

SunCollect Pneumatic Sprayer, MALDI Spotter and Fraction Collector



Selected Publications featuring SunChrom's SunCollect

2012 - 2020

- 1 SunCollect as a sprayer for MALDI-Imaging**
- 2 SunCollect as a MALDI-Spotter (in combination with Nano/Micro-HPLC)**
- 3 SunCollect as a micro fraction collector**

1 SunCollect as a sprayer for MALDI-Imaging

| Year | Author(s) | Titel | Link |
|-------------|----------------|--|---|
| 2020 | | | |
| 2020 | Yang et al. | On-Tissue Derivatization of Lipopolysaccharide for Detection of Lipid A Using MALDI-MSI | https://doi.org/10.1021/acs.analchem.0c02566 |
| 2020 | Mezger et al. | Mass Spectrometry Spatial-Omics on a Single Conductive Slide | https://doi.org/10.1021/acs.analchem.0c04572 |
| 2020 | Boyaval et al. | N-glycomic signature of stage II colorectal cancer and its association with the tumor microenvironment | DOI: 10.1074/mcp.RA120.002215 |
| 2020 | Fülöp et al. | New Derivatization Reagent for Detection of free Thiol-groups in Metabolites and Proteins in Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging | https://doi.org/10.1021/acs.analchem.9b05630 |
| 2020 | Prade et al. | <i>De novo</i> discovery of metabolic heterogeneity with immunophenotype-guided imaging mass spectrometry | https://doi.org/10.1016/j.molmet.2020.01.017 |
| 2020 | Mueller et al. | Dual-polarity SALDI FT-ICR MS imaging and Kendrick mass defect data filtering for lipid analysis | https://link.springer.com/article/10.1007/s00216-020-03020-w |
| 2020 | Arolt et al. | Expression Profiling of Extracellular Matrix Genes Reveals Global and Entity-Specific Characteristics in Adenoid Cystic, Mucoepidermoid and Salivary Duct Carcinomas | https://doi.org/10.3390/cancers12092466 |

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| 2020 | Tiquet et al. | Mass Spectrometry Imaging Using Dynamically Harmonized FT-ICR at Million Resolving Power: Rationalizing and Optimizing Sample Preparation and Instrumental Parameters | https://chemrxiv.org/articles/preprint/Mass_Spectrometry_Imaging_Using_Dynamically_Harmonized_FT-ICR_at_Million_Resolving_Power_Rationalizing_and_Optimizing_Sample_Preparation_and_Instrumental_Parameters/13013900/1 |
| 2020 | Ellis et al. | Mass spectrometry imaging of phosphatidylcholine metabolism in lungs administered with therapeutic surfactants and isotopic tracers | https://doi.org/10.1016/j.jlr.2021.100023 |
| 2020 | Blutke et al. | Light sheet fluorescence microscopy guided MALDI-imaging mass spectrometry of cleared tissue samples | https://www.nature.com/articles/s41598-020-71465-1 |
| 2020 | Nytka et al. | Signal enhancement in desorption nano electrospray ionization by custom-made inlet with pressure regulation | https://doi.org/10.1002/jms.4642 |
| 2020 | Jurikova et al. | Bringing SEM and MSI Closer Than Ever Before: Visualizing Aspergillus and Pseudomonas Infection in the Rat Lungs | https://doi.org/10.3390/jof6040257 |
| 2020 | Butler et al. | Lipidomic profiling of clinical prostate cancer reveals targetable alterations in membrane lipid composition | https://www.biorxiv.org/content/10.1101/2020.10.27.356634v1.abstract |
| 2020 | Kurcyk et al. | Classification of Thyroid Tumors Based on Mass Spectrometry Imaging of Tissue Microarrays; a Single-Pixel Approach | https://doi.org/10.3390/ijms21176289 |
| 2020 | Mitra et al. | Differential expression of proteins in human prostate cancer tissues probed by MALDI imaging mass spectrometry | https://doi.org/10.1101/2020.10.05.326686 |
| 2020 | La Rocca et al. | Using Biological Signals for Mass Recalibration of Mass Spectrometry Imaging Data | https://chemrxiv.org/articles/preprint/Using_Biological_Signals_for_Mass_Recalibration_of_Mass_Spectrometry_Imaging_Data/12901679/1 |
| 2020 | Gregoire et al. | Imaging and quantifying drug delivery in skin – Part 1: Autoradiography and mass spectrometry imaging | https://doi.org/10.1016/j.addr.2019.11.004 |
| 2020 | Berghmans et al. | Mass Spectrometry Imaging Reveals Neutrophil Defensins as Additional Biomarkers for Anti-PD-(L)1 Immunotherapy Response in NSCLC Patients | https://doi.org/10.3390/cancers12040863 |
| 2020 | Andre et al. | The ascorbate-deficient guinea pig model of shigellosis allows the study of the entire Shigella life cycle | https://doi.org/10.1101/2020.08.28.270074 |
| 2020 | Yutuc et al. | Localization of sterols and oxysterols in mouse brain reveals distinct spatial cholesterol metabolism | https://doi.org/10.1073/pnas.1917421117 |
| 2020 | Colley et al. | Mapping and identification of native proteins of developing teeth in mouse mandibles. 92(11):7630-7637. | https://doi.org/10.1021/acs.analchem.0c00359 |

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| 2020 | Heijs et al. | Molecular signatures of tumor progression in myxoid liposarcoma identified by N-glycan mass spectrometry imaging. <i>Laboratory Investigation</i> | https://doi.org/10.1038/s41374-020-0435-2 |
| 2020 | Kunzke et al. | Derangements of amino acids in cachectic skeletal muscle are caused by mitochondrial dysfunction | https://onlinelibrary.wiley.com/doi/full/10.1002/jcsm.12498 |
| 2020 | Geier et al. | Connecting structure and function from organisms to molecules in small animal symbioses through chemo-histo-tomography | https://doi.org/10.1101/2020.09.28.316802 |
| 2020 | Sun et al. | Mass spectrometry imaging establishes 2 distinct metabolic phenotypes of aldosterone-producing cell clusters in primary aldosteronism. <i>Hypertension</i> 75(3):634-644. | https://doi.org/10.1161/HYPERTENSIONAHA.119.14041 |
| 2019 | | | |
| 2019 | Berghmans et al. | MALDI Mass Spectrometry Imaging Linked with Top-Down Proteomics as a Tool to Study the Non-Small-Cell Lung Cancer Tumor Microenvironment. <i>Methods Protoc</i> 2:44 | https://doi.org/10.3390/mps2020044 |
| 2019 | Erich et al. | Spatial distribution of endogenous tissue protease activity in gastric carcinoma mapped by MALDI mass spectrometry imaging. <i>Molecular & Cellular Proteomics</i> 18, 151–161 | https://doi.org/10.1074/mcp.RA118.000980 |
| 2019 | Francese & Russo | Fingermarks as a new proteomic specimen: state of the art and perspective of in situ proteomics. Applications in Forensic Proteomics: Protein Identification and Profiling, 91–105. | https://doi.org/10.1021/bk-2019-1339.ch006 |
| 2019 | García et al. | Secretome analysis of chondrocytes and synovial fibroblasts in osteoarthritis: modulation by VIP <i>Annals of the Rheumatic Diseases</i> 78:1512. | https://ard.bmj.com/content/annrheumdis/78/Suppl_2/1512.1.full.pdf |
| 2019 | Gawin et al. | Molecular heterogeneity of papillary thyroid cancer: comparison of primary tumors and synchronous metastases in regional lymph nodes by mass spectrometry imaging. <i>Endocrine Pathology</i> 30:250–261 | https://doi.org/10.1007/s12022-019-09593-2 |
| 2019 | Gorka et al. | Molecular composition of fingermarks: Assessment of the intra- and inter-variability in a small group of donors using MALDI-MSI. <i>Forensic Chemistry</i> 12: 99–106, | https://doi.org/10.1016/j.forc.2018.12.002 |
| 2019 | Huizing et al. | Development and evaluation of matrix application techniques for highthroughput mass spectrometry imaging of tissues in the clinic. <i>Clinical Mass Spectrometry</i> 12: 7–15. | https://doi.org/10.1016/j.clinms.2019.01.004 |

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| 2019 | Joye et al. | In situ metabolomic changes in rat hippocampus after acute cocaine administration. International Journal of Mass Spectrometry 437: 87-91 | https://doi.org/10.1016/j.ijms.2017.12.001 |
| 2019 | Kune et al. | Rapid visualization of chemically related compounds using Kendrick mass defect as a filter in mass spectrometry imaging. Analytica Chemistry. 2019, 91, 13112-13118 | https://doi.org/10.1021/acs.analchem.9b03333 |
| 2019 | Ly et al. | Enhanced coverage of insect neuropeptides in tissue sections by an optimized mass-spectrometry-imaging protocol. Anal. Chem. 2019, 91, 1980-1988 | https://doi.org/10.1021/acs.analchem.8b04304 |
| 2019 | Nishidate et al. | Applications of MALDI mass spectrometry imaging for pharmacokinetic studies during drug development | https://doi.org/10.1016/j.dmpk.2019.04.006 |
| 2019 | Nollet | Mass spectrometry imaging. In: Mass spectrometry imaging in food analysis. Nollet. CRC Press Taylor&Francis Group, Boca Raton, USA | ISBN: 978-1138370692 |
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| 2019 | Piga et al. | Ultra-highresolutionMALDI-FTICR-MSIanalysisofintactproteinsinmouseandhumanpancreastissue. IntJMassSpec 437:10-16 | https://doi.org/10.1016/j.ijms.2017.11.001 |
| 2019 | Ressa | Characterizing tumor grades of myxoid liposarcoma using integrative clinical proteomics. In : Investigating molecular factors regulating cancer biology: from proteomics to multi-omics. PhD thesis, University of Utrecht, Netherlands. ISBN 978-94-6323-534-1. PhD thesis | https://dspace.library.uu.nl/bitstream/handle/1874/377820/2019_annaressa_phdthesis.pdf?sequence=1#page=71 |
| 2019 | Sugiyama et al. | Mechanical allodynia induced by optogenetic sensory nerve excitation activates dopamine signaling and metabolism in medial nucleus accumbens. Neurochemistry International 129:104494 | https://doi.org/10.1016/j.neuint.2019.104494 |
| 2019 | Sun et al. | prognostic relevance of steroid sulfation in adrenocortical carcinoma revealed by molecular phenotyping using high-resolution massspectrometry imaging. Clinical Chemistry 65(10):1276-1268. | |
| 2019 | Strnad et al. | The use of 1,5-diaminonaphthalene for matrix-assisted laser desorption/ ionization mass spectrometry imaging of brain in neurodegenerative disorders | https://doi.org/10.1016/j.talanta.2019.03.117 |
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| 2018 | | | |
| 2018 | Barré et al. | Fast raster matrix-assisted laser desorption/ionization mass spectrometry imaging of lipids at high lateral resolution. <i>International Journal of Mass Spectrometry</i> . | https://doi.org/10.1016/j.ijms.2018.09.015 |
| 2018 | Buck et al. | Round robin study of formalin-fixed paraffin-embedded tissues in mass spectrometry imaging. <i>Analytical and Bioanalytical Chemistry</i> . Volume 410, Issue 23, pp 5969-5980 | https://link.springer.com/article/10.1007/s00216-018-1216-2 |
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| 2018 | Ucal and Ozpinar | Improved spectra for MALDI MSI of peptides using ammonium phosphate monobasic in MALDI matrix. <i>Journal of Mass Spectrometry</i> . Volume 53, Issue 8, Pages 635-648. | https://onlinelibrary.wiley.com/doi/abs/10.1002/jms.4198 |
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| 2018 | Scotcher and Bradshaw | The analysis of latent fingermarks on polymer banknotes using MALDI-MS. <i>Scientific Reports</i> 8. Article number: 8765. | https://www.nature.com/articles/s41598-018-27004-0 |
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