, 676-81	9.7	217
76	Direct analysis of laser capture microdissected cells by MALDI mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2002 , 13, 1292-7	3.5	140
75	Prostaglandin H2 (PGH2) accelerates formation of amyloid beta1-42 oligomers. <i>Journal of Neurochemistry</i> , 2002 , 82, 1003-6	6	51
74	Epididymal lipocalin-type prostaglandin D2 synthase: identification using mass spectrometry, messenger RNA localization, and immunodetection in mouse, rat, hamster, and monkey. <i>Biology of Reproduction</i> , 2002 , 66, 524-33	3.9	18
73	Organic ion imaging of biological tissue with secondary ion mass spectrometry and matrix-assisted laser desorption/ionization. <i>Journal of Mass Spectrometry</i> , 2001 , 36, 355-69	2.2	288
72	Profiling proteins from azoxymethane-induced colon tumors at the molecular level by matrix-assisted laser desorption/ionization mass spectrometry. <i>Proteomics</i> , 2001 , 1, 1320-6	4.8	115

71	Imaging mass spectrometry: a new technology for the analysis of protein expression in mammalian tissues. <i>Nature Medicine</i> , 2001 , 7, 493-6	50.5	1009
70	Carboxy-terminal proteolytic processing of <i>Helicobacter pylori</i> vacuolating toxin. <i>Infection and Immunity</i> , 2001 , 69, 543-6	3.7	65
69	Heparin-binding histidine and lysine residues of rat selenoprotein P. <i>Journal of Biological Chemistry</i> , 2001 , 276, 15823-31	5.4	58
68	A sperm cytoskeletal protein that signals oocyte meiotic maturation and ovulation. <i>Science</i> , 2001 , 291, 2144-7	33.3	302
67	Characterization of the lysyl adducts of prostaglandin H-synthases that are derived from oxygenation of arachidonic acid. <i>Biochemistry</i> , 2001 , 40, 6948-55	3.2	33
66	Strain-based sequence variations and structure analysis of murine prostate specific spermine binding protein using mass spectrometry. <i>Biochemistry</i> , 2001 , 40, 9725-33	3.2	28
65	Mapping of surrogate markers of cellular components and structures using laser desorption/ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2000 , 35, 258-64	2.2	14
64	Special feature on electrospray ionization. <i>Journal of Mass Spectrometry</i> , 2000 , 35, 761	2.2	3
63	Proteomics, peptide sequencing and the fragmentation mechanisms of small organic ions. <i>Journal of Mass Spectrometry</i> , 2000 , 35, 1375-1375	2.2	2
62	Automated mass spectrometry imaging with a matrix-assisted laser desorption ionization time-of-flight instrument. <i>Journal of the American Society for Mass Spectrometry</i> , 1999 , 10, 67-71	3.5	163
61	Determination of extracellular release of neurotensin in discrete rat brain regions utilizing in vivo microdialysis/electrospray mass spectrometry. <i>Brain Research</i> , 1999 , 845, 123-9	3.7	63
60	Frequency scan for the analysis of high mass ions generated by matrix-assisted laser desorption/ionization in a paul trap. <i>Rapid Communications in Mass Spectrometry</i> , 1999 , 13, 1792-6	2.2	44
59	Combining solid-phase preconcentration, capillary electrophoresis and off-line matrix-assisted laser desorption/ionization mass spectrometry: intracerebral metabolic processing of peptide E in vivo. <i>Journal of Mass Spectrometry</i> , 1999 , 34, 377-83	2.2	52
58	Direct profiling of proteins in biological tissue sections by MALDI mass spectrometry. <i>Analytical Chemistry</i> , 1999 , 71, 5263-70	7.8	253
57	Combining solid-phase preconcentration, capillary electrophoresis and off-line matrix-assisted laser desorption/ionization mass spectrometry: intracerebral metabolic processing of peptide E in vivo 1999 , 34, 377		1
56	Blood-brain barrier penetration of 3-aminopropyl-n-butylphosphinic acid (CGP 36742) in rat brain by microdialysis/mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1998 , 33, 281-7	2.2	25
55	Determination of protein-protein interactions by matrix-assisted laser desorption/ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1998 , 33, 697-704	2.2	117
54	Studies in protein metabolism (J. Biol. Chem. 127, pp. 285-299, 1939). <i>Journal of Mass Spectrometry</i> , 1998 , 33, 1163-1163	2.2	

53	Molecular imaging of biological samples: localization of peptides and proteins using MALDI-TOF MS. <i>Analytical Chemistry</i> , 1997 , 69, 4751-60	7.8	1657
52	Fast atom bombardment mass spectrometry. <i>Methods in Enzymology</i> , 1996 , 270, 453-86	1.7	14
51	Direct analysis of aqueous samples by matrix-assisted laser desorption ionization mass spectrometry using membrane targets precoated with matrix. <i>Journal of Mass Spectrometry</i> , 1996 , 31, 690-2	2.2	21
50	Capillary electrophoresis combined with matrix-assisted laser desorption/ionization mass spectrometry; continuous sample deposition on a matrix-precoated membrane target. <i>Journal of Mass Spectrometry</i> , 1996 , 31, 1039-46	2.2	87
49	Organizations in Mass Spectrometry: Past, Present and Future. <i>Journal of Mass Spectrometry</i> , 1996 , 31, 951-954	2.2	1
48	In vitro metabolism of LVV-hemorphin-7 in human plasma studied by reversed-phase high-performance liquid chromatography and micro-electrospray mass spectrometry. <i>Journal of Chromatography A</i> , 1996 , 743, 207-12	4.5	22
47	Reversed-phase high-performance liquid chromatography combined with tandem mass spectrometry in studies of a substance P-converting enzyme from human cerebrospinal fluid. <i>Journal of Chromatography A</i> , 1996 , 743, 213-20	4.5	14
46	In vivo metabolism of substance P in rat striatum utilizing microdialysis/liquid chromatography/micro-electrospray mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1995 , 30, 817-824	2.2	60
45	Mass discrimination in matrix-assisted laser desorption ionization time-of-flight mass spectrometry: A study using cross-linked oligomeric complexes. <i>Journal of Mass Spectrometry</i> , 1995 , 30, 1245-1254	2.2	10
44	Micro-preparation procedure for high-sensitivity matrix-assisted laser desorption ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1995 , 30, 1768-1771	2.2	42
43	Specific molecular mass detection of endogenously released neuropeptides using in vivo microdialysis/mass spectrometry. <i>Journal of Neuroscience Methods</i> , 1995 , 62, 141-7	3	86
42	Micro-electrospray mass spectrometry: Ultra-high-sensitivity analysis of peptides and proteins. <i>Journal of the American Society for Mass Spectrometry</i> , 1994 , 5, 605-13	3.5	437
41	Micro-Electrospray: Zeptomole/attomole per microliter sensitivity for peptides. <i>Journal of the American Society for Mass Spectrometry</i> , 1994 , 5, 867-9	3.5	121
40	Recent advances in liquid chromatography-mass spectrometry and capillary zone electrophoresis-mass spectrometry for protein analysis. <i>Journal of Chromatography A</i> , 1991 , 553, 101-164	4.5	34
39	Identification of nearest-neighbor peptides in protease digests by mass spectrometry for construction of sequence-ordered tryptic maps. <i>Biological Mass Spectrometry</i> , 1991 , 20, 210-4		16
38	Assessing the multimeric states of proteins: studies using laser desorption mass spectrometry. <i>Biological Mass Spectrometry</i> , 1991 , 20, 796-800		50
37	Continuous-flow fast atom bombardment mass spectrometry. <i>Methods in Enzymology</i> , 1990 , 193, 214-371	1.7	38
36	Synthesis of phosphopeptides containing O-phosphoserine or O-phosphothreonine. <i>International Journal of Peptide and Protein Research</i> , 1989 , 33, 468-76		35

35	Coupling capillary zone electrophoresis and continuous-flow fast atom bombardment mass spectrometry for the analysis of peptide mixtures. <i>Journal of Chromatography A</i> , 1989 , 480, 247-57	4.5	81
34	Direct analysis of drugs by continuous-flow fast-atom bombardment and tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1989 , 3, 117-22	2.2	18
33	Design of a coaxial continuous flow fast atom bombardment probe. <i>Rapid Communications in Mass Spectrometry</i> , 1988 , 2, 100-104	2.2	52
32	Analysis of mixtures of hydrophilic peptides by continuous-flow fast atom bombardment mass spectrometry. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1988 , 86, 187-199		16
31	Microbore high-performance liquid chromatography-mass spectrometry for the analysis of proteolytic digests by continuous-flow fast-atom bombardment mass spectrometry. <i>Journal of Chromatography A</i> , 1988 , 443, 355-62	4.5	47
30	Microbore HPLC/mass spectrometry for the analysis of peptide mixtures using a continuous flow interface. <i>Biochemical and Biophysical Research Communications</i> , 1987 , 146, 291-9	3.4	47
29	Improved detection of suppressed peptides in enzymic digests analyzed by fab mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1987 , 1, 15-18	2.2	60
28	Analyses of carcinogen-modified oligonucleotides by fast atom bombardment/tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1987 , 1, 69-71	2.2	17
27	Enzymes and mass spectrometry: A dynamic combination. <i>Mass Spectrometry Reviews</i> , 1987 , 6, 237-287	11	39
26	Peptide sequence analysis using exopeptidases with molecular analysis of the truncated polypeptides by mass spectrometry. <i>Analytical Biochemistry</i> , 1986 , 154, 596-603	3.1	36
25	High sensitivity mass spectrometric determination of peptides: direct analysis of aqueous solutions. <i>Biochemical and Biophysical Research Communications</i> , 1986 , 141, 1058-65	3.4	44
24	Determination of K_m and V_{max} for tryptic peptide hydrolysis using fast atom bombardment mass spectrometry. <i>Analytical Chemistry</i> , 1986 , 58, 1080-1083	7.8	20
23	Continuous-flow sample probe for fast atom bombardment mass spectrometry. <i>Analytical Chemistry</i> , 1986 , 58, 2949-54	7.8	261
22	Quantitative aspects of fast atom bombardment mass spectrometry. <i>Biomedical Mass Spectrometry</i> , 1984 , 11, 60-62		26
21	Enzyme reaction rates determined by fast atom bombardment mass spectrometry. <i>Biomedical Mass Spectrometry</i> , 1984 , 11, 392-395		20
20	Energy-dispersive X-ray fluorescence determination of platinum in plasma, urine, and cerebrospinal fluid of patients administered cis-dichlorodiammineplatinum(II). <i>Cancer Chemotherapy and Pharmacology</i> , 1983 , 11, 120-3	3.5	7
19	Performance of a fast atom bombardment source on a quadrupole mass spectrometer. <i>Biomedical Mass Spectrometry</i> , 1983 , 10, 94-97		20
18	Following enzyme catalysis in real-time inside a fast atom bombardment mass spectrometer. <i>Biomedical Mass Spectrometry</i> , 1983 , 10, 98-102		31

17	Fast atom bombardment mass spectrometry for determination of dissociation constants of weak acids in solution. <i>Analytical Chemistry</i> , 1983 , 55, 2387-2391	7.8	35
16	Comparison of high-performance liquid chromatography and anticholinesterase assay for measuring azinphos-methyl metabolism in vitro. <i>Journal of Agricultural and Food Chemistry</i> , 1983 , 31, 756-9	5.7	2
15	Protein N-terminal analysis using fast atom bombardment mass spectrometry. <i>Analytical Biochemistry</i> , 1983 , 130, 328-33	3.1	8
14	Fast atom bombardment for real-time analysis of peptide fragments from protein digestions. <i>International Journal of Mass Spectrometry and Ion Physics</i> , 1983 , 46, 419-422		9
13	Inhibition of human polymorphonuclear leukocyte function by components of human colostrum and mature milk. <i>Infection and Immunity</i> , 1983 , 40, 8-15	3.7	8
12	Report on FAB mass spectrometry workshop held in Baltimore, Maryland, 11 December, 1981. <i>Biomedical Mass Spectrometry</i> , 1982 , 9, 557-558		1
11	Human tissue distribution of platinum after cis-diamminedichloroplatinum. <i>Cancer Chemotherapy and Pharmacology</i> , 1982 , 10, 51-4	3.5	95
10	Determination of plasma fentanyl by GC-mass spectrometry and pharmacokinetic analysis. <i>Journal of Pharmaceutical Sciences</i> , 1981 , 70, 1276-9	3.9	25
9	Oxygen rearrangement of molecular ions of 3-phenylpropionates. <i>Organic Mass Spectrometry</i> , 1980 , 15, 157-160		4
8	Analysis of dipeptide mixtures by the combination of ion-pair reversed-phase high-performance liquid chromatographic and gas chromatographic-mass spectrometric techniques. <i>Journal of Chromatography A</i> , 1980 , 197, 31-41	4.5	6
7	Proteolytic activity of dipeptidyl carboxypeptidase from human lung. <i>Biochemical and Biophysical Research Communications</i> , 1980 , 93, 1290-6	3.4	15
6	Quantitative high-performance liquid chromatography and mass spectrometry for the analysis of the in vitro metabolism of the insecticide azinphos-methyl (guthion) by rat liver homogenates. <i>Journal of Agricultural and Food Chemistry</i> , 1980 , 28, 85-8	5.7	17
5	Phthalate esters in normal and pathological human kidneys. <i>Bulletin of Environmental Contamination and Toxicology</i> , 1979 , 22, 536-42	2.7	23
4	Characterization of mixtures of dipeptides by gas chromatography/mass spectrometry. <i>Analytical Biochemistry</i> , 1978 , 88, 149-61	3.1	14
3	Synthesis of methyl alpha- and beta-D-xylopyranoside-5-18O. <i>Carbohydrate Research</i> , 1976 , 46, 195-200	2.9	4
2	Mechanism of the expulsion of OH from the [M ⁺ C ₂ H ₄] ⁺ ion from ethyl benzoate. <i>Organic Mass Spectrometry</i> , 1970 , 3, 1333-1340		23
1	A computational framework to explore cellular response mechanisms from multi-omics datasets		1