Tao Huan

List of Publications by Year in Descending Order

65 papers	2,092 citations	22 h-index	45 g-index
79 ext. papers	2,868 ext. citations	7.9 avg, IF	5.36 L-index

#	Paper	IF	Citations
65	Radical fragment ions in collision-induced dissociation-based tandem mass spectrometry.. *Analytica Chimica Acta*, **2022**, 1200, 339613	6.6	0
64	Comprehensive assessment of the diminished statistical power caused by nonlinear electrospray ionization responses in mass spectrometry-based metabolomics.. *Analytica Chimica Acta*, **2022**, 1200, 339614	6.6	0
63	Epigenetic aberrations of gene expression in a rat model of hepatocellular carcinoma.. *Epigenetics*, **2022**, 1-22	5.7	0
62	SIMILE enables alignment of tandem mass spectra with statistical significance.. *Nature Communications*, **2022**, 13, 2510	17.4	0
61	Serum integrative omics reveals the landscape of human diabetic kidney disease. *Molecular Metabolism*, **2021**, 54, 101367	8.8	3
60	Recognizing Contamination Fragment Ions in Liquid Chromatography-Tandem Mass Spectrometry Data. *Journal of the American Society for Mass Spectrometry*, **2021**, 32, 2296-2305	3.5	2
59	Risk-Based Chemical Ranking and Generating a Prioritized Human Exposome Database. *Environmental Health Perspectives*, **2021**, 129, 47014	8.4	11
58	Global-Scale Metabolomic Profiling of Human Hair for Simultaneous Monitoring of Endogenous Metabolome, Short- and Long-Term Exposome. *Frontiers in Chemistry*, **2021**, 9, 674265	5	5
57	Computational Variation: An Underinvestigated Quantitative Variability Caused by Automated Data Processing in Untargeted Metabolomics. *Analytical Chemistry*, **2021**,	7.8	2
56	System Biology-Guided Chemical Proteomics to Discover Protein Targets of Monoethylhexyl Phthalate in Regulating Cell Cycle. *Environmental Science & Technology*, **2021**, 55, 1842-1851	10.3	6
55	DaDIA: Hybridizing Data-Dependent and Data-Independent Acquisition Modes for Generating High-Quality Metabolomic Data. *Analytical Chemistry*, **2021**, 93, 2669-2677	7.8	8
54	Patterned Signal Ratio Biases in Mass Spectrometry-Based Quantitative Metabolomics. *Analytical Chemistry*, **2021**, 93, 2254-2262	7.8	3
53	Endogenous Metabolites Released by Sanitized Sprouting Alfalfa Seed Inhibit the Growth of Salmonella enterica. *MSystems*, **2021**, 6,	7.6	2
52	SteroidXtract: Deep Learning-Based Pattern Recognition Enables Comprehensive and Rapid Extraction of Steroid-Like Metabolic Features for Automated Biology-Driven Metabolomics. *Analytical Chemistry*, **2021**, 93, 5735-5743	7.8	5
51	ISFrag: De Novo Recognition of In-Source Fragments for Liquid Chromatography-Mass Spectrometry Data. *Analytical Chemistry*, **2021**, 93, 10243-10250	7.8	5
50	EVA: Evaluation of Metabolic Feature Fidelity Using a Deep Learning Model Trained With Over 25000 Extracted Ion Chromatograms. *Analytical Chemistry*, **2021**, 93, 12181-12186	7.8	5
49	Toxicity mechanisms of polystyrene microplastics in marine mussels revealed by high-coverage quantitative metabolomics using chemical isotope labeling liquid chromatography mass spectrometry. *Journal of Hazardous Materials*, **2021**, 417, 126003	12.8	24

48	RTP: One Effective Platform to Probe Reactive Compound Transformation Products and Its Applications for a Reactive Plasticizer BADGE. *Environmental Science & Technology*, **2021**, 55, 16034-16043	10.2	0
47	Comparison of Full-Scan, Data-Dependent, and Data-Independent Acquisition Modes in Liquid Chromatography-Mass Spectrometry Based Untargeted Metabolomics. *Analytical Chemistry*, **2020**, 92, 8072-8080	7.8	57
46	Effects of Freeze-Thaw Cycles of Blood Samples on High-Coverage Quantitative Metabolomics. *Analytical Chemistry*, **2020**, 92, 9265-9272	7.8	5
45	Cloud-based archived metabolomics data: A resource for in-source fragmentation/annotation, meta-analysis and systems biology.. *Analytical Science Advances*, **2020**, 1, 70-80	1.1	1
44	A Universal Gut-Microbiome-Derived Signature Predicts Cirrhosis. *Cell Metabolism*, **2020**, 32, 878-888.e6	24.6	63
43	CD44 Loss Disrupts Lung Lipid Surfactant Homeostasis and Exacerbates Oxidized Lipid-Induced Lung Inflammation. *Frontiers in Immunology*, **2020**, 11, 29	8.4	10
42	Metabolomics-Based Discovery of Molecular Signatures for Triple Negative Breast Cancer in Asian Female Population. *Scientific Reports*, **2020**, 10, 370	4.9	15
41	Fold-Change Compression: An Unexplored But Correctable Quantitative Bias Caused by Nonlinear Electrospray Ionization Responses in Untargeted Metabolomics. *Analytical Chemistry*, **2020**, 92, 7011-7019	7.8	11
40	Cariogenic Produces Tetramic Acid Strain-Specific Antibiotics That Impair Commensal Colonization. *ACS Infectious Diseases*, **2020**, 6, 563-571	5.5	23
39	Pass-back chain extension expands multimodular assembly line biosynthesis. *Nature Chemical Biology*, **2020**, 16, 42-49	11.7	14
38	Streamlined MRM method transfer between instruments assisted with HRMS matching and retention-time prediction. *Analytica Chimica Acta*, **2020**, 1100, 88-96	6.6	7
37	Parallel metabolomics and lipidomics enables the comprehensive study of mouse brain regional metabolite and lipid patterns. *Analytica Chimica Acta*, **2020**, 1136, 168-177	6.6	2
36	Evaluation of significant features discovered from different data acquisition modes in mass spectrometry-based untargeted metabolomics. *Analytica Chimica Acta*, **2020**, 1137, 37-46	6.6	13
35	Retrieving and Utilizing Hypothetical Neutral Losses from Tandem Mass Spectra for Spectral Similarity Analysis and Unknown Metabolite Annotation. *Analytical Chemistry*, **2020**, 92, 14476-14483	7.8	15
34	Dissemination and analysis of the quality assurance (QA) and quality control (QC) practices of LC-MS based untargeted metabolomics practitioners. *Metabolomics*, **2020**, 16, 113	4.7	16
33	Reply to: TComment on "Microbiota Composition and Metabolism Are Associated With Gut Function in ParkinsonTs Disease"T *Movement Disorders*, **2020**, 35, 1695-1697	7	4
32	No endospore formation confirmed in members of the phylum Proteobacteria. *Applied and Environmental Microbiology*, **2020**,	4.8	4
31	Glioma Stem Cell-Specific Superenhancer Promotes Polyunsaturated Fatty-Acid Synthesis to Support EGFR Signaling. *Cancer Discovery*, **2019**, 9, 1248-1267	24.4	60

30	Chemical Isotope Labeling Exposome (CIL-EXPOSOME): One High-Throughput Platform for Human Urinary Global Exposome Characterization. *Environmental Science & Technology*, **2019**, 53, 5445-5453	10.3	18
29	Enhancing Metabolome Coverage in Data-Dependent LC-MS/MS Analysis through an Integrated Feature Extraction Strategy. *Analytical Chemistry*, **2019**, 91, 14433-14441	7.8	18
28	Data processing, multi-omic pathway mapping, and metabolite activity analysis using XCMS Online. *Nature Protocols*, **2018**, 13, 633-651	18.8	141
27	METLIN: A Technology Platform for Identifying Knowns and Unknowns. *Analytical Chemistry*, **2018**, 90, 3156-3164	7.8	461
26	Metabolomics Reveals that Dietary Xenoestrogens Alter Cellular Metabolism Induced by Palbociclib/Letrozole Combination Cancer Therapy. *Cell Chemical Biology*, **2018**, 25, 291-300.e3	8.2	35
25	Autonomous Multimodal Metabolomics Data Integration for Comprehensive Pathway Analysis and Systems Biology. *Analytical Chemistry*, **2018**, 90, 8396-8403	7.8	16
24	Bretschneider solution-induced alterations in the urine metabolome in cardiac surgery patients. *Scientific Reports*, **2018**, 8, 17774	4.9	6
23	Alzheimer's Biomarkers From Multiple Modalities Selectively Discriminate Clinical Status: Relative Importance of Salivary Metabolomics Panels, Genetic, Lifestyle, Cognitive, Functional Health and Demographic Risk Markers. *Frontiers in Aging Neuroscience*, **2018**, 10, 296	5.3	14
22	Metabolomics Analyses of Saliva Detect Novel Biomarkers of Alzheimer's Disease. *Journal of Alzheimer's Disease*, **2018**, 65, 1401-1416	4.3	35
21	Systems biology guided by XCMS Online metabolomics. *Nature Methods*, **2017**, 14, 461-462	21.6	120
20	Data Streaming for Metabolomics: Accelerating Data Processing and Analysis from Days to Minutes. *Analytical Chemistry*, **2017**, 89, 1254-1259	7.8	20
19	Exposome-Scale Investigations Guided by Global Metabolomics, Pathway Analysis, and Cognitive Computing. *Analytical Chemistry*, **2017**, 89, 11505-11513	7.8	78
18	Smartphone Analytics: Mobilizing the Lab into the Cloud for Omic-Scale Analyses. *Analytical Chemistry*, **2016**, 88, 9753-9758	7.8	13
17	Metabolite Analysis and Histology on the Exact Same Tissue: Comprehensive Metabolomic Profiling and Metabolic Classification of Prostate Cancer. *Scientific Reports*, **2016**, 6, 32272	4.9	24
16	Fatty acid and sterol composition reveal food selectivity of juvenile ark shell Tegillarca granosa Linnaeus after feeding with mixed microalgae. *Aquaculture*, **2016**, 455, 109-117	4.4	8
15	High-Performance Chemical Isotope Labeling Liquid Chromatography-Mass Spectrometry for Profiling the Metabolomic Reprogramming Elicited by Ammonium Limitation in Yeast. *Journal of Proteome Research*, **2016**, 15, 1602-12	5.6	15
14	Dansylation isotope labeling liquid chromatography mass spectrometry for parallel profiling of human urinary and fecal submetabolomes. *Analytica Chimica Acta*, **2016**, 903, 100-9	6.6	24
13	Cerebrospinal Fluid Metabolomics After Natural Product Treatment in an Experimental Model of Cerebral Ischemia. *OMICS A Journal of Integrative Biology*, **2016**, 20, 670-680	3.8	6

List of Publications

12	Quantitative Metabolome Analysis Based on Chromatographic Peak Reconstruction in Chemical Isotope Labeling Liquid Chromatography Mass Spectrometry. *Analytical Chemistry*, **2015**, 87, 7011-6	7.8	54
11	Development of versatile isotopic labeling reagents for profiling the amine submetabolome by liquid chromatography-mass spectrometry. *Analytica Chimica Acta*, **2015**, 881, 107-16	6.6	17
10	MyCompoundID MS/MS Search: Metabolite Identification Using a Library of Predicted Fragment-Ion-Spectra of 383,830 Possible Human Metabolites. *Analytical Chemistry*, **2015**, 87, 10619-26	7.8	78
9	DnsID in MyCompoundID for rapid identification of dansylated amine- and phenol-containing metabolites in LC-MS-based metabolomics. *Analytical Chemistry*, **2015**, 87, 9838-45	7.8	78
8	P3-090: Metabolomics analyses of salivary samples discriminate normal aging, mild cognitive impairment, and Alzheimer's disease groups and produce biomarkers predictive of neurocognitive performance **2015**, 11, P654-P654		3
7	Counting missing values in a metabolite-intensity data set for measuring the analytical performance of a metabolomics platform. *Analytical Chemistry*, **2015**, 87, 1306-13	7.8	61
6	Development of high-performance chemical isotope labeling LC-MS for profiling the human fecal metabolome. *Analytical Chemistry*, **2015**, 87, 829-36	7.8	58
5	IsoMS: automated processing of LC-MS data generated by a chemical isotope labeling metabolomics platform. *Analytical Chemistry*, **2014**, 86, 4675-9	7.8	86
4	Rewiring AMPK and mitochondrial retrograde signaling for metabolic control of aging and histone acetylation in respiratory-defective cells. *Cell Reports*, **2014**, 7, 565-574	10.6	31
3	MyCompoundID: using an evidence-based metabolome library for metabolite identification. *Analytical Chemistry*, **2013**, 85, 3401-8	7.8	143
2	Metabolomics reveals that dietary xenoestrogens alter cellular metabolism induced by palbociclib/letrozole combination cancer therapy		1
1	Avant-garde assembly-line biosynthesis expands diversity of cyclic lipodepsipeptide products		1