Carsten Hopf

List of Publications by Year
in descending order

88 papers	7,888 citations	109264 35 h-index	51562 86 g-index
100 all docs	100 docs citations	100 times ranked	12712 citing authors

#	Article	IF	Citations
1	A new update of MALDI-TOF mass spectrometry in lipid research. Progress in Lipid Research, 2022, 86, 101145.	5.3	30
2	LPS-induced lipid alterations in microglia revealed by MALDI mass spectrometry-based cell fingerprinting in neuroinflammation studies. Scientific Reports, 2022, 12, 2908.	1.6	9
3	Structural amyloid plaque polymorphism is associated with distinct lipid accumulations revealed by trapped ion mobility mass spectrometry imaging. Journal of Neurochemistry, 2022, 160, 482-498.	2.1	17
4	Spatially resolved mass spectrometry analysis of amyloid plaqueâ€associated lipids. Journal of Neurochemistry, 2021, 159, 330-342.	2.1	11
5	Recent developments of novel matrices and on-tissue chemical derivatization reagents for MALDI-MSI. Analytical and Bioanalytical Chemistry, 2021, 413, 2599-2617.	1.9	53
6	Batch Effects in MALDI Mass Spectrometry Imaging. Journal of the American Society for Mass Spectrometry, 2021, 32, 628-635.	1.2	26
7	Fast Nanoliterâ€Scale Cell Assays Using Droplet Microarrayâ€“Mass Spectrometry Imaging. Advanced Biology, 2021, 5, e2000279.	1.4	14
8	Tryptophan metabolism drives dynamic immunosuppressive myeloid states in IDH-mutant gliomas. Nature Cancer, 2021, 2, 723-740.	5.7	110
9	Following spatial Aβ aggregation dynamics in evolving Alzheimerâ€™s disease pathology by imaging stable isotope labeling kinetics. Science Advances, 2021, 7, .	4.7	22
10	M2aiaâ€”Interactive, fast, and memory-efficient analysis of 2D and 3D multi-modal mass spectrometry imaging data. GigaScience, 2021, 10, .	3.3	15
11	Tryptophan metabolism is inversely regulated in the tumor and blood of patients with glioblastoma. Theranostics, 2021, 11, 9217-9233.	4.6	16
12	Label-free cell assays to determine compound uptake or drug action using MALDI-TOF mass spectrometry. Nature Protocols, 2021, 16, 5533-5558.	5.5	12
13	Clinically Relevant OATP2B1 Inhibitors in Marketed Drug Space. Molecular Pharmaceutics, 2020, 17, 488-498.	2.3	9
14	Computational Analysis of Alzheimer Amyloid Plaque Composition in 2D- and Elastically Reconstructed 3D-MALDI MS Images. Analytical Chemistry, 2020, 92, 14484-14493.	3.2	15
15	IL4I1 Is a Metabolic Immune Checkpoint that Activates the AHR and Promotes Tumor Progression. Cell, 2020, 182, 1252-1270.e34.	13.5	259
16	Direct Automated MALDI Mass Spectrometry Analysis of Cellular Transporter Function: Inhibition of OATP2B1 Uptake by 294 Drugs. Analytical Chemistry, 2020, 92, 11851-11859.	3.2	8
17	Fast Quantification Without Conventional Chromatography, The Growing Power of Mass Spectrometry. Analytical Chemistry, 2020, 92, 8628-8637.	3.2	17
18	New Derivatization Reagent for Detection of free Thiol-groups in Metabolites and Proteins in Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging. Analytical Chemistry, 2020, 92, 6224-6228.	3.2	21

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19	Quantitative Mass Spectrometry Imaging Reveals Mutation Status-independent Lack of Imatinib in Liver Metastases of Gastrointestinal Stromal Tumors. Scientific Reports, 2019, 9, 10698.	1.6	37
20	Mechanistic MALDI-TOF Cell-Based Assay for the Discovery of Potent and Specific Fatty Acid Synthase Inhibitors. Cell Chemical Biology, 2019, 26, 1322-1331.e4.	2.5	11
21	Bacterial immunogenic Î±-galactosylceramide identified in the murine large intestine: dependency on diet and inflammation. Journal of Lipid Research, 2019, 60, 1892-1904.	2.0	32
22	The Influence of Different Fat Sources on Steatohepatitis and Fibrosis Development in the Western Diet Mouse Model of Non-alcoholic Steatohepatitis (NASH). Frontiers in Physiology, 2019, 10, 770.	1.3	27
23	Advanced MALDI mass spectrometry imaging in pharmaceutical research and drug development. Current Opinion in Biotechnology, 2019, 55, 51-59.	3.3	202
24	Siteâ€toâ€Site Reproducibility and Spatial Resolution in MALDIâ€“MSI of Peptides from Formalinâ€Fixed Paraffinâ€Embedded Samples. Proteomics - Clinical Applications, 2019, 13, e1800029.	0.8	73
25	Spatial Distribution of Endogenous Tissue Protease Activity in Gastric Carcinoma Mapped by MALDI Mass Spectrometry Imaging. Molecular and Cellular Proteomics, 2019, 18, 151-161.	2.5	26
26	The combination of 2,5-dihydroxybenzoic acid and 2,5-dihydroxyacetophenone matrices for unequivocal assignment of phosphatidylethanolamine species in complex mixtures. Analytical and Bioanalytical Chemistry, 2018, 410, 2437-2447.	1.9	22
27	Fourier Transform Infrared Microscopy Enables Guidance of Automated Mass Spectrometry Imaging to Predefined Tissue Morphologies. Scientific Reports, 2018, 8, 313.	1.6	37
28	Murine Sialidase Neu3 facilitates GM2 degradation and bypass in mouse model of Tay-Sachs disease. Experimental Neurology, 2018, 299, 26-41.	2.0	50
29	Massenspektrometrie in der Biomedizin- und Pharmaforschung. BioSpektrum, 2018, 24, 694-696.	0.0	1
30	Automated analysis of lipid drug-response markers by combined fast and high-resolution whole cell MALDI mass spectrometry biotyping. Scientific Reports, 2018, 8, 11260.	1.6	19
31	Deletion of Specific Sphingolipids in Distinct Neurons Improves Spatial Memory in a Mouse Model of Alzheimerâ€™s Disease. Frontiers in Molecular Neuroscience, 2018, 11, 206.	1.4	17
32	Discovery of a Highly Selective Tankyrase Inhibitor Displaying Growth Inhibition Effects against a Diverse Range of Tumor Derived Cell Lines. Journal of Medicinal Chemistry, 2017, 60, 5455-5471.	2.9	24
33	Altered mitochondrial and peroxisomal integrity in lipocalin-2-deficient mice with hepatic steatosis. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 2093-2110.	1.8	22
34	Structure-performance relationships of phenyl cinnamic acid derivatives as MALDI-MS matrices for sulfatide detection. Analytical and Bioanalytical Chemistry, 2017, 409, 1569-1580.	1.9	10
35	Alzheimerâ€™s-Causing Mutations Shift AÎ² Length by Destabilizing Î³-Secretase-AÎ²n Interactions. Cell, 2017, 170, 443-456.e14.	13.5	199
36	Scores for standardization of on-tissue digestion of formalin-fixed paraffin-embedded tissue in MALDI-MS imaging. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 907-915.	1.1	20

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37	Inhibition of Rho-Associated Kinase 1/2 Attenuates Tumor Growth in Murine Gastric Cancer. Neoplasia, 2016, 18, 500-511.	2.3	35
38	Molecular imaging of brain localization of liposomes in mice using MALDI mass spectrometry. Scientific Reports, 2016, 6, 33791.	1.6	30
39	The stress kinase GCN2 does not mediate suppression of antitumor T cell responses by tryptophan catabolism in experimental melanomas. Oncolmmunology, 2016, 5, e1240858.	2.1	51
40	Studying epigenetic complexes and their inhibitors with the proteomics toolbox. Clinical Epigenetics, 2016, 8, 76.	1.8	15
41	Therapeutic drug monitoring in dried blood spots using liquid microjunction surface sampling and high resolution mass spectrometry. Analyst, The, 2016, 141, 892-901.	1.7	29
42	Whole/Intact Cell MALDI MS Biotyping in Mammalian Cell Analysis. , 2016, , 249-262.		3
43	Myotubularin-related protein 7 inhibits insulin signaling in colorectal cancer. Oncotarget, 2016, 7, 50490-50506.	0.8	21
44	Standardized processing of MALDI imaging raw data for enhancement of weak analyte signals in mouse models of gastric cancer and Alzheimerâ€™s disease. Analytical and Bioanalytical Chemistry, 2015, 407, 2255-2264.	1.9	12
45	Optimized Chemical Proteomics Assay for Kinase Inhibitor Profiling. Journal of Proteome Research, 2015, 14, 1574-1586.	1.8	104
46	Personalized monitoring of therapeutic salicylic acid in dried blood spots using a three-layer setup and desorption electrospray ionization mass spectrometry. Analytical and Bioanalytical Chemistry, 2015, 407, 7229-7238.	1.9	23
47	Renal sulfatides: sphingoid base-dependent localization and region-specific compensation of CerS2-dysfunction. Journal of Lipid Research, 2014, 55, 2354-2369.	2.0	23
48	Quantitative imaging mass spectrometry of renal sulfatides: validation by classical mass spectrometric methods. Journal of Lipid Research, 2014, 55, 2343-2353.	2.0	27
49	Label-Free in Situ Monitoring of Histone Deacetylase Drug Target Engagement by Matrix-Assisted Laser Desorption Ionization-Mass Spectrometry Biotyping and Imaging. Analytical Chemistry, 2014, 86, 4642-4647.	3.2	69
50	The Commonly Used PI3-Kinase Probe LY294002 Is an Inhibitor of BET Bromodomains. ACS Chemical Biology, 2014, 9, 495-502.	1.6	97
51	Chemoproteomics Reveals Time-Dependent Binding of Histone Deacetylase Inhibitors to Endogenous Repressor Complexes. ACS Chemical Biology, 2014, 9, 1736-1746.	1.6	52
52	Mapping Protein Complexes Using Covalently Linked Antibodies and Isobaric Mass Tags. Methods in Molecular Biology, 2014, 1156, 279-291.	0.4	4
53	Intact cell MALDI mass spectrometry biotyping for "at-line" monitoring of apoptosis progression in CHO cell cultures. BMC Proceedings, 2013, 7, .	1.8	1
54	4-Phenyl-Î±-cyanocinnamic Acid Amide: Screening for a Negative Ion Matrix for MALDI-MS Imaging of Multiple Lipid Classes. Analytical Chemistry, 2013, 85, 9156-9163.	3.2	62

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55	Monitoring CHO cell cultures: Cell stress and early apoptosis assessment by mass spectrometry. Journal of Biotechnology, 2013, 168, 452-461.	1.9	16
56	Affinity Profiling of the Cellular Kinome for the Nucleotide Cofactors ATP, ADP, and GTP. ACS Chemical Biology, 2013, 8, 599-607.	1.6	73
57	Structural Basis and SAR for G007-LK, a Lead Stage 1,2,4-Triazole Based Specific Tankyrase 1/2 Inhibitor. Journal of Medicinal Chemistry, 2013, 56, 3012-3023.	2.9	109
58	Emergence of whole-cell MALDI-MS biotyping for high-throughput bioanalysis of mammalian cells?. Bioanalysis, 2013, 5, 885-893.	0.6	25
59	Quantitative Characterization of Tissue Globotetraosylceramides in a Rat Model of Polycystic Kidney Disease by PrimaDrop Sample Preparation and Indirect High-Performance Thin Layer Chromatographyâ€“Matrix-Assisted Laser Desorption/Ionization-Time-of-Flight-Mass Spectrometry with Automated Data Acquisition. Analytical Chemistry, 2013, 85, 6233-6240.	3.2	25
60	DMSO-enhanced MALDI MS imaging with normalization against a deuterated standard for relative quantification of dasatinib in serial mouse pharmacology studies. Analytical and Bioanalytical Chemistry, 2013, 405, 9467-9476.	1.9	29
61	MALDI imaging MS reveals candidate lipid markers of polycystic kidney disease. Journal of Lipid Research, 2013, 54, 2785-2794.	2.0	37
62	Sulfatides are required for renal adaptation to chronic metabolic acidosis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9998-10003.	3.3	53
63	CHAPTER 11. LRRK2 Kinase Inhibitors as New Drugs for Parkinsonâ€™s Disease?. RSC Drug Discovery Series, 2013, , 266-293.	0.2	2
64	Mass spectrometry approaches to monitor proteinâ€“drug interactions. Methods, 2012, 57, 430-440.	1.9	22
65	Identification of serum proteins bound to industrial nanomaterials. Toxicology Letters, 2012, 208, 41-50.	0.4	90
66	Sensitive, robust and automated protein analysis of cell differentiation and of primary human blood cells by intact cell MALDI mass spectrometry biotyping. Analytical and Bioanalytical Chemistry, 2012, 404, 2277-2286.	1.9	30
67	A selective inhibitor reveals PI3KÎ³ dependence of TH17 cell differentiation. Nature Chemical Biology, 2012, 8, 576-582.	3.9	136
68	Determination of Kinase Inhibitor Potencies in Cell Extracts by Competition Binding Assays and Isobaric Mass Tags. Methods in Molecular Biology, 2012, 803, 141-155.	0.4	2
69	Inhibition of BET recruitment to chromatin as an effective treatment for MLL-fusion leukaemia. Nature, 2011, 478, 529-533.	13.7	1,354
70	Chemoproteomics-Based Design of Potent LRRK2-Selective Lead Compounds That Attenuate Parkinsonâ€™s Disease-Related Toxicity in Human Neurons. ACS Chemical Biology, 2011, 6, 1021-1028.	1.6	131
71	Chronic treatment with a novel Î³â€secretase modulator, JNJâ€40418677, inhibits amyloid plaque formation in a mouse model of Alzheimer's disease. British Journal of Pharmacology, 2011, 163, 375-389.	2.7	54
72	Chemoproteomics profiling of HDAC inhibitors reveals selective targeting of HDAC complexes. Nature Biotechnology, 2011, 29, 255-265.	9.4	597

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73	Imaging of complex sulfatides SM3 and SB1a in mouse kidney using MALDI-TOF/TOF mass spectrometry. Analytical and Bioanalytical Chemistry, 2011, 401, 53-64.	1.9	56
74	Purification, Pharmacological Modulation, and Biochemical Characterization of Interactors of Endogenous Human Î³-Secretase. Biochemistry, 2009, 48, 1183-1197.	1.2	65
75	mGluR1/5-Dependent Long-Term Depression Requires the Regulated Ectodomain Cleavage of Neuronal Pentraxin NPR by TACE. Neuron, 2008, 57, 858-871.	3.8	106
76	Chemical and Pathway Proteomics. Molecular and Cellular Proteomics, 2008, 7, 1887-1901.	2.5	43
77	Pathway Proteomics and Chemical Proteomics Team Up in Drug Discovery. Neurodegenerative Diseases, 2007, 4, 270-280.	0.8	19
78	Quantitative chemical proteomics reveals mechanisms of action of clinical ABL kinase inhibitors. Nature Biotechnology, 2007, 25, 1035-1044.	9.4	979
79	Protein co-membership and biochemical affinity purifications. Drug Discovery Today: Technologies, 2006, 3, 325-330.	4.0	6
80	A physical and functional map of the human TNF-Î±/NF-ÎºB signal transduction pathway. Nature Cell Biology, 2004, 6, 97-105.	4.6	970
81	Narp and NP1 Form Heterocomplexes that Function in Developmental and Activity-Dependent Synaptic Plasticity. Neuron, 2003, 39, 513-528.	3.8	217
82	Synaptically Targeted Narp Plays an Essential Role in the Aggregation of AMPA Receptors at Excitatory Synapses in Cultured Spinal Neurons. Journal of Neuroscience, 2002, 22, 4487-4498.	1.7	140
83	Nitric Oxide Synthase (NOS-1) Coclustered With Agrin-Induced AChR-Specializations on Cultured Skeletal Myotubes. Molecular and Cellular Neurosciences, 2000, 16, 269-281.	1.0	48
84	Tyrosine phosphorylation of the muscle-specific kinase is exclusively induced by acetylcholine receptor-aggregating agrin fragments. FEBS Journal, 1998, 253, 382-389.	0.2	31
85	Formation of Postsynaptic-Like Membranes during Differentiation of Embryonic Stem Cellsin Vitro. Experimental Cell Research, 1998, 239, 214-225.	1.2	44
86	Dimerization of the Muscle-specific Kinase Induces Tyrosine Phosphorylation of Acetylcholine Receptors and Their Aggregation on the Surface of Myotubes. Journal of Biological Chemistry, 1998, 273, 6467-6473.	1.6	77
87	Heparin Inhibits Acetylcholine Receptor Aggregation at Two Distinct Steps in the Agrin-induced Pathway. European Journal of Neuroscience, 1997, 9, 1170-1177.	1.2	25
88	Agrin Binding to Î±-Dystroglycan. Journal of Biological Chemistry, 1996, 271, 5231-5236.	1.6	71