

Kristin E Burnum

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3699066/publications.pdf>

Version: 2024-02-01

67
papers

3,856
citations

117625

34
h-index

133252

59
g-index

71
all docs

71
docs citations

71
times ranked

6373
citing authors

#	ARTICLE	IF	CITATIONS
1	Solvent-free matrix dry-coating for MALDI imaging of phospholipids. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 882-886.	2.8	211
2	Uncovering biologically significant lipid isomers with liquid chromatography, ion mobility spectrometry and mass spectrometry. <i>Analyst, The</i> , 2016, 141, 1649-1659.	3.5	196
3	Proteomic Profiling of Exosomes Leads to the Identification of Novel Biomarkers for Prostate Cancer. <i>PLoS ONE</i> , 2013, 8, e82589.	2.5	179
4	Automated mass spectrometry imaging of over 2000 proteins from tissue sections at 100- μ m spatial resolution. <i>Nature Communications</i> , 2020, 11, 8.	12.8	178
5	MPLEx: a Robust and Universal Protocol for Single-Sample Integrative Proteomic, Metabolomic, and Lipidomic Analyses. <i>MSystems</i> , 2016, 1, .	3.8	166
6	MERS-CoV and H5N1 influenza virus antagonize antigen presentation by altering the epigenetic landscape. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E1012-E1021.	7.1	142
7	Spatial and temporal alterations of phospholipids determined by mass spectrometry during mouse embryo implantation. <i>Journal of Lipid Research</i> , 2009, 50, 2290-2298.	4.2	136
8	Quantitative proteomics analysis of adsorbed plasma proteins classifies nanoparticles with different surface properties and size. <i>Proteomics</i> , 2011, 11, 4569-4577.	2.2	135
9	Membrane Stresses Induced by Overproduction of Free Fatty Acids in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2011, 77, 8114-8128.	3.1	135
10	Metagenomic and metaproteomic insights into bacterial communities in leaf-cutter ant fungus gardens. <i>ISME Journal</i> , 2012, 6, 1688-1701.	9.8	126
11	High spatial resolution imaging of biological tissues using nanospray desorption electrospray ionization mass spectrometry. <i>Nature Protocols</i> , 2019, 14, 3445-3470.	12.0	125
12	<i>Leucoagaricus gongylophorus</i> Produces Diverse Enzymes for the Degradation of Recalcitrant Plant Polymers in Leaf-Cutter Ant Fungus Gardens. <i>Applied and Environmental Microbiology</i> , 2013, 79, 3770-3778.	3.1	98
13	Multi-platform α Omics Analysis of Human Ebola Virus Disease Pathogenesis. <i>Cell Host and Microbe</i> , 2017, 22, 817-829.e8.	11.0	88
14	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.	5.4	86
15	Coupling Front-End Separations, Ion Mobility Spectrometry, and Mass Spectrometry For Enhanced Multidimensional Biological and Environmental Analyses. <i>Annual Review of Analytical Chemistry</i> , 2017, 10, 71-92.	5.4	84
16	High Spatial Resolution Imaging of Mouse Pancreatic Islets Using Nanospray Desorption Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 6548-6555.	6.5	76
17	Metabolic Reprogramming during Purine Stress in the Protozoan Pathogen <i>Leishmania donovani</i> . <i>PLoS Pathogens</i> , 2014, 10, e1003938.	4.7	74
18	Mass spectrometry for translational proteomics: progress and clinical implications. <i>Genome Medicine</i> , 2012, 4, 63.	8.2	71

#	ARTICLE	IF	CITATIONS
19	Ion mobility spectrometry and the omics: Distinguishing isomers, molecular classes and contaminant ions in complex samples. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 116, 292-299.	11.4	71
20	High-Speed Tandem Mass Spectrometric in Situ Imaging by Nanospray Desorption Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2013, 85, 9596-9603.	6.5	69
21	SPE-IMS-MS: An automated platform for sub-sixty second surveillance of endogenous metabolites and xenobiotics in biofluids. <i>Clinical Mass Spectrometry</i> , 2016, 2, 1-10.	1.9	63
22	Uterine FK506-binding protein 52 (FKBP52)â€™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, 15577-15582.	7.1	62
23	Plasma lipidome reveals critical illness and recovery from human Ebola virus disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 3919-3928.	7.1	62
24	Imaging Mass Spectrometry Reveals Unique Protein Profiles during Embryo Implantation. <i>Endocrinology</i> , 2008, 149, 3274-3278.	2.8	61
25	Quantitative Mass Spectrometry Imaging of Prostaglandins as Silver Ion Adducts with Nanospray Desorption Electrospray Ionization. <i>Analytical Chemistry</i> , 2018, 90, 7246-7252.	6.5	61
26	Proteome insights into the symbiotic relationship between a captive colony of <i>Nasutitermes corniger</i> and its hindgut microbiome. <i>ISME Journal</i> , 2011, 5, 161-164.	9.8	57
27	Proteomic and Transcriptomic Analyses of <i>Candidatus</i> <i>Pelagibacter ubique</i> â€™Describe the First P _{II} -Independent Response to Nitrogen Limitation in a Free-Living Alphaproteobacterium. <i>MBio</i> , 2013, 4, e00133-12.	4.1	54
28	Enhancing bottomâ€™up and topâ€™down proteomic measurements with ion mobility separations. <i>Proteomics</i> , 2015, 15, 2766-2776.	2.2	54
29	Advancing the High Throughput Identification of Liver Fibrosis Protein Signatures Using Multiplexed Ion Mobility Spectrometry. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 1119-1127.	3.8	51
30	SNaPP: Simplified Nanoproteomics Platform for Reproducible Global Proteomic Analysis of Nanogram Protein Quantities. <i>Endocrinology</i> , 2016, 157, 1307-1314.	2.8	48
31	Three-dimensional imaging of lipids and metabolites in tissues by nanospray desorption electrospray ionization mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 2063-2071.	3.7	47
32	Surfactant-assisted one-pot sample preparation for label-free single-cell proteomics. <i>Communications Biology</i> , 2021, 4, 265.	4.4	46
33	The Long Noncoding RNA Paupar Modulates PAX6 Regulatory Activities to Promote Alpha Cell Development and Function. <i>Cell Metabolism</i> , 2019, 30, 1091-1106.e8.	16.2	45
34	MPLEx: a method for simultaneous pathogen inactivation and extraction of samples for multi-omics profiling. <i>Analyst</i> , The, 2017, 142, 442-448.	3.5	43
35	Proteome and computational analyses reveal new insights into the mechanisms of hepatitis C virus-mediated liver disease posttransplantation. <i>Hepatology</i> , 2012, 56, 28-38.	7.3	39
36	<i>pmartR</i> : Quality Control and Statistics for Mass Spectrometry-Based Biological Data. <i>Journal of Proteome Research</i> , 2019, 18, 1418-1425.	3.7	39

#	ARTICLE	IF	CITATIONS
37	The fungal cultivar of leaf-cutter ants produces specific enzymes in response to different plant substrates. <i>Molecular Ecology</i> , 2016, 25, 5795-5805.	3.9	37
38	Moisture modulates soil reservoirs of active DNA and RNA viruses. <i>Communications Biology</i> , 2021, 4, 992.	4.4	33
39	Uterine Deletion of Trp53 Compromises Antioxidant Responses in the Mouse Decidua. <i>Endocrinology</i> , 2012, 153, 4568-4579.	2.8	32
40	Comparing identified and statistically significant lipids and polar metabolites in 15-year old serum and dried blood spot samples for longitudinal studies. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 447-456.	1.5	31
41	Production of ent-kaurene from lignocellulosic hydrolysate in <i>Rhodospodium toruloides</i> . <i>Microbial Cell Factories</i> , 2020, 19, 24.	4.0	30
42	Simultaneous Proteomic Discovery and Targeted Monitoring using Liquid Chromatography, Ion Mobility Spectrometry, and Mass Spectrometry. <i>Molecular and Cellular Proteomics</i> , 2016, 15, 3694-3705.	3.8	29
43	Enrichment and Broad Representation of Plant Biomass-Degrading Enzymes in the Specialized Hyphal Swellings of <i>Leucoagaricus gongylophorus</i> , the Fungal Symbiont of Leaf-Cutter Ants. <i>PLoS ONE</i> , 2015, 10, e0134752.	2.5	28
44	Broad Substrate-Specific Phosphorylation Events Are Associated With the Initial Stage of Plant Cell Wall Recognition in <i>Neurospora crassa</i> . <i>Frontiers in Microbiology</i> , 2019, 10, 2317.	3.5	25
45	Evaluating lipid mediator structural complexity using ion mobility spectrometry combined with mass spectrometry. <i>Bioanalysis</i> , 2018, 10, 279-289.	1.5	22
46	The fungus gardens of leaf-cutter ants undergo a distinct physiological transition during biomass degradation. <i>Environmental Microbiology Reports</i> , 2014, 6, 389-395.	2.4	21
47	Multiplexed Activity-based Protein Profiling of the Human Pathogen <i>Aspergillus fumigatus</i> Reveals Large Functional Changes upon Exposure to Human Serum. <i>Journal of Biological Chemistry</i> , 2012, 287, 33447-33459.	3.4	20
48	Characterizing the lipid and metabolite changes associated with placental function and pregnancy complications using ion mobility spectrometry-mass spectrometry and mass spectrometry imaging. <i>Placenta</i> , 2017, 60, S67-S72.	1.5	20
49	Application of multiplexed ion mobility spectrometry towards the identification of host protein signatures of treatment effect in pulmonary tuberculosis. <i>Tuberculosis</i> , 2018, 112, 52-61.	1.9	20
50	Galectin-1 Markedly Reduces the Incidence of Resorptions in Mice Missing Immunophilin FKBP52. <i>Endocrinology</i> , 2012, 153, 2486-2493.	2.8	19
51	The MPLEx Protocol for Multi-omic Analyses of Soil Samples. <i>Journal of Visualized Experiments</i> , 2018, , .	0.3	19
52	STEPS: A grid search methodology for optimized peptide identification filtering of MS/MS database search results. <i>Proteomics</i> , 2013, 13, 766-770.	2.2	18
53	Development of an ecophysiological model for <i>Diplosphaera colotermitum</i> TAV2, a termite hindgut Verrucomicrobium. <i>ISME Journal</i> , 2013, 7, 1803-1813.	9.8	18
54	Muscle Segment Homeobox Genes Direct Embryonic Diapause by Limiting Inflammation in the Uterus*. <i>Journal of Biological Chemistry</i> , 2015, 290, 15337-15349.	3.4	18

#	ARTICLE	IF	CITATIONS
55	Trp53 deficient mice predisposed to preterm birth display region-specific lipid alterations at the embryo implantation site. <i>Scientific Reports</i> , 2016, 6, 33023.	3.3	17
56	Unveiling molecular signatures of preeclampsia and gestational diabetes mellitus with multi-omics and innovative cheminformatics visualization tools. <i>Molecular Omics</i> , 2020, 16, 521-532.	2.8	16
57	Unfolded Protein Response Inhibition Reduces Middle East Respiratory Syndrome Coronavirus-Induced Acute Lung Injury. <i>MBio</i> , 2021, 12, e0157221.	4.1	16
58	New Views of Old Proteins: Clarifying the Enigmatic Proteome. <i>Molecular and Cellular Proteomics</i> , 2022, 21, 100254.	3.8	16
59	Urinary Virome Perturbations in Kidney Transplantation. <i>Frontiers in Medicine</i> , 2018, 5, 72.	2.6	12
60	Hanging drop sample preparation improves sensitivity of spatial proteomics. <i>Lab on A Chip</i> , 2022, 22, 2869-2877.	6.0	12
61	From Plants to Ants: Fungal Modification of Leaf Lipids for Nutrition and Communication in the Leaf-Cutter Ant Fungal Garden Ecosystem. <i>MSystems</i> , 2021, 6, .	3.8	11
62	High-Throughput Large-Scale Targeted Proteomics Assays for Quantifying Pathway Proteins in <i>Pseudomonas putida</i> KT2440. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 603488.	4.1	10
63	From Prevention to Disease Perturbations: A Multi-Omic Assessment of Exercise and Myocardial Infarctions. <i>Biomolecules</i> , 2021, 11, 40.	4.0	8
64	Uncovering Hidden Members and Functions of the Soil Microbiome Using <i>De Novo</i> Metaproteomics. <i>Journal of Proteome Research</i> , 2022, 21, 2023-2035.	3.7	6
65	Preserved and variable spatial chemical changes of lipids across tomato leaves in response to central vein wounding reveals potential origin of linolenic acid in signal transduction cascade. <i>Plant-Environment Interactions</i> , 2021, 2, 28-35.	1.5	4
66	Uniformly ¹⁵ N-Labeled Recombinant Ricin A-Chain as an Internal Retention Time Standard for Increased Confidence in Forensic Identification of Ricin by Untargeted Nanoflow Liquid Chromatography-Tandem Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 13372-13376.	6.5	3
67	Proteomic Sample Preparation Techniques: Toward Forensic Proteomic Applications. <i>ACS Symposium Series</i> , 2019, , 29-46.	0.5	0