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	Inhibition of BET recruitment to chromatin as an effective treatment for MLL-fusion leukaemia. Nature, 2011, 478, 529-533.	13.7	1,354
2	Quantitative chemical proteomics reveals mechanisms of action of clinical ABL kinase inhibitors. Nature Biotechnology, 2007, 25, 1035-1044.	9.4	979
3	A physical and functional map of the human TNF-Î±/NF-Î²B signal transduction pathway. Nature Cell Biology, 2004, 6, 97-105.	4.6	970
4	Chemoproteomics profiling of HDAC inhibitors reveals selective targeting of HDAC complexes. Nature Biotechnology, 2011, 29, 255-265.	9.4	597
5	IL4I1 Is a Metabolic Immune Checkpoint that Activates the AHR and Promotes Tumor Progression. Cell, 2020, 182, 1252-1270.e34.	13.5	259
6	Narp and NP1 Form Heterocomplexes that Function in Developmental and Activity-Dependent Synaptic Plasticity. Neuron, 2003, 39, 513-528.	3.8	217
7	Advanced MALDI mass spectrometry imaging in pharmaceutical research and drug development. Current Opinion in Biotechnology, 2019, 55, 51-59.	3.3	202
8	Alzheimerâ€™s-Causing Mutations Shift AÎ² Length by Destabilizing Î³-Secretase-AÎ²n Interactions. Cell, 2017, 170, 443-456.e14.	13.5	199
9	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
10	A selective inhibitor reveals PI3KÎ³ dependence of TH17 cell differentiation. Nature Chemical Biology, 2012, 8, 576-582.	3.9	136
11	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
12	Tryptophan metabolism drives dynamic immunosuppressive myeloid states in IDH-mutant gliomas. Nature Cancer, 2021, 2, 723-740.	5.7	110
13	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
14	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
15	Optimized Chemical Proteomics Assay for Kinase Inhibitor Profiling. Journal of Proteome Research, 2015, 14, 1574-1586.	1.8	104
16	The Commonly Used PI3-Kinase Probe LY294002 Is an Inhibitor of BET Bromodomains. ACS Chemical Biology, 2014, 9, 495-502.	1.6	97
17	Identification of serum proteins bound to industrial nanomaterials. Toxicology Letters, 2012, 208, 41-50.	0.4	90
18	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

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19	Affinity Profiling of the Cellular Kinome for the Nucleotide Cofactors ATP, ADP, and GTP. ACS Chemical Biology, 2013, 8, 599-607.	1.6	73
20	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
21	Agrin Binding to Î±-Dystroglycan. Journal of Biological Chemistry, 1996, 271, 5231-5236.	1.6	71
22	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
23	Purification, Pharmacological Modulation, and Biochemical Characterization of Interactors of Endogenous Human Î³-Secretase. Biochemistry, 2009, 48, 1183-1197.	1.2	65
24	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
25	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
26	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
27	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
28	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
29	Chemoproteomics Reveals Time-Dependent Binding of Histone Deacetylase Inhibitors to Endogenous Repressor Complexes. ACS Chemical Biology, 2014, 9, 1736-1746.	1.6	52
30	The stress kinase GCN2 does not mediate suppression of antitumor T cell responses by tryptophan catabolism in experimental melanomas. OncoImmunology, 2016, 5, e1240858.	2.1	51
31	Murine Sialidase Neu3 facilitates GM2 degradation and bypass in mouse model of Tay-Sachs disease. Experimental Neurology, 2018, 299, 26-41.	2.0	50
32	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
33	Formation of Postsynaptic-Like Membranes during Differentiation of Embryonic Stem Cellsin Vitro. Experimental Cell Research, 1998, 239, 214-225.	1.2	44
34	Chemical and Pathway Proteomics. Molecular and Cellular Proteomics, 2008, 7, 1887-1901.	2.5	43
35	MALDI imaging MS reveals candidate lipid markers of polycystic kidney disease. Journal of Lipid Research, 2013, 54, 2785-2794.	2.0	37
36	Fourier Transform Infrared Microscopy Enables Guidance of Automated Mass Spectrometry Imaging to Predefined Tissue Morphologies. Scientific Reports, 2018, 8, 313.	1.6	37

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37	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
38	Inhibition of Rho-Associated Kinase 1/2 Attenuates Tumor Growth in Murine Gastric Cancer. Neoplasia, 2016, 18, 500-511.	2.3	35
39	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
40	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
41	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
42	Molecular imaging of brain localization of liposomes in mice using MALDI mass spectrometry. Scientific Reports, 2016, 6, 33791.	1.6	30
43	A new update of MALDI-TOF mass spectrometry in lipid research. Progress in Lipid Research, 2022, 86, 101145.	5.3	30
44	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
45	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
46	Quantitative imaging mass spectrometry of renal sulfatides: validation by classical mass spectrometric methods. Journal of Lipid Research, 2014, 55, 2343-2353.	2.0	27
47	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
48	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
49	Batch Effects in MALDI Mass Spectrometry Imaging. Journal of the American Society for Mass Spectrometry, 2021, 32, 628-635.	1.2	26
50	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
51	Emergence of whole-cell MALDI-MS biotyping for high-throughput bioanalysis of mammalian cells?. Bioanalysis, 2013, 5, 885-893.	0.6	25
52	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
53	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
54	Renal sulfatides: sphingoid base-dependent localization and region-specific compensation of CerS2-dysfunction. Journal of Lipid Research, 2014, 55, 2354-2369.	2.0	23

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55	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
56	Mass spectrometry approaches to monitor proteinâ€“drug interactions. Methods, 2012, 57, 430-440.	1.9	22
57	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
58	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
59	Following spatial Aî² aggregation dynamics in evolving Alzheimerâ€™s disease pathology by imaging stable isotope labeling kinetics. Science Advances, 2021, 7, .	4.7	22
60	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
61	Myotubularin-related protein 7 inhibits insulin signaling in colorectal cancer. Oncotarget, 2016, 7, 50490-50506.	0.8	21
62	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
63	Pathway Proteomics and Chemical Proteomics Team Up in Drug Discovery. Neurodegenerative Diseases, 2007, 4, 270-280.	0.8	19
64	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
65	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
66	Fast Quantification Without Conventional Chromatography, The Growing Power of Mass Spectrometry. Analytical Chemistry, 2020, 92, 8628-8637.	3.2	17
67	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
68	Monitoring CHO cell cultures: Cell stress and early apoptosis assessment by mass spectrometry. Journal of Biotechnology, 2013, 168, 452-461.	1.9	16
69	Tryptophan metabolism is inversely regulated in the tumor and blood of patients with glioblastoma. Theranostics, 2021, 11, 9217-9233.	4.6	16
70	Studying epigenetic complexes and their inhibitors with the proteomics toolbox. Clinical Epigenetics, 2016, 8, 76.	1.8	15
71	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
72	M2aiaâ€”Interactive, fast, and memory-efficient analysis of 2D and 3D multi-modal mass spectrometry imaging data. GigaScience, 2021, 10, .	3.3	15

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73	Fast Nanoliterâ€Scale Cell Assays Using Droplet Microarrayâ€“Mass Spectrometry Imaging. Advanced Biology, 2021, 5, e2000279.	1.4	14
74	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
75	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
76	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
77	Spatially resolved mass spectrometry analysis of amyloid plaqueâ€associated lipids. Journal of Neurochemistry, 2021, 159, 330-342.	2.1	11
78	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
79	Clinically Relevant OATP2B1 Inhibitors in Marketed Drug Space. Molecular Pharmaceutics, 2020, 17, 488-498.	2.3	9
80	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
81	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
82	Protein co-membership and biochemical affinity purifications. Drug Discovery Today: Technologies, 2006, 3, 325-330.	4.0	6
83	Mapping Protein Complexes Using Covalently Linked Antibodies and Isobaric Mass Tags. Methods in Molecular Biology, 2014, 1156, 279-291.	0.4	4
84	Whole/Intact Cell MALDI MS Biotyping in Mammalian Cell Analysis. , 2016, , 249-262.		3
85	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
86	CHAPTER 11. LRRK2 Kinase Inhibitors as New Drugs for Parkinsonâ€™s Disease?. RSC Drug Discovery Series, 2013, , 266-293.	0.2	2
87	Intact cell MALDI mass spectrometry biotyping for "at-line" monitoring of apoptosis progression in CHO cell cultures. BMC Proceedings, 2013, 7, .	1.8	1
88	Massenspektrometrie in der Biomedizin- und Pharmaforschung. BioSpektrum, 2018, 24, 694-696.	0.0	1