



SunCollect Pneumatic Sprayer, MALDI Spotter and Fraction Collector



Selected Publications featuring SunChrom's SunCollect

2012 - 2017

1. SunCollect as a sprayer for MALDI-Imaging

Year	Author(s)	Titel	Link
2017			
2017	Asimakopoulou et al.	Altered mitochondrial and peroxisomal integrity in lipocalin-2-deficient mice with hepatic steatosis. Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease, Volume 1863, Issue 9, September 2017, Pages 2093-2110.	http://www.sciencedirect.com/science/article/pii/S0925443917301187
2017	Bakker et al.	Oxygen-Dependent Lipid Profiles of Three-Dimensional Cultured Human Chondrocytes Revealed by MALDI-MSI. Anal Chem. 2017 Sep 5;89(17):9438-9444.	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5588094/
2017	Bradshaw R.	MALDI Mass Spectrometry Profiling and Imaging Applied to the Analysis of Latent Fingermarks. In: Cole L. (eds) Imaging Mass Spectrometry. Methods in Molecular Biology, vol 1618. Humana Press, New York, NY	https://link.springer.com/protocol/10.1007/978-1-4939-7051-3_13
2017	Bradshaw et al.	Implementation of MALDI MS profiling and imaging methods for the analysis of real crime scene fingermarks. Analyst, 2017, 142, 1581-1590	http://pubs.rsc.org/-/content/articlehtml/2017/an/c7an00218a
2017	Cechová et al.	Towards Better Understanding of Pea Seed Dormancy Using Laser	http://www.mdpi.com/1422-0067/18/10/2196

		Desorption/Ionization Mass Spectrometry. Int. J. Mol. Sci. 2017, 18(10), 2196.	
2017	Dilillo et al.	Mass Spectrometry Imaging, Laser Capture Microdissection, and LC-MS/MS of the Same Tissue Section. J. Proteome Res., 2017, 16 (8), pp 2993–3001.	http://pubs.acs.org/doi/abs/10.1021/acs.jproteome.7b00284
2017	Dilillo et al.	Ultra-High Mass Resolution MALDI Imaging Mass Spectrometry of Proteins and Metabolites in a Mouse Model of Glioblastoma. Nature Scientific Reports 7, Article number: 603	https://www.nature.com/articles/s41598-017-00703-w
2017	Fack et al.	Altered metabolic landscape in IDH-mutant gliomas affects phospholipid, energy, and oxidative stress pathways. EMBO Molecular Medicine (2017) e201707729. DOI 10.15252/emmm.201707729.	http://embomolmed.embopress.org/content/early/2017/10/20/emmm.201707729
2017	Flinders et al.	Optimization of Sample Preparation and Instrumental Parameters for the Rapid Analysis of Drugs of Abuse in Hair samples by MALDI-MS/MS Imaging. J. Am. Soc. Mass Spectrom. (2017) 28: 2462. https://doi.org/10.1007/s13361-017-1766-0	https://link.springer.com/article/10.1007/s13361-017-1766-0
2017	Francese et al.	An update on MALDI mass spectrometry based technology for the analysis of fingerprints – stepping into operational deployment. Analyst, 2017, 142, 2518-2546.	http://pubs.rsc.org/-/content/articlelanding/2017/an/c7an00569e/unauth#!divAbstract
2017	Gussenhoven et al.	The Paradoxical Effects of Chronic Intra-Amniotic Ureaplasma parvum Exposure on Ovine Fetal Brain Development. Dev Neurosci 2017;39:472-486.	https://www.karger.com/Article/Abstract/479021
2017	Hall et al.	Lipid zonation and phospholipid remodeling in nonalcoholic fatty liver disease. Hepatology, Volume 65, Issue 4, April 2017, Pages 1165–1180.	http://onlinelibrary.wiley.com/doi/10.1002/hep.28953/full

2017	Hamm and Stauber	US Patent US 9645138 B2. Method to evaluate the tissue targeting of a molecule of interest.	https://www.google.com/patents/US9645138
2017	Hart and Clench M.R.	MALDI-MSI of Lipids in Human Skin. In: Cole L. (eds) Imaging Mass Spectrometry. Methods in Molecular Biology, vol 1618. (2017) Humana Press, New York, NY	https://link.springer.com/protocol/10.1007/978-1-4939-7051-3_4
2017	Joye et al.	In situ metabolomic changes in rat hippocampus after acute cocaine administration. International Journal of Mass Spectrometry, In press, corrected proof, Available online 14 December 2017	https://www.sciencedirect.com/science/article/pii/S1387380617303184
2017	Kunzke et al.	Native glycan fragments detected by MALDI-FT-ICR mass spectrometry imaging impact gastric cancer biology and patient outcome. Oncotarget. 2017 Sep 15; 8(40): 68012–68025.	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5620232/
2017	Lackner et al.	Insights into the lifestyle of uncultured bacterial natural product factories associated with marine sponges. PNAS 2017, vol. 114 no. 3, E347-E356.	http://www.pnas.org/content/114/3/E347.full
2017	Lazova and Seeley	US Patent US20170154759A1: Mass spectrometry imaging of benign melanocytic nevi and malignant melanomas.	https://patents.google.com/patent/US20170154759A1/en
2017	Lerner et al.	Simultaneous lipidomic and transcriptomic profiling in mouse brain punches of acute epileptic seizure model compared to controls. Journal of Lipid Research, doi: 10.1194/jlr.M080093	https://www.ncbi.nlm.nih.gov/pubmed/29208697
2017	Patel E.	Fresh Frozen Versus Formalin-Fixed Paraffin Embedded for Mass Spectrometry Imaging. In: Cole L. (eds) Imaging Mass Spectrometry. Methods in Molecular	https://link.springer.com/protocol/10.1007/978-1-4939-7051-3_2

		Biology, vol 1618. Humana Press, New York, NY	
2017	Patel E.	Peptide Imaging: Maximizing Peptide Yield, Optimization of the "Peptide Mass Fingerprint". In: Cole L. (eds) Imaging Mass Spectrometry. Methods in Molecular Biology, vol 1618. Humana Press, New York, NY	https://link.springer.com/protocol/10.1007/978-1-4939-7051-3_8
2017	Picard de Muller et al.	Automated Morphological and Morphometric Analysis of Mass Spectrometry Imaging Data: Application to Biomarker Discovery. <i>J. Am. Soc. Mass Spectrom.</i> (2017) 28: 2635.	https://link.springer.com/article/10.1007/s13361-017-1784-y
2017	Piga et al.	Ultra-high resolution MALDI-FTICR-MSI analysis of intact proteins in mouse and human pancreas tissue. <i>International Journal of Mass Spectrometry</i> , In press.	https://www.sciencedirect.com/science/article/pii/S1387380617303160
2017	Scott et al.	Host-based lipid inflammation drives pathogenesis in <i>Francisella</i> infection. <i>PNAS</i> , vol. 114 no. 47, 12596–12601.	http://www.pnas.org/content/114/47/12596.abstract
2017	Stauber et al.	US Patent US20170221687A1. Method for characterising a sample by mass spectrometry imaging.	https://patents.google.com/patent/US20170221687A1/en
2017	Sturtevant et al.	Lipid metabolites in seeds of diverse <i>Gossypium</i> accessions: molecular identification of a high oleic mutant allele. <i>Planta</i> , March 2017, Volume 245, Issue 3, pp 595–610.	https://link.springer.com/article/10.1007/s00425-016-2630-3
2017	Urban et al.	PAXgene fixation enables comprehensive metabolomic and proteomic analyses of tissue specimens by MALDI MSI. <i>Biochimica et Biophysica Acta (BBA) - General Subjects</i> . Volume 1862, Issue 1, January 2018, Pages 51-60	https://www.sciencedirect.com/science/article/pii/S0304416517303264

2017	Winter et al.	MALDI Mass Spectrometry Imaging: A Novel Tool for the Identification and Classification of Amyloidosis, <i>Proteomics</i> 2017, 17, 1700236.	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201700236/full
2017	Yu et al.	.: Identification of bottlenecks in the accumulation of cyclic fatty acids in camelina seed oil. <i>Plant Biotechnol J.</i> Accepted Author Manuscript. doi:10.1111/pbi.12839.	http://onlinelibrary.wiley.com/doi/10.1111/pbi.12839/full#footer-article-info
2016			
2016	Bakker et al.	Oxygen regulates lipid profiles in human primary chondrocyte cultures. <i>Osteoarthritis and Cartilage</i> , Volume 24, Supplement 1, Pages S456–S457.	http://www.oarsijournal.com/article/S1063-4584(16)00852-9/abstract
2016	Barre et al.	Derivatization Strategies for the Detection of Triamcinolone Acetonide in Cartilage by Using Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging. <i>Anal. Chem.</i> , 2016, 88 (24), pp 12051–12059	http://pubs.acs.org/doi/abs/10.1021/acs.analchem.6b02491
2016	Beasley et al.	Detection and Mapping of Cannabinoids in Single Hair Samples through Rapid Derivatization and Matrix-Assisted Laser Desorption Ionization Mass Spectrometry. <i>Anal Chem.</i> 2016 Oct 18;88(20):10328–10334	http://pubs.acs.org/doi/pdf/10.1021/acs.analchem.6b03551
2016	Beine et al.	Tissue MALDI Mass Spectrometry Imaging (MALDI MSI) of Peptides <i>Proteomics in Systems Biology</i> Volume 1394 of the series <i>Methods in Molecular Biology</i> pp 129-150	http://link.springer.com/protocol/10.1007/978-1-4939-3341-9_10

2016	Bruinen et al.	Mass Spectrometry Imaging of Drug Related Crystal-Like Structures in Formalin-Fixed Frozen and Paraffin-Embedded Rabbit Kidney Tissue Sections J Am Soc Mass Spectrom. 2016 Jan;27(1):117-23.	http://link.springer.com/article/10.1007/s13361-015-1254-3
2016	Buck et al.	How Suitable is Matrix-Assisted Laser Desorption/Ionization-Time-of-Flight for Metabolite Imaging from Clinical Formalin-Fixed and Paraffin-Embedded Tissue Samples in Comparison to Matrix-Assisted Laser Desorption/Ionization-Fourier Transform Ion Cyclotron Resonance Mass Spectrometry?, Anal. Chem., 2016, 88 (10), pp 5281-5289	http://pubs.acs.org/doi/abs/10.1021/acs.analchem.6b00460
2016	Deininger et al.	Proteomics goes forensic: detection and mapping of blood signatures in fingerprints, Proteomics. 2016, Jun;16(11-12):1707-17.	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201500544/full
2016	Ellis et al.	More from less: high-throughput dual polarity lipid imaging of biological tissues. Analyst. 2016 Jun 21;141(12):3832-41.	http://pubs.rsc.org/is/content/articlelanding/2016/an/c6an00169f#!divAbstract
2016	Esteve et al.	Mass spectrometry imaging of amino neurotransmitters: a comparison of derivatization methods and application in mouse brain tissue. Metabolomics. 2016; 12: 30. Published online 2016 Jan 8.	http://link.springer.com/article/10.1007/s11306-015-0926-0
2016	Francesc	Techniques for Fingermark Analysis Using MALDI MS: A Practical Overview, Book Chapter in: Advances in MALDI and Laser-Induced Soft Ionization Mass Spectrometry, pp 93-128	http://link.springer.com/chapter/10.1007/978-3-319-04819-2_6
2016	Fueloep et al.	Molecular imaging of brain localization of liposomes in mice using MALDI mass	https://www.nature.com/articles/srep33791?WT.feed_name=subjects_nanomedicine

		spectrometry. <i>Scientific Reports</i> 6, Article number: 33791	
2016	Harvey et al.	MALDI-MSI for the analysis of a 3D tissue-engineered psoriatic skin model. <i>Proteomics</i> , Volume 16, Issue 11-12, June 2016, Pages 1718–1725.	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201600036/full
2016	Heijs et al.	Multimodal Mass Spectrometry Imaging of N-Glycans and Proteins from the Same Tissue Section. <i>Anal. Chem.</i> , 2016, 88 (15), pp 7745–7753.	http://pubs.acs.org/doi/abs/10.1021/acs.analchem.6b01739
2016	Hinsenkamp et al.	Inhibition of Rho-Associated Kinase 1/2 Attenuates Tumor Growth in Murine Gastric Cancer. <i>Neoplasia</i> , Volume 18, Issue 8, August 2016, Pages 500-511	http://www.sciencedirect.com/science/article/pii/S1476558616300288
2016	Holst et al.	Linkage-Specific in Situ Sialic Acid Derivatization for N-Glycan Mass Spectrometry Imaging of Formalin-Fixed Paraffin-Embedded Tissues <i>Anal. Chem.</i> , 2016, 88 (11), pp 5904–5913	http://pubs.acs.org/doi/abs/10.1021/acs.analchem.6b00819
2016	Jadoul et al.	An Improved Molecular Histology Method for Ion Suppression Monitoring and Quantification of Phosphatidyl Cholines During MALDI MSI Lipidomics Analyses <i>OMICS: A Journal of Integrative Biology</i> . February 2016, 20(2): 110-121.	http://online.liebertpub.com/doi/abs/10.1089/omi.2015.0165
2016	Ly et al.	High-mass-resolution MALDI mass spectrometry imaging of metabolites from formalin-fixed paraffin-embedded tissue. <i>Nature Protocols</i> 11, 1428–1443.	http://www.nature.com/nprot/journal/v11/n8/abs/nprot.2016.081.html?foxtrotcallback=true
2016	Lazova and Seeley	US Patent 20170154759 A1: Mass spectrometry imaging of benign melanocytic nevi and malignant melanomas.	https://www.google.com/patents/US20170154759

2016	Mascini et al.	Mass Spectrometry Imaging of the Hypoxia Marker Pimonidazole in a Breast Tumor Model Anal. Chem., 2016, 88 (6), pp 3107–3114	http://pubs.acs.org/doi/abs/10.1021/acs.analchem.5b04032
2016	Mulder et al.	Funnel-freezing versus heat-stabilization for the visualization of metabolites by mass spectrometry imaging in a mouse stroke model Proteomics, Volume 16, Issue 11-12, Pages 1652–1659.	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201500402/full
2016	Miyamoto et al.	Mass Spectrometry Imaging Reveals Elevated Glomerular ATP/AMP in Diabetes/obesity and Identifies Sphingomyelin as a Possible Mediator EBioMedicine, Volume 7, May 2016, Pages 121–134	http://www.sciencedirect.com/science/article/pii/S2352396416301207
2016	Reed et al.	The <i>Reed-Stanton</i> press rig for the generation of reproducible fingermarks: Towards a standardised methodology for fingermark research, Science & Justice, Volume 56, Issue 1, January 2016, Pages 9–17,	http://www.sciencedirect.com/science/article/pii/S1355030615001136
2016	Ryffel et al.	Metabolic footprint of epiphytic bacteria on <i>Arabidopsis thaliana</i> leaves The ISME Journal (2016) 10, 632–643.	http://www.nature.com/ismej/journal/v10/n3/abs/ismej2015141a.html
2016	Scott et al.	Norharmane matrix enhances detection of endotoxin by MALDI-MS for simultaneous profiling of pathogen, host and vector systems. Pathogens and Disease, Volume 74, Issue 8.	https://academic.oup.com/femspd/article-abstract/74/8/ftw097/2632703/Norharmane-matrix-enhances-detection-of-endotoxin?redirectedFrom=fulltext
2016	Shyti, R.	Modulating factors for and consequences of cortical spreading depression. Doctoral Thesis, Leiden University, ISBN: 9789090293615	https://openaccess.leidenuniv.nl/handle/1887/37231

2016	Skraskova et al.	Enhanced capabilities for imaging gangliosides in murine brain with matrix-assisted laser desorption/ionization and desorption electrospray ionization mass spectrometry coupled to ion mobility separation Methods. 2016 Feb 23. pii: S1046-2023(16)30031-7. doi: 10.1016/j.jymeth.2016.02.014.	http://www.sciencedirect.com/science/article/pii/S1046202316300317
2016	Soares et al.	Tetraspanins displayed in retrovirus-derived virus-like particles and their immunogenicity. Vaccine, Volume 34, Issue 13, 18 March 2016, Pages 1634-1641	http://www.sciencedirect.com/science/article/pii/S0264410X15017879
2016	Sun et al.	Pharmacokinetic and pharmacometabolomic study of pirfenidone in normal mouse tissues using high mass resolution MALDI-FTICR-mass spectrometry imaging, Histochem Cell Biol., 2016, Feb;145(2):201-11.,	http://link.springer.com/article/10.1007/s00418-015-1382-7
2016	van de Ven et al.	Protein biomarkers on tissue as imaged via MALDI mass spectrometry: A systematic approach to study the limits of detection. Proteomics, Volume 16, Issue 11-12, June 2016, Pages 1660-1669.)	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201500515/full
2016	Weidner et al.	Myotubularin-related protein 7 inhibits insulin signaling in colorectal cancer. Oncotarget. 2016 Aug 2; 7 (31): 50490-50506.	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5226598/

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2015	Heijs et al.	Brain Region-Specific Dynamics of On-Tissue Protein Digestion Using MALDI Mass Spectrometry Imaging J. Proteome Res., 2015, 14 (12), pp 5348-5354 DOI: 10.1021/acs.jproteome.5b00849	http://pubs.acs.org/doi/abs/10.1021/acs.jproteome.5b00849
2015	Buck et al.	High-resolution MALDI-FT-ICR MS imaging for the analysis of metabolites from formalin-fixed, paraffin-embedded clinical tissue samples. J Pathol. 2015 Sep;237(1):123-32. doi: 10.1002/path.4560.	onlinelibrary.wiley.com/doi/10.1002/path.4560/abstract
2015	Patel et al.	Alternative Surfactants for Improved Efficiency of In Situ Tryptic Proteolysis of Fingermarks Journal of The American Society for Mass Spectrometry June 2015, Volume 26, Issue 6, pp 862-872 DOI: 10.1007/s13361-015-1140-z	http://link.springer.com/article/10.1007/s13361-015-1140-z
2015	Heijs et al.	Histology-Guided High-Resolution Matrix-Assisted Laser Desorption Ionization Mass Spectrometry Imaging Anal. Chem., 2015, 87 (24), pp 11978-11983 DOI: 10.1021/acs.analchem.5b03610	http://pubs.acs.org/doi/abs/10.1021/acs.analchem.5b03610
2015	Winter et al.	MALDI-Mass Spectrometry Imaging Identifies Vitronectin as a Common Constituent of Amyloid Deposits J Histochem Cytochem June 22, 2015 0022155415595264 doi: 10.1369/0022155415595264	http://jhc.sagepub.com/content/early/2015/07/13/0022155415595264.abstract

2015	Cole et al.	Communication of medical images to diverse audiences using multimodal imaging Advanced Structural and Chemical Imaging December 2015, 1:13 DOI: 10.1186/s40679-015-0012-8	http://link.springer.com/article/10.1186/s40679-015-0012-8
2015	Heijs et al.	Comprehensive Analysis of the Mouse Brain Proteome Sampled in Mass Spectrometry Imaging	http://pubs.acs.org/doi/abs/10.1021/ac503952q
2015	Batubara et al.	Thin-layer chromatography/matrix-assisted laser desorption/ionisation mass spectrometry and matrix-assisted laser desorption/ionisation mass spectrometry imaging for the analysis of phospholipids in LS174T colorectal adenocarcinoma xenografts treated with the vascular disrupting agent DMXAA	http://onlinelibrary.wiley.com/doi/10.1002/rcm.7223/full
2015	Stauber et al. (IMA Biotech)	US-Patent: Method for detecting and quantifying a target analyte in a sample	https://www.google.com/patents/US20160049284
2015	Stauber et al. (IMA Biotech)	US-Patent: Mass spectrometry imaging method for detecting and quantifying a target molecule in a tissue sample	https://www.google.com/patents/US9182409
2015	Satuber and Hamm (IMA Biotech)	US Patent Application: Method to evaluate the tissue targeting of a molecule of interest	http://www.freepatentsonline.com/y2015/0377862.html
2015	Schwartz et al.	Standardized processing of MALDI imaging raw data for enhancement of weak analyte signals in mouse models of gastric cancer and Alzheimer's disease Anal Bioanal Chem (2015) 407:2255–2264 DOI 10.1007/s00216-014-8356-9	http://link.springer.com/article/10.1007/s00216-014-8356-9

2015	Carreira et al.	Large-Scale Mass Spectrometry Imaging Investigation of Consequences of Cortical Spreading Depression in a Transgenic Mouse Model of Migraine Journal of The American Society for Mass Spectrometry, June 2015, Volume 26, Issue 6, pp 853–861, DOI: 10.1007/s13361-015-1136-8	http://link.springer.com/article/10.1007/s13361-015-1136-8
2015	Potocnik et al.	Use of advantageous, volatile matrices enabled by next-generation high-speed matrix-assisted laser desorption/ionization time-of-flight imaging employing a scanning laser beam Rapid Comm. Mass. Spec., Volume 29, Issue 23 15 December 2015, Pages 2195–2203	http://onlinelibrary.wiley.com/doi/10.1002/rcm.7379/full
2015	Groeneveld et al.	Detection and mapping of illicit drugs and their metabolites in fingermarks by MALDI MS and compatibility with forensic techniques, Scientific Reports 5, Article number: 11716 (2015), doi:10.1038/srep11716	http://www.nature.com/articles/srep11716?WT.ec_id=SREP-631-20150630
2015	Mitchell et al.	Lipid changes within the epidermis of living skin equivalents observed across a time-course by MALDI-MS Imaging and profiling, Lipids in Health and Disease ,2015, 14:84, DOI: 10.1186/s12944-015-0089-z	https://lipidworld.biomedcentral.com/articles/10.1186/s12944-015-0089-z
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2014	Seaman et al.	"Afterlife Experiment": Use of MALDI-MS and SIMS Imaging for the Study of the Nitrogen Cycle within Plants	http://pubs.acs.org/doi/abs/10.1021/ac501191w

		Anal. Chem., 2014, 86 (20), pp 10071-10077 DOI: 10.1021/ac501191w	
2014	Cole et al.	MALDI-MSI and label-free LC-ESI-MS/MS shotgun proteomics to investigate protein induction in a murine fibrosarcoma model following treatment with a vascular disrupting agent Proteomics, Volume 14, Issue 7-8, April 2014 Pages 890–903 DOI: 10.1002/pmic.201300429	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201300429/full
2014	Sun et al.	High-resolution metabolite imaging of light and dark treated retina using MALDI-FTICR mass spectrometry. Proteomics. 2014 Apr;14(7-8):913-23. doi: 10.1002/pmic.201300407.	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201300407/full
2014	Abdelmoula et al.	Automatic Registration of Mass Spectrometry Imaging Data Sets to the Allen Brain Atlas. Anal Chem. 2014 Apr 15;86(8):3947-54. doi: 10.1021/ac500148a.	http://pubs.acs.org/doi/abs/10.1021/ac500148a
2014	Buck et al.	Distribution and quantification of irinotecan and its active metabolite SN-38 in colon cancer murine model systems using MALDI MSI. Anal Bioanal Chem. 2015 Mar;407(8):2107-16. doi: 10.1007/s00216-014-8237-2.	http://link.springer.com/article/10.1007/s00216-014-8237-2
2014	Cuypers et al.	Hydrogen peroxide reactions on cocaine in hair using imaging mass spectrometry Forensic Science International, Volume 242, September 2014, Pages 103–110 doi:10.1016/j.forsciint.2014.06.035	http://www.sciencedirect.com/science/article/pii/S0379073814002710
2014	Horn et al.	Modified oleic cottonseeds show altered content, composition and tissue-specific	http://www.sciencedirect.com/science/article/pii/S0300908413002800

		distribution of triacylglycerol molecular species Biochimie, Volume 96, January 2014, Pages 28–36 doi:10.1016/j.biochi.2013.08.010	
2014	Hochart et al.	Label-free MS imaging from drug discovery to preclinical development. Future Science - Bioanalysis, October 2014 ,Vol. 6, No. 20, Pages 2775-2788 , DOI 10.4155/bio.14.202	http://www.future-science.com/doi/abs/10.4155/bio.14.202
2014	Horn and Chapman	Metabolite Imager: customized spatial analysis of metabolite distributions in mass spectrometry imaging, Metabolomics, April 2014, 10:0, DOI: 10.1007/s11306-013-0575-0	http://link.springer.com/article/10.1007/s11306-013-0575-0
2014	Bradshaw et al.	Direct detection of blood in fingermarks by MALDI MS profiling and Imaging, Science & Justice, Volume 54, Issue 2, March 2014, Pages 110–117, doi:10.1016/j.scijus.2013.12.004	http://www.sciencedirect.com/science/article/pii/S1355030613001433
2014	Munteanu et al.	Label-Free <i>in Situ</i> Monitoring of Histone Deacetylase Drug Target Engagement by Matrix-Assisted Laser Desorption Ionization-Mass Spectrometry Biotyping and Imaging, Anal. Chem., 2014, 86 (10), pp 4642–4647 DOI: 10.1021/ac500038j	http://pubs.acs.org/doi/abs/10.1021/ac500038j
2014	Funke, S.	Proteomic analysis of ocular surface components by use of HPLC based mass spectrometric strategies, DOI / URN: urn:nbn:de:hbis:77-40802	http://ubm.opus.hbz-nrw.de/volltexte/2015/4080/

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2013	Horn et al.	Identification of a New Class of Lipid Droplet-Associated Proteins in Plants, Plant Physiology, August 2013, Vol. 162, pp. 1926–1936, doi: http://dx.doi.org/10.1104/pp.113.222455	http://www.plantphysiol.org/content/162/4/1926.short
2013	Horn et al.	Imaging heterogeneity of membrane and storage lipids in transgenic <i>Camelina sativa</i> seeds with altered fatty acid profiles, Plant J., Volume 76, Issue 1, October 2013, Pages 138–150, DOI: 10.1111/tpj.12278	http://onlinelibrary.wiley.com/doi/10.1111/tpj.12278/full
2013	Claude et al. (Waters cooperation)	Visualisation and Identification of Proteins Directly from a Single On-Tissue Tryptically Digested Sections Using MALDI Imaging HDMSE. <i>J Biomol Tech.</i> 2013 May; 24(Suppl): S52–S53.	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3635284/
2013	Claude et al. (Waters cooperation)	MALDI Imaging HDMSE: A Novel Data Independent Technique for the Visualisation and Identification of Lipids Directly from a Single Tissue Section. <i>J Biomol Tech.</i> 2013 May; 24(Suppl): S53.	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3635441/
2013	Ferguson et al.	Efficiency of the dry-wet method for the MALDI-MSI analysis of latent fingermarks. <i>J Mass Spectrom.</i> 2013 Jun;48(6):677-84. doi: 10.1002/jms.3216.	http://onlinelibrary.wiley.com/doi/10.1002/jms.3216/abstract
2013	Francese et al.	Mini Review: Beyond the ridge pattern: multi-informative analysis of latent fingermarks by MALDI mass spectrometry. <i>Analyst.</i> 2013 Aug 7;138(15):4215-28. doi: 10.1039/c3an36896c.	http://pubs.rsc.org/en/content/articlelanding/2013/an/c3an36896c#!divAbstract

2013	Cole et al.	Recombinant " IMS TAG" proteins – A new method for validating bottom-up matrix-assisted laser desorption/ionisation ion mobility separation mass spectrometry imaging. Rapid Commun Mass Spectrom. 2013 Nov 15;27(21):2355-62. doi: 10.1002/rcm.6693.	http://onlinelibrary.wiley.com/doi/10.1002/rcm.6693/full
2013	Hart et al.	Matrix assisted laser desorption ionisation ion mobility separation mass spectrometry imaging of ex-vivo human skin International Journal for Ion Mobility Spectrometry June 2013, Volume 16, Issue 2, pp 71-83	http://link.springer.com/article/10.1007/s12127-013-0124-6
2013	Francese et al.	Curcumin: A Multipurpose Matrix for MALDI Mass Spectrometry Imaging Applications Anal. Chem., 2013, 85 (10), pp 5240–5248 DOI: 10.1021/ac4007396	http://pubs.acs.org/doi/abs/10.1021/ac4007396
2013	Bradshaw et al.	Towards the integration of matrix assisted laser desorption ionisation mass spectrometry imaging into the current fingermark examination workflow Forensic science international, 2013, Volume 232, Issues 1-3, Pages 111-124	http://www.sciencedirect.com/science/article/pii/S0379073813003630
2013	Mahmoud et al.	Detection of the epidermal growth factor receptor, amphiregulin and epiregulin in formalin-fixed paraffin-embedded human placenta tissue by matrix-assisted laser desorption/ionization mass spectrometry imaging European Journal of Mass Spectrometry Volume 19 Issue 1, Pages 17–28 (2013) doi: 10.1255/ejms.1212	https://www.impublications.com/content/abstract?code=E19_0017

2013	Fueloep et al.	4-Phenyl- α -cyanocinnamic Acid Amide: Screening for a Negative Ion Matrix for MALDI-MS Imaging of Multiple Lipid Classes. Anal Chem. 2013 Oct 1;85(19):9156-63. doi: 10.1021/ac4018154.	http://pubs.acs.org/doi/abs/10.1021/ac4018154
2012			
2012	Ferguson et al.	US Patent: Matrix Assisted Laser Desorption Ionisation Mass Spectrometry Imaging (MALDI-MSI)	https://www.google.com/patents/US20140084151
2012	Bradshaw et al.	Separation of overlapping fingermarks by Matrix Assisted Laser Desorption Ionisation Mass Spectrometry Imaging Forensic Science International Volume 222, Issues 1–3, 10 October 2012, Pages 318–326	http://www.sciencedirect.com/science/article/pii/S0379073812003519
2012	Brignole-Baudouin et al.	A New Safety Concern for Glaucoma Treatment Demonstrated by Mass Spectrometry Imaging of Benzalkonium Chloride Distribution in the Eye, an Experimental Study in Rabbits	http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0050180
2012	Hamm et al.	Quantitative mass spectrometry imaging of propranolol and olanzapine using tissue extinction calculation as normalization factor Journal of Proteomics, Volume 75, Issue 16, 30 August 2012, Pages 4952–4961 doi:10.1016/j.jprot.2012.07.035	http://www.sciencedirect.com/science/article/pii/S1874391912005659
2012	Seppala et al.	In situ imaging of honeybee (<i>Apis mellifera</i>) venom components from aqueous and aluminum hydroxide-adsorbed venom immunotherapy preparations, Journal of	http://www.sciencedirect.com/science/article/pii/S0091674911016460

		Allergy and Clinical Immunology, Volume 129, Issue 5, May 2012, Pages 1314–1320.e3, doi:10.1016/j.jaci.2011.10.014	
2012	Kreye et al.	MALDI-TOF MS imaging of controlled release implants, Journal of Controlled Release, Volume 161, Issue 1, 10 July 2012, Pages 98–108, doi:10.1016/j.jconrel.2012.04.017	http://www.sciencedirect.com/science/article/pii/S0168365912002581
2012	Bailey et al.	Chemical Characterization of Latent Fingerprints by Matrix-Assisted Laser Desorption Ionization, Time-of-Flight Secondary Ion Mass Spectrometry, Mega Electron Volt Secondary Mass Spectrometry, Gas Chromatography/Mass Spectrometry, X-ray Photoelectron Spectroscopy, and Attenuated Total Reflection Fourier Transform Infrared Spectroscopic Imaging: An Intercomparison, Anal. Chem., 2012, 84 (20), pp 8514–8523, DOI: 10.1021/ac302441y	http://pubs.acs.org/doi/abs/10.1021/ac302441y
2012	Stauber and Bonnel	US-Patent: Method for detecting and quantifying a target molecule in a tissue	https://www.google.com/patents/US20140106391

2. SunCollect as a MALDI-Spotter (in combination with Nano/Micro-HPLC)

Year	Author(s)	Title	Link
2017			
2017	Angenendt et al.	An atlas of bloodstream-accessible bone marrow proteins for site-directed therapy of acute myeloid leukemia. Leukemia (2017), 1-10.	https://www.nature.com/articles/leu2017208
2017	Diaz-Diaz et al.	Proteomic Analysis of the E3 Ubiquitin-Ligase Hakai Highlights a Role in Plasticity of the Cytoskeleton Dynamics and in the Proteasome System. J. Proteome Res., 2017, 16 (8), pp 2773-2788.	https://www.ncbi.nlm.nih.gov/pubmed/28675930
2017	Mateos et al.	Multicentric study of the effect of pre-analytical variables in the quality of plasma samples stored in biobanks using different complementary proteomic methods. Journal of Proteomics, Volume 150, 6 January 2017, Pages 109-120.	http://www.sciencedirect.com/science/article/pii/S1874391916304031
2017	Nadler et al.	MALDI versus ESI: The Impact of the Ion Source on Peptide Identification. J. Proteome Res., 2017, 16 (3), pp 1207-1215.	https://www.ncbi.nlm.nih.gov/pubmed/28176526

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2016	Hanke et al.	The pivotal role of reactivity in the design of novel biotinylation reagents for the chemical-proteomics-based identification of vascular accessible biomarkers, <i>Journal of Proteomics</i> , Volume 141, 1 June 2016, Pages 57–66, doi:10.1016/j.jprot.2016.04.014	http://www.sciencedirect.com/science/article/pii/S187439191630135X
2016	Lourido et al.	Secretome analysis of human articular chondrocytes unravels catabolic effects of nicotine on the joint. <i>Proteomics - Clinical Applications</i> , Volume 10, Issue 6, June 2016, Pages 671–680.	http://onlinelibrary.wiley.com/doi/10.1002/prca.201400186/full
2016	Poßberg et al.	Quantitative Identification of Biogenic Nonextractable Pesticide Residues in Soil by 14C-Analysis. <i>Environ. Sci. Technol.</i> , 2016, 50 (12), pp 6415–6422.	http://pubs.acs.org/doi/abs/10.1021/acs.est.6b00689
2016	Ruprecht	Online Dissertation TU Munich: Development of phosphor and chemoproteomic methods to study cellular signaling	https://mediatum.ub.tum.de/doc/1293383/1293383.pdf
2016	Schmidt et al.	Identification of E-cadherin signature motifs functioning as cleavage sites for Helicobacter pylori HtrA, <i>Sci Rep.</i> 2016; 6: 23264, doi: 10.1038/srep23264	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4794652/
2016	Shatsky et al.	Quantitative Tagless Copurification: A Method to Validate and Identify Protein-Protein Interactions. <i>Molecular & Cellular Proteomics</i> , 15, 2186-2202.	http://www.mcponline.org/content/15/6/2186.short

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2015	Gago-Fuentes et al.	Proteomic Analysis of Connexin 43 Reveals Novel Interactors Related to Osteoarthritis. Mol Cell Proteomics. 2015 Jul;14(7):1831-45. doi: 10.1074/mcp.M115.050211.	http://www.mcponline.org/content/14/7/1831.long
2015	Lourido et al.	Secretome analysis of human articular chondrocytes unravels catabolic effects of nicotine on the joint. Proteomics Clin Appl. 2016 Jun;10(6):671-80. doi: 10.1002/prca.201400186.	http://onlinelibrary.wiley.com/doi/10.1002/prca.201400186/abstract
2015	Schmitt et al.	Neuropeptidomics of the Carpenter Ant Camponotus floridanus. J Proteome Res. 2015 Mar 6;14(3):1504-14. doi: 10.1021/pr5011636. Epub 2015 Feb 16.	http://pubs.acs.org/doi/abs/10.1021/pr5011636
2015	Mateos et al.	iTRAQ-based analysis of progerin expression reveals mitochondrial dysfunction, reactive oxygen species accumulation and altered proteostasis Stem Cell Research & Therapy, 2015, 6:119 DOI: 10.1186/s13287-015-0110-5	http://stemcellres.biomedcentral.com/articles/10.1186/s13287-015-0110-5
2015	Fafian-Labora et al.	Influence of age on rat bone-marrow mesenchymal stem cells potential, Sci Rep. 2015; 5: 16765, doi: 10.1038/srep16765	http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4652164/
2015	Mendez et al.	Quantitative proteomic analysis of host—pathogen interactions: a study of <i>Acinetobacter baumannii</i> responses to host airways, MC Genomics 2015 16:422, DOI: 10.1186/s12864-015-1608-z	http://bmcbioinformatics.biomedcentral.com/articles/10.1186/s12864-015-1608-z

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2014	Lourido et al.	Quantitative Proteomic Profiling of Human Articular Cartilage Degradation in Osteoarthritis. J. Proteome Res., 2014, 13 (12), pp 6096–6106 DOI: 10.1021/pr501024p	http://pubs.acs.org/doi/abs/10.1021/pr501024p
2014	Martinez-Cortes et al.	A proteomic approach to <i>Physcomitrella patens</i> rhizoid exudates. Journal of Plant Physiology, Volume 171, Issue 17, 1 November 2014, Pages 1671–1678, doi:10.1016/j.jplph.2014.08.004	http://www.sciencedirect.com/science/article/pii/S0176161714002168
2014	Calamia et al.	A pharmacoproteomic study confirms the synergistic effect of chondroitin sulfate and glucosamine Scientific Reports 4, Article number: 5069 (2014) doi:10.1038/srep05069	http://www.nature.com/articles/srep05069?WT.ec_id=SREP-20140617
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2014	Mateos et al.	Cryoconservation of Peptide Extracts from Trypsin Digestion of Proteins for Proteomic Analysis in a Hospital Biobank Facility. J. Proteome Res., 2014, 13 (4), pp 1930–1937 DOI: 10.1021/pr401046u	http://pubs.acs.org/doi/abs/10.1021/pr401046u
2014	Maier et al.	PAS-cal: A repetitive peptide sequence calibration standard for MALDI mass	http://onlinelibrary.wiley.com/doi/10.1002/pmic.201400199/full

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2014	Roan et al.	Liquefaction of Semen Generates and Later Degrades a Conserved Semenogelin Peptide That Enhances HIV Infection, J. Virol. July 2014 vol. 88 no. 13 7221-7234	http://jvi.asm.org/content/88/13/7221.short
2014	Araujo et al.	A comprehensive factorial design study of variables affecting protein extraction from formalin-fixed kidney tissue samples, Talanta, Volume 119, 15 February 2014, Pages 90–97, doi:10.1016/j.talanta.2013.10.019	http://www.sciencedirect.com/science/article/pii/S0039914013008187
2014	Weingarten et al.	The proteome of the presynaptic active zone from mouse brain, Molecular and Cellular Neuroscience, Volume 59, March 2014, Pages 106–118,	http://www.sciencedirect.com/science/article/pii/S1044743114000220
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2013	Ivashov et al.	Lipidome and proteome of lipid droplets from the methylotrophic yeast <i>Pichia pastoris</i> , BBA - Molecular and Cell Biology of Lipids, Volume 1831, Issue 2, February 2013, Pages 282–290, doi:10.1016/j.bbaliip.2012.09.017	http://www.sciencedirect.com/science/article/pii/S138819811200220X
2013	Khan et al.	The proteolytic processing of amelogenin by enamel matrix metalloproteinase (MMP-20) is controlled by mineral ions, BBA - General Subjects, Volume 1830, Issue 3, March 2013,	http://www.sciencedirect.com/science/article/pii/S0304416512003418

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2013	Santos et al.	Mapping sea urchins tube feet proteome — A unique hydraulic mechano-sensory adhesive organ, Journal of Proteomics, Volume 79, 21 February 2013, Pages 100–113	http://www.sciencedirect.com/science/article/pii/S187439191200783X
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2012	Calamia et al.	Secretome analysis of chondroitin sulfate-treated chondrocytes reveals anti-angiogenic, anti-inflammatory and anti-catabolic properties Arthritis Research & Therapy, 2012, 14:R202 DOI: 10.1186/ar4040	http://arthritis-research.biomedcentral.com/articles/10.1186/ar4040#Sec2
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2012	Konopka et al.	Improving the precision of quantitative bottom-up proteomics based on stable isotope-labeled proteins, Analytical and Bioanalytical Chemistry	http://link.springer.com/article/10.1007/s00216-012-6007-6

		September 2012, Volume 404, Issue 4, pp 1079–1087, DOI: 10.1007/s00216-012-6007-6	
2012	McDonagh et al.	Application of iTRAQ Reagents to Relatively Quantify the Reversible Redox State of Cysteine Residues, International Journal of Proteomics, Volume 2012 (2012), Article ID 514847 http://dx.doi.org/10.1155/2012/514847	http://www.hindawi.com/journals/ijpro/2012/514847/abs/
2012	Calamia et al.	Pharmacoproteomic Study of Three Different Chondroitin Sulfate Compounds on Intracellular and Extracellular Human Chondrocyte Proteomes, Molecular & Cellular Proteomics, 11, M111.013417, doi: 10.1074/mcp.M111.013417	http://www.mcponline.org/content/11/6/M111.013417.long
2012	Mendez et al.	Extracellular Proteome of a Highly Invasive Multidrug-resistant Clinical Strain of <i>Acinetobacter baumannii</i> , J. Proteome Res., 2012, 11 (12), pp 5678–5694 DOI: 10.1021/pr300496c	http://pubs.acs.org/doi/abs/10.1021/pr300496c
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2011	Roesli et al.	The accessible cerebral vascular proteome in a mouse model of cerebral β-amyloidosis. J Proteomics. 2011 Apr 1;74(4):539-46. doi: 10.1016/j.jprot.2011.01.010.	http://www.sciencedirect.com/science/article/pii/S1874391911000273

3. SunCollect as a micro fraction collector

Year	Author(s)	Titel	Link
2011-2016			
2016	Kummer et al.	Listeriosis down-regulates hepatic cytochrome P450 enzymes in sub-lethal murine infection, Proteomics - Clinical Applications, doi: 10.1002/prca.201600030	http://onlinelibrary.wiley.com/doi/10.1002/prca.201600030/abstract
2016	Poßberg et al.	Quantitative Identification of Biogenic Nonextractable Pesticide Residues in Soil by ¹⁴ C-Analysis Environ. Sci. Technol., 2016, 50 (12), pp 6415–6422 DOI: 10.1021/acs.est.6b00689	http://pubs.acs.org/doi/abs/10.1021/acs.est.6b00689
2015	Wirsing et al.	Linear Discriminant Analysis Identifies Mitochondrially Localized Proteins in <i>Neurospora crassa</i> , J. Proteome Res., 2015, 14 (9), pp 3900–3911 DOI: 10.1021/acs.jproteome.5b00329	http://pubs.acs.org/doi/abs/10.1021/acs.jproteome.5b00329
2014	Strassberger et al.	A comprehensive surface proteome analysis of myeloid leukemia cell lines for therapeutic antibody development	http://www.sciencedirect.com/science/article/pii/S1874391914000402#bb0070
2013	Scheiter et al.	Proteome Analysis of Distinct Developmental Stages of Human	http://www.mcponline.org/content/12/5/1099.abstract

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