Zheng-Jiang Zhu

List of Publications by Year in Descending Order

77 papers	4,926 citations	38 h-index	70 g-index
81 ext. papers	6,124 ext. citations	10.5 avg, IF	5.7 L-index

#	Paper	IF	Citations
77	Trapped ion mobility spectrometry-mass spectrometry improves the coverage and accuracy of four-dimensional untargeted lipidomics. *Analytica Chimica Acta*, **2022**, 1210, 339886	6.6	0
76	RIPK1 regulates starvation resistance by modulating aspartate catabolism. *Nature Communications*, **2021**, 12, 6144	17.4	1
75	A serum metabolomics analysis reveals a panel of screening metabolic biomarkers for esophageal squamous cell carcinoma. *Clinical and Translational Medicine*, **2021**, 11, e419	5.7	2
74	Multi-dimensional characterization and identification of sterols in untargeted LC-MS analysis using all ion fragmentation technology. *Analytica Chimica Acta*, **2021**, 1142, 108-117	6.6	5
73	Ion mobility-based sterolomics reveals spatially and temporally distinctive sterol lipids in the mouse brain. *Nature Communications*, **2021**, 12, 4343	17.4	6
72	NEK1-mediated retromer trafficking promotes blood-brain barrier integrity by regulating glucose metabolism and RIPK1 activation. *Nature Communications*, **2021**, 12, 4826	17.4	4
71	Serum Metabolomics Identifies Dysregulated Pathways and Potential Metabolic Biomarkers for Hyperuricemia and Gout. *Arthritis and Rheumatology*, **2021**, 73, 1738-1748	9.5	7
70	WaveICA 2.0: a novel batch effect removal method for untargeted metabolomics data without using batch information. *Metabolomics*, **2021**, 17, 87	4.7	2
69	The Application of Ion Mobility-Mass Spectrometry in Untargeted Metabolomics: from Separation to Identification. *Journal of Analysis and Testing*, **2020**, 4, 163-174	3.2	15
68	A lipidome atlas in MS-DIAL 4. *Nature Biotechnology*, **2020**, 38, 1159-1163	44.5	141
67	Different regions of synaptic vesicle membrane regulate VAMP2 conformation for the SNARE assembly. *Nature Communications*, **2020**, 11, 1531	17.4	10
66	NormAE: Deep Adversarial Learning Model to Remove Batch Effects in Liquid Chromatography Mass Spectrometry-Based Metabolomics Data. *Analytical Chemistry*, **2020**, 92, 5082-5090	7.8	11
65	Subacute Toxicity Study of Nicotinamide Mononucleotide via Oral Administration. *Frontiers in Pharmacology*, **2020**, 11, 604404	5.6	4
64	Overview of Tandem Mass Spectral and Metabolite Databases for Metabolite Identification in Metabolomics. *Methods in Molecular Biology*, **2020**, 2104, 139-148	1.4	2
63	Aspirin Reshapes Acetylomes in Inflammatory and Cancer Cells via CoA-Dependent and CoA-Independent Pathways. *Journal of Proteome Research*, **2020**, 19, 962-972	5.6	2
62	Daily Oscillation of the Excitation-Inhibition Balance in Visual Cortical Circuits. *Neuron*, **2020**, 105, 621-629.e4	13.9	30
61	Development of a combined strategy for accurate lipid structural identification and quantification in ion-mobility mass spectrometry based untargeted lipidomics. *Analytica Chimica Acta*, **2020**, 1136, 115-124	6.6	14

60	Ion mobility collision cross-section atlas for known and unknown metabolite annotation in untargeted metabolomics. *Nature Communications*, **2020**, 11, 4334	17.4	68
59	Exploring the protective effects of Danqi Tongmai tablet on acute myocardial ischemia rats by comprehensive metabolomics profiling. *Phytomedicine*, **2020**, 74, 152918	6.5	7
58	The Use of LipidIMMS Analyzer for Lipid Identification in Ion Mobility-Mass Spectrometry-Based Untargeted Lipidomics. *Methods in Molecular Biology*, **2020**, 2084, 269-282	1.4	1
57	A vitamin-C-derived DNA modification catalysed by an algal TET homologue. *Nature*, **2019**, 569, 581-585	50.4	41
56	The emerging role of ion mobility-mass spectrometry in lipidomics to facilitate lipid separation and identification. *TrAC - Trends in Analytical Chemistry*, **2019**, 116, 332-339	14.6	31
55	Advancing untargeted metabolomics using data-independent acquisition mass spectrometry technology. *Analytical and Bioanalytical Chemistry*, **2019**, 411, 4349-4357	4.4	53
54	Metabolic reaction network-based recursive metabolite annotation for untargeted metabolomics. *Nature Communications*, **2019**, 10, 1516	17.4	108
53	WaveICA: A novel algorithm to remove batch effects for large-scale untargeted metabolomics data based on wavelet analysis. *Analytica Chimica Acta*, **2019**, 1061, 60-69	6.6	21
52	LipidIMMS Analyzer: integrating multi-dimensional information to support lipid identification in ion mobility-mass spectrometry based lipidomics. *Bioinformatics*, **2019**, 35, 698-700	7.2	35
51	DecoMetDIA: Deconvolution of Multiplexed MS/MS Spectra for Metabolite Identification in SWATH-MS-Based Untargeted Metabolomics. *Analytical Chemistry*, **2019**, 91, 11897-11904	7.8	21
50	Development of a Correlative Strategy To Discover Colorectal Tumor Tissue Derived Metabolite Biomarkers in Plasma Using Untargeted Metabolomics. *Analytical Chemistry*, **2019**, 91, 2401-2408	7.8	17
49	MetFlow: an interactive and integrated workflow for metabolomics data cleaning and differential metabolite discovery. *Bioinformatics*, **2019**, 35, 2870-2872	7.2	16
48	A High-Throughput Targeted Metabolomics Workflow for the Detection of 200 Polar Metabolites in Central Carbon Metabolism. *Methods in Molecular Biology*, **2019**, 1859, 263-274	1.4	10
47	SWATHtoMRM: Development of High-Coverage Targeted Metabolomics Method Using SWATH Technology for Biomarker Discovery. *Analytical Chemistry*, **2018**, 90, 4062-4070	7.8	57
46	Metabolomics approach for predicting response to neoadjuvant chemotherapy for colorectal cancer. *Metabolomics*, **2018**, 14, 110	4.7	8
45	Stable-isotope Labeled Metabolic Analysis in : From Experimental Setup to Data Analysis. *Bio-protocol*, **2018**, 8, e3015	0.9	1
44	Advancing the large-scale CCS database for metabolomics and lipidomics at the machine-learning era. *Current Opinion in Chemical Biology*, **2018**, 42, 34-41	9.7	46
43	Predicting the pathological response to neoadjuvant chemoradiation using untargeted metabolomics in locally advanced rectal cancer. *Radiotherapy and Oncology*, **2018**, 128, 548-556	5.3	22

42	Epigenetic drift of H3K27me3 in aging links glycolysis to healthy longevity in. *ELife*, **2018**, 7,	8.9	58
41	Comprehensive metabolomics identified lipid peroxidation as a prominent feature in human plasma of patients with coronary heart diseases. *Redox Biology*, **2017**, 12, 899-907	11.3	42
40	MetCCS predictor: a web server for predicting collision cross-section values of metabolites in ion mobility-mass spectrometry based metabolomics. *Bioinformatics*, **2017**, 33, 2235-2237	7.2	48
39	Discovery of novel 1,2,3,4-tetrahydrobenzo[4, 5]thieno[2, 3-c]pyridine derivatives as potent and selective CYP17 inhibitors. *European Journal of Medicinal Chemistry*, **2017**, 132, 157-172	6.8	5
38	CLOCK Acetylates ASS1 to Drive Circadian Rhythm of Ureagenesis. *Molecular Cell*, **2017**, 68, 198-209.e6	17.6	33
37	Proteome-Wide Analysis of N-Glycosylation Stoichiometry Using SWATH Technology. *Journal of Proteome Research*, **2017**, 16, 3830-3840	5.6	9
36	LipidCCS: Prediction of Collision Cross-Section Values for Lipids with High Precision To Support Ion Mobility-Mass Spectrometry-Based Lipidomics. *Analytical Chemistry*, **2017**, 89, 9559-9566	7.8	107
35	Absolute quantitative lipidomics reveals lipidome-wide alterations in aging brain. *Metabolomics*, **2017**, 14, 5	4.7	38
34	MetDIA: Targeted Metabolite Extraction of Multiplexed MS/MS Spectra Generated by Data-Independent Acquisition. *Analytical Chemistry*, **2016**, 88, 8757-64	7.8	71
33	Large-Scale Prediction of Collision Cross-Section Values for Metabolites in Ion Mobility-Mass Spectrometry. *Analytical Chemistry*, **2016**, 88, 11084-11091	7.8	116
32	Serum metabolomics for early diagnosis of esophageal squamous cell carcinoma by UHPLC-QTOF/MS. *Metabolomics*, **2016**, 12, 1	4.7	56
31	Normalization and integration of large-scale metabolomics data using support vector regression. *Metabolomics*, **2016**, 12, 1	4.7	82
30	Comprehensive bioimaging with fluorinated nanoparticles using breathable liquids. *Nature Communications*, **2015**, 6, 5998	17.4	39
29	An integrated targeted metabolomic platform for high-throughput metabolite profiling and automated data processing. *Metabolomics*, **2015**, 11, 1575-1586	4.7	58
28	Degradation of HK2 by chaperone-mediated autophagy promotes metabolic catastrophe and cell death. *Journal of Cell Biology*, **2015**, 210, 705-16	7.3	73
27	Regulating exocytosis of nanoparticles via host-guest chemistry. *Organic and Biomolecular Chemistry*, **2015**, 13, 2474-2479	3.9	27
26	Arteriovenous Blood Metabolomics: A Readout of Intra-Tissue Metabostasis. *Scientific Reports*, **2015**, 5, 12757	4.9	47
25	Degradation of HK2 by chaperone-mediated autophagy promotes metabolic catastrophe and cell death. *Journal of Experimental Medicine*, **2015**, 212, 21210OIA79	16.6	

24	Toward ωmic scale metabolite profiling: a dual separation-mass spectrometry approach for coverage of lipid and central carbon metabolism. *Analytical Chemistry*, **2013**, 85, 6876-84	7.8	204
23	Direct delivery of functional proteins and enzymes to the cytosol using nanoparticle-stabilized nanocapsules. *ACS Nano*, **2013**, 7, 6667-6673	16.7	154
22	Liquid chromatography quadrupole time-of-flight mass spectrometry characterization of metabolites guided by the METLIN database. *Nature Protocols*, **2013**, 8, 451-60	18.8	288
21	Characterization of surface ligands on functionalized magnetic nanoparticles using laser desorption/ionization mass spectrometry (LDI-MS). *Nanoscale*, **2013**, 5, 5063-6	7.7	21
20	Effect of surface charge on the uptake and distribution of gold nanoparticles in four plant species. *Environmental Science & Technology*, **2012**, 46, 12391-8	10.3	245
19	Determination of the intracellular stability of gold nanoparticle monolayers using mass spectrometry. *Analytical Chemistry*, **2012**, 84, 4321-6	7.8	35
18	An accelerated workflow for untargeted metabolomics using the METLIN database. *Nature Biotechnology*, **2012**, 30, 826-8	44.5	378
17	The interplay of monolayer structure and serum protein interactions on the cellular uptake of gold nanoparticles. *Small*, **2012**, 8, 2659-63	11	60
16	Stability of quantum dots in live cells. *Nature Chemistry*, **2011**, 3, 963-8	17.6	107
15	Colorimetric bacteria sensing using a supramolecular enzyme-nanoparticle biosensor. *Journal of the American Chemical Society*, **2011**, 133, 9650-3	16.4	273
14	Drug Delivery Using Nanoparticle-Stabilized Nanocapsules. *Angewandte Chemie*, **2011**, 123, 497-501	3.6	17
13	Drug delivery using nanoparticle-stabilized nanocapsules. *Angewandte Chemie - International Edition*, **2011**, 50, 477-81	16.4	103
12	Recognition-mediated activation of therapeutic gold nanoparticles inside living cells. *Nature Chemistry*, **2010**, 2, 962-6	17.6	265
11	Intracellular delivery of a membrane-impermeable enzyme in active form using functionalized gold nanoparticles. *Journal of the American Chemical Society*, **2010**, 132, 2642-5	16.4	153
10	Laser desorption/ionization mass spectrometry analysis of monolayer-protected gold nanoparticles. *Analytical and Bioanalytical Chemistry*, **2010**, 396, 1025-35	4.4	53
9	The role of surface functionality on acute cytotoxicity, ROS generation and DNA damage by cationic gold nanoparticles. *Small*, **2010**, 6, 2246-9	11	203
8	Surface properties dictate uptake, distribution, excretion, and toxicity of nanoparticles in fish. *Small*, **2010**, 6, 2261-5	11	100
7	Entrapment of hydrophobic drugs in nanoparticle monolayers with efficient release into cancer cells. *Journal of the American Chemical Society*, **2009**, 131, 1360-1	16.4	276

6	Engineered nanoparticle surfaces for improved mass spectrometric analyses. *Analyst, The*, **2009**, 134, 2183-8	5	50
5	Multiplexed screening of cellular uptake of gold nanoparticles using laser desorption/ionization mass spectrometry. *Journal of the American Chemical Society*, **2008**, 130, 14139-43	16.4	107
4	One-step immobilization of glucose oxidase in a silica matrix on a Pt electrode by an electrochemically induced sol-gel process. *Langmuir*, **2007**, 23, 11896-900	4	95
3	MS-DIAL 4: accelerating lipidomics using an MS/MS, CCS, and retention time atlas		8
2	Metabolic Reaction Network-based Recursive Metabolite Identification for Untargeted Metabolomics		1
1	metID: A R package for automatable compound annotation for LC-MS-based data		1