HMDB 4.0: the human metabolome database for 2018

Nucleic Acids Research 46, D608-D617

DOI: 10.1093/nar/gkx1089

Citation Report

#	Article	IF	CITATIONS
2	Challenges and emergent solutions for LCâ€MS/MS based untargeted metabolomics in diseases. Mass Spectrometry Reviews, 2018, 37, 772-792.	2.8	219
3	Bio- and Chemoinformatics Approaches for Metabolomics Data Analysis. Methods in Molecular Biology, 2018, 1738, 41-61.	0.4	3
4	The role of the Human Metabolome Database in inborn errors of metabolism. Journal of Inherited Metabolic Disease, 2018, 41, 329-336.	1.7	15
5	Caveat Usor: Assessing Differences between Major Chemistry Databases. ChemMedChem, 2018, 13, 470-481.	1.6	12
6	Using Metabolomics to Explore the Role of Postmenopausal Adiposity in Breast Cancer Risk. Journal of the National Cancer Institute, 2018, 110, 547-548.	3.0	0
7	Horizons of Systems Biocatalysis and Renaissance of Metabolite Synthesis. Biotechnology Journal, 2018, 13, 1700620.	1.8	19
8	Applications of metabolomics to study cancer metabolism. Biochimica Et Biophysica Acta: Reviews on Cancer, 2018, 1870, 2-14.	3.3	129
9	Think big â€" think omics. Journal of Inherited Metabolic Disease, 2018, 41, 281-283.	1.7	19
10	KniMet: a pipeline for the processing of chromatography–mass spectrometry metabolomics data. Metabolomics, 2018, 14, 52.	1.4	40
11	Observation of acetyl phosphate formation in mammalian mitochondria using real-time in-organelle NMR metabolomics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4152-4157.	3.3	37
12	Targeting human urinary metabolome by LC–MS/MS: a review. Bioanalysis, 2018, 10, 489-516.	0.6	42
13	Influence of Metabolite Extraction Methods on 1H-NMR-Based Metabolomic Profiling of Enteropathogenic Yersinia. Methods and Protocols, 2018, 1, 45.	0.9	O
15	A Model Integration Pipeline for the Improvement of Human Genome-Scale Metabolic Reconstructions. Journal of Integrative Bioinformatics, 2018, 16, .	1.0	4
16	Untargeted metabolomics profiles delineate metabolic alterations in mouse plasma during lung carcinoma development using UPLC-QTOF/MS in MS ^E mode. Royal Society Open Science, 2018, 5, 181143.	1.1	30
17	MER: a shell script and annotation server for minimal named entity recognition and linking. Journal of Cheminformatics, 2018, 10, 58.	2.8	22
18	ComPath: an ecosystem for exploring, analyzing, and curating mappings across pathway databases. Npj Systems Biology and Applications, 2018, 4, 3.	1.4	43
19	From Single Level Analysis to Multi-Omics Integrative Approaches: A Powerful Strategy towards the Precision Oncology. High-Throughput, 2018, 7, 33.	4.4	48
20	HS-SPME-GC-MS metabolomics approach for sperm quality evaluation by semen volatile organic compounds (VOCs) analysis. Biomedical Physics and Engineering Express, 2018, 5, 015006.	0.6	21

#	Article	IF	CITATIONS
21	Review of recent developments in GC–MS approaches to metabolomics-based research. Metabolomics, 2018, 14, 152.	1.4	314
22	Diapause-associated changes in the lipid and metabolite profile of the Asian tiger mosquito, <i>Aedes albopictus</i> . Journal of Experimental Biology, 2018, 221, .	0.8	38
23	Plasma Derived Exosomal Biomarkers of Exposure to Ionizing Radiation in Nonhuman Primates. International Journal of Molecular Sciences, 2018, 19, 3427.	1.8	30
24	Enzymatic assay of D-mannose from urine. Bioanalysis, 2018, 10, 1947-1954.	0.6	5
25	Discovering a new catabolic pathway of D-ribonate in Mycobacterium smegmatis. Biochemical and Biophysical Research Communications, 2018, 505, 1107-1111.	1.0	1
26	Dietary Lignans: Definition, Description and Research Trends in Databases Development. Molecules, 2018, 23, 3251.	1.7	77
27	Gluconeogenesis using glycerol as a substrate in bloodstream-form Trypanosoma brucei. PLoS Pathogens, 2018, 14, e1007475.	2.1	32
28	A robust intracellular metabolite extraction protocol for human neutrophil metabolic profiling. PLoS ONE, 2018, 13, e0209270.	1.1	13
29	Structure-Based Design of Versatile Biosensors for Small Molecules Based on the PAS Domain of a Thermophilic Histidine Kinase. ACS Synthetic Biology, 2018, 7, 2888-2897.	1.9	7
30	Inhibitory Effect of Methotrexate on Rheumatoid Arthritis Inflammation and Comprehensive Metabolomics Analysis Using Ultra-Performance Liquid Chromatography-Quadrupole Time of Flight-Mass Spectrometry (UPLC-Q/TOF-MS). International Journal of Molecular Sciences, 2018, 19, 2894	1.8	33
31	Human Breast Milk NMR Metabolomic Profile across Specific Geographical Locations and Its Association with the Milk Microbiota. Nutrients, 2018, 10, 1355.	1.7	74
32	900MHz 1H-/13C-NMR analysis of 2-hydroxyglutarate and other brain metabolites in human brain tumor tissue extracts. PLoS ONE, 2018, 13, e0203379.	1.1	8
33	Comment on METLIN: A Technology Platform for Identifying Knowns and Unknowns. Analytical Chemistry, 2018, 90, 13126-13127.	3.2	5
34	Advances in the application of comprehensive two-dimensional gas chromatography in metabolomics. TrAC - Trends in Analytical Chemistry, 2018, 109, 275-286.	5.8	99
35	A dual regulatory circuit consisting of S-adenosylmethionine decarboxylase protein and its reaction product controls expression of the paralogous activator prozyme in Trypanosoma brucei. PLoS Pathogens, 2018, 14, e1007404.	2.1	6
36	Modeling Meets Metabolomics—The WormJam Consensus Model as Basis for Metabolic Studies in the Model Organism Caenorhabditis elegans. Frontiers in Molecular Biosciences, 2018, 5, 96.	1.6	40
37	The proteomic and metabolomic characterization of exercise-induced sweat for human performance monitoring: A pilot investigation. PLoS ONE, 2018, 13, e0203133.	1.1	36
38	Quantification of phenolic acid metabolites in humans by LC–MS: a structural and targeted metabolomics approach. Bioanalysis, 2018, 10, 1591-1608.	0.6	20

3

#	Article	IF	CITATIONS
39	Using urine metabolomics to understand the pathogenesis of infant respiratory syncytial virus (RSV) infection and its role in childhood wheezing. Metabolomics, 2018, 14, 135.	1.4	28
40	Serum Metabolomics Analysis of Asthma in Different Inflammatory Phenotypes: A Cross-Sectional Study in Northeast China. BioMed Research International, 2018, 2018, 1-14.	0.9	29
41	Biomarker of food intake for assessing the consumption of dairy and egg products. Genes and Nutrition, 2018, 13, 26.	1.2	40
42	Implications of the expression of Enterococcus faecalis citrate fermentation genes during infection. PLoS ONE, 2018, 13, e0205787.	1.1	14
43	Intervention effect of Qi-Yu-San-Long Decoction on Lewis lung carcinoma in C57BL/6 mice: Insights from UPLC–QTOF/MS-based metabolic profiling. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1102-1103, 23-33.	1.2	25
44	Protocatechuic Acid Ameliorated Palmitic-Acid-Induced Oxidative Damage in Endothelial Cells through Activating Endogenous Antioxidant Enzymes via an Adenosine-Monophosphate-Activated-Protein-Kinase-Dependent Pathway. Journal of Agricultural and Food Chemistry. 2018, 66, 10400-10409.	2.4	34
45	Mind the Gap: Mapping Mass Spectral Databases in Genome-Scale Metabolic Networks Reveals Poorly Covered Areas. Metabolites, 2018, 8, 51.	1.3	51
46	Branching Out: Alterations in Bacterial Physiology and Virulence Due to Branched-Chain Amino Acid Deprivation. MBio, $2018,9,.$	1.8	82
47	Human Milk Lipidomics: Current Techniques and Methodologies. Nutrients, 2018, 10, 1169.	1.7	34
48	An Overview of Metabolomics Data Analysis: Current Tools and Future Perspectives. Comprehensive Analytical Chemistry, 2018, 82, 387-413.	0.7	52
49	Single-platform â€~multi-omic' profiling: unified mass spectrometry and computational workflows for integrative proteomics–metabolomics analysis. Molecular Omics, 2018, 14, 307-319.	1.4	41
50	From Plant Compounds to Botanicals and Back: A Current Snapshot. Molecules, 2018, 23, 1844.	1.7	101
51	Application of Metabolomic Tools for Studying Low Molecular-Weight Fraction of Animal Venoms and Poisons. Toxins, 2018, 10, 306.	1.5	17
52	Chemoselective Probe Containing a Unique Bioorthogonal Cleavage Site for Investigation of Gut Microbiota Metabolism. Angewandte Chemie, 2018, 130, 14001-14005.	1.6	8
53	Chemoselective Probe Containing a Unique Bioorthogonal Cleavage Site for Investigation of Gut Microbiota Metabolism. Angewandte Chemie - International Edition, 2018, 57, 13805-13809.	7.2	33
54	Improving metabolome coverage and data quality: advancing metabolomics and lipidomics for biomarker discovery. Chemical Communications, 2018, 54, 6728-6749.	2.2	38
55	Metabolic Footprinting of Fermented Milk Consumption in Serum of Healthy Men. Journal of Nutrition, 2018, 148, 851-860.	1.3	43
56	An Updated Taxonomy and a Graphical Summary Tool for Optimal Classification and Comprehension of Omics Research. OMICS A Journal of Integrative Biology, 2018, 22, 337-353.	1.0	12

#	Article	IF	CITATIONS
57	MetaboAnalyst 4.0: towards more transparent and integrative metabolomics analysis. Nucleic Acids Research, 2018, 46, W486-W494.	6.5	3,199
58	Systems protobiology: origin of life in lipid catalytic networks. Journal of the Royal Society Interface, 2018, 15, 20180159.	1.5	102
59	The potential of metabolic profiling for vaccine development. Seminars in Immunology, 2018, 39, 44-51.	2.7	10
60	Role of Endogenous Metabolite Alterations in Neuropsychiatric Disease. ACS Chemical Neuroscience, 2018, 9, 2101-2113.	1.7	6
61	Progress in Metabonomics of Type 2 Diabetes Mellitus. Molecules, 2018, 23, 1834.	1.7	44
62	Characterizing the plasma metabolome during and following a maximal exercise cycling test. Journal of Applied Physiology, 2018, 125, 1193-1203.	1.2	22
63	Fluorinated Phenylalanine Precursor Resistance in Yeast. Fermentation, 2018, 4, 41.	1.4	0
64	In-Vivo NMR Spectroscopy: A Powerful and Complimentary Tool for Understanding Environmental Toxicity. Metabolites, 2018, 8, 35.	1.3	67
65	Plasma Nuclear Magnetic Resonance Metabolomics Discriminates Between High and Low Endoscopic Activity and Predicts Progression in a Prospective Cohort of Patients With Ulcerative Colitis. Journal of Crohn's and Colitis, 2018, 12, 1326-1337.	0.6	35
66	Quantitative metabolomics comparison of traditional blood draws and TAP capillary blood collection. Metabolomics, 2018, 14, 100.	1.4	32
67	Illuminating the dark metabolome to advance the molecular characterisation of biological systems. Metabolomics, 2018, 14, 101.	1.4	35
68	A review on human fecal metabolomics: Methods, applications and the human fecal metabolome database. Analytica Chimica Acta, 2018, 1030, 1-24.	2.6	187
69	Metabolomics 20Âyears on: what have we learned and what hurdles remain?. Plant Journal, 2018, 94, 933-942.	2.8	166
70	Challenges of Connecting Chemistry to Pharmacology: Perspectives from Curating the IUPHAR/BPS Guide to PHARMACOLOGY. ACS Omega, 2018, 3, 8408-8420.	1.6	3
71	MS-based lipidomics of human blood plasma: a community-initiated position paper to develop accepted guidelines. Journal of Lipid Research, 2018, 59, 2001-2017.	2.0	231
72	Flavonoids exert multiple periodontic benefits including anti-inflammatory, periodontal ligament-supporting, and alveolar bone-preserving effects. Life Sciences, 2018, 209, 435-454.	2.0	41
73	Online Liquid Chromatography–Sheath-Flow Surface Enhanced Raman Detection of Phosphorylated Carbohydrates. Analytical Chemistry, 2018, 90, 11062-11069.	3.2	15
74	Characteristics of Colon-Derived Uremic Solutes. Clinical Journal of the American Society of Nephrology: CJASN, 2018, 13, 1398-1404.	2.2	73

#	Article	IF	CITATIONS
75	Ambit-SMIRKS: a software module for reaction representation, reaction search and structure transformation. Journal of Cheminformatics, 2018, 10, 42.	2.8	16
76	Nutritional Metabolomics: Postprandial Response of Meals Relating to Vegan, Lacto-Ovo Vegetarian, and Omnivore Diets. Nutrients, 2018, 10, 1063.	1.7	22
77	A Cloud-Based Metabolite and Chemical Prioritization System for the Biology/Disease-Driven Human Proteome Project. Journal of Proteome Research, 2018, 17, 4345-4357.	1.8	7
78	Citrobacter freundii fitness during bloodstream infection. Scientific Reports, 2018, 8, 11792.	1.6	46
79	A systematic review on metabolomics-based diagnostic biomarker discovery and validation in pancreatic cancer. Metabolomics, 2018, 14, 109.	1.4	46
80	Applications of Parametrized NMR Spin Systems of Small Molecules. Analytical Chemistry, 2018, 90, 10646-10649.	3.2	23
81	Liver metabolomics in a mouse model of erythropoietic protoporphyria. Biochemical Pharmacology, 2018, 154, 474-481.	2.0	4
82	New supported liquid membrane for electromembrane extraction of polar basic endogenous metabolites. Journal of Pharmaceutical and Biomedical Analysis, 2018, 159, 53-59.	1.4	35
83	Recent applications of deep learning and machine intelligence on in silico drug discovery: methods, tools and databases. Briefings in Bioinformatics, 2019, 20, 1878-1912.	3.2	310
84	Translational and Disease Bioinformatics. , 2019, , 1046-1057.		0
85	Recent advances and prospects of computational methods for metabolite identification: a review with emphasis on machine learning approaches. Briefings in Bioinformatics, 2019, 20, 2028-2043.	3.2	61
86	Highâ€Throughput Metabolomics by 1D NMR. Angewandte Chemie - International Edition, 2019, 58, 968-994.	7.2	254
87	Hochdurchsatzâ€Metabolomik mit 1Dâ€NMR. Angewandte Chemie, 2019, 131, 980-1007.	1.6	8
88	Tissue, urine and blood metabolite signatures of chronic kidney disease in the 5/6 nephrectomy rat model. Metabolomics, 2019, 15, 112.	1.4	26
89	Evaluation of Multivariate Classification Models for Analyzing NMR Metabolomics Data. Journal of Proteome Research, 2019, 18, 3282-3294.	1.8	19
90	Perspective: Dietary Biomarkers of Intake and Exposureâ€"Exploration with Omics Approaches. Advances in Nutrition, 2020, 11, 200-215.	2.9	79
91	rMSIKeylon: An Ion Filtering R Package for Untargeted Analysis of Metabolomic LDI-MS Images. Metabolites, 2019, 9, 162.	1.3	2
92	Establishment of reference values for the lysine acetylation marker NÉ>-acetyllysine in small volume human plasma samples by a multi-target LC–MS/MS method. Amino Acids, 2019, 51, 1259-1271.	1.2	7

#	Article	IF	CITATIONS
93	Therapeutic effects of hydro-alcoholic extract of Achillea wilhelmsii C. Koch on indomethacin-induced gastric ulcer in rats: a proteomic and metabolomic approach. BMC Complementary and Alternative Medicine, 2019, 19, 205.	3.7	10
94	LC–MS/MS analysis of the central energy and carbon metabolites in biological samples following derivatization by dimethylaminophenacyl bromide. Journal of Chromatography A, 2019, 1608, 460413.	1.8	24
95	Fast and Quantitative NMR Metabolite Analysis Afforded by a Paramagnetic Coâ€Solute. Angewandte Chemie - International Edition, 2019, 58, 15283-15286.	7.2	22
96	Sulfur Assimilation Alters Flagellar Function and Modulates the Gene Expression Landscape of Serratia marcescens. MSystems, 2019, 4, .	1.7	6
97	Examining the predictive accuracy of metabolomics for small-for-gestational-age babies: a systematic review. BMJ Open, 2019, 9, e031238.	0.8	16
98	Kinetics of the isomerization of $\hat{l}\pm$ -pinene epoxide over Fe supported MCM-41 and SBA-15 materials. Reaction Kinetics, Mechanisms and Catalysis, 2019, 128, 1005-1028.	0.8	6
99	Merged Targeted Quantification and Untargeted Profiling for Comprehensive Assessment of Acylcarnitine and Amino Acid Metabolism. Analytical Chemistry, 2019, 91, 11757-11769.	3.2	34
100	Comprehensive lipidomics of mouse plasma using class-specific surrogate calibrants and SWATH acquisition for large-scale lipid quantification in untargeted analysis. Analytica Chimica Acta, 2019, 1086, 90-102.	2.6	27
101	Elucidation of the role of in silico methodologies in approaches to studying bioactive peptides derived from foods. Journal of Functional Foods, 2019, 61, 103486.	1.6	52
102	Application of metabolomics to characterize environmental pollutant toxicity and disease risks. Reviews on Environmental Health, 2019, 34, 251-259.	1.1	37
103	Plasma metabolites related to cellular energy metabolism are altered in adults with Down syndrome and Alzheimer's disease. Developmental Neurobiology, 2019, 79, 622-638.	1.5	29
104	Development of a Plasma Screening Panel for Pediatric Nonalcoholic Fatty Liver Disease Using Metabolomics. Hepatology Communications, 2019, 3, 1311-1321.	2.0	31
105	Metabolomics for Investigating Physiological and Pathophysiological Processes. Physiological Reviews, 2019, 99, 1819-1875.	13.1	516
106	Towards Mass Spectrometry-Based Chemical Exposome: Current Approaches, Challenges, and Future Directions. Toxics, 2019, 7, 41.	1.6	25
107	The Human Gut Microbiome is Structured to Optimize Molecular Interaction Networks. Computational and Structural Biotechnology Journal, 2019, 17, 1040-1046.	1.9	6
108	Determination of online quenching efficiency for an automated cellular microfluidic metabolomic platform using mass spectrometry based ATP degradation analysis. Analytical and Bioanalytical Chemistry, 2019, 411, 6399-6407.	1.9	8
109	Emerging molecular techniques for studying microbial community composition and function in microbiologically influenced corrosion. International Biodeterioration and Biodegradation, 2019, 144, 104722.	1.9	15
110	The Anticancer Drug Discovery Potential of Marine Invertebrates from Russian Pacific. Marine Drugs, 2019, 17, 474.	2.2	16

#	Article	IF	CITATIONS
111	On-Line Analysis of Exhaled Breath. Chemical Reviews, 2019, 119, 10803-10828.	23.0	157
112	Metabolomic Studies of Tissue Injury in Nonhuman Primates Exposed to Gamma-Radiation. International Journal of Molecular Sciences, 2019, 20, 3360.	1.8	23
113	If machines can learn, who needs scientists?. Journal of Magnetic Resonance, 2019, 306, 162-166.	1.2	9
114	Predictive metabolomic profiling of microbial communities using amplicon or metagenomic sequences. Nature Communications, 2019, 10, 3136.	5.8	176
115	Connecting environmental exposure and neurodegeneration using cheminformatics and high resolution mass spectrometry: potential and challenges. Environmental Sciences: Processes and Impacts, 2019, 21, 1426-1445.	1.7	13
116	The effect of sampling procedures and day-to-day variations in metabolomics studies of biofluids. Analytica Chimica Acta, 2019, 1081, 93-102.	2.6	16
117	Metaproteomic and Metabolomic Approaches for Characterizing the Gut Microbiome. Proteomics, 2019, 19, e1800363.	1.3	28
118	Metabolomic Profiling of Body Fluids in Mouse Models Demonstrates that Nuclear Magnetic Resonance Is a Putative Diagnostic Tool for the Presence of Thyroid Hormone Receptor $\hat{I}\pm 1$ Mutations. Thyroid, 2019, 29, 1327-1335.	2.4	8
119	Metabolomics Analytics Workflow for Epidemiological Research: Perspectives from the Consortium of Metabolomics Studies (COMETS). Metabolites, 2019, 9, 145.	1.3	30
120	Application of Volatile Organic Compound Analysis in a Nutritional Intervention Study: Differential Responses during Five Hours Following Consumption of a High†and a Lowâ€Fat Dairy Drink. Molecular Nutrition and Food Research, 2019, 63, 1900189.	1.5	10
121	Deep Metabolomics of a High-Grade Serous Ovarian Cancer Triple-Knockout Mouse Model. Journal of Proteome Research, 2019, 18, 3184-3194.	1.8	12
122	In Silico Toxicology Data Resources to Support Read-Across and (Q)SAR. Frontiers in Pharmacology, 2019, 10, 561.	1.6	56
123	NMR metabolomics: A look ahead. Journal of Magnetic Resonance, 2019, 306, 155-161.	1.2	129
124	Lack of a Synergistic Effect on Cardiometabolic and Redox Markers in a Dietary Supplementation with Anthocyanins and Xanthophylls in Postmenopausal Women. Nutrients, 2019, 11, 1533.	1.7	12
125	GPD1 Specifically Marks Dormant Glioma Stem Cells with a Distinct Metabolic Profile. Cell Stem Cell, 2019, 25, 241-257.e8.	5.2	66
126	Voltammetric layer-by-layer biosensor featuring purine nucleoside phosphorylase and chitosan for inosine in human serum solutions. Sensors and Actuators B: Chemical, 2019, 298, 126840.	4.0	12
127	Acute and short-term administrations of delta-9-tetrahydrocannabinol modulate major gut metabolomic regulatory pathways in C57BL/6 mice. Scientific Reports, 2019, 9, 10520.	1.6	4
128	Automated Analysis of Large-Scale NMR Data Generates Metabolomic Signatures and Links Them to Candidate Metabolites. Journal of Proteome Research, 2019, 18, 3360-3368.	1.8	5

#	ARTICLE	IF	CITATIONS
129	Metabolome of Exosomes: Focus on Vesicles Released by Cancer Cells and Present in Human Body Fluids. International Journal of Molecular Sciences, 2019, 20, 3461.	1.8	65
130	Uncovering mechanisms of global ocean change effects on the Dungeness crab (Cancer magister) through metabolomics analysis. Scientific Reports, 2019, 9, 10717.	1.6	19
131	Mass Spectrometry in Advancement of Redox Precision Medicine. Advances in Experimental Medicine and Biology, 2019, 1140, 327-358.	0.8	7
132	Flavonoid Biosynthesis Is Likely More Susceptible to Elevation and Tree Age Than Other Branch Pathways Involved in Phenylpropanoid Biosynthesis in Ginkgo Leaves. Frontiers in Plant Science, 2019, 10, 983.	1.7	31
133	Polyphenols: A concise overview on the chemistry, occurrence, and human health. Phytotherapy Research, 2019, 33, 2221-2243.	2.8	493
134	Intra- and inter-individual metabolic profiling highlights carnitine and lysophosphatidylcholine pathways as key molecular defects in type 2 diabetes. Scientific Reports, 2019, 9, 9653.	1.6	32
135	Structural Basis of BRCC36 Function in DNA Repair and Immune Regulation. Molecular Cell, 2019, 75, 483-497.e9.	4.5	50
136	ReactELISA method for quantifying methylglyoxal levels in plasma and cell cultures. Redox Biology, 2019, 26, 101252.	3.9	18
137	New Approaches to Fetal Growth Restriction: The Time for Metabolomics Has Come. Revista Brasileira De Ginecologia E Obstetricia, 2019, 41, 454-462.	0.3	8
138	Effects of UV-C irradiation and traditional thermal processing on acemannan contained in Aloe vera gel blends. Carbohydrate Polymers, 2019, 222, 114998.	5.1	8
139	Chemoselective probe for detailed analysis of ketones and aldehydes produced by gut microbiota in human samples. Chemical Communications, 2019, 55, 9080-9083.	2.2	27
140	Urinary Metabolic Signatures Detect Recurrences in Non-Muscle Invasive Bladder Cancer. Cancers, 2019, 11, 914.	1.7	19
141	Phytochemistry and Antioxidant Activity of Aerial Parts of Phagnalon sordidum L Planta Medica, 2019, 85, 1008-1015.	0.7	3
142	Flavonoid-mediated immunomodulation of human macrophages involves key metabolites and metabolic pathways. Scientific Reports, 2019, 9, 14906.	1.6	36
143	Fluid-based assays and precision medicine of cardiovascular diseases: the â€~hope' for Pandora's box?. Journal of Clinical Pathology, 2019, 72, 785-799.	1.0	44
144	Chemical cues of female fertility states in a non-human primate. Scientific Reports, 2019, 9, 13716.	1.6	17
145	Green Tea Extract Treatment in Obese Mice with Nonalcoholic Steatohepatitis Restores the Hepatic Metabolome in Association with Limiting Endotoxemiaâ€₹LR4â€NFκBâ€Mediated Inflammation. Molecular Nutrition and Food Research, 2019, 63, e1900811.	1.5	27
146	Metabolomics Approach Reveals the Effects of Breed and Feed on the Composition of Chicken Eggs. Metabolites, 2019, 9, 224.	1.3	21

#	Article	IF	CITATIONS
147	Identification of a biomarker panel for improvement of prostate cancer diagnosis by volatile metabolic profiling of urine. British Journal of Cancer, 2019, 121, 857-868.	2.9	74
148	Choosing an Optimal Sample Preparation in Caulobacter crescentus for Untargeted Metabolomics Approaches. Metabolites, 2019, 9, 193.	1.3	11
149	In vitro profiling of endothelial volatile organic compounds under resting and pro-inflammatory conditions. Metabolomics, 2019, 15, 132.	1.4	4
150	Comprehensive relationships between gut microbiome and faecal metabolome in individuals with type 2 diabetes and its complications. Endocrine, 2019, 66, 526-537.	1.1	135
151	Type 1 diabetes induces cognitive dysfunction in rats associated with alterations of the gut microbiome and metabolomes in serum and hippocampus. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2019, 1865, 165541.	1.8	85
152	In Silico Optimization of Mass Spectrometry Fragmentation Strategies in Metabolomics. Metabolites, 2019, 9, 219.	1.3	18
153	Serum metabolic profile characteristics of offspring rats before and after birth caused by prenatal caffeine exposure. Toxicology, 2019, 427, 152302.	2.0	9
154	Mass spectrometry-based structure elucidation of small molecule impurities and degradation products in pharmaceutical development. TrAC - Trends in Analytical Chemistry, 2019, 121, 115686.	5.8	18
155	Identification of metabolites from tandem mass spectra with a machine learning approach utilizing structural features. Bioinformatics, 2020, 36, 1213-1218.	1.8	31
156	Computational prediction of toxicity of small organic molecules: state-of-the-art. Physical Sciences Reviews, 2019, 4, .	0.8	2
157	Supply of Methionine During Late-Pregnancy Alters Fecal Microbiota and Metabolome in Neonatal Dairy Calves Without Changes in Daily Feed Intake. Frontiers in Microbiology, 2019, 10, 2159.	1.5	38
158	Association of Circulating Metabolites With Risk of Coronary Heart Disease in a European Population. JAMA Cardiology, 2019, 4, 1270.	3.0	39
159	Creating a Reliable Mass Spectral–Retention Time Library for All Ion Fragmentation-Based Metabolomics. Metabolites, 2019, 9, 251.	1.3	30
160	Effect of a Shading Mesh on the Metabolic, Nutritional, and Defense Profiles of Harvested Greenhouse-Grown Organic Tomato Fruits and Leaves Revealed by NMR Metabolomics. Journal of Agricultural and Food Chemistry, 2019, 67, 12972-12985.	2.4	14
161	Diabetes Mellitus Severity and a Switch From Using Lipoprotein Lipase to Adiposeâ€Derived Fatty Acid Results in a Cardiac Metabolic Signature That Embraces Cell Death. Journal of the American Heart Association, 2019, 8, e014022.	1.6	11
162	Decoding the Metabolome and Lipidome of Child Malnutrition by Mass Spectrometric Techniques: Present Status and Future Perspectives. Analytical Chemistry, 2019, 91, 14784-14791.	3.2	10
163	Influence of Drying Method on NMR-Based Metabolic Profiling of Human Cell Lines. Metabolites, 2019, 9, 256.	1.3	6
164	A LC–MS/MS platform for the identification of productivity markers in industrial mammalian cell culture media. Process Biochemistry, 2019, 86, 136-143.	1.8	6

#	Article	IF	CITATIONS
165	The Chemistry of Chocolate and Pleasure. ACS Symposium Series, 2019, , 33-41.	0.5	1
166	Methods of Metabolite Identification Using MS/MS Data. Journal of Computer Information Systems, 2019, , 1-7.	2.0	3
167	Accurate and Efficient Determination of Unknown Metabolites in Metabolomics by NMR-Based Molecular Motif Identification. Analytical Chemistry, 2019, 91, 15686-15693.	3.2	16
168	Identification of Three Antimicrobials Activating Serotonin Receptor 4 in Colon Cells. ACS Synthetic Biology, 2019, 8, 2710-2717.	1.9	16
169	A Role for the Orphan Human Cytochrome P450 2S1 in Polyunsaturated Fatty Acid <i>\"i\"\" \" \" \" \" \" \" \" \" \" \" \" \"</i>	1.7	12
171	Genomics, Proteomics, and Metabolomics. Pancreatic Islet Biology, 2019, , .	0.1	6
172	A comparative evaluation of the generalised predictive ability of eight machine learning algorithms across ten clinical metabolomics data sets for binary classification. Metabolomics, 2019, 15, 150.	1.4	106
173	Pathophysiological role of prostanoids in coagulation of the portal venous system in liver cirrhosis. PLoS ONE, 2019, 14, e0222840.	1.1	7
174	Iron toxicity-induced physiological and metabolite profile variations among tolerant and sensitive rice varieties. Plant Signaling and Behavior, 2019, 14, 1682829.	1,2	14
175	Pathway Commons 2019 Update: integration, analysis and exploration of pathway data. Nucleic Acids Research, 2020, 48, D489-D497.	6.5	161
176	Reduced Gut Microbiome Diversity and Metabolome Differences in Rhinoceros Species at Risk for Iron Overload Disorder. Frontiers in Microbiology, 2019, 10, 2291.	1.5	26
177	A comprehensive study of metabolite genetics reveals strong pleiotropy and heterogeneity across time and context. Nature Communications, 2019, 10, 4788.	5.8	59
178	Metabolic Insights Into the Effects of Nutrient Stress on Lactobacillus plantarum B21. Frontiers in Molecular Biosciences, 2019, 6, 75.	1.6	21
179	Cellular Interactions in the Tumor Microenvironment: The Role of Secretome. Journal of Cancer, 2019, 10, 4574-4587.	1.2	91
180	NMR-Based Metabolomics. Methods in Molecular Biology, 2019, , .	0.4	9
181	A Metabolome- and Metagenome-Wide Association Network Reveals Microbial Natural Products and Microbial Biotransformation Products from the Human Microbiota. MSystems, 2019, 4, .	1.7	23
182	Metabolomics by UHPLC–MS: benefits provided by complementary use of Q-TOF and QQQ for pathway profiling. Metabolomics, 2019, 15, 120.	1.4	4
183	Comparison of underivatized silica and zwitterionic sulfobetaine hydrophilic interaction liquid chromatography stationary phases for global metabolomics of human plasma. Journal of Chromatography A, 2019, 1608, 460419.	1.8	15

#	Article	IF	CITATIONS
184	Metabolomic Coverage of Chemical-Group-Submetabolome Analysis: Group Classification and Four-Channel Chemical Isotope Labeling LC-MS. Analytical Chemistry, 2019, 91, 12108-12115.	3.2	100
185	Biomarkers of seaweed intake. Genes and Nutrition, 2019, 14, 24.	1.2	10
186	Combining Salt Doping and Matrix Sublimation for High Spatial Resolution MALDI Imaging Mass Spectrometry of Neutral Lipids. Analytical Chemistry, 2019, 91, 12928-12934.	3.2	43
187	Multi-omics signature of brain amyloid deposition in asymptomatic individuals at-risk for Alzheimer's disease: The INSIGHT-preAD study. EBioMedicine, 2019, 47, 518-528.	2.7	36
188	Foodomics assessed by Fourier transform mass spectrometry. , 2019, , 651-677.		4
189	Phenotype-Specific Therapeutic Effect of Rhodiola wallichiana var. cholaensis Combined with Dexamethasone on Experimental Murine Asthma and Its Comprehensive Pharmacological Mechanism. International Journal of Molecular Sciences, 2019, 20, 4216.	1.8	7
190	<p>Disruption of histidine and energy homeostasis in chronic obstructive pulmonary disease</p> . International Journal of COPD, 2019, Volume 14, 2015-2025.	0.9	17
191	Metabolomics to reveal biomarkers and pathways of preterm birth: a systematic review and epidemiologic perspective. Metabolomics, 2019, 15, 124.	1.4	23
192	Daphnia magna metabolic profiling as a promising water quality parameter for the biological early warning system. Water Research, 2019, 166, 115033.	5.3	25
193	Impacts of Fungicide Treatment and Conventional Fertilization Management on the Potato Metabolome (<i>Solanum tuberosum</i> L.) Evaluated with UPLC-IMS-QToF. Journal of Agricultural and Food Chemistry, 2019, 67, 11542-11552.	2.4	5
194	Dimethylguanidino Valerate: A Lifestyleâ€Related Metabolite Associated With Future Coronary Artery Disease and Cardiovascular Mortality. Journal of the American Heart Association, 2019, 8, e012846.	1.6	34
195	Dramatic Remodeling of the Gut Microbiome Around Parturition and Its Relationship With Host Serum Metabolic Changes in Sows. Frontiers in Microbiology, 2019, 10, 2123.	1.5	22
196	Metabolomic analysis of date palm seedlings exposed to salinity and silicon treatments. Plant Signaling and Behavior, 2019, 14, 1663112.	1.2	31
197	Systematic Review: Clinical Metabolomics to Forecast Outcomes in Liver Transplantation Surgery. OMICS A Journal of Integrative Biology, 2019, 23, 463-476.	1.0	12
198	Acylcarnitine profiling by low-resolution LC-MS. PLoS ONE, 2019, 14, e0221342.	1.1	16
199	Syringol metabolites as new biomarkers for smoked meat intake. American Journal of Clinical Nutrition, 2019, 110, 1424-1433.	2.2	17
200	Metabolic Fingerprint of Acromegaly and its Potential Usefulness in Clinical Practice. Journal of Clinical Medicine, 2019, 8, 1549.	1.0	12
201	Steroidomics for the Prevention, Assessment, and Management of Cancers: A Systematic Review and Functional Analysis. Metabolites, 2019, 9, 199.	1.3	11

#	Article	IF	CITATIONS
202	Targeted Clinical Metabolite Profiling Platform for the Stratification of Diabetic Patients. Metabolites, 2019, 9, 184.	1.3	22
203	The metaRbolomics Toolbox in Bioconductor and beyond. Metabolites, 2019, 9, 200.	1.3	64
204	Antibiotic Exposure Disturbs the Gut Microbiota and Its Metabolic Phenotype Differently in Rats with Advanced-Stage Type 1 Diabetes and Age-Matched Controls. Journal of Proteome Research, 2019, 18, 3944-3954.	1.8	2
205	Generating the Blood Exposome Database Using a Comprehensive Text Mining and Database Fusion Approach. Environmental Health Perspectives, 2019, 127, 97008.	2.8	157
206	Database-Assisted Globally Optimized Targeted Mass Spectrometry (dGOT-MS): Broad and Reliable Metabolomics Analysis with Enhanced Identification. Analytical Chemistry, 2019, 91, 13737-13745.	3.2	56
207	Impact of matrix effects and ionization efficiency in non-quantitative untargeted metabolomics. Metabolomics, 2019, 15, 135.	1.4	33
208	Metabolomics analysis of children with autism, idiopathic-developmental delays, and Down syndrome. Translational Psychiatry, 2019, 9, 243.	2.4	81
209	Metabolomics using Fourier transform mass spectrometry. , 2019, , 325-356.		2
210	Metabolic Functions of Gut Microbes Associate With Efficacy ofÂTumor Necrosis Factor Antagonists in Patients With Inflammatory Bowel Diseases. Gastroenterology, 2019, 157, 1279-1292.e11.	0.6	180
211	Characterising polar compounds using supercritical fluid chromatography–nuclear magnetic resonance spectroscopy (SFC–NMR). Faraday Discussions, 2019, 218, 219-232.	1.6	5
212	Collision cross section compendium to annotate and predict multi-omic compound identities. Chemical Science, 2019, 10, 983-993.	3.7	196
213	In silico identification of endogenous and exogenous agonists of Estrogen-related receptor $\hat{l}\pm$. Computational Toxicology, 2019, 10, 105-112.	1.8	3
214	A translational approach to assess the metabolomic impact of stabilized gold nanoparticles by NMR spectroscopy. Analyst, The, 2019, 144, 1265-1274.	1.7	12
215	Breathomics and treatable traits for chronic airway diseases. Current Opinion in Pulmonary Medicine, 2019, 25, 94-100.	1.2	19
216	Urine Nuclear Magnetic Resonance (NMR) Metabolomics in Age-Related Macular Degeneration. Journal of Proteome Research, 2019, 18, 1278-1288.	1.8	15
217	Comprehensive kinetic and substrate specificity analysis of an arylsulfatase from Helix pomatia using mass spectrometry. Bioorganic and Medicinal Chemistry, 2019, 27, 955-962.	1.4	12
218	Broad range metabolomics coupled with network analysis for explaining possible mechanisms of Er-Zhi-Wan in treating liver-kidney Yin deficiency syndrome of Traditional Chinese medicine. Journal of Ethnopharmacology, 2019, 234, 57-66.	2.0	17
219	Insulin resistance disrupts epithelial repair and niche-progenitor Fgf signaling during chronic liver injury. PLoS Biology, 2019, 17, e2006972.	2.6	11

#	Article	IF	CITATIONS
220	Simulation and Reconstruction of Metabolite–Metabolite Association Networks Using a Metabolic Dynamic Model and Correlation Based Algorithms. Journal of Proteome Research, 2019, 18, 1099-1113.	1.8	18
221	Untargeted metabolomic evaluation of mango bagasse and mango bagasse based confection under in vitro simulated colonic fermentation. Journal of Functional Foods, 2019, 54, 271-280.	1.6	19
222	The Influence of Contrasting Microbial Lifestyles on the Pre-symbiotic Metabolite Responses of Eucalyptus grandis Roots. Frontiers in Ecology and Evolution, 2019, 7, .	1.1	17
223	Small-chain fatty acid activates astrocytic odorant receptor Olfr920. Biochemical and Biophysical Research Communications, 2019, 510, 383-387.	1.0	17
224	Metabolically Active, Fully Hydrolysable Polymersomes. Angewandte Chemie - International Edition, 2019, 58, 4581-4586.	7.2	20
225	Potential of ion mobility-mass spectrometry for both targeted and non-targeted analysis of phase II steroid metabolites in urine. Analytica Chimica Acta: X, 2019, 1, 100006.	2.8	28
226	Dual cationic–anionic profiling of metabolites in a single identified cell in a live <i>Xenopus laevis</i> embryo by microprobe CE-ESI-MS. Analyst, The, 2019, 144, 892-900.	1.7	45
227	The Effect of Anticoagulants, Temperature, and Time on the Human Plasma Metabolome and Lipidome from Healthy Donors as Determined by Liquid Chromatography-Mass Spectrometry. Biomolecules, 2019, 9, 200.	1.8	33
228	Evaluation of sample preparation protocols for quantitative NMR-based metabolomics. Metabolomics, 2019, 15, 84.	1.4	27
229	Data analysis of MS-based clinical lipidomics studies with crossover design: A tutorial mini-review of statistical methods. Clinical Mass Spectrometry, 2019, 13, 5-17.	1.9	11
230	An automatic variable laser attenuator for IRMPD spectroscopy and analysis of power-dependence in fragmentation spectra. International Journal of Mass Spectrometry, 2019, 443, 1-8.	0.7	67
231	Reference-standard free metabolite identification using infrared ion spectroscopy. International Journal of Mass Spectrometry, 2019, 443, 77-85.	0.7	32
232	Milk-Derived Amadori Products in Feces of Formula-Fed Infants. Journal of Agricultural and Food Chemistry, 2019, 67, 8061-8069.	2.4	16
233	Small Molecule Isotope Resolved Formula Enumeration: A Methodology for Assigning Isotopologues and Metabolite Formulas in Fourier Transform Mass Spectra. Analytical Chemistry, 2019, 91, 8933-8940.	3.2	11
234	Integration of Metabolomic and Other Omics Data in Population-Based Study Designs: An Epidemiological Perspective. Metabolites, 2019, 9, 117.	1.3	47
235	The human endogenous metabolome as a pharmacology baseline for drug discovery. Drug Discovery Today, 2019, 24, 1806-1820.	3.2	9
236	Isotopic Ratio Outlier Analysis (IROA) of Aqueous Humor for Metabolites. Methods in Molecular Biology, 2019, 1996, 179-185.	0.4	1
237	Recognition of early and late stages of bladder cancer using metabolites and machine learning. Metabolomics, 2019, 15, 94.	1.4	34

#	Article	IF	CITATIONS
238	Metabolomics of childhood exposure to perfluoroalkyl substances: a cross-sectional study. Metabolomics, 2019, 15, 95.	1.4	52
239	Active repurposing of drug candidates for melanoma based on GWAS, PheWAS and a wide range of omics data. Molecular Medicine, 2019, 25, 30.	1.9	21
240	Re-curation and rational enrichment of knowledge graphs in Biological Expression Language. Database: the Journal of Biological Databases and Curation, 2019, 2019, .	1.4	20
241	Trace enrichment of phenylcarboxylic acids from a model biological fluid and serum of human blood. Journal of Separation Science, 2019, 42, 2706-2714.	1.3	1
242	Metabolomics reveals diet-derived plant polyphenols accumulate in physiological bone. Scientific Reports, 2019, 9, 8047.	1.6	38
243	NMR metabolome of Borrelia burgdorferi in vitro and in vivo in mice. Scientific Reports, 2019, 9, 8049.	1.6	4
244	Impact of Artemisia absinthium hydrolate extracts with nematicidal activity on non-target soil organisms of different trophic levels. Ecotoxicology and Environmental Safety, 2019, 180, 565-574.	2.9	20
245	Investigating the Potential of Ion Mobility-Mass Spectrometry for Microalgae Biomass Characterization. Analytical Chemistry, 2019, 91, 9266-9276.	3.2	10
246	iTRAQ-based quantitative proteomic analysis provides insights into strong broodiness in Muscovy duck (Cairina moschata) combined with metabolomics analysis. Journal of Proteomics, 2019, 204, 103401.	1.2	11
247	Systematic Isolation and Structure Elucidation of Urinary Metabolites Optimized for the Analytical-Scale Molecular Profiling Laboratory. Analytical Chemistry, 2019, 91, 8873-8882.	3.2	11
248	Detecting single amino acids and small peptides by combining isobaric tags and peptidomics. European Journal of Mass Spectrometry, 2019, 25, 451-456.	0.5	1
249	The phenolic interactome and gut microbiota: opportunities and challenges in developing applications forÂschizophrenia and autism. Psychopharmacology, 2019, 236, 1471-1489.	1.5	8
250	Impact of short-term exposure to fine particulate matter air pollution on urinary metabolome: A randomized, double-blind, crossover trial. Environment International, 2019, 130, 104878.	4.8	55
251	Environmental Cadmium Enhances Lung Injury by Respiratory Syncytial Virus Infection. American Journal of Pathology, 2019, 189, 1513-1525.	1.9	23
252	Labellum structure of Bulbophyllum echinolabium J.J. Sm. (section Lepidorhiza Schltr., Bulbophyllinae) Tj ETQq0 C) O _{rg} BT /O	verlock 10 Tf
253	Multiâ€omics profiling of CHO parental hosts reveals cell lineâ€specific variations in bioprocessing traits. Biotechnology and Bioengineering, 2019, 116, 2117-2129.	1.7	38
254	Dynamic Network Modeling of Stem Cell Metabolism. Methods in Molecular Biology, 2019, 1975, 305-320.	0.4	21
255	13C Labeling of Nematode Worms to Improve Metabolome Coverage by Heteronuclear Nuclear Magnetic Resonance Experiments. Frontiers in Molecular Biosciences, 2019, 6, 27.	1.6	8

#	Article	IF	Citations
256	Warburg Effects in Cancer and Normal Proliferating Cells: Two Tales of the Same Name. Genomics, Proteomics and Bioinformatics, 2019, 17, 273-286.	3.0	39
257	HighResNPS.com: An Online Crowd-Sourced HR-MS Database for Suspect and Non-targeted Screening of New Psychoactive Substances. Journal of Analytical Toxicology, 2019, 43, 520-527.	1.7	61
258	Integrative Metabolomic and Transcriptomic Analysis for the Study of Bladder Cancer. Cancers, 2019, 11, 686.	1.7	31
259	Metabolic Phenotyping of Adipose-Derived Stem Cells Reveals a Unique Signature and Intrinsic Differences between Fat Pads. Stem Cells International, 2019, 2019, 1-16.	1.2	13
261	CE–MS for anionic metabolic profiling: An overview of methodological developments. Electrophoresis, 2019, 40, 2349-2359.	1.3	14
262	NMR metabolomics to study the metabolic response of human osteoblasts to nonâ€poled and poled poly (Lâ€lactic) acid. Magnetic Resonance in Chemistry, 2019, 57, 919-933.	1.1	6
263	Evaluating sub-lethal stress from Roundup® exposure in Artemia franciscana using 1H NMR and GCâ€"MS. Aquatic Toxicology, 2019, 212, 77-87.	1.9	8
264	Metabolomic markers of healthy dietary patterns in US postmenopausal women. American Journal of Clinical Nutrition, 2019, 109, 1439-1451.	2.2	48
265	The Mechanism of the Selective Antiproliferation Effect of Guanine-Based Biomolecules and Its Compensation. ACS Chemical Biology, 2019, 14, 1164-1173.	1.6	12
266	Fabric Phase Sorptive Extraction—A Metabolomic Preprocessing Approach for Ionizing Radiation Exposure Assessment. Journal of Proteome Research, 2019, 18, 3020-3031.	1.8	12
267	A 1H NMR metabolomic approach for the estimation of the time since death using aqueous humour: an animal model. Metabolomics, 2019, 15, 76.	1.4	30
268	General Framing of Low-, Mid-, and High-Level Data Fusion With Examples in the Life Sciences. Data Handling in Science and Technology, 2019, 31, 51-79.	3.1	18
269	Saliva NMR metabolomics: Analytical issues in pediatric oral health research. Oral Diseases, 2019, 25, 1545-1554.	1.5	33
270	CFM-ID 3.0: Significantly Improved ESI-MS/MS Prediction and Compound Identification. Metabolites, 2019, 9, 72.	1.3	196
271	In silico annotation of discriminative markers of three Zanthoxylum species using molecular network derived annotation propagation. Food Chemistry, 2019, 295, 368-376.	4.2	17
272	Systems Biology and Multi-Omics Integration: Viewpoints from the Metabolomics Research Community. Metabolites, 2019, 9, 76.	1.3	387
273	Colocalization Features for Classification of Tumors Using Desorption Electrospray Ionization Mass Spectrometry Imaging. Analytical Chemistry, 2019, 91, 6530-6540.	3.2	17
274	Applications of machine learning in GPCR bioactive ligand discovery. Current Opinion in Structural Biology, 2019, 55, 66-76.	2.6	39

#	Article	IF	Citations
275	Computational Methods for the Discovery of Metabolic Markers of Complex Traits. Metabolites, 2019, 9, 66.	1.3	28
276	Age-related spatial differences of human lens UV filters revealed by negative ion mode MALDI imaging mass spectrometry. Experimental Eye Research, 2019, 184, 146-151.	1.2	8
277	The potential of nanoflow liquid chromatography-nano electrospray ionisation-mass spectrometry for global profiling the faecal metabolome. Journal of Chromatography A, 2019, 1600, 127-136.	1.8	18
278	Characterizing novel olfactory receptors expressed in the murine renal cortex. American Journal of Physiology - Renal Physiology, 2019, 317, F172-F186.	1.3	28
279	Longitudinal plasma metabolomics of aging and sex. Aging, 2019, 11, 1262-1282.	1.4	115
280	Relationship between Protein Expression Pattern and Host Metabolome Perturbation as Monitored by Twoâ€Dimensional NMR Spectroscopy. Bulletin of the Korean Chemical Society, 2019, 40, 634-641.	1.0	3
281	Computational solutions in redox lipidomics – Current strategies and future perspectives. Free Radical Biology and Medicine, 2019, 144, 110-123.	1.3	36
282	The MACADAM database: a MetAboliC pAthways DAtabase for Microbial taxonomic groups for mining potential metabolic capacities of archaeal and bacterial taxonomic groups. Database: the Journal of Biological Databases and Curation, 2019, 2019, .	1.4	29
283	Genomics, Other "OMIC―Technologies, Precision Medicine, and Additional Biotechnology-Related Techniques. , 2019, , 191-237.		1
284	Deep MS/MS-Aided Structural-Similarity Scoring for Unknown Metabolite Identification. Analytical Chemistry, 2019, 91, 5629-5637.	3.2	47
285	A multiplatform metabolomic approach to characterize fecal signatures of negative postnatal events in chicks: a pilot study. Journal of Animal Science and Biotechnology, 2019, 10, 21.	2.1	11
286	NMR for sample quality assessment in metabolomics. New Biotechnology, 2019, 52, 25-34.	2.4	49
287	Alterations in the gut microbiome and metabolism with coronary artery disease severity. Microbiome, 2019, 7, 68.	4.9	212
288	The Metabolome: a Key Measure for Exposome Research in Epidemiology. Current Epidemiology Reports, 2019, 6, 93-103.	1.1	57
289	Strain-Level Differentiation of Bacteria by Paper Spray Ionization Mass Spectrometry. Analytical Chemistry, 2019, 91, 4964-4968.	3.2	19
290	Challenges in Identifying the Dark Molecules of Life. Annual Review of Analytical Chemistry, 2019, 12, 177-199.	2.8	55
291	Development of a rapid profiling method for the analysis of polar analytes in urine using HILIC–MS and ion mobility enabled HILIC–MS. Metabolomics, 2019, 15, 17.	1.4	57
292	Metabolic characteristics revealing cell differentiation of nasopharyngeal carcinoma by combining NMR spectroscopy with Raman spectroscopy. Cancer Cell International, 2019, 19, 37.	1.8	4

#	Article	IF	CITATIONS
293	Novel applications of mass spectrometryâ€based metabolomics in herbal medicines and its active ingredients: Current evidence. Mass Spectrometry Reviews, 2019, 38, 380-402.	2.8	95
294	A Metabolomic Study of the Variability of the Chemical Composition of Commonly Consumed Coffee Brews. Metabolites, 2019, 9, 17.	1.3	22
295	Applications of metabolomics in assessing ecological effects of emerging contaminants and pollutants on plants. Journal of Hazardous Materials, 2019, 373, 527-535.	6.5	95
296	Advances and challenges in development of precision psychiatry through clinical metabolomics on mood and psychotic disorders. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2019, 93, 182-188.	2.5	23
297	Essentials of Bioinformatics, Volume I. , 2019, , .		8
298	Metabolomic Insights into Human Arboviral Infections: Dengue, Chikungunya, and Zika Viruses. Viruses, 2019, 11, 225.	1.5	51
299	Use of metabolomics for predicting spontaneous preterm birth in asymptomatic pregnant women: protocol for a systematic review and meta-analysis. BMJ Open, 2019, 9, e026033.	0.8	4
300	Beyond Pathway Analysis: Identification of Active Subnetworks in Rett Syndrome. Frontiers in Genetics, 2019, 10, 59.	1.1	10
301	Wide spectrum targeted metabolomics identifies potential ovarian cancer biomarkers. Life Sciences, 2019, 222, 235-244.	2.0	34
302	Identification and characterization of potent and selective aquaporin-3 and aquaporin-7 inhibitors. Journal of Biological Chemistry, 2019, 294, 7377-7387.	1.6	35
303	Bioinformatics applied to biotechnology: A review towards bioenergy research. Biomass and Bioenergy, 2019, 123, 195-224.	2.9	17
304	A survey of web resources and tools for the study of TCM network pharmacology. Quantitative Biology, 2019, 7, 17-29.	0.3	21
305	Public data sources to support systems toxicology applications. Current Opinion in Toxicology, 2019, 16, 17-24.	2.6	10
306	Liquid Chromatography–Mass Spectrometry-Based Metabolomics of Nonhuman Primates after 4 Gy Total Body Radiation Exposure: Global Effects and Targeted Panels. Journal of Proteome Research, 2019, 18, 2260-2269.	1.8	28
307	The Therapeutic Potential of Apigenin. International Journal of Molecular Sciences, 2019, 20, 1305.	1.8	639
308	New frontiers in lipidomics analyses using structurally selective ion mobility-mass spectrometry. TrAC - Trends in Analytical Chemistry, 2019, 116, 316-323.	5.8	37
309	Rapid Solution-Phase Hydrogen/Deuterium Exchange for Metabolite Compound Identification. Journal of the American Society for Mass Spectrometry, 2019, 30, 1102-1114.	1.2	11
310	Metabolic signature of extracellular vesicles depends on the cell culture conditions. Journal of Extracellular Vesicles, 2019, 8, 1596669.	5 . 5	98

#	ARTICLE	IF	CITATIONS
311	The 1H NMR serum metabolomics response to a two meal challenge: a cross-over dietary intervention study in healthy human volunteers. Nutrition Journal, 2019, 18, 25.	1.5	9
312	Advanced liquid chromatography-mass spectrometry enables merging widely targeted metabolomics and proteomics. Analytica Chimica Acta, 2019, 1069, 89-97.	2.6	32
313	Metabolomics of Children and Adolescents Exposed to Industrial Carcinogenic Pollutants. Environmental Science & Environmental	4.6	36
314	NMR Metabolomics as an Effective Tool To Unravel the Effect of Light Intensity and Temperature on the Composition of the Marine Microalgae <i>Isochrysis galbana</i> Isod Chemistry, 2019, 67, 3879-3889.	2.4	29
315	Predicting Ion Mobility Collision Cross-Sections Using a Deep Neural Network: DeepCCS. Analytical Chemistry, 2019, 91, 5191-5199.	3.2	121
316	Metabolomics. , 2019, , 287-318.		0
317	Metabolomics in early detection and prognosis of acute coronary syndrome. Clinica Chimica Acta, 2019, 495, 43-53.	0.5	30
318	The Consortium of Metabolomics Studies (COMETS): Metabolomics in 47 Prospective Cohort Studies. American Journal of Epidemiology, 2019, 188, 991-1012.	1.6	81
319	Defining Dysbiosis in Patients with Urolithiasis. Scientific Reports, 2019, 9, 5425.	1.6	69
320	Progress in low-field benchtop NMR spectroscopy in chemical and biochemical analysis. Analytica Chimica Acta, 2019, 1067, 11-30.	2.6	82
321	Function, Detection and Alteration of Acylcarnitine Metabolism in Hepatocellular Carcinoma. Metabolites, 2019, 9, 36.	1.3	90
322	Lipidomic Analysis of Cancer Cell and Tumor Tissues. Methods in Molecular Biology, 2019, 1928, 175-204.	0.4	12
323	Pathway Based Analysis of Mutation Data Is Efficient for Scoring Target Cancer Drugs. Frontiers in Pharmacology, 2019, 10, 1.	1.6	303
324	Targeted Metabolomic Profiling of Peritoneal Dialysis Effluents Shows Anti-oxidative Capacity of Alanyl-Glutamine. Frontiers in Physiology, 2018, 9, 1961.	1.3	19
325	Role of metabolomics in identification of biomarkers related to food intake. Proceedings of the Nutrition Society, 2019, 78, 189-196.	0.4	34
326	ISiCLE: A Quantum Chemistry Pipeline for Establishing in Silico Collision Cross Section Libraries. Analytical Chemistry, 2019, 91, 4346-4356.	3.2	74
327	InterSpin: Integrated Supportive Webtools for Low- and High-Field NMR Analyses Toward Molecular Complexity. ACS Omega, 2019, 4, 3361-3369.	1.6	19
328	Metabolomics Approaches for the Diagnosis and Understanding of Kidney Diseases. Metabolites, 2019, 9, 34.	1.3	60

#	Article	IF	Citations
329	Metabolically Active, Fully Hydrolysable Polymersomes. Angewandte Chemie, 2019, 131, 4629-4634.	1.6	3
330	Hyperpolarized MRI for Studying Tumor Metabolism. Methods in Molecular Biology, 2019, 1928, 409-426.	0.4	0
331	Metabolomic and lipidomic characterization of Oxalobacter formigenes strains HC1 and OxWR by UHPLC-HRMS. Analytical and Bioanalytical Chemistry, 2019, 411, 4807-4818.	1.9	20
332	Low-Field, Benchtop NMR Spectroscopy as a Potential Tool for Point-of-Care Diagnostics of Metabolic Conditions: Validation, Protocols and Computational Models. High-Throughput, 2019, 8, 2.	4.4	60
333	Mass Spectrometry-Based Profiling of Metabolites in Human Biofluids. Methods in Molecular Biology, 2019, 1928, 205-234.	0.4	0
334	Reviews on Biomarker Studies in Psychiatric and Neurodegenerative Disorders. Advances in Experimental Medicine and Biology, 2019, , .	0.8	6
335	Development and application of a HILIC UHPLC-MS method for polar fecal metabolome profiling. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2019, 1109, 142-148.	1.2	26
336	An integrated approach for mixture analysis using MS and NMR techniques. Faraday Discussions, 2019, 218, 339-353.	1.6	22
337	Coupled Enzymatic Treatment and Mass Spectrometric Analysis for Identification of Glucuronidated Metabolites in Human Samples. ChemBioChem, 2019, 20, 1678-1683.	1.3	13
338	Identification of bioactive metabolites using activity metabolomics. Nature Reviews Molecular Cell Biology, 2019, 20, 353-367.	16.1	602
339	Biomonitoring Exposures to Carcinogens. , 2019, , 789-805.		2
340	Analysis of Chemical Spaces: Implications for Drug Repurposing. , 2019, , 359-395.		2
341	Twenty Years on: Metabolomics in Helminth Research. Trends in Parasitology, 2019, 35, 282-288.	1.5	15
342	Metabolomic Study of Obesity and Its Treatment with Palmitoylated Prolactin-Releasing Peptide Analog in Spontaneously Hypertensive and Normotensive Rats. Journal of Proteome Research, 2019, 18, 1735-1750.	1.8	8
343	1H NMR-based metabolomic analysis of nine organophosphate flame retardants metabolic disturbance in Hep G2 cell line. Science of the Total Environment, 2019, 665, 162-170.	3.9	32
344	Recent advances in the metabolomic study of bladder cancer. Expert Review of Proteomics, 2019, 16, 315-324.	1.3	28
345	A Comprehensive LC-QTOF-MS Metabolic Phenotyping Strategy: Application to Alkaptonuria. Clinical Chemistry, 2019, 65, 530-539.	1.5	17
346	Metabolomic Biomarkers in Mental Disorders: Bipolar Disorder and Schizophrenia. Advances in Experimental Medicine and Biology, 2019, 1118, 271-293.	0.8	16

#	Article	IF	CITATIONS
347	Molecular Characterization of Prostate Cancer with Associated Gleason Score Using Mass Spectrometry Imaging. Molecular Cancer Research, 2019, 17, 1155-1165.	1.5	50
348	Preoperative Metabolic Signatures of Prostate Cancer Recurrence Following Radical Prostatectomy. Journal of Proteome Research, 2019, 18, 1316-1327.	1.8	30
349	The application of high resolution terahertz gas spectroscopy for medical diagnostics based on the analysis of exhaled breath and biological liquid vapor. ITM Web of Conferences, 2019, 30, 13008.	0.4	5
350	Phosphatidylcholine Biosynthesis in Mitis Group Streptococci via Host Metabolite Scavenging. Journal of Bacteriology, 2019, 201, .	1.0	26
351	Standardizing the Assessment of Macular Pigment Using a Dual-Wavelength Autofluorescence Technique. Translational Vision Science and Technology, 2019, 8, 41.	1.1	30
352	Integrating Deep Textual Features to Probability Matrix Factorization for Metabolite-disease Association Prediction. , 2019 , , .		1
353	Metabolite Identification Using Artificial Neural Network. , 2019, , .		6
354	Integrated data across multiple and diverse disciplines are essential for developing a sustainable food system. Journal of Soils and Water Conservation, 2019, 74, 632-638.	0.8	7
355	Developing a Drug Screening Platform: MALDI-Mass Spectrometry Imaging of Paper-Based Cultures. Analytical Chemistry, 2019, 91, 15370-15376.	3.2	19
356	Effects of Aging and Methionine Restriction on Rat Kidney Metabolome. Metabolites, 2019, 9, 280.	1.3	16
357	Predicting metabolite-disease associations based on KATZ model. BioData Mining, 2019, 12, 19.	2.2	7
358	Multi-Organ NMR Metabolomics to Assess In Vivo Overall Metabolic Impact of Cisplatin in Mice. Metabolites, 2019, 9, 279.	1.3	13
359	Mass spectrometry imaging to detect lipid biomarkers and disease signatures in cancer. Cancer Reports, 2019, 2, e1229.	0.6	42
360	The METLIN small molecule dataset for machine learning-based retention timeÂprediction. Nature Communications, 2019, 10, 5811.	5.8	114
361	In vitro metabolomic footprint of the Echinococcus multilocularis metacestode. Scientific Reports, 2019, 9, 19438.	1.6	26
362	Metabolomic Profile of Oviductal Extracellular Vesicles across the Estrous Cycle in Cattle. International Journal of Molecular Sciences, 2019, 20, 6339.	1.8	31
363	Emerging Insights into the Metabolic Alterations in Aging Using Metabolomics. Metabolites, 2019, 9, 301.	1.3	72
364	Multiple Compounds Recognition from The Tandem Mass Spectral Data Using Convolutional Neural Network. Molecules, 2019, 24, 4590.	1.7	5

#	Article	IF	CITATIONS
365	Enzyme annotation in UniProtKB using Rhea. Bioinformatics, 2020, 36, 1896-1901.	1.8	72
366	Using Network Pharmacology to Explore Potential Treatment Mechanism for Coronary Heart Disease Using Chuanxiong and Jiangxiang Essential Oils in Jingzhi Guanxin Prescriptions. Evidence-based Complementary and Alternative Medicine, 2019, 2019, 1-15.	0.5	8
367	AMON: annotation of metabolite origins via networks to integrate microbiome and metabolome data. BMC Bioinformatics, 2019, 20, 614.	1.2	40
368	Rapid Growth and Metabolism of Uropathogenic Escherichia coli in Relation to Urine Composition. Clinical Microbiology Reviews, 2019, 33, .	5.7	56
369	Prioritizing candidate diseases-related metabolites based on literature and functional similarity. BMC Bioinformatics, 2019, 20, 574.	1.2	9
370	BIOPEP-UWM Database of Bioactive Peptides: Current Opportunities. International Journal of Molecular Sciences, 2019, 20, 5978.	1.8	454
371	Untargeted Metabolomics-Based Screening Method for Inborn Errors of Metabolism using Semi-Automatic Sample Preparation with an UHPLC- Orbitrap-MS Platform. Metabolites, 2019, 9, 289.	1.3	34
372	Mucosal Metabolomic Profiling and Pathway Analysis Reveal the Metabolic Signature of Ulcerative Colitis. Metabolites, 2019, 9, 291.	1.3	25
373	Distinct Phenotypic and Genomic Signatures Underlie Contrasting Pathogenic Potential of Staphylococcus epidermidis Clonal Lineages. Frontiers in Microbiology, 2019, 10, 1971.	1.5	32
374	Therapeutic Effect and Mechanism Study of Rhodiola wallichiana var. cholaensis Injection to Acute Blood Stasis Using Metabolomics Based on UPLC-Q/TOF-MS. Evidence-based Complementary and Alternative Medicine, 2019, 2019, 1-20.	0.5	8
375	Metabolomics: Basic Principles and Strategies. , 0, , .		34
376	Impact of a High Protein Intake on the Plasma Metabolome in Elderly Males: 10 Week Randomized Dietary Intervention. Frontiers in Nutrition, 2019, 6, 180.	1.6	7
377	From Samples to Insights into Metabolism: Uncovering Biologically Relevant Information in LC-HRMS Metabolomics Data. Metabolites, 2019, 9, 308.	1.3	61
378	The Translational Status of Cancer Liquid Biopsies. Regenerative Engineering and Translational Medicine, 2021, 7, 312-352.	1.6	39
379	Reactive metabolite production is a targetable liability of glycolytic metabolism in lung cancer. Nature Communications, 2019, 10, 5604.	5.8	45
380	Gut Microbiota in Children With Cystic Fibrosis: A Taxonomic and Functional Dysbiosis. Scientific Reports, 2019, 9, 18593.	1.6	84
381	Gut microbiome and cardiometabolic risk. Reviews in Endocrine and Metabolic Disorders, 2019, 20, 399-406.	2.6	23
382	Persistent Alterations in Plasma Lipid Profiles Before Introduction of Gluten in the Diet Associated With Progression to Celiac Disease. Clinical and Translational Gastroenterology, 2019, 10, e00044.	1.3	30

#	Article	IF	CITATIONS
383	Changes in the Composition of Atlantic Salmon upon the Brown Seaweed (Saccharina latissima) Treatment. Foods, 2019, 8, 625.	1.9	12
384	Volatile metabolomic signatures of rabies immunization in two mesocarnivore species. PLoS Neglected Tropical Diseases, 2019, 13, e0007911.	1.3	4
385	The Beneficial Effects of Stingless Bee Honey from Heterotrigona itama against Metabolic Changes in Rats Fed with High-Carbohydrate and High-Fat Diet. International Journal of Environmental Research and Public Health, 2019, 16, 4987.	1.2	25
386	Fast and Quantitative NMR Metabolite Analysis Afforded by a Paramagnetic Coâ€Solute. Angewandte Chemie, 2019, 131, 15427-15430.	1.6	7
387	Existing and Emerging Metabolomic Tools for ALS Research. Genes, 2019, 10, 1011.	1.0	9
388	Pharmacometabonomics: The Prediction of Drug Effects Using Metabolic Profiling. Handbook of Experimental Pharmacology, 2019, 260, 263-299.	0.9	10
389	Salivary Metabolomics Fingerprint of Chronic Apical Abscess with Sinus Tract: A Pilot Study. Scientific World Journal, The, 2019, 2019, 1-6.	0.8	2
390	Suitability evaluation of new endogenous biomarkers for the identification of nitriteâ€based urine adulteration in mass spectrometry methods. Drug Testing and Analysis, 2019, 11, 230-239.	1.6	10
391	A serum metabolomics signature of hypothermia fatalities involving arginase activity, tryptophan content, and phosphatidylcholine saturation. International Journal of Legal Medicine, 2019, 133, 889-898.	1.2	9
392	Metabolic and histopathological changes in the brain and plasma of rats exposed to fractionated whole-brain irradiation. Brain Research, 2019, 1708, 146-159.	1.1	11
393	CEU Mass Mediator 3.0: A Metabolite Annotation Tool. Journal of Proteome Research, 2019, 18, 797-802.	1.8	104
394	Metabolomics and Age-Related Macular Degeneration. Metabolites, 2019, 9, 4.	1.3	40
395	Retrospective analysis for valproate screening targets with liquid chromatographyâ€"high resolution mass spectrometry with positive electrospray ionization: An omicsâ€based approach. Drug Testing and Analysis, 2019, 11, 730-738.	1.6	22
396	Development and user evaluation of a rare disease gene prioritization workflow based on cognitive ergonomics. Journal of the American Medical Informatics Association: JAMIA, 2019, 26, 124-133.	2.2	2
397	Metabolic fingerprinting for diagnosis of fibromyalgia and other rheumatologic disorders. Journal of Biological Chemistry, 2019, 294, 2555-2568.	1.6	40
398	Identification of new urinary gammaâ€hydroxybutyric acid markers applying untargeted metabolomics analysis following placeboâ€controlled administration to humans. Drug Testing and Analysis, 2019, 11, 813-823.	1.6	29
399	Breathprinting Based Diagnosis, Selected Case Study: U-BIOPRED Project., 2019,, 33-48.		1
400	Nontarget Analysis of Oxygenates in Catalytic Fast Pyrolysis Biocrudes by Supercritical Fluid Chromatography High-Resolution Mass Spectrometry. Energy & Ene	2.5	5

#	Article	IF	CITATIONS
401	UHPLCâ€MS Analyses of Plant Flavonoids. Current Protocols in Plant Biology, 2019, 4, e20085.	2.8	18
402	Tissue-Specific Metabolomics Analysis Identifies the Liver as a Major Organ of Metabolic Disorders in Amyloid Precursor Protein/Presenilin 1 Mice of Alzheimer's Disease. Journal of Proteome Research, 2019, 18, 1218-1227.	1.8	20
403	Structure Annotation of All Mass Spectra in Untargeted Metabolomics. Analytical Chemistry, 2019, 91, 2155-2162.	3.2	131
404	Identifying the Components of Acidosis in Patients With Severe Plasmodium falciparum Malaria Using Metabolomics. Journal of Infectious Diseases, 2019, 219, 1766-1776.	1.9	35
405	Probing human sperm metabolism using 13C-magnetic resonance spectroscopy. Molecular Human Reproduction, 2019, 25, 30-41.	1.3	20
406	Circulating tumour DNA, microRNA and metabolites in cerebrospinal fluid as biomarkers for central nervous system malignancies. Journal of Clinical Pathology, 2019, 72, 271-280.	1.0	27
407	Novel technologies for metabolomics: More for less. TrAC - Trends in Analytical Chemistry, 2019, 120, 115323.	5.8	102
408	Evaluation of endogenous urinary biomarkers for indirect detection of urine adulteration attempts by five different chemical adulterants in mass spectrometry methods. Drug Testing and Analysis, 2019, 11, 638-648.	1.6	8
409	Effects of preâ€treatments on bulk stable isotope ratios in fish samples: A cautionary note for studies comparisons. Rapid Communications in Mass Spectrometry, 2019, 33, 291-302.	0.7	7
410	Multidimensional liquid chromatography-mass spectrometry for metabolomic and lipidomic analyses. TrAC - Trends in Analytical Chemistry, 2019, 120, 115302.	5.8	46
411	Spatial and molecular changes of mouse brain metabolism in response to immunomodulatory treatment with teriflunomide as visualized by MALDI-MSI. Analytical and Bioanalytical Chemistry, 2019, 411, 353-365.	1.9	17
412	NMR-based lipidomics of fish from a metal(loid) contaminated wetland show differences consistent with effects on cellular membranes and energy storage. Science of the Total Environment, 2019, 654, 284-291.	3.9	28
413	Construction and testing of an atmospheric-pressure transmission-mode matrix assisted laser desorption ionisation mass spectrometry imaging ion source with plasma ionisation enhancement. Analytica Chimica Acta, 2019, 1051, 110-119.	2.6	23
414	Application of a molecular networking approach for clinical and forensic toxicology exemplified in three cases involving 3â€MeOâ€PCP, doxylamine, and chlormequat. Drug Testing and Analysis, 2019, 11, 669-677.	1.6	37
415	Direct quantitation and characterization of fatty acids in salmon tissue by condensed phase membrane introduction mass spectrometry (CP-MIMS) using a modified donor phase. Analytical and Bioanalytical Chemistry, 2019, 411, 291-303.	1.9	6
416	Robust 1D NMR lineshape fitting using real and imaginary data in the frequency domain. Journal of Magnetic Resonance, 2019, 298, 91-100.	1.2	24
417	Purity by design: Reducing impurities in bioproduction by stimulus-controlled global translational downregulation of non-product proteins. Metabolic Engineering, 2019, 52, 110-123.	3.6	10
418	Accelerating Metabolite Identification in Natural Product Research: Toward an Ideal Combination of Liquid Chromatography–High-Resolution Tandem Mass Spectrometry and NMR Profiling, ⟨i⟩in Silico⟨ i⟩ Databases, and Chemometrics. Analytical Chemistry, 2019, 91, 704-742.	3.2	165

#	Article	IF	CITATIONS
419	Live single cell mass spectrometry reveals cancerâ€specific metabolic profiles of circulating tumor cells. Cancer Science, 2019, 110, 697-706.	1.7	90
420	Immunometabolism: A Multi-Omics Approach to Interpreting the Influence of Exercise and Diet on the Immune System. Annual Review of Food Science and Technology, 2019, 10, 341-363.	5.1	57
421	PAIRUP-MS: Pathway analysis and imputation to relate unknowns in profiles from mass spectrometry-based metabolite data. PLoS Computational Biology, 2019, 15, e1006734.	1.5	13
422	Directed Non-targeted Mass Spectrometry and Chemical Networking for Discovery of Eicosanoids and Related Oxylipins. Cell Chemical Biology, 2019, 26, 433-442.e4.	2.5	64
423	Determination of Calystegines in Several Tomato Varieties Based on GC-Q-Orbitrap Analysis and Their Classification by ANOVA. Journal of Agricultural and Food Chemistry, 2019, 67, 1284-1291.	2.4	11
424	RANCM: a new ranking scheme for assigning confidence levels to metabolite assignments in NMR-based metabolomics studies. Metabolomics, 2019, 15, 5.	1.4	7
425	\hat{l}^2 -Cyclodextrin inclusion complexes with essential oils: Obtention, characterization, antimicrobial activity and potential application for food preservative sachets. Food Research International, 2019, 119, 499-509.	2.9	81
426	Isotope Labeling Strategies for Acylcarnitines Profile in Biological Samples by Liquid Chromatography–Mass Spectrometry. Analytical Chemistry, 2019, 91, 1701-1705.	3.2	9
427	Bioassay for monitoring the anti-aging effect of cord blood treatment. Theranostics, 2019, 9, 1-10.	4.6	5
428	Conformation-independent quantitative structure-property relationships study on water solubility of pesticides. Ecotoxicology and Environmental Safety, 2019, 171, 47-53.	2.9	21
429	BioTransformer: a comprehensive computational tool for small molecule metabolism prediction and metabolite identification. Journal of Cheminformatics, 2019, 11, 2.	2.8	269
430	Ecotoxicity of a novel biopesticide from Artemisia absinthium on non-target aquatic organisms. Chemosphere, 2019, 216, 131-146.	4.2	38
431	Systems-Wide Approaches in Induced Pluripotent Stem Cell Models. Annual Review of Pathology: Mechanisms of Disease, 2019, 14, 395-419.	9.6	24
432	Incorporating In-Source Fragment Information Improves Metabolite Identification Accuracy in Untargeted LC–MS Data Sets. Journal of Proteome Research, 2019, 18, 791-796.	1.8	27
433	Identification of Unknown Metabolomics Mixture Compounds by Combining NMR, MS, and Cheminformatics. Methods in Enzymology, 2019, 615, 407-422.	0.4	19
434	From mass to metabolite in human untargeted metabolomics: Recent advances in annotation of metabolites applying liquid chromatography-mass spectrometry data. TrAC - Trends in Analytical Chemistry, 2019, 120, 115324.	5.8	62
435	Updates in Rhea: SPARQLing biochemical reaction data. Nucleic Acids Research, 2019, 47, D596-D600.	6.5	54
436	Hepatoprotection of Herpetospermum caudigerum Wall. against CCl4-induced liver fibrosis on rats. Journal of Ethnopharmacology, 2019, 229, 1-14.	2.0	21

#	Article	IF	CITATIONS
437	Metabolome analysis for investigating host-gut microbiota interactions. Journal of the Formosan Medical Association, 2019, 118, S10-S22.	0.8	121
438	Poly-ε-caprolactone (PCL), a promising polymer for pharmaceutical and biomedical applications: Focus on nanomedicine in cancer. International Journal of Polymeric Materials and Polymeric Biomaterials, 2020, 69, 85-126.	1.8	102
439	NMR Spectroscopic Analysis to Evaluate the Quality of Insulin: Concentration, Variability, and Excipient Content. Journal of Diabetes Science and Technology, 2020, 14, 180-184.	1.3	10
440	Identification of potential human urinary biomarkers for tomato juice intake by mass spectrometry-based metabolomics. European Journal of Nutrition, 2020, 59, 685-697.	1.8	19
441	MENDA: a comprehensive curated resource of metabolic characterization in depression. Briefings in Bioinformatics, 2020, 21, 1455-1464.	3.2	31
442	Exploring the protective effects of Danqi Tongmai tablet on acute myocardial ischemia rats by comprehensive metabolomics profiling. Phytomedicine, 2020, 74, 152918.	2.3	17
443	An approach for visualizing the spatial metabolome of an entire plant root system inspired by the Swissâ€rolling technique. Journal of Mass Spectrometry, 2020, 55, e4363.	0.7	9
444	Individualized metabolomics: opportunities and challenges. Clinical Chemistry and Laboratory Medicine, 2020, 58, 939-947.	1.4	6
445	Research Note: The effect of selection for 16-week body weight on turkey serum metabolome. Poultry Science, 2020, 99, 517-525.	1.5	0
446	Heterogeneous information network and its application to human health and disease. Briefings in Bioinformatics, 2020, 21, 1327-1346.	3.2	17
447	Optimal collision energy is an eligible molecular descriptor to boost structural annotation: An application for chlorogenic acid derivatives-focused chemical profiling. Journal of Chromatography A, 2020, 1609, 460515.	1.8	28
448	Metabolic Profiling and Compound-Class Identification Reveal Alterations in Serum Triglyceride Levels in Mice Immunized with Human Vaccine Adjuvant Alum. Journal of Proteome Research, 2020, 19, 269-278.	1.8	5
449	Recent Developments along the Analytical Process for Metabolomics Workflows. Analytical Chemistry, 2020, 92, 203-226.	3.2	72
450	Pre- and Postoperative Neratinib for HER2-Positive Breast Cancer Brain Metastases: Translational Breast Cancer Research Consortium 022. Clinical Breast Cancer, 2020, 20, 145-151.e2.	1.1	21
451	Ethical priority of the most actionable system of biomolecules: the metabolome. American Journal of Physical Anthropology, 2020, 171, 177-181.	2.1	10
452	Structural and ligand binding analyses of the periplasmic sensor domain of RsbU in Chlamydia trachomatis support a role in TCA cycle regulation. Molecular Microbiology, 2020, 113, 68-88.	1.2	11
453	Infrared ion spectroscopy: New opportunities for small-molecule identification in mass spectrometry - A tutorial perspective. Analytica Chimica Acta, 2020, 1093, 1-15.	2.6	57
454	The identification of active compounds in <i>Ganoderma lucidum var. antler</i> extract inhibiting dengue virus serine protease and its computational studies. Journal of Biomolecular Structure and Dynamics, 2020, 38, 4273-4288.	2.0	18

#	Article	IF	CITATIONS
455	PathBank: a comprehensive pathway database for model organisms. Nucleic Acids Research, 2020, 48, D470-D478.	6.5	83
456	Linking volatile and non-volatile compounds to sensory profiles and consumer liking of wild edible Nordic mushrooms. Food Chemistry, 2020, 304, 125403.	4.2	35
457	A paradigm shift in medicine: A comprehensive review of network-based approaches. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2020, 1863, 194416.	0.9	60
458	Using What We Already Have: Uncovering New Drug Repurposing Strategies in Existing Omics Data. Annual Review of Pharmacology and Toxicology, 2020, 60, 333-352.	4.2	39
459	Dynamic Metabolomics for Engineering Biology: Accelerating Learning Cycles for Bioproduction. Trends in Biotechnology, 2020, 38, 68-82.	4.9	20
460	An NMR based panorama of the heterogeneous biology of acute respiratory distress syndrome (ARDS) from the standpoint of metabolic biomarkers. NMR in Biomedicine, 2020, 33, e4192.	1.6	7
461	Facile preparation of porous manganese oxide foams, sponges, and merged spherical networks, using Polydopamine/Dextran for catalytic oxidation of cyclohexane. Microporous and Mesoporous Materials, 2020, 295, 109740.	2.2	2
462	Mass spectrometry and NMR spectroscopy based quantitative metabolomics. , 2020, , 289-311.		5
463	Deep Learning to Generate <i>in Silico</i> Chemical Property Libraries and Candidate Molecules for Small Molecule Identification in Complex Samples. Analytical Chemistry, 2020, 92, 1720-1729.	3.2	62
464	Non-targeted metabolomics analysis reveals dynamic changes of volatile and non-volatile metabolites during oolong tea manufacture. Food Research International, 2020, 128, 108778.	2.9	62
465	Searching for Small Molecules with an Atomic Sort. Angewandte Chemie - International Edition, 2020, 59, 1144-1148.	7.2	4
466	Metabolomics of bronchopulmonary dysplasia. Clinica Chimica Acta, 2020, 500, 109-114.	0.5	22
467	Urinary biomarkers of dietary intake: a review. Nutrition Reviews, 2020, 78, 364-381.	2.6	21
468	A complex matrix characterization approach, applied to cigarette smoke, that integrates multiple analytical methods and compound identification strategies for nonâ€targeted liquid chromatography with highâ€resolution mass spectrometry. Rapid Communications in Mass Spectrometry, 2020, 34, e8571.	0.7	20
469	Supercritical fluid chromatography–mass spectrometry using data independent acquisition for the analysis of polar metabolites in human urine. Journal of Chromatography A, 2020, 1609, 460449.	1.8	19
470	Bioactive Compounds in Moringa oleifera Lam. Leaves Inhibit the Pro-Inflammatory Mediators in Lipopolysaccharide-Induced Human Monocyte-Derived Macrophages. Molecules, 2020, 25, 191.	1.7	39
471	A time-dependent role for the transcription factor CREB in neuronal allocation to an engram underlying a fear memory revealed using a novel in vivo optogenetic tool to modulate CREB function. Neuropsychopharmacology, 2020, 45, 916-924.	2.8	25
472	Heritability estimates for 361 blood metabolites across 40 genome-wide association studies. Nature Communications, 2020, 11, 39.	5.8	64

#	Article	IF	CITATIONS
473	Developing preliminary blood metabolomics-based biomarkers of insufficient sleep in humans. Sleep, 2020, 43, .	0.6	21
474	Spent coffee (Coffea arabica L.) grounds positively modulate indicators of colonic microbial activity. Innovative Food Science and Emerging Technologies, 2020, 60, 102286.	2.7	17
475	Mapping the Human Exposome to Uncover the Causes of Breast Cancer. International Journal of Environmental Research and Public Health, 2020, 17, 189.	1.2	9
476	Metabolome response to anthropogenic contamination on microalgae: a review. Metabolomics, 2020, 16, 8.	1.4	20
477	Discovery of metabolic alterations in the serum of patients infected with Plasmodium spp. by high-resolution metabolomics. Metabolomics, 2020, 16, 9.	1.4	11
478	Comparison of physicochemical, mechanical and antioxidant properties of polyvinyl alcohol films containing green tealeaves waste extracts and discarded balsamic vinegar. Food Packaging and Shelf Life, 2020, 23, 100445.	3.3	26
479	Targeted metabolomic profiles of piglet plasma reveal physiological changes over the suckling period. Livestock Science, 2020, 231, 103890.	0.6	4
480	Effects of metabolite changes during lacto-fermentation on the biological activity and consumer acceptability for dragon fruit juice. LWT - Food Science and Technology, 2020, 121, 108992.	2.5	41
481	A surface-enhanced Raman spectroscopy database of 63 metabolites. Talanta, 2020, 210, 120645.	2.9	13
482	Mass spectrometry searches using MASST. Nature Biotechnology, 2020, 38, 23-26.	9.4	160
483	Identification of 102 Correlations between Serum Metabolites and Habitual Diet in a Metabolomics Study of the Prostate, Lung, Colorectal, and Ovarian Cancer Trial. Journal of Nutrition, 2020, 150, 694-703.	1.3	27
484	Database of free solution mobilities for 276 metabolites. Talanta, 2020, 209, 120545.	2.9	8
485	Urinary metabolomics analysis reveals the anti-diabetic effect of stachyose in high-fat diet/streptozotocin-induced type 2 diabetic rats. Carbohydrate Polymers, 2020, 229, 115534.	5.1	24
486	Measurement of 2-hydroxyglutarate enantiomers in serum by chiral gas chromatography-tandem mass spectrometry and its application as a biomarker for IDH mutant gliomas. Clinical Mass Spectrometry, 2020, 15, 16-24.	1.9	14
487	Cerebrospinal fluid lipidomics: effects of an intravenous triglyceride infusion and apoE status. Metabolomics, 2020, 16, 6.	1.4	20
488	Singleâ€Cell Analysis Using Droplet Microfluidics. Advanced Biology, 2020, 4, e1900188.	3.0	169
489	Gastric Bypass with Different Biliopancreatic Limb Lengths Results in Similar Post-absorptive Metabolomics Profiles. Obesity Surgery, 2020, 30, 1068-1078.	1.1	5
490	Lipidomics from sample preparation to data analysis: a primer. Analytical and Bioanalytical Chemistry, 2020, 412, 2191-2209.	1.9	180

#	Article	IF	CITATIONS
491	Macrophage inflammatory and metabolic responses to graphene-based nanomaterials differing in size and functionalization. Colloids and Surfaces B: Biointerfaces, 2020, 186, 110709.	2.5	30
492	Sweet, umami and bitter taste receptors: State of the art of in silico molecular modeling approaches. Trends in Food Science and Technology, 2020, 96, 21-29.	7.8	67
493	Ambient Ionization Mass Spectrometry Today and Tomorrow: Embracing Challenges and Opportunities. Analytical Chemistry, 2020, 92, 2353-2363.	3.2	97
494	Fe3O4-assisted laser desorption ionization mass spectrometry for typical metabolite analysis and localization: Influencing factors, mechanisms, and environmental applications. Journal of Hazardous Materials, 2020, 388, 121817.	6.5	16
495	Habitual Nut Exposure, Assessed by Dietary and Multiple Urinary Metabolomic Markers, and Cognitive Decline in Older Adults: The InCHIANTI Study. Molecular Nutrition and Food Research, 2020, 64, e1900532.	1.5	21
496	NMR-based metabolomics analysis identifies discriminatory metabolic disturbances in tissue and biofluid samples for progressive prostate cancer. Clinica Chimica Acta, 2020, 501, 241-251.	0.5	27
497	Genome-Scale Metabolic Modeling with Protein Expressions of Normal and Cancerous Colorectal Tissues for Oncogene Inference. Metabolites, 2020, 10, 16.	1.3	16
498	Exercise immunology: Future directions. Journal of Sport and Health Science, 2020, 9, 432-445.	3.3	73
499	Hydrogen–Deuterium Scrambling Based on Chemical Isotope Labeling Coupled with LC–MS: Application to Amine Metabolite Identification in Untargeted Metabolomics. Analytical Chemistry, 2020, 92, 2043-2051.	3.2	11
500	Remote ischaemic preconditioning influences the levels of acylcarnitines in vascular surgery: a randomised clinical trial. Nutrition and Metabolism, 2020, 17, 76.	1.3	3
501	UHPLC–MS/MS-Based Nontargeted Metabolomics Analysis Reveals Biomarkers Related to the Freshness of Chilled Chicken. Foods, 2020, 9, 1326.	1.9	20
502	An 1H NMR- and MS-Based Study of Metabolites Profiling of Garden Snail Helix aspersa Mucus. Metabolites, 2020, 10, 360.	1.3	14
503	Oil-assisted extraction of polyphenols from press cake to enhance oxidative stability of flaxseed oil. LWT - Food Science and Technology, 2020, 133, 110006.	2.5	10
504	Evaluation of the use of untargeted metabolomics in the safety assessment of genetically modified crops. Metabolomics, 2020, 16, 111.	1.4	18
505	Sex-specific metabolic alterations in the type 1 diabetic brain of mice revealed by an integrated method of metabolomics and mixed-model. Computational and Structural Biotechnology Journal, 2020, 18, 2063-2074.	1.9	12
506	Multiomic features associated with mucosal healing and inflammation in paediatric Crohn's disease. Alimentary Pharmacology and Therapeutics, 2020, 52, 1491-1502.	1.9	20
507	Use of Nanovesicles from Orange Juice to Reverse Diet-Induced Gut Modifications in Diet-Induced Obese Mice. Molecular Therapy - Methods and Clinical Development, 2020, 18, 880-892.	1.8	58
508	Role of the Mitochondrial Pyruvate Carrier in the Occurrence of Metabolic Inflexibility in Drosophila melanogaster Exposed to Dietary Sucrose. Metabolites, 2020, 10, 411.	1.3	7

#	ARTICLE	IF	CITATIONS
509	Retrieving and Utilizing Hypothetical Neutral Losses from Tandem Mass Spectra for Spectral Similarity Analysis and Unknown Metabolite Annotation. Analytical Chemistry, 2020, 92, 14476-14483.	3.2	37
510	Enhanced Catecholamine Flux and Impaired Carbonyl Metabolism Disrupt Cardiac Mitochondrial Oxidative Phosphorylation in Diabetes Patients. Antioxidants and Redox Signaling, 2021, 35, 235-251.	2.5	11
511	Mycobacterium tuberculosis curli pili (MTP) is associated with significant host metabolic pathways in an A549 epithelial cell infection model and contributes to the pathogenicity of Mycobacterium tuberculosis. Metabolomics, 2020, 16, 116.	1.4	4
512	Carotenoid isolates of <i>Spondias mombin </i> demonstrate anticancer effects in DMBAâ€induced breast cancer in Wistar rats through Xâ€inked inhibitor of apoptosis protein (XIAP) antagonism and antiâ€inflammation. Journal of Food Biochemistry, 2020, 44, e13523.	1.2	13
513	Staphylococcus aureus Preferentially Liberates Inorganic Phosphate from Organophosphates in Environments where This Nutrient Is Limiting. Journal of Bacteriology, 2020, 202, .	1.0	4
514	Rapid Preparation of a Large Sulfated Metabolite Library for Structure Validation in Human Samples. Metabolites, 2020, 10, 415.	1.3	9
515	Pre-diagnostic biomarkers of type 2 diabetes identified in the UAE's obese national population using targeted metabolomics. Scientific Reports, 2020, 10, 17616.	1.6	24
516	Complementary NAD+ replacement strategies fail to functionally protect dystrophin-deficient muscle. Skeletal Muscle, 2020, 10, 30.	1.9	15
517	Computer-Aided Drug Design. , 2020, , .		13
518	Polyinosinic:polycytidylic acid in vivo enhances Chinook salmon (Oncorhynchus tshawytscha) immunity and alters the fish metabolome. Aquaculture International, 2020, 28, 2437-2463.	1.1	1
519	Chemical characterization of eight herbal liqueurs by means of liquid chromatography coupled with ion mobility quadrupole time-of-flight mass spectrometry. Journal of Chromatography A, 2020, 1631, 461560.	1.8	15
520	Mind your media. Nature Metabolism, 2020, 2, 1369-1372.	5.1	34
521	A novel anti-browning agent 3-mercapto-2-butanol for inhibition of fresh-cut potato browning. Postharvest Biology and Technology, 2020, 170, 111324.	2.9	36
522	An improved detection and identification strategy for untargeted metabolomics based on UPLC-MS. Journal of Pharmaceutical and Biomedical Analysis, 2020, 191, 113531.	1.4	4
523	1H-NMR-based metabolomics for cancer targeting and metabolic engineering –A review. Process Biochemistry, 2020, 99, 112-122.	1.8	27
524	Deep-DRM: a computational method for identifying disease-related metabolites based on graph deep learning approaches. Briefings in Bioinformatics, 2021, 22, .	3.2	55
525	Bacterial catabolism of indole-3-acetic acid. Applied Microbiology and Biotechnology, 2020, 104, 9535-9550.	1.7	31
526	High-Throughput Fractionation Coupled to Mass Spectrometry for Improved Quantitation in Metabolomics. Analytical Chemistry, 2020, 92, 14330-14338.	3.2	7

#	Article	IF	CITATIONS
527	Comprehensive quantification of fuel use by the failing and nonfailing human heart. Science, 2020, 370, 364-368.	6.0	276
528	A Novel LCâ€MS Based Targeted Metabolomic Approach to Study the Biomarkers of Food Intake. Molecular Nutrition and Food Research, 2020, 64, e2000615.	1.5	10
529	MetFID: artificial neural network-based compound fingerprint prediction for metabolite annotation. Metabolomics, 2020, 16, 104.	1.4	30
530	Deep metabolome: Applications of deep learning in metabolomics. Computational and Structural Biotechnology Journal, 2020, 18, 2818-2825.	1.9	82
531	Prediction of drug metabolites using neural machine translation. Chemical Science, 2020, 11, 12777-12788.	3.7	21
532	Semantic Similarity in Cheminformatics. , 0, , .		0
533	Metabolic Signatures of 10 Processed and Non-processed Meat Products after In Vitro Digestion. Metabolites, 2020, 10, 272.	1.3	7
534	Using mass spectrometry to transform the assessment of sexual assault evidence. Forensic Chemistry, 2020, 20, 100262.	1.7	5
535	Multi-omics Data Integration for Identifying Osteoporosis Biomarkers and Their Biological Interaction and Causal Mechanisms. IScience, 2020, 23, 100847.	1.9	48
536	Metabolic profiling of organic acids in urine samples of Cri Du Chat syndrome individuals by gas chromatography-mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1153, 122267.	1.2	4
537	Timeâ€related metabolomics study in the rat plasma after global cerebral ischemia and reperfusion: Effect of ischemic preconditioning. IUBMB Life, 2020, 72, 2010-2023.	1.5	7
538	Chemical evolution: from formamide to nucleobases and amino acids without the presence of catalyst. Journal of Biomolecular Structure and Dynamics, 2021, 39, 5563-5578.	2.0	11
539	Genetics and Not Shared Environment Explains Familial Resemblance in Adult Metabolomics Data. Twin Research and Human Genetics, 2020, 23, 145-155.	0.3	6
540	Metabolome responses of $\langle i \rangle$ Enterococcus faecium $\langle i \rangle$ to acid shock and nitrite stress. Biotechnology and Bioengineering, 2020, 117, 3559-3571.	1.7	7
541	Lipid profile of Trichinella papuae muscle-stage larvae. Scientific Reports, 2020, 10, 10125.	1.6	12
542	The Relationship between Dietary Polyphenol Intakes and Urinary Polyphenol Concentrations in Adults Prescribed a High Vegetable and Fruit Diet. Nutrients, 2020, 12, 3431.	1.7	18
543	Deep phenotyping of myalgic encephalomyelitis/chronic fatigue syndrome in Japanese population. Scientific Reports, 2020, 10, 19933.	1.6	20
544	Sanitary Conditions Affect the Colonic Microbiome and the Colonic and Systemic Metabolome of Female Pigs. Frontiers in Veterinary Science, 2020, 7, 585730.	0.9	9

#	Article	IF	CITATIONS
545	A Genome-wide Association Study Discovers 46 Loci of the Human Metabolome in the Hispanic Community Health Study/Study of Latinos. American Journal of Human Genetics, 2020, 107, 849-863.	2.6	48
546	Monitoring Methylmalonic Aciduria by NMR Urinomics. Molecules, 2020, 25, 5312.	1.7	6
547	Ziziphus joazeiro, a Saponin-Rich Brazilian Medicinal Plant: Pharmacognostic Characterization of Bark and Leaves. Revista Brasileira De Farmacognosia, 2020, 30, 756-764.	0.6	6
548	Multi-Omics Data Integration in Extracellular Vesicle Biology—Utopia or Future Reality?. International Journal of Molecular Sciences, 2020, 21, 8550.	1.8	26
549	Standardizing and increasing the utility of lipidomics: a look to the next decade. Expert Review of Proteomics, 2020, 17, 699-717.	1.3	3
550	Drivers of plasticity in freeze tolerance in the intertidal mussel, <i>Mytilus trossulus</i> . Journal of Experimental Biology, 2020, 223, .	0.8	13
551	Towards a More Reliable Identification of Isomeric Metabolites Using Pattern Guided Retention Validation. Metabolites, 2020, 10, 457.	1.3	14
552	Blood Metabolomic Profiling Confirms and Identifies Biomarkers of Food Intake. Metabolites, 2020, 10, 468.	1.3	13
553	Investigating the Multitarget Mechanism of Traditional Chinese Medicine Prescription for Cancer-Related Pain by Using Network Pharmacology and Molecular Docking Approach. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-11.	0.5	11
554	Evaluation of Different Tandem MS Acquisition Modes to Support Metabolite Annotation in Human Plasma Using Ultra High-Performance Liquid Chromatography High-Resolution Mass Spectrometry for Untargeted Metabolomics. Metabolites, 2020, 10, 464.	1.3	9
555	Workshop report: Toward the development of a human whole stool reference material for metabolomic and metagenomic gut microbiome measurements. Metabolomics, 2020, 16, 119.	1.4	12
556	Longitudinal Multi-omics Analyses Identify Responses of Megakaryocytes, Erythroid Cells, and Plasmablasts as Hallmarks of Severe COVID-19. Immunity, 2020, 53, 1296-1314.e9.	6.6	278
557	From Glucose to Lactate and Transiting Intermediates Through Mitochondria, Bypassing Pyruvate Kinase: Considerations for Cells Exhibiting Dimeric PKM2 or Otherwise Inhibited Kinase Activity. Frontiers in Physiology, 2020, 11, 543564.	1.3	10
558	Oxalobacter formigenes produces metabolites and lipids undetectable in oxalotrophic Bifidobacterium animalis. Metabolomics, 2020, 16, 122.	1.4	7
559	Role of cardiac drugs and flavonoids on the IRE1–JNK pathway as revealed by re-ranked molecular docking scores, MM/PBSA and umbrella sampling. Journal of Biomolecular Structure and Dynamics, 2022, 40, 3428-3450.	2.0	2
560	Mobilization of Iron Stored in Bacterioferritin Is Required for Metabolic Homeostasis in Pseudomonas aeruginosa. Pathogens, 2020, 9, 980.	1.2	8
561	Supercritical fluid chromatography $\hat{a}\in$ Mass spectrometry in metabolomics: Past, present, and future perspectives. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1161, 122444.	1.2	43
562	Automated Annotation of Sphingolipids Including Accurate Identification of Hydroxylation Sites Using MS <i>>ⁿ</i> Data. Analytical Chemistry, 2020, 92, 14054-14062.	3.2	28

#	Article	IF	CITATIONS
563	Plant Omics: Metabolomics and Network Pharmacology of Liquorice, Indian Ayurvedic Medicine Yashtimadhu. OMICS A Journal of Integrative Biology, 2020, 24, 743-755.	1.0	10
564	Cancer Alters the Metabolic Fingerprint of Extracellular Vesicles. Cancers, 2020, 12, 3292.	1.7	11
565	Quantitative NMR-Based Biomedical Metabolomics: Current Status and Applications. Molecules, 2020, 25, 5128.	1.7	81
566	Changes in transcriptomic and metabolomic profiles of morphotypes of Ophiocordyceps sinensis within the hemocoel of its host larvae, Thitarodes xiaojinensis. BMC Genomics, 2020, 21, 789.	1.2	10
567	Aqueous extracts of Crambe abyssinica seed cake: Chemical composition and potential for nematode control. Industrial Crops and Products, 2020, 156, 112860.	2.5	6
568	Phosphotransferase System Uptake and Metabolism of the \hat{l}^2 -Glucoside Salicin Impact Group A Streptococcal Bloodstream Survival and Soft Tissue Infection. Infection and Immunity, 2020, 88, .	1.0	4
569	Mass Spectrometry for Natural Product Discovery. , 2020, , 263-306.		13
570	Precision Medicine for Lysosomal Disorders. Biomolecules, 2020, 10, 1110.	1.8	10
571	Induction of a Timed Metabolic Collapse to Overcome Cancer Chemoresistance. Cell Metabolism, 2020, 32, 391-403.e6.	7.2	79
572	Polyamine pathway activity promotes cysteine essentiality in cancer cells. Nature Metabolism, 2020, 2, 1062-1076.	5.1	35
573	Plasma Metabolites Associate with All-Cause Mortality in Individuals with Type 2 Diabetes. Metabolites, 2020, 10, 315.	1.3	21
574	Correlation of host inflammatory cytokines and immune-related metabolites, but not viral NS1 protein, with disease severity of dengue virus infection. PLoS ONE, 2020, 15, e0237141.	1.1	9
575	Utility of the "omics―in kidney disease: Methods of analysis, sampling considerations, and technical approaches in renal biomarkers. , 2020, , 19-153.		0
576	Comprehensive Isotopic Targeted Mass Spectrometry: Reliable Metabolic Flux Analysis with Broad Coverage. Analytical Chemistry, 2020, 92, 11728-11738.	3.2	24
577	NPid: an Automatic Approach to Rapid Identification of Known Natural Products in the Crude Extract of Crabapple Based on 2D ⟨sup⟩1⟨sup⟩Hâ€"⟨sup⟩13⟨ sup⟩C Heteronuclear Correlation Spectra of the Extract Mixture. Analytical Chemistry, 2020, 92, 10996-11006.	3.2	7
578	Distinct Metabolic Signatures of Hormone-Sensitive and Castration-Resistant Prostate Cancer Revealed by a ¹ H NMR-Based Metabolomics of Biopsy Tissue. Journal of Proteome Research, 2020, 19, 3741-3749.	1.8	7
579	Gas-Phase Reaction of trans-2-Methyl-2-butenal with Cl: Kinetics, Gaseous Products, and SOA Formation. Atmosphere, 2020, 11, 715.	1.0	5
580	Urinary exfoliated tumor single-cell metabolomics technology for establishing a drug resistance monitoring system for bladder cancer with intravesical chemotherapy. Medical Hypotheses, 2020, 143, 110100.	0.8	5

#	Article	IF	CITATIONS
581	The Potential of Metabolomics in the Diagnosis of Thyroid Cancer. International Journal of Molecular Sciences, 2020, 21, 5272.	1.8	21
582	Reckoning the Dearth of Bioinformatics in the Arena of Diabetic Nephropathy (DN)â€"Need to Improvise. Processes, 2020, 8, 808.	1.3	4
583	Charting Metabolism Heterogeneity by Nanostructure Imaging Mass Spectrometry: From Biological Systems to Subcellular Functions. Journal of the American Society for Mass Spectrometry, 2020, 31, 2392-2400.	1.2	11
584	Metabolomic and transcriptomic signatures of prenatal excessive methionine support nature rather than nurture in schizophrenia pathogenesis. Communications Biology, 2020, 3, 409.	2.0	15
585	Interplay between Cellular Metabolism and the DNA Damage Response in Cancer. Cancers, 2020, 12, 2051.	1.7	37
586	Comprehensive nutritional profiling and activity directed identification of lead antioxidant, antilithiatic agent from Macrotyloma uniflorum (Lam.) Verdc. Food Research International, 2020, 137, 109600.	2.9	16
587	HISTome2: a database of histone proteins, modifiers for multiple organisms and epidrugs. Epigenetics and Chromatin, 2020, 13, 31.	1.8	29
588	Muscle Metabolome Profiles in Woody Breast-(un)Affected Broilers: Effects of Quantum Blue Phytase-Enriched Diet. Frontiers in Veterinary Science, 2020, 7, 458.	0.9	18
589	Metabolomic Biomarkers for Detection, Prognosis and Identifying Recurrence in Endometrial Cancer. Metabolites, 2020, 10, 314.	1.3	32
590	Danon Disease-Associated LAMP-2 Deficiency Drives Metabolic Signature Indicative of Mitochondrial Aging and Fibrosis in Cardiac Tissue and hiPSC-Derived Cardiomyocytes. Journal of Clinical Medicine, 2020, 9, 2457.	1.0	12
591	Integrating metabolomics and network pharmacology to explore the protective effect of gross saponins of Tribulus terrestris L. fruit against ischemic stroke in rat. Journal of Ethnopharmacology, 2020, 263, 113202.	2.0	30
592	1H NMR-based metabonomics for infertility diagnosis in men with varicocele. Journal of Assisted Reproduction and Genetics, 2020, 37, 2233-2247.	1.2	16
593	The microbiome and health. , 2020, , 605-624.		0
594	Gold nanostructures - assisted laser desorption/ionization mass spectrometry for kidney cancer blood serum biomarker screening. International Journal of Mass Spectrometry, 2020, 456, 116396.	0.7	5
595	Chemical derivatization in LC-MS-based metabolomics study. TrAC - Trends in Analytical Chemistry, 2020, 131, 115988.	5.8	88
596	A blood-based metabolomics test to distinguish relapsing–remitting and secondary progressive multiple sclerosis: addressing practical considerations for clinical application. Scientific Reports, 2020, 10, 12381.	1.6	8
597	Cell metabolic profiling of colorectal cancer via 1H NMR. Clinica Chimica Acta, 2020, 510, 291-297.	0.5	15
598	Multi-omic meta-analysis identifies functional signatures of airway microbiome in chronic obstructive pulmonary disease. ISME Journal, 2020, 14, 2748-2765.	4.4	43

#	Article	IF	CITATIONS
599	Excretory/Secretory Metabolome of the Zoonotic Roundworm Parasite Toxocara canis. Biomolecules, 2020, 10, 1157.	1.8	12
600	Intestinal microbiota-derived tryptophan metabolites are predictive of Ah receptor activity. Gut Microbes, 2020, 12, 1788899.	4.3	123
601	Untargeted metabolomics reveal dysregulations in sugar, methionine, and tyrosine pathways in the prodromal state of AD. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2020, 12, e12064.	1.2	15
602	Lipidome signatures of metastasis in a transgenic mouse model of sonic hedgehog medulloblastoma. Analytical and Bioanalytical Chemistry, 2020, 412, 7017-7027.	1.9	5
603	Triple Negative Breast Cancer and Breast Epithelial Cells Differentially Reprogram Glucose and Lipid Metabolism upon Treatment with Triterpenic Acids. Biomolecules, 2020, 10, 1163.	1.8	9
604	Network Medicine-Based Unbiased Disease Modules for Drug and Diagnostic Target Identification in ROSopathies. Handbook of Experimental Pharmacology, 2020, 264, 49-68.	0.9	7
605	1H-NMR-Based salivary metabolomics from females with temporomandibular disorders $\hat{a} \in A$ pilot study. Clinica Chimica Acta, 2020, 510, 625-632.	0.5	7
606	Confirmative Structural Annotation for Metabolites of (<i>R</i>)-7,3′-Dihydroxy-4′-methoxy-8-methylflavane, A Natural Sweet Taste Modulator, by Liquid Chromatography–Three-Dimensional Mass Spectrometry. Journal of Agricultural and Food Chemistry, 2020, 68, 12454-12466.	2.4	5
607	Structural-based connectivity and omic phenotype evaluations (SCOPE): a cheminformatics toolbox for investigating lipidomic changes in complex systems. Analyst, The, 2020, 145, 7197-7209.	1.7	16
608	Development of a NanoLC-MS workflow for high-sensitivity global lipidomic analysis. Analytica Chimica Acta, 2020, 1139, 88-99.	2.6	21
609	Comprehensive Metabolomics Analysis of Nontargeted LC-HRMS Data Provides Valuable Insights Regarding the Origin of Veterinary Drug Residues. Journal of Agricultural and Food Chemistry, 2020, 68, 12493-12502.	2.4	8
610	Most abundant metabolites in tissues of freshwater fish pike-perch (Sander lucioperca). Scientific Reports, 2020, 10, 17128.	1.6	16
611	Database-independent molecular formula annotation using Gibbs sampling through ZODIAC. Nature Machine Intelligence, 2020, 2, 629-641.	8.3	103
612	Associations of BMI and Body Fat with Urine Metabolome in Adolescents Are Sex-Specific: A Cross-Sectional Study. Metabolites, 2020, 10, 330.	1.3	6
613	A Metabolomics Workflow for Analyzing Complex Biological Samples Using a Combined Method of Untargeted and Target-List Based Approaches. Metabolites, 2020, 10, 342.	1.3	17
614	Bridging Targeted and Untargeted Mass Spectrometry-Based Metabolomics via Hybrid Approaches. Metabolites, 2020, 10, 348.	1.3	44
615	Synthesis and Characterization of Doubleâ€Salt Herbicidal Ionic Liquids Comprising both 4â€Chloroâ€2â€methylphenoxyacetate and <i>trans</i> >â€Cinnamate Anions. ChemPlusChem, 2020, 85, 2281-2	22 8 9.	9
616	Metabolomic Nuclear Magnetic Resonance Studies at Presymptomatic and Symptomatic Stages of Huntington's Disease on a <i>Drosophila</i>) Model. Journal of Proteome Research, 2020, 19, 4034-4045.	1.8	15

#	Article	IF	Citations
617	Proteomics and Metabolomics Approaches towards a Functional Insight onto AUTISM Spectrum Disorders: Phenotype Stratification and Biomarker Discovery. International Journal of Molecular Sciences, 2020, 21, 6274.	1.8	37
618	Integrative Analyses to Investigate the Link between Microbial Activity and Metabolite Degradation during Anaerobic Digestion. Journal of Proteome Research, 2020, 19, 3981-3992.	1.8	14
619	Fast Evaluation of Herbal Substance Class Composition by Relative Mass Defect Plots. Analytical Chemistry, 2020, 92, 12909-12916.	3.2	5
620	Metabolomic Approaches to Study Chemical Exposure-Related Metabolism Alterations in Mammalian Cell Cultures. International Journal of Molecular Sciences, 2020, 21, 6843.	1.8	16
621	Eicosanoid Inflammatory Mediators Are Robustly Associated With Blood Pressure in the General Population. Journal of the American Heart Association, 2020, 9, e017598.	1.6	17
622	1D ¹ H NMR as a Tool for Fecal Metabolomics. Current Protocols in Chemical Biology, 2020, 12, e83.	1.7	8
623	Comparative dietary sulfated metabolome analysis reveals unknown metabolic interactions of the gut microbiome and the human host. Free Radical Biology and Medicine, 2020, 160, 745-754.	1.3	15
624	Capillary Electrophoresis-Mass Spectrometry at Trial by Metabo-Ring: Effective Electrophoretic Mobility for Reproducible and Robust Compound Annotation. Analytical Chemistry, 2020, 92, 14103-14112.	3.2	44
625	Assessment of the role of FGF15 in mediating the metabolic outcomes of murine vertical sleeve gastrectomy. American Journal of Physiology - Renal Physiology, 2020, 319, G669-G684.	1.6	9
626	Sub-100 μm Spatial Resolution Ambient Mass Spectrometry Imaging of Rodent Brain with Laser Ablation Atmospheric Pressure Photoionization (LAAPPI) and Laser Ablation Electrospray Ionization (LAESI). Analytical Chemistry, 2020, 92, 13734-13741.	3.2	15
627	Decomposing the molecular complexity of brewing. Npj Science of Food, 2020, 4, 11.	2.5	8
628	Dengue virus dominates lipid metabolism modulations in Wolbachia-coinfected Aedes aegypti. Communications Biology, 2020, 3, 518.	2.0	33
629	METLIN MS2 molecular standards database: a broad chemical and biological resource. Nature Methods, 2020, 17, 953-954.	9.0	102
630	Novel Green Silver Nanoparticles as Matrix in the Detection of Small Molecules Using Matrix-Assisted Laser Desorption Ionization Mass Spectrometry (MALDI-MS). Journal of Pharmaceutical Innovation, 2021, 16, 715-725.	1.1	2
631	NMR Metabolomics Applied on the Discrimination of Variables Influencing Tomato (Solanum) Tj ETQq0 0 0 rgBT	/Oyerlock	10 ₁₉ f 50 182
632	Metabolic Alterations in FMR1 Premutation Carriers. Frontiers in Molecular Biosciences, 2020, 7, 571092.	1.6	2
633	Explorative Combined Lipid and Transcriptomic Profiling of Substantia Nigra and Putamen in Parkinson's Disease. Cells, 2020, 9, 1966.	1.8	29
634	Validation and Application of a Derivatization-Free RP-HPLC-DAD Method for the Determination of Low Molecular Weight Salivary Metabolites. International Journal of Environmental Research and Public Health, 2020, 17, 6158.	1.2	5

#	Article	IF	CITATIONS
635	lon mobility collision cross-section atlas for known and unknown metabolite annotation in untargeted metabolomics. Nature Communications, 2020, 11, 4334.	5.8	194
636	Machine learning to predict retention time of small molecules in nano-HPLC. Analytical and Bioanalytical Chemistry, 2020, 412, 7767-7776.	1.9	26
637	Five Easy Metrics of Data Quality for LC–MS-Based Global Metabolomics. Analytical Chemistry, 2020, 92, 12925-12933.	3.2	31
638	Relevant Features of Polypharmacologic Human-Target Antimicrobials Discovered by Machine-Learning Techniques. Pharmaceuticals, 2020, 13, 204.	1.7	1
639	Urinary metabolic signatures reflect cardiovascular risk in the young, middle-aged, and elderly populations. Journal of Molecular Medicine, 2020, 98, 1603-1613.	1.7	10
640	Influence of a cholesterol-lowering strain <i>Lactobacillus plantarum</i> LP3 isolated from traditional fermented yak milk on gut bacterial microbiota and metabolome of rats fed with a high-fat diet. Food and Function, 2020, 11, 8342-8353.	2.1	18
641	Potential Lipid Signatures for Diagnosis and Prognosis of Sepsis and Systemic Inflammatory Response Syndrome. Metabolites, 2020, 10, 359.	1.3	10
642	Metabolic response of the Siberian wood frog Rana amurensis to extreme hypoxia. Scientific Reports, 2020, 10, 14604.	1.6	24
643	Untargeted Metabolomics Reveals Anaerobic Glycolysis as a Novel Target of the Hepatotoxic Antidepressant Nefazodone. Journal of Pharmacology and Experimental Therapeutics, 2020, 375, 239-246.	1.3	5
644	Nutrivolatilomics of Urinary and Plasma Samples to Identify Candidate Biomarkers after Cheese, Milk, and Soy-Based Drink Intake in Healthy Humans. Journal of Proteome Research, 2020, 19, 4019-4033.	1.8	9
645	Peripheral serum metabolomic profiles inform central cognitive impairment. Scientific Reports, 2020, 10, 14059.	1.6	25
646	Metabolomics in Radiation Biodosimetry: Current Approaches and Advances. Metabolites, 2020, 10, 328.	1.3	17
647	Lipid Profiling in Epicardial and Subcutaneous Adipose Tissue of Patients with Coronary Artery Disease. Journal of Proteome Research, 2020, 19, 3993-4003.	1.8	7
648	Application of Differential Network Enrichment Analysis for Deciphering Metabolic Alterations. Metabolites, 2020, 10, 479.	1.3	5
649	Data integration for prediction of weight loss in randomized controlled dietary trials. Scientific Reports, 2020, 10, 20103.	1.6	10
650	Pillar[6]arene acts as a biosensor for quantitative detection of a vitamin metabolite in crude biological samples. Communications Chemistry, 2020, 3, .	2.0	7
651	Metabolic Profiling in Human Fibroblasts Enables Subtype Clustering in Glycogen Storage Disease. Frontiers in Endocrinology, 2020, 11, 579981.	1.5	15
652	Analysis of Pan-omics Data in Human Interactome Network (APODHIN). Frontiers in Genetics, 2020, 11, 589231.	1.1	7

#	Article	IF	Citations
653	The Gut-Brain Axis: How Microbiota and Host Inflammasome Influence Brain Physiology and Pathology. Frontiers in Immunology, 2020, 11, 604179.	2.2	337
654	A Deep Learning-Based Approach for Identifying the Medicinal Uses of Plant-Derived Natural Compounds. Frontiers in Pharmacology, 2020, 11, 584875.	1.6	13
655	The Metabolomic Rationale for Treating Perimenopausal Syndrome as Kidney Deficiency. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-11.	0.5	4
656	Evaluation of Saliva Stability for NMR Metabolomics: Collection and Handling Protocols. Metabolites, 2020, 10, 515.	1.3	20
657	Analysis of urinary exosomal metabolites identifies cardiovascular risk signatures with added value to urine analysis. BMC Biology, 2020, 18, 192.	1.7	18
658	Metabolomic and Transcriptomic Analysis of MCF-7 Cells Exposed to 23 Chemicals at Human-Relevant Levels: Estimation of Individual Chemical Contribution to Effects. Environmental Health Perspectives, 2020, 128, 127008.	2.8	33
659	Using an Untargeted Metabolomics Approach to Identify Salivary Metabolites in Women with Breast Cancer. Metabolites, 2020, 10, 506.	1.3	16
660	Association Between Plasma Metabolites and Psychometric Scores Among Children With Developmental Disabilities: Investigating Sex-Differences. Frontiers in Psychiatry, 2020, 11, 579538.	1.3	11
661	Serum metabolites as biomarkers in systemic sclerosis-associated interstitial lung disease. Scientific Reports, 2020, 10, 21912.	1.6	9
662	Predicting Metabolite-Disease Associations Based on Spy Strategy and ABC Algorithm. Frontiers in Molecular Biosciences, 2020, 7, 603121.	1.6	6
663	Untargeted Metabolomic Characterization of Ovarian Tumors. Cancers, 2020, 12, 3642.	1.7	10
664	Metabolic Landscape of the Mouse Liver by Quantitative 31P Nuclear Magnetic Resonance Analysis of the Phosphorome. Hepatology, 2021, 74, 148-163.	3.6	13
665	Application of Metabolomics in Diagnosis and Treatment of Chronic Liver Diseases. Critical Reviews in Analytical Chemistry, 2022, 52, 906-916.	1.8	6
666	Forensic NMR metabolomics: one more arrow in the quiver. Metabolomics, 2020, 16, 118.	1.4	23
667	Correlation between the Antimicrobial Activity and Metabolic Profiles of Cell Free Supernatants and Membrane Vesicles Produced by Lactobacillus reuteri DSM 17938. Microorganisms, 2020, 8, 1653.	1.6	22
668	Artificial Intelligence (AI)-Based Systems Biology Approaches in Multi-Omics Data Analysis of Cancer. Frontiers in Oncology, 2020, 10, 588221.	1.3	59
669	A two-stage computational approach to predict novel ligands for a chemosensory receptor. Current Research in Structural Biology, 2020, 2, 213-221.	1.1	4
670	Phytochemical Characterization of Dillenia indica L. Bark by Paper Spray Ionization-Mass Spectrometry and Evaluation of Its Antioxidant Potential Against t-BHP-Induced Oxidative Stress in RAW 264.7 Cells. Antioxidants, 2020, 9, 1099.	2.2	15

#	Article	IF	CITATIONS
671	Comparative Metabolomic Profiling of Rat Embryonic and Induced Pluripotent Stem Cells. Stem Cell Reviews and Reports, 2020, 16, 1256-1265.	1.7	4
672	Combining native and â€~omics' mass spectrometry to identify endogenous ligands bound to membrane proteins. Nature Methods, 2020, 17, 505-508.	9.0	111
673	Effect of Huangqin Tang on Urine Metabolic Profile in Rats with Ulcerative Colitis Based on UPLC-Q-Exactive Orbitrap MS. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-11.	0.5	6
674	Direct Infusion-Three-Dimensional-Mass Spectrometry Enables Rapid Chemome Comparison among Herbal Medicines. Analytical Chemistry, 2020, 92, 7646-7656.	3.2	25
675	Determinants of accelerated metabolomic and epigenetic aging in a UK cohort. Aging Cell, 2020, 19, e13149.	3.0	95
676	Metabolomics and Multi-Omics Integration: A Survey of Computational Methods and Resources. Metabolites, 2020, 10, 202.	1.3	69
677	Flavin-Containing Monooxygenase 1 Catalyzes the Production of Taurine from Hypotaurine. Drug Metabolism and Disposition, 2020, 48, 378-385.	1.7	40
678	Construction and Analysis of Human Diseases and Metabolites Network. Frontiers in Bioengineering and Biotechnology, 2020, 8, 398.	2.0	14
679	Anion-exchange chromatography mass spectrometry provides extensive coverage of primary metabolic pathways revealing altered metabolism in IDH1 mutant cells. Communications Biology, 2020, 3, 247.	2.0	51
680	Application of metabolomics to the study of irritable bowel syndrome. Neurogastroenterology and Motility, 2020, 32, e13884.	1.6	12
681	Radiation Induced Metabolic Alterations Associate With Tumor Aggressiveness and Poor Outcome in Glioblastoma. Frontiers in Oncology, 2020, 10, 535.	1.3	22
682	Integrative Analysis of Fecal Metagenomics and Metabolomics in Colorectal Cancer. Cancers, 2020, 12, 1142.	1.7	53
683	Macrophage Metabolomics Reveals Differential Metabolic Responses to Subtoxic Levels of Silver Nanoparticles and Ionic Silver. European Journal of Inorganic Chemistry, 2020, 2020, 1867-1876.	1.0	5
684	Differential metabolic markers associated with primary open-angle glaucoma and cataract in human aqueous humor. BMC Ophthalmology, 2020, 20, 183.	0.6	21
685	A High-Resolution Mass Spectrometry-Based Quantitative Metabolomic Workflow Highlights Defects in 5-Fluorouracil Metabolism in Cancer Cells with Acquired Chemoresistance. Biology, 2020, 9, 96.	1.3	3
686	Bioinformatics Resources for Plant Abiotic Stress Responses: State of the Art and Opportunities in the Fast Evolving -Omics Era. Plants, 2020, 9, 591.	1.6	25
687	Tear analysis as the next routine body fluid test. Eye, 2020, 34, 1731-1733.	1.1	20
688	Metallomic and lipidomic analysis of <i>S. cerevisiae</i> response to cellulosic copper nanoparticles uncovers drivers of toxicity. Metallomics, 2020, 12, 799-812.	1.0	9

#	ARTICLE	IF	CITATIONS
689	EBC metabolomics for asthma severity. Journal of Breath Research, 2020, 14, 036007.	1.5	12
690	Differential Effects of Post-Weaning Diet and Maternal Obesity on Mouse Liver and Brain Metabolomes. Nutrients, 2020, 12, 1572.	1.7	8
691	Reference Standardization for Quantification and Harmonization of Large-Scale Metabolomics. Analytical Chemistry, 2020, 92, 8836-8844.	3.2	116
692	Active and prospective latent tuberculosis are associated with different metabolomic profiles: clinical potential for the identification of rapid and non-invasive biomarkers. Emerging Microbes and Infections, 2020, 9, 1131-1139.	3.0	19
693	EasyVS: a user-friendly web-based tool for molecule library selection and structure-based virtual screening. Bioinformatics, 2020, 36, 4200-4202.	1.8	18
694	Confirmation of neurometabolic diagnoses using ageâ€dependent cerebrospinal fluid metabolomic profiles. Journal of Inherited Metabolic Disease, 2020, 43, 1112-1120.	1.7	16
695	Urinary biomonitoring of subjects with different smoking habits. Part II: an untargeted metabolomic approach and the comparison with the targeted measurement of mercapturic acids. Toxicology Letters, 2020, 329, 56-66.	0.4	10
696	Sensitive mass spectrometric analysis of carbonyl metabolites in human urine and fecal samples using chemoselective modification. Analyst, The, 2020, 145, 3822-3831.	1.7	20
697	Network-based strategies in metabolomics data analysis and interpretation: from molecular networking to biological interpretation. Expert Review of Proteomics, 2020, 17, 243-255.	1.3	70
698	Comprehensive transcriptomic analysis identifies novel regulators of lung adenocarcinoma. Journal of Cell Communication and Signaling, 2020, 14, 453-465.	1.8	17
699	Metabolomics and the Microbiome: Characterizing Molecular Diversity in Complex Microbial Communities., 2020,, 502-518.		2
700	Advances in the diagnosis of inherited neuromuscular diseases and implications for therapy development. Lancet Neurology, The, 2020, 19, 522-532.	4.9	36
701	Benefits of microsampling and microextraction for metabolomics studies. TrAC - Trends in Analytical Chemistry, 2020, 127, 115899.	5.8	16
702	Sphingolipid, fatty acid and phospholipid metabolites are associated with disease severity and mTOR inhibition in lymphangioleiomyomatosis. Thorax, 2020, 75, 679-688.	2.7	9
703	Comparative Blood and Urine Metabolomics Analysis of Healthy Elderly and Young Male Singaporeans. Journal of Proteome Research, 2020, 19, 3264-3275.	1.8	15
705	Sex-Specific Metabolic Changes in Peripheral Organs of Diabetic Mice. Journal of Proteome Research, 2020, 19, 3011-3021.	1.8	4
706	Gold Nanoparticle-Assisted Black Silicon Substrates for Mass Spectrometry Imaging Applications. ACS Nano, 2020, 14, 6785-6794.	7.3	49
707	Integrating untargeted metabolomics, genetically informed causal inference, and pathway enrichment to define the obesity metabolome. International Journal of Obesity, 2020, 44, 1596-1606.	1.6	12

#	ARTICLE	IF	CITATIONS
708	QSRR Automator: A Tool for Automating Retention Time Prediction in Lipidomics and Metabolomics. Metabolites, 2020, 10, 237.	1.3	30
709	The potential for metabolomics in the study and treatment of major depressive disorder and related conditions. Expert Review of Proteomics, 2020, 17, 309-322.	1.3	18
710	One molecular fingerprint to rule them all: drugs, biomolecules, and the metabolome. Journal of Cheminformatics, 2020, 12, 43.	2.8	157
711	The Bovine Metabolome. Metabolites, 2020, 10, 233.	1.3	77
712	Moderate Folic Acid Supplementation in Pregnant Mice Results in Behavioral Alterations in Offspring with Sex-Specific Changes in Methyl Metabolism. Nutrients, 2020, 12, 1716.	1.7	20
713	Sleep fragmentation increases blood pressure and is associated with alterations in the gut microbiome and fecal metabolome in rats. Physiological Genomics, 2020, 52, 280-292.	1.0	61
714	Metabolic Landscape of a Genetically Engineered Mouse Model of IDH1 Mutant Glioma. Cancers, 2020, 12, 1633.	1.7	11
715	Human Faecal ¹ H NMR Metabolomics: Evaluation of Solvent and Sample Processing on Coverage and Reproducibility of Signature Metabolites. Analytical Chemistry, 2020, 92, 9546-9555.	3.2	22
716	Analysis of human metabolism by reducing the complexity of the genome-scale models using redHUMAN. Nature Communications, 2020, 11, 2821.	5.8	19
717	A Portable NMR Spectrometer With a Probe Head Combining RF and DC Capabilities to Generate Pulsed-Field Gradients. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8628-8636.	2.4	8
718	A UPLC-Q-TOF/MS-based plasma metabolomics approach reveals the mechanism of Compound Kushen Injection-based intervention against non-small cell lung cancer in Lewis tumor-bearing mice. Phytomedicine, 2020, 76, 153259.	2.3	32
719	SMfinder: Small Molecules Finder for Metabolomics and Lipidomics Analysis. Analytical Chemistry, 2020, 92, 8874-8882.	3.2	6
720	LC-MS-Based Plasma Metabolomics and Lipidomics Analyses for Differential Diagnosis of Bladder Cancer and Renal Cell Carcinoma. Frontiers in Oncology, 2020, 10, 717.	1.3	31
721	SWATH-MS for metabolomics and lipidomics: critical aspects of qualitative and quantitative analysis. Metabolomics, 2020, 16, 71.	1.4	36
722	Integrated transcriptomic and metabolomic analyses to characterize the anti-cancer effects of (â^3)-epigallocatechin-3-gallate in human colon cancer cells. Toxicology and Applied Pharmacology, 2020, 401, 115100.	1.3	32
723	N8â€Acetylspermidine: A Polyamine Biomarker in Ischemic Cardiomyopathy With Reduced Ejection Fraction. Journal of the American Heart Association, 2020, 9, e016055.	1.6	18
724	Predicting a Molecular Fingerprint from an Electron Ionization Mass Spectrum with Deep Neural Networks. Analytical Chemistry, 2020, 92, 8649-8653.	3.2	59
725	A Metabolomics Approach for Early Prediction of Vincristine-Induced Peripheral Neuropathy. Scientific Reports, 2020, 10, 9659.	1.6	23

#	Article	IF	CITATIONS
726	Machine Learning Applications for Mass Spectrometry-Based Metabolomics. Metabolites, 2020, 10, 243.	1.3	164
727	In situ Metabolite Mass Spectrometry Imaging: New Insights into the Adrenal Gland. Hormone and Metabolic Research, 2020, 52, 435-447.	0.7	3
728	Seed Metabolism and Pathogen Resistance Enhancement in Pisum sativum During Colonization of Arbuscular Mycorrhizal Fungi: An Integrative Metabolomics-Proteomics Approach. Frontiers in Plant Science, 2020, 11, 872.	1.7	9
729	Alterations in Tissue Metabolite Profiles with Amifostine-Prophylaxed Mice Exposed to Gamma Radiation. Metabolites, 2020, 10, 211.	1.3	17
730	Current Status of Metabolomic Biomarker Discovery: Impact of Study Design and Demographic Characteristics. Metabolites, 2020, 10, 224.	1.3	56
731	Gut–Brain Axis and Neurodegeneration: State-of-the-Art of Meta-Omics Sciences for Microbiota Characterization. International Journal of Molecular Sciences, 2020, 21, 4045.	1.8	46
732	Breath indeed carries significant information about a disease: Potential biomarkers of cerebral palsy. Journal of Biophotonics, 2020, 13, e202000125.	1.1	11
733	Analytical techniques in metabolomics. , 2020, , 35-64.		7
734	Solar photocatalytic degradation of pesticides over TiO2-rGO nanocomposites at pilot plant scale. Science of the Total Environment, 2020, 737, 140286.	3.9	56
735	Touching the High Complexity of Prebiotic Vivinal Galacto-oligosaccharides Using Porous Graphitic Carbon Ultra-High-Performance Liquid Chromatography Coupled to Mass Spectrometry. Journal of Agricultural and Food Chemistry, 2020, 68, 7800-7808.	2.4	24
736	Pharmacometabolomics with a combination of PLSâ€DA and random forest algorithm analyses reveal meloxicam alters feline plasma metabolite profiles. Journal of Veterinary Pharmacology and Therapeutics, 2020, 43, 591-601.	0.6	5
737	Biomarkers of intake for tropical fruits. Genes and Nutrition, 2020, 15, 11.	1.2	20
738	Applicability of Supercritical fluid chromatography–Mass spectrometry to metabolomics. Il–Assessment of a comprehensive library of metabolites and evaluation of biological matrices. Journal of Chromatography A, 2020, 1620, 461021.	1.8	34
739	Evaluations of the Peroxidative Susceptibilities of Cod Liver Oils by a 1H NMR Analysis Strategy: Peroxidative Resistivity of a Natural Collagenous and Biogenic Amine-Rich Fermented Product. Nutrients, 2020, 12, 753.	1.7	11
740	Investigations into the Structure-Function Relationship of the Naturally-Derived Surfactant Glycyrrhizin: Emulsion Stability. Food Biophysics, 2020, 15, 288-296.	1.4	22
741	Analysis of the Different Metabolic Phenotypes of Metalaxyl Enantiomers in Adolescent Rat by Using 1H NMR Based Urinary Metabolomics. Chemical Research in Toxicology, 2020, 33, 1449-1457.	1.7	3
742	Mutations in a Single Signaling Pathway Allow Cell Growth in Heavy Water. ACS Synthetic Biology, 2020, 9, 733-748.	1.9	14
743	Stable Isotope-Assisted Metabolomics for Deciphering Xenobiotic Metabolism in Mammalian Cell Culture. ACS Chemical Biology, 2020, 15, 970-981.	1.6	25

#	Article	IF	CITATIONS
744	Identification of Milk and Cheese Intake Biomarkers in Healthy Adults Reveals High Interindividual Variability of Lewis System–Related Oligosaccharides. Journal of Nutrition, 2020, 150, 1058-1067.	1.3	14
745	Current status of retention time prediction in metabolite identification. Journal of Separation Science, 2020, 43, 1746-1754.	1.3	71
746	Principles of Information Storage in Small-Molecule Mixtures. IEEE Transactions on Nanobioscience, 2020, 19, 378-384.	2.2	17
747	A Metabolic Insight Into the Neuroprotective Effect of Jin-Mai-Tong (JMT) Decoction on Diabetic Rats With Peripheral Neuropathy Using Untargeted Metabolomics Strategy. Frontiers in Pharmacology, 2020, 11, 221.	1.6	10
748	VISSA-PLS-DA-Based Metabolomics Reveals a Multitargeted Mechanism of Traditional Chinese Medicine for Traumatic Brain Injury. ASN Neuro, 2020, 12, 175909142091095.	1.5	5
749	Population-based case-control study revealed metabolomic biomarkers of suboptimal health status in Chinese populationâ€"potential utility for innovative approach by predictive, preventive, and personalized medicine. EPMA Journal, 2020, 11, 147-160.	3.3	27
750	Metabolic changes during respiratory syncytial virus infection of epithelial cells. PLoS ONE, 2020, 15, e0230844.	1.1	35
751	OffsampleAl: artificial intelligence approach to recognize off-sample mass spectrometry images. BMC Bioinformatics, 2020, 21, 129.	1.2	27
752	Review on natural products databases: where to find data in 2020. Journal of Cheminformatics, 2020, 12, 20.	2.8	243
753	Metabolomicâ€Based Approach to Identify Biomarkers of Apple Intake. Molecular Nutrition and Food Research, 2020, 64, e1901158.	1.5	12
754	Urinary Volatile Terpenes Analyzed by Gas Chromatography–Mass Spectrometry to Monitor Breast Cancer Treatment Efficacy in Mice. Journal of Proteome Research, 2020, 19, 1913-1922.	1.8	16
755	An Integrated Multi-Disciplinary Perspective for Addressing Challenges of the Human Gut Microbiome. Metabolites, 2020, 10, 94.	1.3	13
756	<i>In Silico</i> Prediction of Metabolic Epoxidation for Drugâ€like Molecules via Machine Learning Methods. Molecular Informatics, 2020, 39, e1900178.	1.4	7
757	Reading From the Crystal Ball: The Laws of Moore and Kurzweil Applied to Mass Spectrometry in Food Analysis. Frontiers in Nutrition, 2020, 7, 9.	1.6	4
758	Identification of Serum-Based Metabolic Feature and Characteristic Metabolites in Paraquat Intoxicated Mouse Models. Frontiers in Physiology, 2020, 11, 65.	1.3	11
7 59	Fundamentals of environmental metabolomics. , 2020, , 1-33.		4
760	Physiologically-Based Pharmacokinetic (PBPK) Modeling of Buprenorphine in Adults, Children and Preterm Neonates. Pharmaceutics, 2020, 12, 578.	2.0	30
761	Chemical interaction analysis of L-Theanine compounds from Camellia sinensis L. with kainate glutamate receptors and their toxicity effect as anti autism candidates based on in silico. AIP Conference Proceedings, 2020, , .	0.3	2

#	Article	IF	CITATIONS
762	Modulation of gut microbiota to overcome resistance to immune checkpoint blockade in cancer immunotherapy. Current Opinion in Pharmacology, 2020, 54, 1-10.	1.7	35
763	Integrated metabolomics and gut microbiome to the effects and mechanisms of naoxintong capsule on type 2 diabetes in rats. Scientific Reports, 2020, 10, 10829.	1.6	26
764	Comparison of the effect of chemically and biologically induced inflammation on the volatile metabolite production of lung epithelial cells by GC×GC-TOFMS. Analyst, The, 2020, 145, 5148-5157.	1.7	14
765	Ganoderic acid A from <i>Ganoderma lucidum</i> ameliorates lipid metabolism and alters gut microbiota composition in hyperlipidemic mice fed a high-fat diet. Food and Function, 2020, 11, 6818-6833.	2.1	54
766	Clinical Multi-Omics Study on the Gut Microbiota in Critically Ill Patients After Cardiovascular Surgery Combined With Cardiopulmonary Bypass With or Without Sepsis (MUL-GM-CSCPB Study): A Prospective Study Protocol. Frontiers in Medicine, 2020, 7, 269.	1.2	8
767	Bromopyrylium Derivatization Facilitates Identification by Mass Spectrometry Imaging of Monoamine Neurotransmitters and Small Molecule Neuroactive Compounds. Journal of the American Society for Mass Spectrometry, 2020, 31, 2553-2557.	1.2	21
768	<i>Clostridioides difficile para</i> -Cresol Production Is Induced by the Precursor <i>para</i> -Hydroxyphenylacetate. Journal of Bacteriology, 2020, 202, .	1.0	12
769	Integration of molecular networking and fingerprint analysis for studying constituents in Microctis Folium. PLoS ONE, 2020, 15, e0235533.	1.1	3
770	NMR-based metabolomics characterizes metabolic changes in different brain regions of streptozotocin-induced diabetic mice with cognitive decline. Metabolic Brain Disease, 2020, 35, 1165-1173.	1.4	15
771	Metabolomic Discovery of Microbiota Dysfunction as the Cause of Pathology. , 2020, , .		8
772	Differential annotation of converted metabolites (DAC-Met): Exploration of Maoto (Ma-huang-tang)-derived metabolites in plasma using high-resolution mass spectrometry. Metabolomics, 2020, 16, 63.	1.4	7
773	Pilot Multi-Omic Analysis of Human Bile from Benign and Malignant Biliary Strictures: A Machine-Learning Approach. Cancers, 2020, 12, 1644.	1.7	38
774	Fast and sensitive flow-injection mass spectrometry metabolomics by analyzing sample-specific ion distributions. Nature Communications, 2020, 11, 3186.	5.8	50
775	In silico analysis for factors affecting anti-malarial penetration into red blood cells. Malaria Journal, 2020, 19, 215.	0.8	3
776	Loss of CLN3, the gene mutated in juvenile neuronal ceroid lipofuscinosis, leads to metabolic impairment and autophagy induction in retinal pigment epithelium. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165883.	1.8	24
777	Identification of secondary metabolites in Averrhoa carambola L. bark by high-resolution mass spectrometry and evaluation for $\hat{l}\pm$ -glucosidase, tyrosinase, elastase, and antioxidant potential. Food Chemistry, 2020, 332, 127377.	4.2	22
778	FOBI: an ontology to represent food intake data and associate it with metabolomic data. Database: the Journal of Biological Databases and Curation, 2020, 2020, .	1.4	29
779	Advancing computer-aided drug discovery (CADD) by big data and data-driven machine learning modeling. Drug Discovery Today, 2020, 25, 1624-1638.	3.2	103

#	Article	IF	CITATIONS
780	Recent advances in non-targeted screening analysis using liquid chromatography - high resolution mass spectrometry to explore new biomarkers for human exposure. Talanta, 2020, 219, 121339.	2.9	33
781	Nuclear magnetic resonance to study bacterial biofilms structure, formation, and resilience. , 2020, , 23-70.		1
782	Exercise training modulates the gut microbiota profile and impairs inflammatory signaling pathways in obese children. Experimental and Molecular Medicine, 2020, 52, 1048-1061.	3.2	104
783	Antimicrobial Susceptibility Testing of Antimicrobial Peptides to Better Predict Efficacy. Frontiers in Cellular and Infection Microbiology, 2020, 10, 326.	1.8	70
784	Energy-stress-mediated AMPK activation inhibits ferroptosis. Nature Cell Biology, 2020, 22, 225-234.	4.6	561
785	Metabolic Profile and Evaluation of Biological Activities of Extracts from the Stems of Cissus trifoliata. International Journal of Molecular Sciences, 2020, 21, 930.	1.8	7
786	Metabolite therapy guided by liquid biopsy proteomics delays retinal neurodegeneration. EBioMedicine, 2020, 52, 102636.	2.7	30
787	Identifying Synergistic Mechanisms of Multiple Ingredients in Shuangbai Tablets against Proteinuria by Virtual Screening and a Network Pharmacology Approach. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-15.	0.5	4
788	De novo discovery of metabolic heterogeneity with immunophenotype-guided imaging mass spectrometry. Molecular Metabolism, 2020, 36, 100953.	3.0	32
789	Impacts of High-Strength Boat Waste on Activated Sludge Processes. Journal of Environmental Engineering, ASCE, 2020, 146, .	0.7	7
790	Epigenetic-sensitive pathways in personalized therapy of major cardiovascular diseases., 2020, 210, 107514.		87
791	The rise of the nanomaterial metabolite corona, and emergence of the complete corona. Environmental Science: Nano, 2020, 7, 1041-1060.	2.2	53
792	Metabolic alterations in the erythrocyte during blood-stage development of the malaria parasite. Malaria Journal, 2020, 19, 94.	0.8	18
793	Absolute Quantification of the Central Carbon Metabolome in Eight Commonly Applied Prokaryotic and Eukaryotic Model Systems. Metabolites, 2020, 10, 74.	1.3	39
794	Localized Metabolomic Gradients in Patient-Derived Xenograft Models of Glioblastoma. Cancer Research, 2020, 80, 1258-1267.	0.4	67
7 95	LC-MS/MS determination of plasma catecholamines after selective extraction by borated zirconia. Mikrochimica Acta, 2020, 187, 165.	2.5	11
796	Dairy Intake in 2 American Adult Cohorts Associates with Novel and Known Targeted and Nontargeted Circulating Metabolites. Journal of Nutrition, 2020, 150, 1272-1283.	1.3	11
797	Metabolomic biomarkers are associated with mortality in patients with cirrhosis caused by primary biliary cholangitis or primary sclerosing cholangitis. Future Science OA, 2020, 6, FSO441.	0.9	8

#	Article	IF	CITATIONS
798	Aging Biomarkers: From Functional Tests to Multiâ€Omics Approaches. Proteomics, 2020, 20, e1900408.	1.3	40
799	Simultaneous quantification of free fatty acids and acylcarnitines in plasma samples using dansylhydrazine labeling and liquid chromatography–triple quadrupole mass spectrometry. Analytical and Bioanalytical Chemistry, 2020, 412, 2841-2849.	1.9	14
800	Prediction of VLCAD deficiency phenotype by a metabolic fingerprint in newborn screening bloodspots. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165725.	1.8	12
801	COLMAR Lipids Web Server and Ultrahigh-Resolution Methods for Two-Dimensional Nuclear Magnetic Resonance- and Mass Spectrometry-Based Lipidomics. Journal of Proteome Research, 2020, 19, 1674-1683.	1.8	23
802	Urinary volatilome analysis in a mouse model of anxiety and depression. PLoS ONE, 2020, 15, e0229269.	1.1	8
803	Crystal Structure of the Mannose-6-Phosphate Uncovering Enzyme. Structure, 2020, 28, 426-436.e3.	1.6	6
804	Metabolite Concentration Changes in Humans After a Bout of Exercise: a Systematic Review of Exercise Metabolomics Studies. Sports Medicine - Open, 2020, 6, 11.	1.3	127
805	Fucose Ameliorates Tryptophan Metabolism and Behavioral Abnormalities in a Mouse Model of Chronic Colitis. Nutrients, 2020, 12, 445.	1.7	25
806	Value-added co-products from biomass of the diatoms Staurosirella pinnata and Phaeodactylum tricornutum. Algal Research, 2020, 47, 101830.	2.4	18
807	Metabolomic networks and pathways associated with feed efficiency and related-traits in Duroc and Landrace pigs. Scientific Reports, 2020, 10, 255.	1.6	23
808	Crowd-Sourced Chemistry: Considerations for Building a Standardized Database to Improve Omic Analyses. ACS Omega, 2020, 5, 980-985.	1.6	5
809	Metabolomics-Based Discovery of Molecular Signatures for Triple Negative Breast Cancer in Asian Female Population. Scientific Reports, 2020, 10, 370.	1.6	25
810	Compartment and hub definitions tune metabolic networks for metabolomic interpretations. GigaScience, 2020, 9, .	3.3	9
811	The exposome and health: Where chemistry meets biology. Science, 2020, 367, 392-396.	6.0	499
812	Defensive Responses of Tea Plants (Camellia sinensis) Against Tea Green Leafhopper Attack: A Multi-Omics Study. Frontiers in Plant Science, 2019, 10, 1705.	1.7	63
813	Precision medicine integrating whole-genome sequencing, comprehensive metabolomics, and advanced imaging. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3053-3062.	3.3	85
814	A Multi-tissue Transcriptome Analysis of Human Metabolites Guides Interpretability of Associations Based on Multi-SNP Models for Gene Expression. American Journal of Human Genetics, 2020, 106, 188-201.	2.6	26
816	Simultaneous Detection of Zinc and Its Pathway Metabolites Using MALDI MS Imaging of Prostate Tissue. Analytical Chemistry, 2020, 92, 3171-3179.	3.2	32

#	Article	IF	Citations
817	Skyline for Small Molecules: A Unifying Software Package for Quantitative Metabolomics. Journal of Proteome Research, 2020, 19, 1447-1458.	1.8	253
818	Effectiveness of Different Analytical Methods for the Characterization of Propolis: A Case of Study in Northern Italy. Molecules, 2020, 25, 504.	1.7	34
819	Metabolic and immune responses of Chinook salmon (<scp><i>Oncorhynchus tshawytscha</i></scp>) smolts to a shortâ€ŧerm poly (l:C) challenge. Journal of Fish Biology, 2020, 96, 731-746.	0.7	11
820	Extending Metabolomic Studies of Apis mellifera Venom: LC-MS-Based Targeted Analysis of Organic Acids. Toxins, 2020, 12, 14.	1.5	15
821	Metabolomics in the Context of Plant Natural Products Research: From Sample Preparation to Metabolite Analysis. Metabolites, 2020, 10, 37.	1.3	147
822	Identifying drug targets in tissues and whole blood with thermal-shift profiling. Nature Biotechnology, 2020, 38, 303-308.	9.4	111
823	Mass Spectrometry Imaging Establishes 2 Distinct Metabolic Phenotypes of Aldosterone-Producing Cell Clusters in Primary Aldosteronism. Hypertension, 2020, 75, 634-644.	1.3	33
824	Targeting redox metabolism: the perfect storm induced by acrylamide poisoning in the brain. Scientific Reports, 2020, 10, 312.	1.6	14
825	Genome-wide scan identifies novel genetic loci regulating salivary metabolite levels. Human Molecular Genetics, 2020, 29, 864-875.	1.4	13
826	Predictive value of metabolomic biomarkers for cardiovascular disease risk: a systematic review and meta-analysis. Biomarkers, 2020, 25, 101-111.	0.9	24
827	Detection of myocardial mediumâ€chain fatty acid oxidation and tricarboxylic acid cycle activity with hyperpolarized [1– ^{13} C]octanoate . NMR in Biomedicine, 2020, 33, e4243.	1.6	8
828	Multi-platform NMR Study of Pluripotent Stem Cells Unveils Complementary Metabolic Signatures towards Differentiation. Scientific Reports, 2020, 10, 1622.	1.6	12
829	Association between phospholipid metabolism in plasma and spontaneous preterm birth: a discovery lipidomic analysis in the cork pregnancy cohort. Metabolomics, 2020, 16, 19.	1.4	24
830	UHPLC-ESI-Orbitrap-MS Analysis of Biologically Active Extracts from <i>Gynura procumbens</i> (Lour.) Merr. and <i>Cleome gynandra</i> L. Leaves. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-14.	0.5	14
831	Predicting octanol/water partition coefficients for the SAMPL6 challenge using the SM12, SM8, and SMD solvation models. Journal of Computer-Aided Molecular Design, 2020, 34, 575-588.	1.3	12
832	Metabolomic and Lipidomic Biomarkers for Premalignant Liver Disease Diagnosis and Therapy. Metabolites, 2020, 10, 50.	1.3	52
833	Metabolomics as an Emerging Tool for the Study of Plant–Pathogen Interactions. Metabolites, 2020, 10, 52.	1.3	126
834	Metabolomic tools used in marine natural product drug discovery. Expert Opinion on Drug Discovery, 2020, 15, 499-522.	2.5	44

#	Article	IF	CITATIONS
835	Methods of the Analysis of Oxylipins in Biological Samples. Molecules, 2020, 25, 349.	1.7	31
836	Metabolomics Adaptation of Juvenile Pacific Abalone Haliotis discus hannai to Heat Stress. Scientific Reports, 2020, 10, 6353.	1.6	16
837	The Presence of Active Brown Adipose Tissue Determines Cold-Induced Energy Expenditure and Oxylipin Profiles in Humans. Journal of Clinical Endocrinology and Metabolism, 2020, 105, 2203-2216.	1.8	46
838	Signal Deconvolution and Noise Factor Analysis Based on a Combination of Time–Frequency Analysis and Probabilistic Sparse Matrix Factorization. International Journal of Molecular Sciences, 2020, 21, 2978.	1.8	12
839	Suspect and non-targeted screening of chemicals of emerging concern for human biomonitoring, environmental health studies and support to risk assessment: From promises to challenges and harmonisation issues. Environment International, 2020, 139, 105545.	4.8	133
840	Evaluation of MDA-MB-468 Cell Culture Media Analysis in Predicting Triple-Negative Breast Cancer Patient Sera Metabolic Profiles. Metabolites, 2020, 10, 173.	1.3	8
841	Microbial Polyhydroxyalkanoates and Nonnatural Polyesters. Advanced Materials, 2020, 32, e1907138.	11.1	65
842	The Nanomaterial Metabolite Corona Determined Using a Quantitative Metabolomics Approach: A Pilot Study. Small, 2020, 16, e2000295.	5.2	38
843	Effects of lifelong exercise and aging on the blood metabolic fingerprint of rats. Biogerontology, 2020, 21, 577-591.	2.0	8
844	Improving lipid mapping in Genome Scale Metabolic Networks using ontologies. Metabolomics, 2020, 16, 44.	1.4	17
845	Medium and long-term effects of low doses of Chlorpyrifos during the postnatal, preweaning developmental stage on sociability, dominance, gut microbiota and plasma metabolites. Environmental Research, 2020, 184, 109341.	3.7	33
846	Molecular profile of the rat peri-infarct region four days after stroke: Study with MANF. Experimental Neurology, 2020, 329, 113288.	2.0	18
847	Metabolic profiling by reversed-phase/ion-exchange mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1143, 122072.	1.2	9
848	MS2 and LC libraries for untargeted metabolomics: Enhancing method development and identification confidence. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1145, 122105.	1.2	11
849	Polyphenols composition from leaves of Cuphea spp. and inhibitor potential, in vitro, of angiotensin l-converting enzyme (ACE). Journal of Ethnopharmacology, 2020, 255, 112781.	2.0	19
850	Chemical Discovery in the Era of Metabolomics. Journal of the American Chemical Society, 2020, 142, 9097-9105.	6.6	106
851	NMR Determination of Free Fatty Acids in Vegetable Oils. Processes, 2020, 8, 410.	1.3	72
852	<i>In vivo</i> detection of <scp>d</scp> â€amino acid oxidase with hyperpolarized <scp>d</scp> â€{1â€ ¹³ C]alanine. NMR in Biomedicine, 2020, 33, e4303.	1.6	2

#	Article	IF	CITATIONS
853	Modification of an atmospheric pressure photoionization source for online analysis of exhaled breath coupled with quadrupole time-of-flight mass spectrometry. Analytical and Bioanalytical Chemistry, 2020, 412, 3663-3671.	1.9	4
854	Highâ€throughput serum metabolomics analysis of gouty arthritis rat treated by total saponins of Rhizoma Dioscoreae Makino by UPLC–Q/TOF–MS. Biomedical Chromatography, 2020, 34, e4867.	0.8	4
855	Traditional Chinese medicine Biqi capsule compared with leflunomide in combination with methotrexate in patients with rheumatoid arthritis: a randomized controlled trial. Chinese Medicine, 2020, 15, 36.	1.6	5
856	<p>Nanoparticle Drug Delivery Systems for α-Mangostin</p> . Nanotechnology, Science and Applications, 2020, Volume 13, 23-36.	4.6	42
857	Altered gut microbial profile is associated with abnormal metabolism activity of Autism Spectrum Disorder. Gut Microbes, 2020, 11, 1246-1267.	4.3	166
858	Structured reviews for data and knowledge-driven research. Database: the Journal of Biological Databases and Curation, 2020, 2020, .	1.4	5
859	Assessment of substrate biodegradability improvement in anaerobic Co-digestion using a chemometrics-based metabolomic approach. Chemosphere, 2020, 254, 126812.	4.2	11
860	Multiâ€network logistic matrix factorization for metabolite–disease interaction prediction. FEBS Letters, 2020, 594, 1675-1684.	1.3	9
861	Metabolic profiling of different wild and cultivated <i>Allium</i> species based on highâ€resolution mass spectrometry, highâ€performance liquid chromatographyâ€photodiode array detector, and color analysis. Journal of Mass Spectrometry, 2020, 55, e4525.	0.7	11
862	Biological Filtering and Substrate Promiscuity Prediction for Annotating Untargeted Metabolomics. Metabolites, 2020, 10, 160.	1.3	14
863	Identifying Cranberry Juice Consumers with Predictive OPLSâ€DA Models of Plasma Metabolome and Validation of Cranberry Juice Intake Biomarkers in a Doubleâ€Blinded, Randomized, Placeboâ€Controlled, Crossâ€Over Study. Molecular Nutrition and Food Research, 2020, 64, e1901242.	1.5	24
864	Integration of mass spectral fingerprinting analysis with precursor ion (MS1) quantification for the characterisation of botanical extracts: application to extracts of <scp><i>Centella asiatica</i></scp> (L.) Urban. Phytochemical Analysis, 2020, 31, 722-738.	1.2	28
865	Enhanced single-cell metabolomics by capillary electrophoresis electrospray ionization-mass spectrometry with field amplified sample injection. Analytica Chimica Acta, 2020, 1118, 36-43.	2.6	33
866	Mixture toxicity of chlorpyrifos-methyl, pirimiphos-methyl, and nonylphenol in Atlantic salmon (Salmo salar) hepatocytes. Toxicology Reports, 2020, 7, 547-558.	1.6	12
867	Metabolomics Profiles of Smokers from Two Ethnic Groups with Differing Lung Cancer Risk. Chemical Research in Toxicology, 2020, 33, 2087-2098.	1.7	14
868	Multilevel omics for the discovery of biomarkers and therapeutic targets for stroke. Nature Reviews Neurology, 2020, 16, 247-264.	4.9	167
869	Chemical profiling of liposoluble liquid smokes obtained from Eucalyptus wood tar: confirmation of absence of polycyclic aromatic hydrocarbons. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2020, 37, 882-894.	1.1	2
870	Structural and Functional Changes in Prokaryotic Communities in Artificial Pit Mud during Chinese Baijiu Production. MSystems, 2020, 5, .	1.7	36

#	ARTICLE	IF	CITATIONS
871	Effect of L-Ergothioneine on the metabolic plasma profile of the RUPP rat model of pre-eclampsia. PLoS ONE, 2020, 15, e0230977.	1.1	14
872	NMR-based metabolomic profile of hypercholesterolemic human sera: Relationship with in vitro gene expression?. PLoS ONE, 2020, 15, e0231506.	1.1	6
873	Metabolic reprograming of LPS-stimulated human lung macrophages involves tryptophan metabolism and the aspartate-arginosuccinate shunt. PLoS ONE, 2020, 15, e0230813.	1.1	18
874	Human Melanoma-Cell Metabolic Profiling: Identification of Novel Biomarkers Indicating Metastasis. International Journal of Molecular Sciences, 2020, 21, 2436.	1.8	18
875	Metabolomic Studies of Lipid Storage Disorders, with Special Reference to Niemann-Pick Type C Disease: A Critical Review with Future Perspectives. International Journal of Molecular Sciences, 2020, 21, 2533.	1.8	13
876	Bile Acid Profile and its Changes in Response to Cefoperazone Treatment in MR1 Deficient Mice. Metabolites, 2020, 10, 127.	1.3	7
877	The ABRF Metabolomics Research Group 2016 Exploratory Study: Investigation of Data Analysis Methods for Untargeted Metabolomics. Metabolites, 2020, 10, 128.	1.3	5
878	Suggestions for Standardized Identifiers for Fatty Acyl Compounds in Genome Scale Metabolic Models and Their Application to the WormJam Caenorhabditis elegans Model. Metabolites, 2020, 10, 130.	1.3	3
879	Metabolomics Benefits from Orbitrap GC–MS—Comparison of Low- and High-Resolution GC–MS. Metabolites, 2020, 10, 143.	1.3	34
880	The application of â€~omics' to pulmonary arterial hypertension. British Journal of Pharmacology, 2021, 178, 108-120.	2.7	18
881	Serum metabolic signatures of high myopia among older Chinese adults. Eye, 2021, 35, 817-824.	1.1	17
882	Low Molecular Weight (poly)Phenol Metabolites Across the Blood-Brain Barrier: The Underexplored Journey. Brain Plasticity, 2021, 6, 193-214.	1.9	29
883	Serum choline in extremely preterm infants declines with increasing parenteral nutrition. European Journal of Nutrition, 2021, 60, 1081-1089.	1.8	6
884	MMEASE: Online meta-analysis of metabolomic data by enhanced metabolite annotation, marker selection and enrichment analysis. Journal of Proteomics, 2021, 232, 104023.	1.2	50
885	Predictive diagnosis of chronic obstructive pulmonary disease using serum metabolic biomarkers and leastâ€squares support vector machine. Journal of Clinical Laboratory Analysis, 2021, 35, e23641.	0.9	21
886	Information-rich high-throughput cellular assays using acoustic mist ionisation mass spectrometry. Analyst, The, 2021, 146, 315-321.	1.7	11
887	Evaluation of ion mobility in capillary electrophoresis coupled to mass spectrometry for the identification in metabolomics. Electrophoresis, 2021, 42, 342-349.	1.3	15
888	Finding distinctions between oral cancer and periodontitis using saliva metabolites and machine learning. Oral Diseases, 2021, 27, 484-493.	1.5	32

#	Article	IF	CITATIONS
889	Analysis of plant secondary metabolism using stable isotope″abelled precursors. Phytochemical Analysis, 2021, 32, 62-68.	1.2	4
890	Characterization of Liver Failure by the Analysis of Exhaled Breath by Extractive Electrospray lonization Mass Spectrometry (EESI-MS): A Pilot Study. Analytical Letters, 2021, 54, 1038-1054.	1.0	11
891	Exploring Associations Between Metabolites and Symptoms of Fatigue, Depression and Pain in Women With Fibromyalgia. Biological Research for Nursing, 2021, 23, 119-126.	1.0	10
892	A quest to identify suitable organic tracers for estimating children's dust ingestion rates. Journal of Exposure Science and Environmental Epidemiology, 2021, 31, 70-81.	1.8	10
893	Investigating metabolism by mass spectrometry: From steady state to dynamic view. Journal of Mass Spectrometry, 2021, 56, e4658.	0.7	6
894	Exhaled volatile organic compounds analysis in clinical pediatrics: a systematic review. Pediatric Research, 2021, 89, 1352-1363.	1.1	19
895	High sodium intake, glomerular hyperfiltration, and protein catabolism in patients with essential hypertension. Cardiovascular Research, 2021, 117, 1372-1381.	1.8	27
896	Systematically gap-filling the genome-scale metabolic model of CHO cells. Biotechnology Letters, 2021, 43, 73-87.	1.1	10
897	Genomeâ€wide identification of <i>Streptococcus sanguinis</i> fitness genes in human serum and discovery of potential selective drug targets. Molecular Microbiology, 2021, 115, 658-671.	1.2	8
898	Organophosphorus flame retardants are developmental neurotoxicants in a rat primary brainsphere in vitro model. Archives of Toxicology, 2021, 95, 207-228.	1.9	35
899	Lipidome Alterations Induced by Cystic Fibrosis, CFTR Mutation, and Lung Function. Journal of Proteome Research, 2021, 20, 549-564.	1.8	16
900	A critical review on metabolomic analysis of milk and milk products. International Journal of Dairy Technology, 2021, 74, 17-31.	1.3	16
901	GIMICA: host genetic and immune factors shaping human microbiota. Nucleic Acids Research, 2021, 49, D715-D722.	6.5	29
902	Nuclear magnetic resonance-based metabolomic analysis in the assessment of preclinical atherosclerosis in type 1 diabetes and preeclampsia. Diabetes Research and Clinical Practice, 2021, 171, 108548.	1.1	4
903	Metabolomics in posttraumatic stress disorder: Untargeted metabolomic analysis of plasma samples from Croatian war veterans. Free Radical Biology and Medicine, 2021, 162, 636-641.	1.3	14
904	Catechinâ€Rich Green Tea Extract and the Lossâ€ofâ€TLR4 Signaling Differentially Alter the Hepatic Metabolome in Mice with Nonalcoholic Steatohepatitis. Molecular Nutrition and Food Research, 2021, 65, e2000998.	1.5	10
905	Recurrent Topics in Mass Spectrometry-Based Metabolomics and Lipidomicsâ€"Standardization, Coverage, and Throughput. Analytical Chemistry, 2021, 93, 519-545.	3.2	92
906	Metabolomics analysis of microbiota-gut-brain axis in neurodegenerative and psychiatric diseases. Journal of Pharmaceutical and Biomedical Analysis, 2021, 194, 113681.	1.4	56

#	Article	IF	CITATIONS
907	Multimodal Imaging Based on Vibrational Spectroscopies and Mass Spectrometry Imaging Applied to Biological Tissue: A Multiscale and Multiomics Review. Analytical Chemistry, 2021, 93, 445-477.	3.2	43
908	MarkerDB: an online database of molecular biomarkers. Nucleic Acids Research, 2021, 49, D1259-D1267.	6.5	64
909	Metabolic dysfunction in pregnancy: Fingerprinting the maternal metabolome using proton nuclear magnetic resonance spectroscopy. Endocrinology, Diabetes and Metabolism, 2021, 4, e00201.	1.0	10
910	BAP1 mutant uveal melanoma is stratified by metabolic phenotypes with distinct vulnerability to metabolic inhibitors. Oncogene, 2021, 40, 618-632.	2.6	28
911	30ÂYears of research on ESI/MS response: Trends, contradictions and applications. Analytica Chimica Acta, 2021, 1152, 238117.	2.6	25
912	Metabolomic profiling reveals amino acid and carnitine alterations as metabolic signatures in psoriasis. Theranostics, 2021, 11, 754-767.	4.6	48
913	Simultaneous determination of 30 neurologically and metabolically important molecules: A sensitive and selective way to measure tyrosine and tryptophan pathway metabolites and other biomarkers in human serum and cerebrospinal fluid. Journal of Chromatography A, 2021, 1635, 461775.	1.8	25
914	Serum Metabolites Associated with Healthy Diets in African Americans and European Americans. Journal of Nutrition, 2021, 151, 40-49.	1.3	23
915	Systematic classification of unknown metabolites using high-resolution fragmentation mass spectra. Nature Biotechnology, 2021, 39, 462-471.	9.4	317
916	Metaproteome and metabolome of oral microbial communities. Periodontology 2000, 2021, 85, 46-81.	6.3	26
917	High-coverage lipidomics for functional lipid and pathway analyses. Analytica Chimica Acta, 2021, 1147, 199-210.	2.6	33
918	Effect of Very-Low-Calorie Ketogenic Diet on Psoriasis Patients: A Nuclear Magnetic Resonance-Based Metabolomic Study. Journal of Proteome Research, 2021, 20, 1509-1521.	1.8	33
919	Models of Metabolomic Networks. , 2021, , 134-142.		1
920	Urine Metabolites Associated with the Dietary Approaches to Stop Hypertension (DASH) Diet: Results from the DASHâ€Sodium Trial. Molecular Nutrition and Food Research, 2021, 65, 2000695.	1.5	14
921	PET nanoplastics interactions with water contaminants and their impact on human cells. Environmental Pollution, 2021, 271, 116262.	3.7	33
922	Tandem mass spectrometry of organic nitro and halogen compounds: Competition between losses of molecules and of radicals. International Journal of Mass Spectrometry, 2021, 460, 116496.	0.7	5
923	Region-specific metabolic characterization of the type 1 diabetic brain in mice with and without cognitive impairment. Neurochemistry International, 2021, 143, 104941.	1.9	7
924	Spatial Distribution of Transcytosis Relevant Phospholipids in Response to Omega-3 Dietary Deprivation. ACS Chemical Biology, 2021, 16, 106-115.	1.6	3

#	ARTICLE	IF	Citations
925	Nuclear magnetic resonance spectroscopy of biofluids for osteoarthritis. British Medical Bulletin, 2021, 137, 28-41.	2.7	13
926	Comparison of two arylsulfatases for targeted mass spectrometric analysis of microbiota-derived metabolites. Journal of Pharmaceutical and Biomedical Analysis, 2021, 195, 113818.	1.4	6
927	Lipid alterations in human frontal cortex in ALSâ€FTLDâ€TDP43 proteinopathy spectrum are partly related to peroxisome impairment. Neuropathology and Applied Neurobiology, 2021, 47, 544-563.	1.8	14
928	Differential Network Analysis Reveals Molecular Determinants Associated with Blood Pressure and Heart Rate in Healthy Subjects. Journal of Proteome Research, 2021, 20, 1040-1051.	1.8	3
929	From Metabolomics to HRMS-Based Exposomics: Adapting Peak Picking and Developing Scoring for MS1 Suspect Screening. Analytical Chemistry, 2021, 93, 1792-1800.	3.2	21
930	Metabolomics approach to understand the hepatitis C virus induced hepatocellular carcinoma using LC-ESI-MS/MS. Arabian Journal of Chemistry, 2021, 14, 102907.	2.3	8
931	Tumor Reliance on Cytosolic versus Mitochondrial One-Carbon Flux Depends on Folate Availability. Cell Metabolism, 2021, 33, 190-198.e6.	7.2	31
932	Exposure to estrogenic mixtures results in tissue-specific alterations to the metabolome of oysters. Aquatic Toxicology, 2021, 231, 105722.	1.9	16
933	Discovery and quantification of Irgacure-907 in commercial cow milk by using untargeted liquid chromatography high-resolution mass spectrometry. Journal of Food Composition and Analysis, 2021, 97, 103762.	1.9	3
934	Exploratory analysis of large-scale lipidome in large cohorts: are we any closer of finding lipid-based markers suitable for CVD risk stratification and management?. Analytica Chimica Acta, 2021, 1142, 189-200.	2.6	7
935	An apoplastic fluid extraction method for the characterization of grapevine leaves proteome and metabolome from a single sample. Physiologia Plantarum, 2021, 171, 343-357.	2.6	18
937	Preanalytical Sample Handling Conditions and Their Effects on the Human Serum Metabolome in Epidemiologic Studies. American Journal of Epidemiology, 2021, 190, 459-467.	1.6	7
938	Metabolic Effects of a <i>Eucalyptus</i> Bark Lipophilic Extract on Triple Negative Breast Cancer and Nontumor Breast Epithelial Cells. Journal of Proteome Research, 2021, 20, 565-575.	1.8	5
939	Deep learning meets metabolomics: a methodological perspective. Briefings in Bioinformatics, 2021, 22, 1531-1542.	3.2	59
940	Microbial natural product databases: moving forward in the multi-omics era. Natural Product Reports, 2021, 38, 264-278.	5.2	51
941	Prediction of complex phenotypes using the Drosophila melanogaster metabolome. Heredity, 2021, 126, 717-732.	1.2	4
942	Cancers in Agreement? Exploring the Cross-Talk of Cancer Metabolomic and Transcriptomic Landscapes Using Publicly Available Data. Cancers, 2021, 13, 393.	1.7	4
943	Advances in decomposing complex metabolite mixtures using substructure- and network-based computational metabolomics approaches. Natural Product Reports, 2021, 38, 1967-1993.	5.2	78

#	ARTICLE	IF	CITATIONS
944	Salivary metabolomics for the diagnosis of periodontal diseases: a systematic review with methodological quality assessment. Metabolomics, 2021, 17, 1.	1.4	35
945	Safety risk management for low molecular weight processâ€related impurities in monoclonal antibody therapeutics: Categorization, risk assessment, testing strategy, and process development with leveraging clearance potential. Biotechnology Progress, 2021, 37, e3119.	1.3	7
946	A cross-platform approach identifies genetic regulators of human metabolism and health. Nature Genetics, 2021, 53, 54-64.	9.4	117
947	Comprehensive metabolic profiling of modified gegen qinlian decoction by ultra-high-performance liquid chromatography-diode array detection-Q-exactive-orbitrap-electrospray ionization-mass spectrometry/mass spectrometry and application of high-performance thin-layer chromatography for its fingerprint analysis. World lournal of Traditional Chinese Medicine. 2021. 7. 11.	0.9	14
948	Analysis of Melanoma Cell Glutamine Metabolism by Stable Isotope Tracing and Gas Chromatography-Mass Spectrometry. Methods in Molecular Biology, 2021, 2265, 91-110.	0.4	4
949	Comprehensive Meta-Analysis of COVID-19 Global Metabolomics Datasets. Metabolites, 2021, 11, 44.	1.3	72
950	Metabolome-wide association study of occupational exposure to benzene. Carcinogenesis, 2021, 42, 1326-1336.	1.3	14
951	Multiple Omics Data Integration. , 2021, , 103-115.		O
952	Linking Gut Microbiome and Lipid Metabolism: Moving beyond Associations. Metabolites, 2021, 11, 55.	1.3	54
953	Integration of epigenomics and metabolomics: From biomarkers discovery to personalized medicine. , 2021, , 31-73.		3
954	MALDI TOF Mass Spectrometry Imaging of Blood Smear: Method Development and Evaluation. International Journal of Molecular Sciences, 2021, 22, 585.	1.8	1
955	Databases of bioactive peptides. , 2021, , 309-330.		4
956	Network Pharmacology and Modern Drug R& D Cases., 2021,, 247-320.		0
957	Spatially Resolved Multi-Omics Deciphers Bidirectional Tumor-Host Interdependence in Glioblastoma. SSRN Electronic Journal, 0, , .	0.4	0
958	The contribution of gut bacterial metabolites in the human immune signaling pathway of non-communicable diseases. Gut Microbes, 2021, 13, 1-22.	4.3	99
959	Proteomic and metabolomic advances uncover biomarkers of mitochondrial disease pathophysiology and severity. Journal of Clinical Investigation, $2021, 131, \ldots$	3.9	3
960	Molecule identification approaches in imaging mass spectrometry. , 2021, , 77-90.		0
961	Enhancement of polyhydroxyalkanoate production by co-feeding lignin derivatives with glycerol in Pseudomonas putida KT2440. Biotechnology for Biofuels, 2021, 14, 11.	6.2	28

#	ARTICLE	IF	CITATIONS
962	MYC regulates ribosome biogenesis and mitochondrial gene expression programs through its interaction with host cell factor $\hat{a}\in 1$. ELife, 2021, 10, .	2.8	45
963	Untargeted Metabolomic Analysis Combined With Multivariate Statistics Reveal Distinct Metabolic Changes in GPR40 Agonist-Treated Animals Related to Bile Acid Metabolism. Frontiers in Molecular Biosciences, 2020, 7, 598369.	1.6	4
964	Chapter 8. NMR Approaches for Probing the Polar Metabolome. New Developments in Mass Spectrometry, 2021, , 185-218.	0.2	0
965	Chapter 3. Ion Pair Liquid Chromatography–Mass Spectrometry for Probing the Polar Metabolome. New Developments in Mass Spectrometry, 2021, , 41-68.	0.2	0
966	Decoding personal biotic and abiotic airborne exposome. Nature Protocols, 2021, 16, 1129-1151.	5.5	21
967	Roux-en-Y gastric bypass surgery in Zucker rats induces bacterial and systemic metabolic changes independent of caloric restriction-induced weight loss. Gut Microbes, 2021, 13, 1-20.	4.3	18
968	Survey of potential diagnostic metabolite markers in serum of the rat model of Alzheimer's disease using nuclear magnatic resonance (1H-NMR) technique. Koomesh, 2021, 23, 105-116.	0.1	0
969	The Fecal and Serum Metabolomics of Giant Pandas Based on Untargeted Metabolomics. Zoological Science, 2021, 38, 179-186.	0.3	2
971	Roles of Bioinformatics in Reproductive Science. , 2021, , 203-228.		2
972	Polycythemia Vera and Essential Thrombocythemia Patients Exhibit Unique Serum Metabolic Profiles Compared to Healthy Individuals and Secondary Thrombocytosis Patients. Cancers, 2021, 13, 482.	1.7	2
973	Inferring Metabolite-disease Association Using Graph Convolutional Networks. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021, PP, 1-1.	1.9	4
974	Metabolic impact of weight variations in Icelandic horses. PeerJ, 2021, 9, e10764.	0.9	5
975	Repurposing the orphan drug nitisinone to control the transmission of African trypanosomiasis. PLoS Biology, 2021, 19, e3000796.	2.6	12
976	Antiseizure Medication use in Gastric Bypass Patients and Other Post-Surgical Malabsorptive States. Epilepsy and Behavior Reports, 2021, 16, 100439.	0.5	6
977	Proteomics, Lipidomics, Metabolomics, and 16S DNA Sequencing of Dental Plaque From Patients With Diabetes and Periodontal Disease. Molecular and Cellular Proteomics, 2021, 20, 100126.	2.5	19
978	Using 3D Printing to Visualize 2D Chromatograms and NMR Spectra for the Classroom. Journal of Chemical Education, 2021, 98, 1024-1030.	1.1	8
979	Live monitoring of cellular metabolism and mitochondrial respiration in 3D cell culture system using NMR spectroscopy. Analyst, The, 2021, 146, 4326-4339.	1.7	16
980	VEGFR-2 kinase domain inhibition as a scaffold for anti-angiogenesis: Validation of the anti-angiogenic effects of carotenoids from Spondias mombin in DMBA model of breast carcinoma in Wistar rats. Toxicology Reports, 2021, 8, 489-498.	1.6	12

#	Article	IF	CITATIONS
981	<i>Machine-OlF-Action</i> : a unified framework for developing and interpreting machine-learning models for chemosensory research. Bioinformatics, 2021, 37, 1769-1771.	1.8	6
982	NMR reveals the metabolic changes induced by auranofin in A2780 cancer cells: evidence for glutathione dysregulation. Dalton Transactions, 2021, 50, 6349-6355.	1.6	17
983	Predicting chemical shifts with graph neural networks. Chemical Science, 2021, 12, 10802-10809.	3.7	25
984	Human Plasma Metabolomics for Biomarker Discovery: Targeting the Molecular Subtypes in Breast Cancer. Cancers, 2021, 13, 147.	1.7	19
985	Synthetic gut microbiome: Advances and challenges. Computational and Structural Biotechnology Journal, 2021, 19, 363-371.	1.9	19
986	Data analysis and computation for imaging mass spectrometry. , 2021, , 129-146.		0
987	Functional Metabolomics and Chemoproteomics Approaches Reveal Novel Metabolic Targets for Anticancer Therapy. Advances in Experimental Medicine and Biology, 2021, 1280, 131-147.	0.8	1
988	Screening of Potential Stress Biomarkers in Sweat Associated with Sports Training. Sports Medicine - Open, 2021, 7, 8.	1.3	17
989	Plasma metabolomics of presymptomatic <i>PSEN1</i> \$100 i>i>a€H163Y mutation carriers: a pilot study. Annals of Clinical and Translational Neurology, 2021, 8, 579-591.	1.7	0
990	Next-generation sequencing: an expedition from workstation to clinical applications. , 2021, , 29-47.		5
991	Novel Metabolic Signatures of Prostate Cancer Revealed by 1H-NMR Metabolomics of Urine. Diagnostics, 2021, 11, 149.	1.3	22
992	Metabolic profile distinguishes laminitis-susceptible and -resistant ponies before and after feeding a high sugar diet. BMC Veterinary Research, 2021, 17, 56.	0.7	5
993	The Three Pillars of Natural Product Dereplication. Alkaloids from the Bulbs of Urceolina peruviana (C. Presl) J.F. Macbr. as a Preliminary Test Case. Molecules, 2021, 26, 637.	1.7	16
994	Ligand- and Structure-Based Analysis of Deep Learning-Generated Potential α2a Adrenoceptor Agonists. Journal of Chemical Information and Modeling, 2021, 61, 481-492.	2.5	1
997	Multi-omic profiling of plasma reveals molecular alterations in children with COVID-19. Theranostics, 2021, 11, 8008-8026.	4.6	27
998	Sampling Method Affects HR-MAS NMR Spectra of Healthy Caprine Brain Biopsies. Metabolites, 2021, 11, 38.	1.3	3
999	Models for measuring metabolic chemical changes in the metastasis of high grade serous ovarian cancer: fallopian tube, ovary, and omentum. Molecular Omics, 2021, 17, 819-832.	1.4	3
1000	Opportunities at the Interface of Network Science and Metabolic Modeling. Frontiers in Bioengineering and Biotechnology, 2020, 8, 591049.	2.0	15

#	Article	IF	CITATIONS
1001	LC/MS-Based Global Metabolomic Identification of Serum Biomarkers Differentiating Hepatocellular Carcinoma from Chronic Hepatitis B and Liver Cirrhosis. ACS Omega, 2021, 6, 1160-1170.	1.6	18
1002	Black Tea Theaflavin Detoxifies Metabolic Toxins inÂtheÂIntestinal Tract of Mice. Molecular Nutrition and Food Research, 2021, 65, 2000887.	1.5	10
1003	Cerebrospinal fluid metabolomics identifies 19 brain-related phenotype associations. Communications Biology, 2021, 4, 63.	2.0	28
1004	Multiomics approach for precision wellness. , 2021, , 147-180.		0
1005	Low-field benchtop NMR spectroscopy as a potential non-stationary tool for point-of-care urinary metabolite tracking in diabetic conditions. Diabetes Research and Clinical Practice, 2021, 171, 108554.	1.1	12
1006	Circulating markers of NADH-reductive stress correlate with mitochondrial disease severity. Journal of Clinical Investigation, 2021, 131, .	3.9	95
1007	Metabolomics: small molecules that matter more. Molecular Omics, 2021, 17, 210-229.	1.4	68
1008	Food Constituent and Food Metabolite Databases. , 2021, , 2-18.		2
1010	Application of Predicted Collisional Cross Section to Metabolome Databases to Probabilistically Describe the Current and Future Ion Mobility Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 661-669.	1.2	23
1011	Systems Biology and Multiâ€Omics. Proteomics, 2021, 21, e2000306.	1.3	4
1012	Paroxetineâ€"Overview of the Molecular Mechanisms of Action. International Journal of Molecular Sciences, 2021, 22, 1662.	1.8	21
1013	Novel Insights into Mice Multi-Organ Metabolism upon Exposure to a Potential Anticancer Pd(II)-Agent. Metabolites, 2021, 11, 114.	1.3	8
1014	In-Depth Analysis of the Impact of Different Serum-Free Media on the Production of Clinical Grade Dendritic Cells for Cancer Immunotherapy. Frontiers in Immunology, 2020, 11, 593363.	2.2	7
1015	The potential pathways underlying the association of propyl-paraben exposure with aeroallergen sensitization and EASI score using metabolomics analysis. Scientific Reports, 2021, 11, 3772.	1.6	9
1016	Untargeted Metabolomics Reveals Major Differences in the Plasma Metabolome between Colorectal Cancer and Colorectal Adenomas. Metabolites, 2021, 11, 119.	1.3	20
1017	Unravelling the chemical exposome in cohort studies: routes explored and steps to become comprehensive. Environmental Sciences Europe, 2021, 33, 17.	2.6	22
1018	Tissue Lipidomic Alterations Induced by Prolonged Dexamethasone Treatment. Journal of Proteome Research, 2021, 20, 1558-1570.	1.8	11
1019	Identification of α-Amylase and α-Glucosidase Inhibitors and Ligularoside A, a New Triterpenoid Saponin from <i>Passiflora ligularis</i> Juss (Sweet Granadilla) Leaves, by a Nuclear Magnetic Resonance-Based Metabolomic Study. Journal of Agricultural and Food Chemistry, 2021, 69, 2919-2931.	2.4	15

#	ARTICLE	IF	CITATIONS
1021	Multi ompartment metabolomics and metagenomics reveal major hepatic and intestinal disturbances in cancer cachectic mice. Journal of Cachexia, Sarcopenia and Muscle, 2021, 12, 456-475.	2.9	30
1022	The Efficacy of Pilates on Urinary Incontinence in Korean Women: A Metabolomics Approach. Metabolites, 2021, 11, 118.	1.3	4
1023	NMRFinder: a novel method for 1D 1H-NMR metabolite annotation. Metabolomics, 2021, 17, 21.	1.4	2
1024	High Plasticity of the Gut Microbiome and Muscle Metabolome of Chinese Mitten Crab (<i>Eriocheir) Tj ETQq1 1 C</i>).784314 r 0.9	rgBT /Overlo
1027	METABOLOMIC APPROACHES IN STUDYING OF CARDIOVASCULAR DISEASES. Eurasian Heart Journal, 2021, , 106-117.	0.2	1
1028	15â€Deoxyâ€Î" ^{12,14} â€prostaglandin J ₂ binds and inactivates STAT3 <i>via</i> covalen modification of cysteine 259 in Hâ€ <i>Ras</i> â€transformed human breast epithelial cells. FEBS Letters, 2021, 595, 604-622.	t 1.3	6
1029	Ethanol Extract of Yak-Kong Fermented by Lactic Acid Bacteria from a Korean Infant Markedly Reduces Matrix Metallopreteinase-1 Expression Induced by Solar Ultraviolet Irradiation in Human Keratinocytes and a 3D Skin Model. Antioxidants, 2021, 10, 291.	2.2	3
1030	Early Detection of Pancreatic Cancer in Type 2 Diabetes Mellitus Patients Based on ¹ H NMR Metabolomics. Journal of Proteome Research, 2021, 20, 1744-1753.	1.8	14
1031	Reviewing the metabolome coverage provided by LC-MS: Focus on sample preparation and chromatography-A tutorial. Analytica Chimica Acta, 2021, 1147, 38-55.	2.6	40
1032	Deep Learning-Based Annotation Transfer between Molecular Imaging Modalities: An Automated Workflow for Multimodal Data Integration. Analytical Chemistry, 2021, 93, 3061-3071.	3.2	31
1033	Rare genetic variants affecting urine metabolite levels link population variation to inborn errors of metabolism. Nature Communications, 2021, 12, 964.	5.8	20
1034	Metabolomic/lipidomic profiling of COVID-19 and individual response to tocilizumab. PLoS Pathogens, 2021, 17, e1009243.	2.1	76
1035	Multimodal single-cell/nucleus RNA sequencing data analysis uncovers molecular networks between disease-associated microglia and astrocytes with implications for drug repurposing in Alzheimer's disease. Genome Research, 2021, 31, 1900-1912.	2.4	53
1036	A Pilot Study for Metabolic Profiling of Obesity-Associated Microbial Gut Dysbiosis in Male Wistar Rats. Biomolecules, 2021, 11, 303.	1.8	3
1037	Improving rehabilitation outcomes using metabolomics: Health, recovery and biomarkers of mortality in sick and injured green turtles (Chelonia mydas). Biological Conservation, 2021, 254, 108943.	1.9	9
1039	Occurrence of Tocols in Foods: An Updated Shot of Current Databases. Journal of Food Quality, 2021, 2021, 1-7.	1.4	19
1040	Creation and filtering of a recurrent spectral library of CHO cell metabolites and media components. Biotechnology and Bioengineering, 2021, 118, 1491-1510.	1.7	2
1041	Ion mobility mass spectrometry in the omics era: Challenges and opportunities for metabolomics and lipidomics. Mass Spectrometry Reviews, 2022, 41, 722-765.	2.8	87

#	Article	IF	CITATIONS
1042	Development of an optimized method for processing peripheral blood mononuclear cells for 1H-nuclear magnetic resonance-based metabolomic profiling. PLoS ONE, 2021, 16, e0247668.	1.1	3
1043	Magnetic resonance spectroscopy for the study of cns malignancies. Progress in Nuclear Magnetic Resonance Spectroscopy, 2021, 122, 23-41.	3.9	19
1044	Differences in Fatty Acid Oxidation between Nab-Paclitaxel- and Solvent-Based Paclitaxel-Treated A549 Cells Based on Metabolomics. ACS Omega, 2021, 6, 5138-5145.	1.6	3
1046	Discovery of Volatile Biomarkers for Bladder Cancer Detection and Staging through Urine Metabolomics. Metabolites, 2021, 11, 199.	1.3	27
1047	Coupling Machine Learning and Lipidomics as a Tool to Investigate Metabolic Dysfunction-Associated Fatty Liver Disease. A General Overview. Biomolecules, 2021, 11, 473.	1.8	10
1048	No Evidence for Sexâ€specificity in Vitamins C, E, and Fatty Acid Content of Human Milk from Healthy Polish Mothers. Journal of Pediatric Gastroenterology and Nutrition, 2021, 73, e20-e25.	0.9	3
1050	AutoGraph: Autonomous Graph-Based Clustering of Small-Molecule Conformations. Journal of Chemical Information and Modeling, 2021, 61, 1647-1656.	2.5	9
1051	A multi-omics view of the complex mechanism of vascular calcification. Biomedicine and Pharmacotherapy, 2021, 135, 111192.	2.5	9
1053	Cardiovascular informatics: building a bridge to data harmony. Cardiovascular Research, 2021, , .	1.8	4
1054	The Metabolic Response to Infection With Wolbachia Implicates the Insulin/Insulin-Like-Growth Factor and Hypoxia Signaling Pathways in Drosophila melanogaster. Frontiers in Ecology and Evolution, 2021, 9, .	1.1	6
1055	¹ H NMRâ€based metabolomics of paired esophageal tumor tissues and serum samples identifies specific serum biomarkers for esophageal cancer. NMR in Biomedicine, 2021, 34, e4505.	1.6	8
1057	Volatile scent chemicals in the urine of the red fox, Vulpes vulpes. PLoS ONE, 2021, 16, e0248961.	1.1	13
1058	Rapid Identification of New Biomarkers for the Classification of GM1 Type 2 Gangliosidosis Using an Unbiased 1H NMR-Linked Metabolomics Strategy. Cells, 2021, 10, 572.	1.8	5
1059	SARS-CoV-2 Main Protease Active Site Ligands in the Human Metabolome. Molecules, 2021, 26, 1409.	1.7	22
1060	HLHâ€30â€dependent rewiring of metabolism during starvation in <i>C</i> . <i>elegans</i> . Aging Cell, 2021, 20, e13342.	3.0	6
1061	Analysis of the effects of related fingerprints on molecular similarity using an eigenvalue entropy approach. Journal of Cheminformatics, 2021, 13, 27.	2.8	16
1062	A Serum Metabolomic Signature for the Detection and Grading of Bladder Cancer. Applied Sciences (Switzerland), 2021, 11, 2835.	1.3	9
1063	The mwtab Python Library for RESTful Access and Enhanced Quality Control, Deposition, and Curation of the Metabolomics Workbench Data Repository. Metabolites, 2021, 11, 163.	1.3	10

#	ARTICLE	IF	Citations
1065	Venom Gland Mass Spectrometry Imaging of Saw-Scaled Viper, <i>Echis carinatus sochureki</i> , at High Lateral Resolution. Journal of the American Society for Mass Spectrometry, 2021, 32, 1105-1115.	1.2	6
1066	A map of mass spectrometry-based <i>in silico</i> fragmentation prediction and compound identification in metabolomics. Briefings in Bioinformatics, 2021, 22, .	3.2	18
1067	Spray-Capillary-Based Capillary Electrophoresis Mass Spectrometry for Metabolite Analysis in Single Cells. Analytical Chemistry, 2021, 93, 4479-4487.	3.2	26
1068	Cell metabolomics analyses revealed a role of altered fatty acid oxidation in neurotoxicity pattern difference between nab-paclitaxel and solvent-based paclitaxel. PLoS ONE, 2021, 16, e0248942.	1.1	6
1069	Expanding the drug discovery space with predicted metabolite–target interactions. Communications Biology, 2021, 4, 288.	2.0	9
1070	Terahertz high-resolution spectroscopy of thermal decomposition gas products of diabetic and non-diabetic blood plasma and kidney tissue pellets. Journal of Biomedical Optics, 2021, 26, .	1.4	9
1071	Metabolic signatures of osteoarthritis in urine using liquid chromatographyâ€high resolution tandem mass spectrometry. Metabolomics, 2021, 17, 29.	1.4	14
1073	Mahuang Decoction Antagonizes Acute Liver Failure via Modulating Tricarboxylic Acid Cycle and Amino Acids Metabolism. Frontiers in Pharmacology, 2021, 12, 599180.	1.6	14
1074	Integrating omics to characterize ecoâ€physiological adaptations: How moose diet and metabolism differ across biogeographic zones. Ecology and Evolution, 2021, 11, 3159-3183.	0.8	5
1075	Applications of Omics Technologies for Three-Dimensional <i>In Vitro </i> Disease Models. Tissue Engineering - Part C: Methods, 2021, 27, 183-199.	1.1	4
1077	Knowledge Beacons: Web services for data harvesting of distributed biomedical knowledge. PLoS ONE, 2021, 16, e0231916.	1.1	1
1078	Comparative Metabolomic Analysis of Multi-Ovary Wheat under Heterogeneous Cytoplasm Suppression. Agronomy, 2021, 11, 658.	1.3	0
1079	Spinal Muscular Atrophy after Nusinersen Therapy: Improved Physiology in Pediatric Patients with No Significant Change in Urine, Serum, and Liquor 1H-NMR Metabolomes in Comparison to an Age-Matched, Healthy Cohort. Metabolites, 2021, 11, 206.	1.3	16
1080	Analytical challenges in human exposome analysis with focus on environmental analysis combined with metabolomics. Journal of Separation Science, 2021, 44, 1769-1787.	1.3	12
1081	Machine learning applications in genome-scale metabolic modeling. Current Opinion in Systems Biology, 2021, 25, 42-49.	1.3	27
1082	Metabolomics in Severe Aortic Stenosis Reveals Intermediates of Nitric Oxide Synthesis as Most Distinctive Markers. International Journal of Molecular Sciences, 2021, 22, 3569.	1.8	12
1083	Suspect Screening, Prioritization, and Confirmation of Environmental Chemicals in Maternal-Newborn Pairs from San Francisco. Environmental Science & Environmental Science, 2021, 55, 5037-5049.	4.6	56
1084	Development of Polymeric Nanoparticles for Blood–Brain Barrier Transfer—Strategies and Challenges. Advanced Science, 2021, 8, 2003937.	5.6	143

#	Article	IF	CITATIONS
1085	Plasma Metabolomic Profiling in 1391 Subjects with Overweight and Obesity from the SPHERE Study. Metabolites, 2021, 11, 194.	1.3	15
1086	Role of dietary fiber in the recovery of the human gut microbiome and its metabolome. Cell Host and Microbe, 2021, 29, 394-407.e5.	5.1	137
1087	NMR metabolomic profiles associated with long-term risk of prostate cancer. Metabolomics, 2021, 17, 32.	1.4	8
1088	Metabolomic Biomarkers of Healthy Dietary Patterns and Cardiovascular Outcomes. Current Atherosclerosis Reports, 2021, 23, 26.	2.0	16
1090	Pepper Alkaloids and Processed Meat Intake: Results from a Randomized Trial and the European Prospective Investigation into Cancer and Nutrition (EPIC) Cohort. Molecular Nutrition and Food Research, 2021, 65, e2001141.	1.5	7
1091	Empowering large chemical knowledge bases for exposomics: PubChemLite meets MetFrag. Journal of Cheminformatics, 2021, 13, 19.	2.8	63
1092	Polyphenol Exposure, Metabolism, and Analysis: A Global Exposomics Perspective. Annual Review of Food Science and Technology, 2021, 12, 461-484.	5.1	17
1093	KibioR & Samp; Kibio: a new architecture for next-generation data querying and sharing in big biology. Bioinformatics, 2021, 37, 2706-2713.	1.8	1
1094	Fallopian Tube-Derived Tumor Cells Induce Testosterone Secretion from the Ovary, Increasing Epithelial Proliferation and Invasion. Cancers, 2021, 13, 1925.	1.7	3
1096	Detecting Sex-Related Changes to the Metabolome of a Critically Endangered Freshwater Crayfish During the Mating Season. Frontiers in Molecular Biosciences, 2021, 8, 650839.	1.6	2
1097	Predicting Metabolite–Disease Associations Based on LightGBM Model. Frontiers in Genetics, 2021, 12, 660275.	1,1	9
1098	Acetaminophen metabolism revisited using non-targeted analyses: Implications for human biomonitoring. Environment International, 2021, 149, 106388.	4.8	20
1100	Quantification of endogenous aminoacids and aminoacid derivatives in urine by hydrophilic interaction liquid chromatography tandem mass spectrometry. Journal of Chromatography A, 2021, 1642, 462005.	1.8	14
1101	Novel Strategy for Untargeted Chiral Metabolomics using Liquid Chromatography-High Resolution Tandem Mass Spectrometry. Analytical Chemistry, 2021, 93, 5805-5814.	3.2	17
1102	Urine analysis using FTIR spectroscopy: A study on healthy adults and children. Journal of Biophotonics, 2021, 14, e202100009.	1.1	15
1103	The long-term genetic stability and individual specificity of the human gut microbiome. Cell, 2021, 184, 2302-2315.e12.	13.5	166
1104	Biomarkers of cholestasis. Biomarkers in Medicine, 2021, 15, 437-454.	0.6	11
1105	Insights into intrauterine growth restriction based on maternal and umbilical cord blood metabolomics. Scientific Reports, 2021, 11, 7824.	1.6	14

#	Article	IF	CITATIONS
1106	Lipids and organic acids in three gut locations affect feed efficiency of commercial pigs as revealed by LC–MS-based metabolomics. Scientific Reports, 2021, 11, 7746.	1.6	5
1107	Unraveling the Extracellular Metabolism of Immortalized Hippocampal Neurons Under Normal Growth Conditions. Frontiers in Chemistry, 2021, 9, 621548.	1.8	2
1108	Sexâ€specific alterations in NAD+ metabolism in 3xTg Alzheimer's disease mouse brain assessed by quantitative targeted LCâ€MS. Journal of Neurochemistry, 2021, 159, 378-388.	2.1	21
1109	Chronic pesticide exposure elicits a subtle carry-over effect on the metabolome of Aurelia coerulea ephyrae. Environmental Pollution, 2021, 275, 116641.	3.7	2
1110	Adrenal Hormone Interactions and Metabolism: A Single Sample Multi-Omics Approach. Hormone and Metabolic Research, 2021, 53, 326-334.	0.7	8
1111	TOMATOMET: A metabolome database consists of 7118 accurate mass values detected in mature fruits of 25 tomato cultivars. Plant Direct, 2021, 5, e00318.	0.8	20
1112	The combined effect of fermentation of lactic acid bacteria and in vitro digestion on metabolomic and oligosaccharide profile of oat beverage. Food Research International, 2021, 142, 110216.	2.9	32
1113	First Genome-Scale Metabolic Model of Dolosigranulum pigrum Confirms Multiple Auxotrophies. Metabolites, 2021, 11, 232.	1.3	8
1115	Slotting metabolomics into routine precision medicine. Expert Review of Precision Medicine and Drug Development, 2021, 6, 173-187.	0.4	11
1116	Plant growth and metabolic changes in â€~Super Hot' chili fruit (Capsicum annuum) exposed to supplemental LED lights. Plant Science, 2021, 305, 110826.	1.7	14
1117	Quantitative Mass Spectrometry Imaging of Metabolomes and Lipidomes for Tracking Changes and Therapeutic Response in Traumatic Brain Injury Surrounding Injured Area at Chronic Phase. ACS Chemical Neuroscience, 2021, 12, 1363-1375.	1.7	7
1118	Metabolomic and lipidomic characterization of an X-chromosome deletion disorder in neural progenitor cells by UHPLC-HRMS. Journal of Mass Spectrometry and Advances in the Clinical Lab, 2021, 20, 11-24.	1.3	7
1119	Sequential Orbitrap Secondary Ion Mass Spectrometry and Liquid Extraction Surface Analysis-Tandem Mass Spectrometry-Based Metabolomics for Prediction of Brain Tumor Relapse from Sample-Limited Primary Tissue Archives. Analytical Chemistry, 2021, 93, 6947-6954.	3.2	13
1120	iNetModels 2.0: an interactive visualization and database of multi-omics data. Nucleic Acids Research, 2021, 49, W271-W276.	6.5	25
1121	Deep mining of oxysterols and cholestenoic acids in human plasma and cerebrospinal fluid: Quantification using isotope dilution mass spectrometry. Analytica Chimica Acta, 2021, 1154, 338259.	2.6	14
1122	Pharmacometabonomics: data processing and statistical analysis. Briefings in Bioinformatics, 2021, 22,	3.2	50
1123	Post-Mortem Metabolomics: A Novel Approach in Clinical Biomarker Discovery and a Potential Tool in Death Investigations. Chemical Research in Toxicology, 2021, 34, 1496-1502.	1.7	11
1124	The relationship between urinary polyphenol metabolites and dietary polyphenol intakes in young adults. British Journal of Nutrition, 2021, , 1-10.	1.2	7

#	Article	IF	CITATIONS
1125	Determination of ketone bodies in biological samples via rapid UPLC-MS/MS. Talanta, 2021, 225, 122048.	2.9	24
1126	Retrospective non-target analysis to support regulatory water monitoring: from masses of interest to recommendations via in silico workflows. Environmental Sciences Europe, 2021, 33, .	2.6	18
1127	Lipidomics-Based Comparison of Molecular Compositions of Green, Yellow, and Red Bell Peppers. Metabolites, 2021, 11, 241.	1.3	13
1128	Quo Vadis Caenorhabditis elegans Metabolomicsâ€"A Review of Current Methods and Applications to Explore Metabolism in the Nematode. Metabolites, 2021, 11, 284.	1.3	20
1129	Potential role of indolelactate and butyrate in multiple sclerosis revealed by integrated microbiome-metabolome analysis. Cell Reports Medicine, 2021, 2, 100246.	3.3	37
1130	Integrative biochemical, proteomics and metabolomics cerebrospinal fluid biomarkers predict clinical conversion to multiple sclerosis. Brain Communications, 2021, 3, fcab084.	1.5	14
1132	An integrated strategy of MS-network-based offline 2DLC-QTOF-MS/MS coupled with UHPLC-QTRAP®-MS/MS for the characterization and quantification of the non-polysaccharides in Sijunzi decoction. Analytical and Bioanalytical Chemistry, 2021, 413, 3511-3527.	1.9	17
1133	Effect of Mastiha supplementation on NAFLD: The MAST4HEALTH Randomised, Controlled Trial. Molecular Nutrition and Food Research, 2021, 65, e2001178.	1.5	19
1134	Drug Repurposing in Oncology, an Attractive Opportunity for Novel Combinatorial Regimens. Current Medicinal Chemistry, 2021, 28, 2114-2136.	1.2	6
1135	A literature survey of all volatiles from healthy human breath and bodily fluids: the human volatilome. Journal of Breath Research, 2021, 15, 034001.	1.5	111
1136	Metabolomic profile associated with obstructive sleep apnoea severity in obese pregnant women with gestational diabetes mellitus: A pilot study. Journal of Sleep Research, 2021, 30, e13327.	1.7	8
1137	Identification of biomarkers to diagnose diseases and find adverse drug reactions by metabolomics. Drug Metabolism and Pharmacokinetics, 2021, 37, 100373.	1.1	36
1138	UPLC-MS-Based Serum Metabolomics Reveals Potential Biomarkers of Ang II-Induced Hypertension in Mice. Frontiers in Cardiovascular Medicine, 2021, 8, 683859.	1.1	1
1140	Modifying gut integrity and microbiome in children with severe acute malnutrition using legume-based feeds (MIMBLE): A pilot trial. Cell Reports Medicine, 2021, 2, 100280.	3.3	14
1141	M. tuberculosis curli pili (MTP) is associated with alterations in carbon, fatty acid and amino acid metabolism in a THP-1 macrophage infection model. Microbial Pathogenesis, 2021, 154, 104806.	1.3	3
1142	Modulation of Gastrointestinal Mucus Properties with Ionic Liquids for Drug Delivery. Advanced Healthcare Materials, 2021, 10, e2002192.	3.9	27
1143	Emerging role of metabolomics in protein conformational disorders. Expert Review of Proteomics, 2021, 18, 395-410.	1.3	0
1144	Therapeutic Targeting of Repurposed Anticancer Drugs in Alzheimer's Disease: Using the Multiomics Approach. ACS Omega, 2021, 6, 13870-13887.	1.6	13

#	Article	IF	CITATIONS
1145	Longitudinal Profiles of Dietary and Microbial Metabolites in Formula- and Breastfed Infants. Frontiers in Molecular Biosciences, 2021, 8, 660456.	1.6	19
1147	Gaining Insights Into Metabolic Networks Using Chemometrics and Bioinformatics: Chronic Kidney Disease as a Clinical Model. Frontiers in Molecular Biosciences, 2021, 8, 682559.	1.6	5
1148	Global-Scale Metabolomic Profiling of Human Hair for Simultaneous Monitoring of Endogenous Metabolome, Short- and Long-Term Exposome. Frontiers in Chemistry, 2021, 9, 674265.	1.8	16
1149	Aspergillus Metabolome Database for Mass Spectrometry Metabolomics. Journal of Fungi (Basel,) Tj ETQq1 1 0.78	34314 rgB 1.5	T <u>/</u> Overlock
1150	Metabolomic profiling identifies complex lipid species and amino acid analogues associated with response to weight loss interventions. PLoS ONE, 2021, 16, e0240764.	1.1	9
1151	Metabolomics patterns of breast cancer tumors using mass spectrometry imaging. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 1089-1099.	1.7	7
1152	An integrative network analysis framework for identifying molecular functions in complex disorders examining major depressive disorder as a test case. Scientific Reports, 2021, 11, 9645.	1.6	3
1153	Systematic evaluation of sample preparation strategy for GC-MS-based plasma metabolomics and its application in osteoarthritis. Analytical Biochemistry, 2021, 621, 114153.	1.1	6
1154	Using lipid profiling to better characterize metabolic differences in apolipoprotein E (APOE) genotype among community-dwelling older Black men. GeroScience, 2022, 44, 1083-1094.	2.1	2
1155	The remodel of the "central dogma― a metabolomics interaction perspective. Metabolomics, 2021, 17, 48.	1.4	21
1156	The Effect of Blood Contained in the Samples on the Metabolomic Profile of Mouse Brain Tissue: A Study by NMR Spectroscopy. Molecules, 2021, 26, 3096.	1.7	11
1159	A Bioinformatics Investigation into the Pharmacological Mechanisms of Sodium-Clucose Co-transporter 2 Inhibitors in Diabetes Mellitus and Heart Failure Based on Network Pharmacology. Cardiovascular Drugs and Therapy, 2022, 36, 713-726.	1.3	6
1160	Ultra-high-performance liquid chromatography high-resolution mass spectrometry variants for metabolomics research. Nature Methods, 2021, 18, 733-746.	9.0	143
1161	Supervised topic modeling for predicting molecular substructure from mass spectrometry. F1000Research, 0, 10, 403.	0.8	4
1162	LipidSig: a web-based tool for lipidomic data analysis. Nucleic Acids Research, 2021, 49, W336-W345.	6.5	38
1163	Discovering the landscape of protein modifications. Molecular Cell, 2021, 81, 1868-1878.	4.5	43
1164	Predictable cholesterol binding sites in GPCRs lack consensus motifs. Structure, 2021, 29, 499-506.e3.	1.6	45
1165	Streptococcus pneumoniae, S. pyogenes and S. agalactiae membrane phospholipid remodelling in response to human serum. Microbiology (United Kingdom), 2021, 167, .	0.7	10

#	Article	IF	CITATIONS
1166	Dysregulation of Glycerophosphocholines in the Cutaneous Lesion Caused by Leishmania major in Experimental Murine Models. Pathogens, 2021, 10, 593.	1.2	7
1167	The Ability to Normalise Energy Metabolism in Advanced COVID-19 Disease Seems to Be One of the Key Factors Determining the Disease Progression—A Metabolomic NMR Study on Blood Plasma. Applied Sciences (Switzerland), 2021, 11, 4231.	1.3	19
1168	The Effects of Sampling and Storage Conditions on the Metabolite Profile of the Marine Sponge Geodia barretti. Frontiers in Chemistry, 2021, 9, 662659.	1.8	4
1169	Metabolomic Biomarkers in Polycystic Ovary Syndrome: A Review of the Evidence. Seminars in Reproductive Medicine, 2021, 39, 102-110.	0.5	8
1170	Advances in the Study of Metabolomics and Metabolites in Some Species Interactions. Molecules, 2021, 26, 3311.	1.7	32
1171	The Synergistic Effects of 5-Aminosalicylic Acid and Vorinostat in the Treatment of Ulcerative Colitis. Frontiers in Pharmacology, 2021, 12, 625543.	1.6	10
1172	Novel Biomarkers of Habitual Alcohol Intake and Associations With Risk of Pancreatic and Liver Cancers and Liver Disease Mortality. Journal of the National Cancer Institute, 2021, 113, 1542-1550.	3.0	20
1173	Current State of SLC and ABC Transporters in the Skin and Their Relation to Sweat Metabolites and Skin Diseases. Proteomes, 2021, 9, 23.	1.7	9
1174	Quantum Chemistry Calculations for Metabolomics. Chemical Reviews, 2021, 121, 5633-5670.	23.0	47
1175	Genomics, Exometabolomics, and Metabolic Probing Reveal Conserved Proteolytic Metabolism of Thermoflexus hugenholtzii and Three Candidate Species From China and Japan. Frontiers in Microbiology, 2021, 12, 632731.	1.5	8
1176	GC–MS and Surface Characteristics of Polyvinyl Siloxane–An <i>In Vitro</i> Analysis. Journal of Chromatographic Science, 2022, 60, 111-116.	0.7	3
1177	Monosodium Glutamate Induces Changes in Hepatic and Renal Metabolic Profiles and Gut Microbiome of Wistar Rats. Nutrients, 2021, 13, 1865.	1.7	13
1178	Malonate utilization by <i>Pseudomonas aeruginosa</i> affects quorumâ€sensing and virulence and leads to formation of mineralized biofilmâ€ike structures. Molecular Microbiology, 2021, 116, 516-537.	1.2	6
1179	Influence of Age, Sex, and Diet on the Human Fecal Metabolome Investigated by ¹ H NMR Spectroscopy. Journal of Proteome Research, 2021, 20, 3642-3653.	1.8	16
1180	Multiomic Big Data Analysis Challenges: Increasing Confidence in the Interpretation of Artificial Intelligence Assessments. Analytical Chemistry, 2021, 93, 7763-7773.	3.2	18
1181	Perspectives in systems nephrology. Cell and Tissue Research, 2021, 385, 475-488.	1.5	7
1182	Mass spectrometryâ€based strategies for singleâ€cell metabolomics. Mass Spectrometry Reviews, 2023, 42, 67-94.	2.8	27
1183	Omics and Transgenic Analyses Reveal that Salvianolic Acid B Exhibits its Anti-Inflammatory Effects through Inhibiting the Mincle-Syk-Related Pathway in Macrophages. Journal of Proteome Research, 2021, 20, 3734-3748.	1.8	9

#	Article	IF	CITATIONS
1184	Up-Regulation of Specific Bioactive Lipids in Celiac Disease. Nutrients, 2021, 13, 2271.	1.7	5
1186	Effect of Protoberberine-Rich Fraction of Chelidonium majus L. on Endometriosis Regression. Pharmaceutics, 2021, 13, 931.	2.0	6
1187	Serum Metabolites Responding in a Dose-Dependent Manner to the Intake of a High-Fat Meal in Normal Weight Healthy Men Are Associated with Obesity. Metabolites, $2021,11,392.$	1.3	4
1188	Extracellular Metabolites Profile of Different Stages Colorectal Cancer Cell Lines. Science Letters, 2021, 15, 26-41.	0.5	0
1190	Intraspecific variation in polar and nonpolar metabolite profiles of a threatened Caribbean coral. Metabolomics, 2021, 17, 60.	1.4	5
1191	Depletion of acetate-producing bacteria from the gut microbiota facilitates cognitive impairment through the gut-brain neural mechanism in diabetic mice. Microbiome, 2021, 9, 145.	4.9	56
1192	Higher Prevalence of Bacteroides fragilis in Crohn's Disease Exacerbations and Strain-Dependent Increase of Epithelial Resistance. Frontiers in Microbiology, 2021, 12, 598232.	1.5	18
1193	Advanced tandem mass spectrometry in metabolomics and lipidomics—methods and applications. Analytical and Bioanalytical Chemistry, 2021, 413, 5927-5948.	1.9	61
1194	Plasma Metabolomic Signatures of Healthy Dietary Patterns in the Chronic Renal Insufficiency Cohort (CRIC) Study. Journal of Nutrition, 2021, 151, 2894-2907.	1.3	12
1195	Ultrafiltration-based Sample Preparation for Pharmaceutical Analysis. Current Pharmaceutical Analysis, 2021, 17, 951-959.	0.3	1
1196	Systematic Feature Filtering in Exploratory Metabolomics: Application toward Biomarker Discovery. Analytical Chemistry, 2021, 93, 9103-9110.	3.2	6
1197	A metabolome-wide association study in the general population reveals decreased levels of serum laurylcarnitine in people with depression. Molecular Psychiatry, 2021, 26, 7372-7383.	4.1	23
1198	Towards Standards for Human Fecal Sample Preparation in Targeted and Untargeted LC-HRMS Studies. Metabolites, 2021, 11, 364.	1.3	12
1199	MS2Compound: A User-Friendly Compound Identification Tool for LC-MS/MS-Based Metabolomics Data. OMICS A Journal of Integrative Biology, 2021, 25, 389-399.	1.0	10
1200	Soft Tissue Sarcoma: An Insight on Biomarkers at Molecular, Metabolic and Cellular Level. Cancers, 2021, 13, 3044.	1.7	20
1201	peakPantheR, an R package for large-scale targeted extraction and integration of annotated metabolic features in LC–MS profiling datasets. Bioinformatics, 2021, 37, 4886-4888.	1.8	19
1202	Systemic and mitochondrial effects of metabolic inflexibility induced by high fat diet in Drosophila melanogaster. Insect Biochemistry and Molecular Biology, 2021, 133, 103556.	1.2	14
1203	Polyphenolic Composition and <i>in Vitro</i> Antihypertensive and Antiâ€Inflammatory Effects of <i>Cuphea lindmaniana</i> and <i>Cuphea urbaniana</i> . Chemistry and Biodiversity, 2021, 18, e2100041.	1.0	4

#	Article	IF	CITATIONS
1204	Comparison of dried blood spot and plasma sampling for untargeted metabolomics. Metabolomics, 2021, 17, 62.	1.4	13
1205	Non-Invasive Differentiation of M1 and M2 Activation in Macrophages Using Hyperpolarized 13C MRS of Pyruvate and DHA at 1.47 Tesla. Metabolites, 2021 , 11 , 410 .	1.3	6
1206	Metabolic Changes in Early-Stage Nonâ€"Small Cell Lung Cancer Patients after Surgical Resection. Cancers, 2021, 13, 3012.	1.7	9
1207	Curating and comparing 114 strain-specific genome-scale metabolic models of Staphylococcus aureus. Npj Systems Biology and Applications, 2021, 7, 30.	1.4	10
1208	From QCEIMS to QCxMS: A Tool to Routinely Calculate CID Mass Spectra Using Molecular Dynamics. Journal of the American Society for Mass Spectrometry, 2021, 32, 1735-1751.	1.2	30
1209	Three-Dimensional Cell Metabolomics Deciphers the Anti-Angiogenic Properties of the Radioprotectant Amifostine. Cancers, 2021, 13, 2877.	1.7	6
1210	Urine NMR Metabolomics Profile of Preterm Infants With Necrotizing Enterocolitis Over the First Two Months of Life: A Pilot Longitudinal Case-Control Study. Frontiers in Molecular Biosciences, 2021, 8, 680159.	1.6	9
1212	Multi-Omics Approaches in Immunological Research. Frontiers in Immunology, 2021, 12, 668045.	2.2	22
1213	Buckwheat (Fagopyrum esculentum Moench) characterization as adjunct in beer brewing. Food Science and Technology, 2021, 41, 265-272.	0.8	10
1214	Combined epigenetic and metabolic treatments overcome differentiation blockade in acute myeloid leukemia. IScience, 2021, 24, 102651.	1.9	4
1215	Metabolomic Laboratory-Developed Tests: Current Status and Perspectives. Metabolites, 2021, 11, 423.	1.3	16
1216	Plasmatic Oxidative and Metabonomic Profile of Patients with Different Degrees of Biliary Acute Pancreatitis Severity. Antioxidants, 2021, 10, 988.	2.2	7
1218	Integrative Multi-Omics Reveals Serum Markers of Tuberculosis in Advanced HIV. Frontiers in Immunology, 2021, 12, 676980.	2.2	12
1219	Application of metabolomics in clinical and laboratory gastrointestinal oncology. World Journal of Gastrointestinal Oncology, 2021, 13, 536-549.	0.8	5
1220	Untargeted metabolomics profiling of skeletal muscle samples from malignant hyperthermia susceptible patients. Canadian Journal of Anaesthesia, 2021, 68, 761-772.	0.7	9
1221	<i>Omics Untargeted Key Script</i> : R-Based Software Toolbox for Untargeted Metabolomics with Bladder Cancer Biomarkers Discovery Case Study. Journal of Proteome Research, 2022, 21, 833-847.	1.8	12
1222	Spatial visualization of comprehensive brain neurotransmitter systems and neuroactive substances by selective in situ chemical derivatization mass spectrometry imaging. Nature Protocols, 2021, 16, 3298-3321.	5 . 5	27
1223	Monitoring the Reaction of the Body State to Antibiotic Treatment against Helicobacter pylori via Infrared Spectroscopy: A Case Study. Molecules, 2021, 26, 3474.	1.7	9

#	Article	IF	CITATIONS
1224	Identification of a Preliminary Plasma Metabolome-based Biomarker for Circadian Phase in Humans. Journal of Biological Rhythms, 2021, 36, 369-383.	1.4	11
1225	Sugar phosphate activation of the stress sensor elF2B. Nature Communications, 2021, 12, 3440.	5.8	17
1226	Linking the IL-17A immune response with NMR-based faecal metabolic profile in IBD patients treated with Mastiha. Biomedicine and Pharmacotherapy, 2021, 138, 111535.	2.5	10
1227	Combined Urinary Biomarkers to Assess Coffee Intake Using Untargeted Metabolomics: Discovery in Three Pilot Human Intervention Studies and Validation in Cross-Sectional Studies. Journal of Agricultural and Food Chemistry, 2021, 69, 7230-7242.	2.4	3
1228	CRISPR screens in physiologic medium reveal conditionally essential genes in human cells. Cell Metabolism, 2021, 33, 1248-1263.e9.	7.2	77
1229	Using nontargeted LC-MS metabolomics to identify the Association of Biomarkers in pig feces with feed efficiency. Porcine Health Management, 2021, 7, 39.	0.9	11
1230	The Physicochemical Characteristics of Gelam Honey and Its Outcome on the Female Reproductive Tissue of Sprague–Dawley Rats: A Preliminary Study. Molecules, 2021, 26, 3346.	1.7	4
1231	Evaluating the Robustness of Biomarkers of Dairy Food Intake in a Free-Living Population Using Single- and Multi-Marker Approaches. Metabolites, 2021, 11, 395.	1.3	4
1232	Intergenerational trauma transmission is associated with brain metabotranscriptome remodeling and mitochondrial dysfunction. Communications Biology, 2021, 4, 783.	2.0	11
1233	Data Processing Thresholds for Abundance and Sparsity and Missed Biological Insights in an Untargeted Chemical Analysis of Blood Specimens for Exposomics. Frontiers in Public Health, 2021, 9, 653599.	1.3	12
1234	Metabolic perturbations sensitize triple-negative breast cancers to apoptosis induced by BH3 mimetics. Science Signaling, 2021, 14, .	1.6	10
1235	CLARINET: Efficient learning of dynamic network models from literature. Bioinformatics Advances, 0, ,	0.9	5
1236	Bioactivity descriptors for uncharacterized chemical compounds. Nature Communications, 2021, 12, 3932.	5.8	44
1237	Urinary biomarkers indicative of recovery from spinal cord injury: A pilot study. IBRO Neuroscience Reports, 2021, 10, 178-185.	0.7	5
1238	Mining microbes for mental health: Determining the role of microbial metabolic pathways in human brain health and disease. Neuroscience and Biobehavioral Reviews, 2021, 125, 698-761.	2.9	80
1239	Metabolomic Profiling of Human Urine Samples Using LC-TIMS-QTOF Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2021, 32, 2072-2080.	1.2	9
1240	Continuous Monitoring Reveals Protective Effects of <i>N</i> ê€Acetylcysteine Amide on an Isogenic Microphysiological Model of the Neurovascular Unit. Small, 2021, 17, e2101785.	5.2	19
1242	Metabolic changes in colorectal carcinomas are key factors for the early detection of neoplastic change. Annals of Clinical and Biomedical Research, 2021, 2, .	0.0	O

#	Article	IF	CITATIONS
1243	Metabolomics and metabolites in ischemic stroke. Reviews in the Neurosciences, 2022, 33, 181-205.	1.4	11
1244	Impact of Weaning and Maternal Immune Activation on the Metabolism of Pigs. Frontiers in Molecular Biosciences, 2021, 8, 660764.	1.6	7
1245	Radicalâ€free hyperpolarized MRI using endogenously occurring pyruvate analogues and UVâ€induced nonpersistent radicals. NMR in Biomedicine, 2021, 34, e4584.	1.6	2
1246	Brain-dead and coma patients exhibit different serum metabolic profiles: preliminary investigation of a novel diagnostic approach in neurocritical care. Scientific Reports, 2021, 11, 15519.	1.6	1
1247	Developing the building blocks to elucidate the impact of the urban exposome on cardiometabolic-pulmonary disease. Environmental Epidemiology, 2021, 5, e162.	1.4	22
1248	An annotation database for chemicals of emerging concern in exposome research. Environment International, 2021, 152, 106511.	4.8	29
1249	Disease Differentiation and Monitoring of Anti-TNF Treatment in Rheumatoid Arthritis and Spondyloarthropathies. International Journal of Molecular Sciences, 2021, 22, 7389.	1.8	3
1250	Signals from the Circle: Tricarboxylic Acid Cycle Intermediates as Myometabokines. Metabolites, 2021, 11, 474.	1.3	13
1251	Random forest classification for predicting lifespan-extending chemical compounds. Scientific Reports, 2021, 11, 13812.	1.6	21
1252	Complementary Nuclear Magnetic Resonance-Based Metabolomics Approaches for Glioma Biomarker Identification in a <i>Drosophila melanogaster</i> Model. Journal of Proteome Research, 2021, 20, 3977-3991.	1.8	4
1253	A Comprehensive Non-targeted Analysis Study of the Prenatal Exposome. Environmental Science & Emp; Technology, 2021, 55, 10542-10557.	4.6	31
1254	Age-Related Neurometabolomic Signature of Mouse Brain. ACS Chemical Neuroscience, 2021, 12, 2887-2902.	1.7	2
1255	Mass spectrometry-based metabolomics: a guide for annotation, quantification and best reporting practices. Nature Methods, 2021, 18, 747-756.	9.0	403
1256	Using machine learning approaches for multi-omics data analysis: A review. Biotechnology Advances, 2021, 49, 107739.	6.0	277
1257	Bacterial Composition and Metabolomics of Dental Plaque From Adolescents. Frontiers in Cellular and Infection Microbiology, 2021, 11, 716493.	1.8	26
1258	Personalized Metabolic Profile by Synergic Use of NMR and HRMS. Molecules, 2021, 26, 4167.	1.7	3
1259	Linking the $\langle i \rangle$ FTO $\langle i \rangle$ obesity rs1421085 variant circuitry to cellular, metabolic, and organismal phenotypes in vivo. Science Advances, 2021, 7, .	4.7	19
1260	Two human metabolites rescue a C. elegans model of Alzheimer's disease via a cytosolic unfolded protein response. Communications Biology, 2021, 4, 843.	2.0	6

#	Article	IF	CITATIONS
1261	Characterization of the Exometabolome of Nitrosopumilus maritimus SCM1 by Liquid Chromatography–lon Mobility Mass Spectrometry. Frontiers in Microbiology, 2021, 12, 658781.	1.5	4
1262	<i>Vibrio fischeri</i> imports and assimilates sulfate during symbiosis with <i>Euprymna scolopes</i> Molecular Microbiology, 2021, 116, 926-942.	1.2	3
1263	Benefits of Innovative and Fully Water-Compatible Stationary Phases of Thin-Film Microextraction (TFME) Blades. Molecules, 2021, 26, 4413.	1.7	5
1264	The role of fecal sulfur metabolome in inflammatory bowel diseases. International Journal of Medical Microbiology, 2021, 311, 151513.	1.5	40
1265	A system biology approach based on metabolic biomarkers and protein–protein interactions for identifying pathways underlying schizophrenia and bipolar disorder. Scientific Reports, 2021, 11, 14450.	1.6	4
1266	Investigation of Andrographolide Effect on Non-Infected Red Blood Cells Using the 1H-NMR-Based Metabolomics Approach. Metabolites, 2021, 11, 486.	1.3	4
1267	Model-based assessment of mammalian cell metabolic functionalities using omics data. Cell Reports Methods, 2021, 1, 100040.	1.4	25
1268	High-Throughput Non-targeted Chemical Structure Identification Using Gas-Phase Infrared Spectra. Analytical Chemistry, 2021, 93, 10688-10696.	3.2	4
1271	Discovery and mining of enzymes from the human gut microbiome. Trends in Biotechnology, 2022, 40, 240-254.	4.9	21
1272	Metabolic Profiling of Plasma in Patients with Irritable Bowel Syndrome after a 4-Week Starch- and Sucrose-Reduced Diet. Metabolites, 2021, 11, 440.	1.3	10
1273	Exhaled volatilome analysis as a useful tool to discriminate asthma with other coexisting atopic diseases in women of childbearing age. Scientific Reports, 2021, 11, 13823.	1.6	9
1274	LC–MS/MS method validation for the quantitation of 1-kestose in wheat flour. Journal of Food Composition and Analysis, 2021, 100, 103930.	1.9	4
1275	Individual variability in human urinary metabolites identifies ageâ€related, body mass indexâ€related, and sexâ€related biomarkers. Molecular Genetics & Enomic Medicine, 2021, 9, e1738.	0.6	5
1276	Sex-Specific Relationship between the Cardiorespiratory Fitness and Plasma Metabolite Patterns in Healthy Humans—Results of the KarMeN Study. Metabolites, 2021, 11, 463.	1.3	6
1277	Multiplatform metabolomics for an integrative exploration of metabolic syndrome in older men. EBioMedicine, 2021, 69, 103440.	2.7	18
1278	A metabolomics pipeline for the mechanistic interrogation of the gut microbiome. Nature, 2021, 595, 415-420.	13.7	198
1280	Development of an Accurate Mass Retention Time Database for Untargeted Metabolomic Analysis and Its Application to Plasma and Urine Pediatric Samples. Molecules, 2021, 26, 4256.	1.7	6
1281	Mass spectrometry investigation of nucleoside adducts of fatty acid hydroperoxides from oxidation of linolenic and linoleic acids. Journal of Chromatography A, 2021, 1649, 462236.	1.8	6

#	ARTICLE	IF	CITATIONS
1282	Analytical aspects of meet-in-metabolite analysis for molecular pathway reconstitution from exposure to adverse outcome. Molecular Aspects of Medicine, 2021, , 101006.	2.7	5
1283	DecoID improves identification rates in metabolomics through database-assisted MS/MS deconvolution. Nature Methods, 2021, 18, 779-787.	9.0	34
1284	Metabolomic Studies for the Evaluation of Toxicity Induced by Environmental Toxicants on Model Organisms. Metabolites, 2021, 11, 485.	1.3	17
1285	Comparative Proteomic and Metabolomic Analysis of Human Osteoblasts, Differentiated from Dental Pulp Stem Cells, Hinted Crucial Signaling Pathways Promoting Osteogenesis. International Journal of Molecular Sciences, 2021, 22, 7908.	1.8	4
1286	Chronic Kidney Disease Cohort Studies: A Guide to Metabolome Analyses. Metabolites, 2021, 11, 460.	1.3	4
1287	Integrated human/SARS-CoV-2 metabolic models present novel treatment strategies against COVID-19. Life Science Alliance, 2021, 4, e202000954.	1.3	13
1288	High-Resolution QTOF-MRM for Highly Accurate Identification and Quantification of Trace Levels of Triterpenoids in <i>Ganoderma lucidum</i> Mycelium. Journal of the American Society for Mass Spectrometry, 2021, 32, 2451-2462.	1.2	3
1289	CYPstrate: A Set of Machine Learning Models for the Accurate Classification of Cytochrome P450 Enzyme Substrates and Non-Substrates. Molecules, 2021, 26, 4678.	1.7	5
1290	Exometabolome profiling reveals activation of the carnitine buffering pathway in fedâ€batch cultures of CHO cells coâ€fed with glucose and lactic acid. Biotechnology Progress, 2021, , e3198.	1.3	4
1291	Intratumour heterogeneity in microRNAs expression regulates glioblastoma metabolism. Scientific Reports, 2021, 11, 15908.	1.6	7
1292	An extended reconstruction of human gut microbiota metabolism of dietary compounds. Nature Communications, 2021, 12, 4728.	5.8	19
1293	Construction and analysis of an integrated biological network of Escherichia coli. Systems Microbiology and Biomanufacturing, 2022, 2, 165-176.	1.5	3
1295	NICEdrug.ch, a workflow for rational drug design and systems-level analysis of drug metabolism. ELife, 2021, 10, .	2.8	8
1296	Spontaneous hydrolysis and spurious metabolic properties of \hat{l}_{\pm} -ketoglutarate esters. Nature Communications, 2021, 12, 4905.	5.8	17
1297	Prevotella copri increases fat accumulation in pigs fed with formula diets. Microbiome, 2021, 9, 175.	4.9	100
1298	Gut and Vagina Microbiota Associated With Estrus Return of Weaning Sows and Its Correlation With the Changes in Serum Metabolites. Frontiers in Microbiology, 2021, 12, 690091.	1.5	8
1300	Closing the gap between in vivo and in vitro omics: using QA/QC to strengthen ex vivo NMR metabolomics. NMR in Biomedicine, 2021, , e4594.	1.6	5
1301	An in vitro study on the differentiated metabolic mechanism of chloroquine-resistant Plasmodium falciparum using high-resolution metabolomics. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2021, 84, 859-874.	1.1	2

#	Article	IF	Citations
1302	Metabolomic Recovery as a Result of Ischemic Preconditioning Was More Pronounced in Hippocampus than in Cortex That Appeared More Sensitive to Metabolomic Blood Components. Metabolites, 2021, 11, 516.	1.3	5
1303	Comparison of High-Resolution Fourier Transform Mass Spectrometry Platforms for Putative Metabolite Annotation. Analytical Chemistry, 2021, 93, 12374-12382.	3.2	7
1305	Difference in the metabolome of colostrum from healthy mothers and mothers with type 2 diabetic mellitus. European Food Research and Technology, 2021, 247, 2699-2707.	1.6	0
1306	Association predictions of genomics, proteinomics, transcriptomics, microbiome, metabolomics, pathomics, radiomics, drug, symptoms, environment factor, and disease networks: A comprehensive approach. Medicinal Research Reviews, 2022, 42, 441-461.	5.0	33
1307	Detection of Lung Cancer via Blood Plasma and 1H-NMR Metabolomics: Validation by a Semi-Targeted and Quantitative Approach Using a Protein-Binding Competitor. Metabolites, 2021, 11, 537.	1.3	6
1308	Reproducible Lipid Alterations in Patient-Derived Breast Cancer Xenograft FFPE Tissue Identified with MALDI MSI for Pre-Clinical and Clinical Application. Metabolites, 2021, 11, 577.	1.3	9
1309	Micellar Antibiotics of Bacillus. Pharmaceutics, 2021, 13, 1296.	2.0	9
1310	Evidence for glutamine synthetase function in mouse spinal cord oligodendrocytes. Glia, 2021, 69, 2812-2827.	2.5	13
1312	Exploring functionality of the reverse \hat{l}^2 -oxidation pathway in Corynebacterium glutamicum for production of adipic acid. Microbial Cell Factories, 2021, 20, 155.	1.9	8
1313	Production of Functional Buttermilk and Soymilk Using Pediococcus acidilactici BD16 (alaD+). Molecules, 2021, 26, 4671.	1.7	17
1314	A Cross-Platform Metabolomics Comparison Identifies Serum Metabolite Signatures of Liver Fibrosis Progression in Chronic Hepatitis C Patients. Frontiers in Molecular Biosciences, 2021, 8, 676349.	1.6	11
1315	Disentangling Independent and Mediated Causal Relationships Between Blood Metabolites, Cognitive Factors, and Alzheimer's Disease. Biological Psychiatry Global Open Science, 2022, 2, 167-179.	1.0	6
1316	The Combined Treatment With the FLT3-Inhibitor AC220 and the Complex I Inhibitor IACS-010759 Synergistically Depletes Wt- and FLT3-Mutated Acute Myeloid Leukemia Cells. Frontiers in Oncology, 2021, 11, 686765.	1.3	10
1317	Food Composition Databases: Does It Matter to Human Health?. Nutrients, 2021, 13, 2816.	1.7	26
1318	Personalised Precision Medicine- a Novel Approach for Oral Cancer Management., 0,,.		2
1319	Evaluation of the Oxidative Stability of Wholegrain Flours Using Nontargeted Ultraperformance Liquid Chromatography Coupled with Electrospray Ionization Quadrupole Time-of-Flight (UPLC-ESI-QTOF) Metabolomics. ACS Food Science & Technology, 2021, 1, 1151-1159.	1.3	2
1320	Analysis of the Thermal Decomposition Products of Pathological and Healthy Tissues in Paranasal Sinuses: A High-Resolution Terahertz Gas Spectroscopy Study. Applied Sciences (Switzerland), 2021, 11, 7562.	1.3	6
1321	Research Progress of Metabolomics in Asthma. Metabolites, 2021, 11, 567.	1.3	21

#	Article	IF	CITATIONS
1322	Xconnector: Retrieving and visualizing metabolites and pathways information from various database resources. Journal of Proteomics, 2021, 245, 104302.	1.2	3
1323	Thioesterase induction by 2,3,7,8-tetrachlorodibenzo-p-dioxin results in a futile cycle that inhibits hepatic \hat{I}^2 -oxidation. Scientific Reports, 2021, 11, 15689.	1.6	14
1324	Current progress in metabolomics of gestational diabetes mellitus. World Journal of Diabetes, 2021, 12, 1164-1186.	1.3	11
1325	Large-Scale Implementation and Flaw Investigation of Human Serum Suspect Screening Analysis for Industrial Chemicals. Journal of the American Society for Mass Spectrometry, 2021, 32, 2425-2435.	1.2	5
1326	CRB-SWATH: A Method for Enhancing Untargeted Precursor Ion Extraction and Automatically Constructing Their Tandem Mass Spectra from SWATH Datasets by Chromatographic Retention Behaviors. Analytical Chemistry, 2021, 93, 12273-12280.	3.2	6
1327	Response of Osteosarcoma Cell Metabolism to Platinum and Palladium Chelates as Potential New Drugs. Molecules, 2021, 26, 4805.	1.7	5
1328	Comparison of Antioxidant Properties of a Conjugate of Taxifolin with Glyoxylic Acid and Selected Flavonoids. Antioxidants, 2021, 10, 1262.	2.2	19
1329	5′-Nucleotidase Plays a Key Role in Uric Acid Metabolism of Bombyx mori. Cells, 2021, 10, 2243.	1.8	11
1330	Non-Invasive Detection and Staging of Colorectal Cancer Using a Portable Electronic Nose. Sensors, 2021, 21, 5440.	2.1	21
1331	Longitudinal metabolomics of human plasma reveals prognostic markers of COVID-19 disease severity. Cell Reports Medicine, 2021, 2, 100369.	3.3	61
1332	α-Cyano-4-hydroxycinnamic Acid and Tri-Potassium Citrate Salt Pre-Coated Silicon Nanopost Array Provides Enhanced Lipid Detection for High Spatial Resolution MALDI Imaging Mass Spectrometry. Analytical Chemistry, 2021, 93, 12243-12249.	3.2	9
1333	rMSlannotation: A peak annotation tool for mass spectrometry imaging based on the analysis of isotopic intensity ratios. Analytica Chimica Acta, 2021, 1171, 338669.	2.6	11
1334	A quantitative systems pharmacology modeling platform for evaluating triglyceride profiles in patients with high triglycerides receiving evinacumab. CPT: Pharmacometrics and Systems Pharmacology, 2021, 10, 1332-1342.	1.3	2
1335	Computational Approaches for Cancer-Fighting: From Gene Expression to Functional Foods. Cancers, 2021, 13, 4207.	1.7	2
1336	Untargeted metabolomics and infrared ion spectroscopy identify biomarkers for pyridoxine-dependent epilepsy. Journal of Clinical Investigation, 2021, 131, .	3.9	33
1337	CFM-ID 4.0: More Accurate ESI-MS/MS Spectral Prediction and Compound Identification. Analytical Chemistry, 2021, 93, 11692-11700.	3.2	151
1338	Utilizing a Biology-Driven Approach to Map the Exposome in Health and Disease: An Essential Investment to Drive the Next Generation of Environmental Discovery. Environmental Health Perspectives, 2021, 129, 85001.	2.8	20
1339	Comprehensive polar metabolomics and lipidomics profiling discriminates the transformed from the non-transformed state in colon tissue and cell lines. Scientific Reports, 2021, 11, 17249.	1.6	5

#	Article	IF	CITATIONS
1340	Specific sweat metabolite profile in ocular Behcet's disease. International Immunopharmacology, 2021, 97, 107812.	1.7	12
1341	Circulating Metabolomic Analysis following Cecal Ligation and Puncture in Young and Aged Mice Reveals Age-Associated Temporal Shifts in Nicotinamide and Histidine/Histamine Metabolic Pathways. Oxidative Medicine and Cellular Longevity, 2021, 2021, 1-15.	1.9	3
1342	Mammary Tumorigenesis and Metabolome in Male Adipose Specific Monocyte Chemotactic Protein-1 Deficient MMTV-PyMT Mice Fed a High-Fat Diet. Frontiers in Oncology, 2021, 11, 667843.	1.3	4
1343	Pre-Treatment of Industrial Tubing with Aqueous Hop Derived Metabolites Reduces Lactobacillus brevis Biofouling. Journal of the American Society of Brewing Chemists, 0, , 1-11.	0.8	0
1344	Association of antioxidant monophenolic compounds with \hat{l}^2 -cyclodextrin-functionalized cellulose and starch substrates. Carbohydrate Polymers, 2021, 267, 118189.	5.1	16
1345	Deep Investigating the Changes of Gut Microbiome and Its Correlation With the Shifts of Host Serum Metabolome Around Parturition in Sows. Frontiers in Microbiology, 2021, 12, 729039.	1.5	7
1346	Multiomics Method Enabled by Sequential Metabolomics and Proteomics for Human Pluripotent Stem-Cell-Derived Cardiomyocytes. Journal of Proteome Research, 2021, 20, 4646-4654.	1.8	10
1347	Effect of intravenous ghrelin administration, combined with alcohol, on circulating metabolome in heavy drinking individuals with alcohol use disorder. Alcoholism: Clinical and Experimental Research, 2021, 45, 2207-2216.	1.4	3
1348	gutMGene: a comprehensive database for target genes of gut microbes and microbial metabolites. Nucleic Acids Research, 2022, 50, D795-D800.	6.5	67
1349	The Potential of Metabolomic Analyses as Predictive Biomarkers of Preterm Delivery: A Systematic Review. Frontiers in Endocrinology, 2021, 12, 668417.	1.5	5
1350	Cross-Platform Evaluation of Commercially Targeted and Untargeted Metabolomics Approaches to Optimize the Investigation of Psychiatric Disease. Metabolites, 2021, 11, 609.	1.3	6
1351	Application of Artificial Intelligence to Clinical Practice in Inflammatory Bowel Disease – What the Clinician Needs to Know. Journal of Crohn's and Colitis, 2022, 16, 460-471.	0.6	5
1352	Untargeted LCâ€MSâ€based metabonomic analysis of the effect of photoperiod on the testes of broiler roosters. Journal of Animal Physiology and Animal Nutrition, 2021, , .	1.0	1
1353	Chemoselective and Highly Sensitive Quantification of Gut Microbiome and Human Metabolites. Angewandte Chemie - International Edition, 2021, 60, 23232-23240.	7.2	20
1354	Integration of Multi-omics Data Using Probabilistic Graph Models and External Knowledge. Current Bioinformatics, 2021, 16, .	0.7	2
1356	Pre- versus post-operative untargeted plasma nuclear magnetic resonance spectroscopy metabolomics of pheochromocytoma and paraganglioma. Endocrine, 2022, 75, 254-265.	1.1	3
1357	An Extensive Metabolomics Workflow to Discover Cardiotoxin-Induced Molecular Perturbations in Microtissues. Metabolites, 2021, 11, 644.	1.3	2
1358	Metabolomic Response of the Creeping Wood Sorrel Oxalis corniculata to Low-Dose Radiation Exposure from Fukushima's Contaminated Soil. Life, 2021, 11, 990.	1.1	6

#	Article	IF	CITATIONS
1359	Deciphering metabolomic alterations in seminal plasma of crossbred (Bos taurus X Bos indicus) bulls through comparative deep metabolomic analysis. Andrologia, 2021, , e14253.	1.0	4
1360	Using a Two-Sample Mendelian Randomization Method in Assessing the Causal Relationships Between Human Blood Metabolites and Heart Failure. Frontiers in Cardiovascular Medicine, 2021, 8, 695480.	1.1	6
1361	Integrating genomics and multiplatform metabolomics enables metabolite quantitative trait loci detection in breedingâ€relevant apple germplasm. New Phytologist, 2021, 232, 1944-1958.	3.5	7
1362	SARS-CoV2 Infection Alters Tryptophan Catabolism and Phospholipid Metabolism. Metabolites, 2021, 11, 659.	1.3	14
1363	NMR Metabolite Profiles of the Bivalve Mollusc Mytilus galloprovincialis Before and After Immune Stimulation With Vibrio splendidus. Frontiers in Molecular Biosciences, 2021, 8, 686770.	1.6	11
1364	In silico insights into potential gut microbial modulation of NAD+ metabolism and longevity. Journal of Biochemical and Molecular Toxicology, 2021, 35, e22925.	1.4	5
1365	Suspect screening and targeted analyses: Two complementary approaches to characterize human exposure to pesticides. Science of the Total Environment, 2021, 786, 147499.	3.9	13
1366	Metabolomic Approaches to Investigate the Effect of Metformin: An Overview. International Journal of Molecular Sciences, 2021, 22, 10275.	1.8	18
1367	The Impact of Gut Microbiota-Derived Metabolites in Autism Spectrum Disorders. International Journal of Molecular Sciences, 2021, 22, 10052.	1.8	23
1369	A Unique Urinary Metabolic Feature for the Determination of Bladder Cancer, Prostate Cancer, and Renal Cell Carcinoma. Metabolites, 2021, 11, 591.	1.3	11
1370	Metabolomic changes in animal models of depression: a systematic analysis. Molecular Psychiatry, 2021, 26, 7328-7336.	4.1	34
1371	Complex Positive Effects of SGLT-2 Inhibitor Empagliflozin in the Liver, Kidney and Adipose Tissue of Hereditary Hypertriglyceridemic Rats: Possible Contribution of Attenuation of Cell Senescence and Oxidative Stress. International Journal of Molecular Sciences, 2021, 22, 10606.	1.8	15
1372	A merged method for targeted analysis of amino acids and derivatives using parallel reaction monitoring combined with untargeted profiling by HILIC-Q-Orbitrap HRMS. Journal of Pharmaceutical and Biomedical Analysis, 2021, 203, 114208.	1.4	6
1373	Exploring the Pleiotropic Genes and Therapeutic Targets Associated with Heart Failure and Chronic Kidney Disease by Integrating metaCCA and SGLT2 Inhibitors' Target Prediction. BioMed Research International, 2021, 2021, 1-13.	0.9	0
1374	Hypergraph-based logistic matrix factorization for metabolite–disease interaction prediction. Bioinformatics, 2022, 38, 435-443.	1.8	10
1375	Detection of bovine milk adulteration in caprine milk with N-acetyl carbohydrate biomarkers by using 1H nuclear magnetic resonance spectroscopy. Journal of Dairy Science, 2021, 104, 9583-9595.	1.4	17
1376	Data sharing in PredRet for accurate prediction of retention time: Application to plant food bioactive compounds. Food Chemistry, 2021, 357, 129757.	4.2	12
1377	Glucose metabolic crosstalk and regulation in brain function and diseases. Progress in Neurobiology, 2021, 204, 102089.	2.8	64

#	Article	IF	CITATIONS
1378	Metabolomic Analysis Reveals Changes in Plasma Metabolites in Response to Acute Cold Stress and Their Relationships to Metabolic Health in Cold-Acclimatized Humans. Metabolites, 2021, 11, 619.	1.3	8
1379	Extraction Processes Affect the Composition and Bioavailability of Flavones from Lamiaceae Plants: A Comprehensive Review. Processes, 2021, 9, 1675.	1.3	11
1380	Transcriptomic and Metabolomic Analyses Reveals That Exogenous Methyl Jasmonate Regulates Galanthamine Biosynthesis in Lycoris longituba Seedlings. Frontiers in Plant Science, 2021, 12, 713795.	1.7	9
1381	Chemoselective and Highly Sensitive Quantification of Gut Microbiome and Human Metabolites. Angewandte Chemie, 2021, 133, 23420-23428.	1.6	2
1382	Nasopharyngeal metabolomics and machine learning approach for the diagnosis of influenza. EBioMedicine, 2021, 71, 103546.	2.7	16
1383	Microbial community structure and metabolome profiling characteristics of soil contaminated by TNT, RDX, and HMX. Environmental Pollution, 2021, 285, 117478.	3.7	38
1384	Regional lung metabolic profile in a piglet model of cardiopulmonary bypass with circulatory arrest. Metabolomics, 2021, 17, 89.	1.4	4
1385	Bioaccumulation of therapeutic drugs by human gut bacteria. Nature, 2021, 597, 533-538.	13.7	159
1386	Looking at time dependent differentiation of mesenchymal stem cells by culture media using MALDI-TOF-MS. Cell and Tissue Banking, 2022, 23, 653-668.	0.5	2
1387	Serum and urine analysis with gold nanoparticle-assisted laser desorption/ionization mass spectrometry for renal cell carcinoma metabolic biomarkers discovery. Advances in Medical Sciences, 2021, 66, 326-335.	0.9	11
1388	MetaClass, a Comprehensive Classification System for Predicting the Occurrence of Metabolic Reactions Based on the MetaQSAR Database. Molecules, 2021, 26, 5857.	1.7	4
1389	Relationship Between Inflammation and Metabolism in Patients With Newly Presenting Rheumatoid Arthritis. Frontiers in Immunology, 2021, 12, 676105.	2.2	22
1390	Prospects and challenges of cancer systems medicine: from genes to disease networks. Briefings in Bioinformatics, 2022, 23, .	3.2	7
1392	Recent Developments Toward Integrated Metabolomics Technologies (UHPLC-MS-SPE-NMR and) Tj ETQq1 1 0.78-Biosciences, 2021, 8, 720955.	4314 rgBT 1.6	Overlock 9
1393	Applications of Metabolomics to Precision Nutrition. Lifestyle Genomics, 2022, 15, 1-9.	0.6	26
1394	The Transporter-Mediated Cellular Uptake and Efflux of Pharmaceutical Drugs and Biotechnology Products: How and Why Phospholipid Bilayer Transport Is Negligible in Real Biomembranes. Molecules, 2021, 26, 5629.	1.7	14
1395	Multi †omic data integration: A review of concepts, considerations, and approaches. Seminars in Perinatology, 2021, 45, 151456.	1.1	37
1396	Biodegradation of expanded polystyrene by mealworm larvae under different feeding strategies evaluated by metabolic profiling using GC-TOF-MS. Chemosphere, 2021, 281, 130840.	4.2	24

#	Article	IF	CITATIONS
1397	Facile and highly efficient three-phase single drop microextraction in-line coupled with capillary electrophoresis. Journal of Chromatography A, 2021, 1655, 462520.	1.8	8
1398	Complementary Lipidomic, Proteomic, and Mass Spectrometry Imaging Approach to the Characterization of the Acute Effects of Radiation in the Non-human Primate Mesenteric Lymph Node after Partial-body Irradiation with Minimal Bone Marrow Sparing. Health Physics, 2021, 121, 372-383.	0.3	3
1399	Multi-omics analysis of brain tissue metabolome and proteome reveals the protective effect of gross saponins of Tribulus terrestris L. fruit against ischemic stroke in rat. Journal of Ethnopharmacology, 2021, 278, 114280.	2.0	16
1400	Droplet-based extraction mass spectrometry. TrAC - Trends in Analytical Chemistry, 2021, 143, 116366.	5.8	9
1401	Neonatal heel prick mass spectrometry identifies metabolic predictors of AML latency. Leukemia Research, 2021, 109, 106644.	0.4	1
1402	Online pressurized liquid extraction enables directly chemical analysis of herbal medicines: A mini review. Journal of Pharmaceutical and Biomedical Analysis, 2021, 205, 114332.	1.4	2
1403	Blood, urine and semen Volatile Organic Compound (VOC) pattern analysis for assessing health environmental impact in highly polluted areas in Italy. Environmental Pollution, 2021, 286, 117410.	3.7	28
1404	Integration of metabolomic and transcriptomic analyses to characterize the influence of the gill metabolism of Nibea albiflora on the response to Cryptocaryon irritans infection. Veterinary Parasitology, 2021, 298, 109533.	0.7	10
1405	Towards a comprehensive characterisation of the human internal chemical exposome: Challenges and perspectives. Environment International, 2021, 156, 106630.	4.8	39
1406	Development of a single retention time prediction model integrating multiple liquid chromatography systems: Application to new psychoactive substances. Analytica Chimica Acta, 2021, 1184, 339035.	2.6	23
1407	Impact of water matrix and oxidant agent on the solar assisted photodegradation of a complex mix of pesticides over titania-reduced graphene oxide nanocomposites. Catalysis Today, 2021, 380, 114-124.	2.2	10
1408	Evaluation of natural gum-based cryogels for soft tissue engineering. Carbohydrate Polymers, 2021, 271, 118407.	5.1	13
1409	Correlation guided Network Integration (CoNI) reveals novel genes affecting hepatic metabolism. Molecular Metabolism, 2021, 53, 101295.	3.0	4
1410	The exposome in practice: an exploratory panel study of biomarkers of air pollutant exposure in Chinese people aged 60–69 years (China BAPE Study). Environment International, 2021, 157, 106866.	4.8	21
1411	Classification and biomarker identification of prostate tissue from TRAMP mice with hyperpolarized 13C-SIRA. Talanta, 2021, 235, 122812.	2.9	11
1412	Characterising Alzheimer's disease through integrative NMR- and LC-MS-based metabolomics. Metabolism Open, 2021, 12, 100125.	1.4	19
1413	How does biological sex affect the physiological response to nanomaterials?. Nano Today, 2021, 41, 101292.	6.2	6
1414	Identifying metabolic alterations in newly diagnosed small cell lung cancer patients. Metabolism Open, 2021, 12, 100127.	1.4	10

#	Article	IF	Citations
1415	Sex-dependent effects on the gut microbiota and host metabolome in type 1 diabetic mice. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2021, 1867, 166266.	1.8	7
1416	Detection of adulteration activities in edible bird's nest using untargeted 1H-NMR metabolomics with chemometrics. Food Control, 2022, 132, 108542.	2.8	9
1417	A dynamic multi-tissue model to study human metabolism. Npj Systems Biology and Applications, 2021, 7, 5.	1.4	10
1419	A prospective study of maternal adiposity and glycemic traits across pregnancy and mid-childhood metabolomic profiles. International Journal of Obesity, 2021, 45, 860-869.	1.6	3
1420	Metabolomics Signatures of Aging: Recent Advances. , 2021, 12, 646.		39
1421	<i>In situ</i> characterisation of phytohormones from wounded <i>Arabidopsis</i> leaves using desorption electrospray ionisation mass spectrometry imaging. Analyst, The, 2021, 146, 2653-2663.	1.7	16
1422	Diet and the Gut Microbiota in the Adulthood. , 2021, , 39-39.		0
1423	Squaric acid as a new chemoselective moiety for mass spectrometry-based metabolomics analysis of amines. RSC Chemical Biology, 2021, 2, 1479-1483.	2.0	4
1424	Metabolomics and complementary techniques to investigate the plant phytochemical cosmos. Natural Product Reports, 2021, 38, 1729-1759.	5. 2	46
1426	Propionate and Alzheimer's Disease. Frontiers in Aging Neuroscience, 2020, 12, 580001.	1.7	32
1427	Glycerophospholipid and detoxification pathways associated with small for gestation age pathophysiology: discovery metabolomics analysis in the SCOPE cohort. Metabolomics, 2021, 17, 5.	1.4	7
1428	Implications of Peak Selection in the Interpretation of Unsupervised Mass Spectrometry Imaging Data Analyses. Analytical Chemistry, 2021, 93, 2309-2316.	3.2	18
1429	LimeMap: a comprehensive map of lipid mediator metabolic pathways. Npj Systems Biology and Applications, 2021, 7, 6.	1.4	8
1430	Impact of Plant Origin on Eurasian Propolis on Phenolic Profile and Classical Antioxidant Activity. Biomolecules, 2021, 11, 68.	1.8	19
1431	Cognitive analysis of metabolomics data for systems biology. Nature Protocols, 2021, 16, 1376-1418.	5 . 5	13
1432	Metabolomics of Infectious Disease. , 2021, , .		0
1433	The importance of nutrients for microbial priming in a bog rhizosphere. Biogeochemistry, 2021, 152, 271-290.	1.7	4
1435	Plant and Animal-Type Feedstuff Shape the Gut Microbiota and Metabolic Processes of the Chinese Mitten Crab Eriocheir sinensis. Frontiers in Veterinary Science, 2021, 8, 589624.	0.9	10

#	Article	IF	CITATIONS
1437	Isolation and characterization of bioactive compounds from natural resources: Metabolomics and molecular approaches. , 2021, , 77-101.		1
1438	Predicting Microbe-Disease Association Based on Multiple Similarities and LINE Algorithm. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2022, 19, 2399-2408.	1.9	8
1439	High Confidence Shotgun Lipidomics Using Structurally Selective Ion Mobility-Mass Spectrometry. Methods in Molecular Biology, 2021, 2306, 11-37.	0.4	8
1441	Ingested Ketone Ester Leads to a Rapid Rise of Acetyl-CoA and Competes with Glucose Metabolism in the Brain of Non-Fasted Mice. International Journal of Molecular Sciences, 2021, 22, 524.	1.8	17
1442	Metabolomic Approaches for Apple Fruit Quality Improvement. Compendium of Plant Genomes, 2021, , 311-339.	0.3	2
1443	Metabolic analysis of unripe papaya (<i>Carica papaya</i> L.) to promote its utilization as a functional food. Bioscience, Biotechnology and Biochemistry, 2021, 85, 1194-1204.	0.6	8
1444	<i>Sargassum fusiforme</i> fucoidan alleviates diet-induced insulin resistance by inhibiting colon-derived ceramide biosynthesis. Food and Function, 2021, 12, 8440-8453.	2.1	13
1445	Preliminary comparative deep metabolomic analysis of spermatozoa from zebu and crossbred cattle suggests associations between metabolites, sperm quality and fertility. Reproduction, Fertility and Development, 2021, 33, 427.	0.1	7
1446	State-of-the-art Mass Spectrometry-based Approaches to Explore the Polar Metabolome: Alzheimer's Disease as a Case Study. New Developments in Mass Spectrometry, 2021, , 219-241.	0.2	1
1447	Application and assessment of deep learning for the generation of potential NMDA receptor antagonists. Physical Chemistry Chemical Physics, 2021, 23, 1197-1214.	1.3	9
1448	Water and Life: The Medium is the Message. Journal of Molecular Evolution, 2021, 89, 2-11.	0.8	29
1449	Utilizing Drift Tube Ion Mobility Spectrometry for the Evaluation of Metabolites and Xenobiotics. Methods in Molecular Biology, 2020, 2084, 35-54.	0.4	10
1450	Metabolomic Data Exploration and Analysis with the Human Metabolome Database. Methods in Molecular Biology, 2020, 2104, 165-184.	0.4	6
1451	De Novo Molecular Formula Annotation and Structure Elucidation Using SIRIUS 4. Methods in Molecular Biology, 2020, 2104, 185-207.	0.4	11
1452	Metabolomics Data Processing Using OpenMS. Methods in Molecular Biology, 2020, 2104, 49-60.	0.4	6
1453	NMR-Based Urinary Metabolomics Applications. Methods in Molecular Biology, 2019, 2037, 215-229.	0.4	3
1454	Automated Tools for the Analysis of 1D-NMR and 2D-NMR Spectra. Methods in Molecular Biology, 2019, 2037, 429-449.	0.4	9
1455	Metabolic Profiling of the Mesenchymal Stem Cells' Secretome. Pancreatic Islet Biology, 2019, , 67-81.	0.1	5

#	Article	IF	Citations
1456	Toward collaborative open data science in metabolomics using Jupyter Notebooks and cloud computing. Metabolomics, 2019, 15, 125.	1.4	59
1457	Food Metabolomics—An Overview. , 2019, , .		1
1458	Role and regulation of the stress activated sigma factor sigma B (ÏfB) in the saprophytic and host-associated life stages of Listeria monocytogenes. Advances in Applied Microbiology, 2019, 106, 1-48.	1.3	47
1459	Mass spectrometry-based metabolomics for an in-depth questioning of human health. Advances in Clinical Chemistry, 2020, 99, 147-191.	1.8	8
1460	Stable isotope resolved metabolomics classification of prostate cancer cells using hyperpolarized NMR data. Journal of Magnetic Resonance, 2020, 316, 106750.	1.2	16
1461	Consecutive Queries to Assess Biological Correlation in NMR Metabolomics: Performance of Comprehensive Search of Multiplets over Typical 1D ¹ H NMR Database Search. Journal of Proteome Research, 2020, 19, 2977-2988.	1.8	9
1462	Direct Tissue Mass Spectrometry Imaging by Atmospheric Pressure UV-Laser Desorption Plasma Postionization. Journal of the American Society for Mass Spectrometry, 2021, 32, 429-435.	1.2	12
1463	Spatial metabolomics of in situ host–microbe interactions at the micrometre scale. Nature Microbiology, 2020, 5, 498-510.	5.9	144
1464	Advanced identification of global bioactivity hotspots via screening of the metabolic fingerprint of entire ecosystems. Scientific Reports, 2020, 10, 1319.	1.6	17
1465	Quantification for non-targeted LC/MS screening without standard substances. Scientific Reports, 2020, 10, 5808.	1.6	80
1466	A reference set of curated biomedical data and metadata from clinical case reports. Scientific Data, 2018, 5, 180258.	2.4	22
1467	Recent advances in the application of metabolomics for food safety control and food quality analyses. Critical Reviews in Food Science and Nutrition, 2021, 61, 1448-1469.	5.4	186
1468	jMorp updates in 2020: large enhancement of multi-omics data resources on the general Japanese population. Nucleic Acids Research, 2021, 49, D536-D544.	6.5	107
1469	MetaNetX/MNXref: unified namespace for metabolites and biochemical reactions in the context of metabolic models. Nucleic Acids Research, 2021, 49, D570-D574.	6.5	91
1503	Crystal structure of zymonic acid and a redetermination of its precursor, pyruvic acid. Acta Crystallographica Section E: Crystallographic Communications, 2019, 75, 858-862.	0.2	5
1504	A Solution to Antifolate Resistance in Group B Streptococcus: Untargeted Metabolomics Identifies Human Milk Oligosaccharide-Induced Perturbations That Result in Potentiation of Trimethoprim. MBio, 2020, 11, .	1.8	25
1505	Mining the Human Metabolome for Precision Oncology Research. , 2020, , .		1
1506	Distinctive lipid signatures of bronchial epithelial cells associated with cystic fibrosis drugs, including Trikafta. JCI Insight, 2020, 5, .	2.3	21

#	Article	IF	CITATIONS
1507	Integrative omics approaches provide biological and clinical insights: examples from mitochondrial diseases. Journal of Clinical Investigation, 2020, 130, 20-28.	3.9	39
1508	An integrated multiomic and quantitative label-free microscopy-based approach to study pro-fibrotic signalling in <i>ex vivo</i> human precision-cut lung slices. European Respiratory Journal, 2021, 58, 2000221.	3.1	21
1509	A European proposal for quality control and quality assurance of tandem mass spectral libraries. Environmental Sciences Europe, 2020, 32, .	2.6	53
1510	Biobtree: A tool to search and map bioinformatics identifiers and special keywords. F1000Research, 2019, 8, 145.	0.8	1
1511	A network medicine approach to investigation and population-based validation of disease manifestations and drug repurposing for COVID-19. PLoS Biology, 2020, 18, e3000970.	2.6	139
1512	Gut Microbial Metabolites Induce Changes in Circadian Oscillation of Clock Gene Expression in the Mouse Embryonic Fibroblasts. Molecules and Cells, 2020, 43, 276-285.	1.0	12
1513	An enumeration of natural products from microbial, marine and terrestrial sources. Physical Sciences Reviews, 2020, 5, .	0.8	13
1514	Nutrient metabolism and cancer in the <i>inÂvivo</i> context: a metabolic game of give and take. EMBO Reports, 2020, 21, e50635.	2.0	56
1515	Cheminformatics and Computational Approaches in Metabolomics. , 0, , 143-159.		2
1516	Analysis of Nitrogen-containing Compounds in Mouth-exhaled Breath by Electrospray Ionization Quadrupole Time-of-Flight Mass Spectrometry. Analytical Sciences, 2019, 35, 1155-1159.	0.8	2
1517	Screening of Urinary Renal Cancer Metabolic Biomarkers with Gold Nanoparticles-assisted Laser Desorption/Ionization Mass Spectrometry. Analytical Sciences, 2020, 36, 1521-1527.	0.8	13
1518	Prediction of Drug-Drug Interactions Related to Inhibition or Induction of Drug-Metabolizing Enzymes. Current Topics in Medicinal Chemistry, 2019, 19, 319-336.	1.0	15
1519	Prognostic value of endogenous and exogenous metabolites in liver transplantation. Biomarkers in Medicine, 2020, 14, 1165-1181.	0.6	2
1520	Phytochemical characterization of Tabernanthe iboga root bark and its effects on dysfunctional metabolism and cognitive performance in high-fat-fed C57BL/6J mice. Journal of Food Bioactives: an Official Scientific Publication of the International Society of Nutraceuticals and Functional Foods (ISNFF), 2018, 3, 111-123.	2.4	9
1521	Fecal Metabolites As Non-Invasive Biomarkers of Gut Diseases. Acta Naturae, 2020, 12, 4-14.	1.7	12
1522	Metabolite Profile of Xylem Sap in Cotton Seedlings Is Changed by K Deficiency. Frontiers in Plant Science, 2020, 11, 592591.	1.7	5
1523	Blood Metabolite Signature of Metabolic Syndrome Implicates Alterations in Amino Acid Metabolism: Findings from the Baltimore Longitudinal Study of Aging (BLSA) and the Tsuruoka Metabolomics Cohort Study (TMCS). International Journal of Molecular Sciences, 2020, 21, 1249.	1.8	19
1524	Metabolite Profiling of Manilkara zapota L. Leaves by High-Resolution Mass Spectrometry Coupled with ESI and APCI and In Vitro Antioxidant Activity, α-Glucosidase, and Elastase Inhibition Assays. International Journal of Molecular Sciences, 2021, 22, 132.	1.8	14

#	Article	IF	CITATIONS
1525	Current Practice in Untargeted Human Milk Metabolomics. Metabolites, 2020, 10, 43.	1.3	21
1526	Evaluation of Metabolic Profiles of Patients with Anorexia Nervosa at Inpatient Admission, Short- and Long-Term Weight Regain—Descriptive and Pattern Analysis. Metabolites, 2021, 11, 7.	1.3	7
1527	Metabolic Dynamics of In Vitro CD8+ T Cell Activation. Metabolites, 2021, 11, 12.	1.3	18
1528	Impaired Tubular Secretion of Organic Solutes in Acute Kidney Injury. Kidney360, 2020, 1, 724-730.	0.9	1
1529	An Interstellar Synthesis of Glycerol Phosphates. Astrophysical Journal Letters, 2020, 899, L3.	3.0	9
1530	Novel sphingomyelin biomarkers for brain glioma and associated regulation research on the PI3K/Akt signaling pathway. Oncology Letters, 2019, 18, 6207-6213.	0.8	3
1531	Metabolomic profiling of crayfish haemolymph distinguishes sister species and sex: implications for conservation, aquaculture and physiological studies. Freshwater Crayfish, 2020, 25, 89-101.	0.5	1
1532	Imaging of glucose metabolism by 13C-MRI distinguishes pancreatic cancer subtypes in mice. ELife, 2019, 8, .	2.8	19
1533	Metabolic response of blood vessels to TNFα. ELife, 2020, 9, .	2.8	15
1534	Effects of obesity on the lipid and metabolite profiles of young adults by serum1H-NMR spectroscopy. PeerJ, 2019, 7, e7137.	0.9	13
1535	NP-MRD: the Natural Products Magnetic Resonance Database. Nucleic Acids Research, 2022, 50, D665-D677.	6.5	39
1536	Effects of oral milk extracellular vesicles on the gut microbiome and serum metabolome in mice. Food and Function, 2021, 12, 10938-10949.	2.1	21
1537	HMDB 5.0: the Human Metabolome Database for 2022. Nucleic Acids Research, 2022, 50, D622-D631.	6.5	736
1538	Advancements in capturing and mining mass spectrometry data are transforming natural products research. Natural Product Reports, 2021, 38, 2066-2082.	5.2	38
1539	Development of computational models using omics data for the identification of effective cancer metabolic biomarkers. Molecular Omics, 2021, 17, 881-893.	1.4	4
1540	Capillary Electrophoresis-Mass Spectrometry for Metabolomics: Possibilities and Perspectives. Advances in Experimental Medicine and Biology, 2021, 1336, 159-178.	0.8	7
1541	New Advances in Tissue Metabolomics: A Review. Metabolites, 2021, 11, 672.	1.3	41
1542	A Catalog of Natural Products Occurring in Watermelonâ€"Citrullus lanatus. Frontiers in Nutrition, 2021, 8, 729822.	1.6	4

#	Article	IF	CITATIONS
1543	A meta-analysis study of the robustness and universality of gut microbiome-metabolome associations. Microbiome, 2021, 9, 203.	4.9	35
1544	Transcriptome and Metabolome Comparison of Smooth and Rough Citrus limon L. Peels Grown on Same Trees and Harvested in Different Seasons. Frontiers in Plant Science, 2021, 12, 749803.	1.7	3
1545	Patterns of Carbon-Bound Exogenous Compounds in Patients with Lung Cancer and Association with Disease Pathophysiology. Cancer Research, 2021, 81, 5862-5875.	0.4	12
1546	Metabolic signatures of ARDS and ARDS heterogeneity. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 321, L1067-L1068.	1.3	2
1547	Untargeted serum metabolites profiling in high-fat diet mice supplemented with enhanced palm tocotrienol-rich fraction using UHPLC-MS. Scientific Reports, 2021, 11, 21001.	1.6	5
1548	E.Âcoli enhance colonization resistance against Salmonella Typhimurium by competing for galactitol, a context-dependent limiting carbon source. Cell Host and Microbe, 2021, 29, 1680-1692.e7.	5.1	53
1549	Open Characterization of Vaping Liquids in Canada: Chemical Profiles and Trends. Frontiers in Chemistry, 2021, 9, 756716.	1.8	2
1550	The Hitchhiker's Guide to Untargeted Lipidomics Analysis: Practical Guidelines. Metabolites, 2021, 11, 713.	1.3	9
1551	Metabolic memory underlying minimal residual disease in breast cancer. Molecular Systems Biology, 2021, 17, e10141.	3.2	14
1552	Genetic overlap and causality between blood metabolites and migraine. American Journal of Human Genetics, 2021, 108, 2086-2098.	2.6	19
1553	Finger sweat analysis enables short interval metabolic biomonitoring in humans. Nature Communications, 2021, 12, 5993.	5.8	28
1554	High-confidence structural annotation of metabolites absent from spectral libraries. Nature Biotechnology, 2022, 40, 411-421.	9.4	100
1555	Serum and Amniotic Fluid Metabolic Profile Changes in Response to Gestational Diabetes Mellitus and the Association with Maternal–Fetal Outcomes. Nutrients, 2021, 13, 3644.	1.7	16
1556	An Extended Text Combination Classification Model for Short Video Based on Albert. Journal of Sensors, 2021, 2021, 1-7.	0.6	1
1557	Metabolomics in Diabetes and Diabetic Complications: Insights from Epidemiological Studies. Cells, 2021, 10, 2832.	1.8	66
1558	Personal Metabolomics: A Global Challenge. Metabolites, 2021, 11, 715.	1.3	4
1559	Objective biomarkers for clinical relapse in multiple sclerosis: a metabolomics approach. Brain Communications, 2021, 3, fcab240.	1.5	9
1560	Untargeted Metabolome- and Transcriptome-Wide Association Study Suggests Causal Genes Modulating Metabolite Concentrations in Urine. Journal of Proteome Research, 2021, 20, 5103-5114.	1.8	6

#	Article	IF	CITATIONS
1561	Impact of the Pd2Spm (Spermine) Complex on the Metabolism of Triple-Negative Breast Cancer Tumors of a Xenograft Mouse Model. International Journal of Molecular Sciences, 2021, 22, 10775.	1.8	5
1562	Odd Chain Fatty Acids Are Not Robust Biomarkers for Dietary Intake of Fiber. Molecular Nutrition and Food Research, 2021, 65, 2100316.	1.5	0
1563	Plasma metabolomics of autism spectrum disorder and influence of shared components in proband families. Exposome, 2021, 1, osab004.	1.2	5
1564	Gut–microbiota–microglia–brain interactions in Alzheimer's disease: knowledge-based, multi-dimensional characterization. Alzheimer's Research and Therapy, 2021, 13, 177.	3.0	15
1566	Lipidomic approaches to dissect dysregulated lipid metabolism in kidney disease. Nature Reviews Nephrology, 2022, 18, 38-55.	4.1	46
1567	Spatial metabolomics identifies localized chemical changes in heart tissue during chronic cardiac Chagas Disease. PLoS Neglected Tropical Diseases, 2021, 15, e0009819.	1.3	18
1568	Toxicometabolomics: Small Molecules to Answer Big Toxicological Questions. Metabolites, 2021, 11, 692.	1.3	21
1569	Metabolomics atlas of oral 13C-glucose tolerance test in mice. Cell Reports, 2021, 37, 109833.	2.9	20
1570	Defining NASH from a Multi-Omics Systems Biology Perspective. Journal of Clinical Medicine, 2021, 10, 4673.	1.0	9
1571	Targeted volatolomics of human monocytes: Comparison of 2Dâ€GC/TOFâ€MS and 1Dâ€GC/Orbitrapâ€MS methods. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2021, 1184, 122975.	1.2	3
1572	Metabolomics to understand placental biology: Where are we now?. Tissue and Cell, 2021, 73, 101663.	1.0	3
1573	Urinary Metabolites of Green Tea as Potential Markers of Colonization Resistance to Pathogenic Gut Bacteria in Mice. Pathogens and Immunity, 2019, 4, 271.	1.4	1
1574	Capillary Electrophoresis–Mass Spectrometry for Metabolomics – From Metabolite Analysis to Metabolic Profiling. New Developments in Mass Spectrometry, 2018, , 1-20.	0.2	3
1580	Metabolomic Insights in Pulmonary Arterial Hypertension. Advances in Pulmonary Hypertension, 2018, 17, 103-109.	0.1	2
1584	Gene und Gesellschaft. , 2019, , 225-266.		0
1585	Food Metabolome Repository: a New Database for Identification of Unknown Compounds in Food Metabolome Analyses. Oleoscience, 2019, 19, 59-65.	0.0	0
1590	Nephrology: fundamental and clinical. Nephrology (Saint-Petersburg), 2019, 23, 9-26.	0.1	3
1598	Assessment of coverage for endogenous metabolites and exogenous chemical compounds using an untargeted metabolomics platform. , 2019, , .		5

#	Article	IF	CITATIONS
1599	Expected future developments in child neurology. Journal of International Child Neurology Association, $0, , .$	0.0	0
1606	Effect of 3,3'-Diindolylmethane on Pulmonary Injury Following Thoracic Irradiation in CBA Mice. Health Physics, 2020, 119, 746-757.	0.3	2
1610	Current Update on the Risk Factor Modification and Excercise Following Coronary Artery Disease. Biomolecular and Health Science Journal, 2020, 3, 56.	0.1	1
1611	Beneficial effect of <i>Bidens pilosa</i> L. (Asteraceae) in a rat model of colitis. Journal of Basic and Clinical Physiology and Pharmacology, 2020, 31, .	0.7	6
1612	Metabolomic characterization of colorectal cancer cell lines highlighting stage-specific alterations during cancer progression. BioImpacts, 2020, 11, 147-156.	0.7	3
1614	Race modifies the association between animal protein metabolite 1-methylhistidine and blood pressure in middle-aged adults: the Bogalusa Heart Study. Journal of Hypertension, 2020, 38, 2435-2442.	0.3	1
1616	Metabolic profiling and pathway analysis in red arillus of Salacca sumatrana demonstrate significant pyruvate, sulfur, and fatty acid metabolisms. Biodiversitas, 2020, 21, .	0.2	1
1618	MetaFetcheR: An R Package for Complete Mapping of Small-Compound Data. Metabolites, 2021, 11, 743.	1.3	0
1619	Computer-Aided Design for Identifying Anticancer Targets in Genome-Scale Metabolic Models of Colon Cancer. Biology, 2021, 10, 1115.	1.3	9
1620	Urinary metabolomic signatures as indicators of injury severity following traumatic brain injury: A pilot study. IBRO Neuroscience Reports, 2021, 11, 200-206.	0.7	9
1621	Metabolite discovery through global annotation of untargeted metabolomics data. Nature Methods, 2021, 18, 1377-1385.	9.0	107
1622	Production of p-cresol by Decarboxylation of p-HPA by All Five Lineages of Clostridioides difficile Provides a Growth Advantage. Frontiers in Cellular and Infection Microbiology, 2021, 11, 757599.	1.8	7
1623	FIAâ€"HRMS fingerprinting subjected to chemometrics as a valuable tool to address food classification and authentication: Application to red wine, paprika, and vegetable oil samples. Food Chemistry, 2022, 373, 131491.	4.2	5
1624	Fecal metabolomics reveals products of dysregulated proteolysis and altered microbial metabolism in obesity-related osteoarthritis. Osteoarthritis and Cartilage, 2022, 30, 81-91.	0.6	25
1625	FADS1 rs174550 genotype and high linoleic acid diet modify plasma PUFA phospholipids in a dietary intervention study. European Journal of Nutrition, 2021, , 1.	1.8	1
1626	Uneven metabolic and lipidomic profiles in recovered COVIDâ€19 patients as investigated by plasma NMR metabolomics. NMR in Biomedicine, 2022, 35, e4637.	1.6	32
1627	Automated Exploration of Prebiotic Chemical Reaction Space: Progress and Perspectives. Life, 2021, 11, 1140.	1.1	6
1628	Metabolism as a signal generator in bacteria. Current Opinion in Systems Biology, 2021, 28, 100404.	1.3	6

#	Article	IF	CITATIONS
1629	Large-Scale Transcriptional Profiling of Molecular Perturbations Reveals Cell Line Specific Responses and Implications for Environmental Screening. Environmental Science & Technology, 2021, 55, 15266-15275.	4.6	0
1630	Distinct Metabolomic Signatures in Preclinical and Obstructive Hypertrophic Cardiomyopathy. Cells, 2021, 10, 2950.	1.8	5
1631	Machine Learning Assisted Approach for Finding Novel High Activity Agonists of Human Ectopic Olfactory Receptors. International Journal of Molecular Sciences, 2021, 22, 11546.	1.8	10
1632	HERMES: a molecular-formula-oriented method to target the metabolome. Nature Methods, 2021, 18, 1370-1376.	9.0	16
1633	Metabolic profiling of attached and detached metformin and 2-deoxy-D-glucose treated breast cancer cellsÂreveals adaptive changes in metabolome of detached cells. Scientific Reports, 2021, 11, 21354.	1.6	9
1634	Identification of Cross-Pathway Connections via Protein-Protein Interactions Linked to Altered States of Metabolic Enzymes in Cervical Cancer. Frontiers in Medicine, 2021, 8, 736495.	1.2	3
1635	NMR-Based Metabolomics Analysis Predicts Response to Neoadjuvant Chemotherapy for Triple-Negative Breast Cancer. Frontiers in Molecular Biosciences, 2021, 8, 708052.	1.6	16
1636	Nutritional Lipidomics in Alzheimer's Disease. Advances in Experimental Medicine and Biology, 2020, 1195, 95-104.	0.8	3
1637	Fundamentals of Mass Spectrometry-Based Metabolomics. NATO Science for Peace and Security Series A: Chemistry and Biology, 2020, , 61-81.	0.5	0
1638	Holistic Metabolomic Laboratory-Developed Test (LDT): Development and Use for the Diagnosis of Early-Stage Parkinson's Disease. Metabolites, 2021, 11, 14.	1.3	4
1639	UPLC-PDA-Q Exactive Orbitrap-MS profiling of the lipophilic compounds product isolated from Eucalyptus viminalis plants. Heliyon, 2020, 6, e05768.	1.4	7
1640	Role of Metabolomics in Personalized Medicine. , 2021, , 177-183.		0
1641	Discovery of Urinary Biomarkers of Seaweed Intake Using Untargeted LC–MS Metabolomics in a Three-Way Cross-Over Human Study. Metabolites, 2021, 11, 11.	1.3	5
1643	COMPOSITION AND CONTENT OF PHENOLIC COMPOUNDS IN DIFFERENT FRACTIONS OF EXTRACT FROM PLANTS OF ARNICA FOLIOSA NUTT Khimiya Rastitel'nogo Syr'ya, 2021, , 139-147.	0.0	1
1644	A New Metric Quantifying Chemical and Biological Property of Small Molecule Metabolites and Drugs. Frontiers in Molecular Biosciences, 2020, 7, 594800.	1.6	1
1645	Changes in the Serum Metabolome of Patients Treated With Broad-Spectrum Antibiotics. Pathogens and Immunity, 2020, 5, 382.	1.4	2
1646	Identification of known and novel nonpolar endocrine disruptors in human amniotic fluid. Environment International, 2022, 158, 106904.	4.8	10
1647	Secondary electrospray ionization-high resolution mass spectrometry (SESI-HRMS) fingerprinting enabled treatment monitoring of pulmonary carcinoma cells in real time. Analytica Chimica Acta, 2022, 1189, 339230.	2.6	9

#	ARTICLE	IF	CITATIONS
1648	Predicting chemical shelf life of mozzarella cheese submitted to irregular refrigeration practices by Nuclear Magnetic Resonance spectroscopy and statistical analysis. Journal of Food Composition and Analysis, 2022, 105, 104229.	1.9	5
1649	Chapter 8. Metabolomics in Nutritional Metabolism, Obesity, and Diabetes. Food Chemistry, Function and Analysis, 2020, , 210-236.	0.1	0
1651	Investigation of the individual human sulfatome in plasma and urine samples reveals an age-dependency. RSC Advances, 2021, 11, 34788-34794.	1.7	3
1652	Variable-temperature NMR spectroscopy for metabolite identification in biological materials. RSC Advances, 2021, 11, 35321-35325.	1.7	7
1653	Sample-to-analysis platform for rapid intracellular mass spectrometry from small numbers of cells. Lab on A Chip, 2021, 21, 4696-4706.	3.1	3
1654	UPLCâ€'MS/MSâ€'based metabolomic characterization and comparison of pancreatic adenocarcinoma tissues using formalinâ€'fixed, paraffinâ€'embedded and optimal cutting temperatureâ€'embedded materials. International Journal of Oncology, 2019, 55, 1249-1260.	1.4	2
1656	Univariate and Multivariate Statistical Approaches to the Analysis and Interpretation of NMR-based Metabolomics Datasets of Increasing Complexity. RSC Theoretical and Computational Chemistry Series, 2020, , 1-40.	0.7	5
1657	Overview of Tandem Mass Spectral and Metabolite Databases for Metabolite Identification in Metabolomics. Methods in Molecular Biology, 2020, 2104, 139-148.	0.4	5
1658	Bioinformatics—The Power of Integrated Platforms for Omics Mining. , 2020, , 211-221.		0
1659	Precision Medicine in Critical Illness: Sepsis and Acute Respiratory Distress Syndrome. Respiratory Medicine, 2020, , 267-288.	0.1	2
1660	Unveiling potential anticancer drugs through inÂsilico drug repurposing approaches., 2020,, 81-119.		3
1661	Database Resources for Drug Discovery. , 2020, , 89-114.		0
1664	Induction of a Timed Metabolic Collapse to Overcome Cancer Chemoresistance. SSRN Electronic Journal, 0 , , .	0.4	0
1668	Global metabolomics profiling of colorectal cancer in Malaysian patients. BioImpacts, 2021, 11, 33-43.	0.7	16
1671	Tungsten enzymes play a role in detoxifying food and antimicrobial aldehydes in the human gut microbiome. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
1672	Plastic nanoparticles cause mild inflammation, disrupt metabolic pathways, change the gut microbiota and affect reproduction in zebrafish: A full generation multi-omics study. Journal of Hazardous Materials, 2022, 424, 127705.	6.5	30
1673	Integrated Analysis of the Metabolome and Transcriptome on Anthocyanin Biosynthesis in Four Developmental Stages of Cerasus humilis Peel Coloration. International Journal of Molecular Sciences, 2021, 22, 11880.	1.8	17
1674	Spot urine collection: A valid alternative to total urine collection for metabolomic studies in dairy cattle. Journal of Dairy Science, 2022, 105, 301-312.	1.4	4

#	Article	IF	CITATIONS
1676	Detection of highly overlapping peaks via adaptive apodization. Journal of Magnetic Resonance, 2021, 333, 107104.	1.2	3
1678	Paediatric obesity: a systematic review and pathway mapping of metabolic alterations underlying early disease processes. Molecular Medicine, 2021, 27, 145.	1.9	13
1679	Urinary volatomic profile of traditional tobacco smokers and electronic cigarettes users as a strategy to unveil potential healthy issues. Journal of Separation Science, 2021, , .	1.3	0
1680	NMR metabolic composition profiling of high pressure pasteurized milk preserved by hyperbaric storage at room temperature. Food Control, 2022, 134, 108660.	2.8	7
1681	Potential biomarkers identified in plasma of patients with gestational diabetes mellitus. Metabolomics, 2021, 17, 99.	1.4	10
1683	Personalized Anesthesia for Renal and Genitourinary System., 2021,, 183-196.		1
1687	Host behaviour alteration by its parasite: from brain gene expression to functional test. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20202252.	1.2	6
1689	NMR spectroscopy analysis reveals differential metabolic responses in arabidopsis roots and leaves treated with a cytokinesis inhibitor. PLoS ONE, 2020, 15, e0241627.	1.1	2
1691	Metabolomics as a potential tool for the diagnosis of growth hormone deficiency (GHD): a review. Archives of Endocrinology and Metabolism, 2020, 64, 654-663.	0.3	1
1693	The metabolome: A key measure for exposome research in epidemiology. Current Epidemiology Reports, 2019, 6, 93-103.	1.1	18
1694	Assessment of coverage for endogenous metabolites and exogenous chemical compounds using an untargeted metabolomics platform. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2020, 25, 587-598.	0.7	2
1695	Biochemical Effects of Routine Gonadectomy on Blood of Domestic Ferrets (). Journal of the American Association for Laboratory Animal Science, 2020, 59, 567-574.	0.6	0
1696	Small Molecule Responses to Sequential Irradiation with Neutrons and Photons for Biodosimetry Applications: An Initial Assessment. Radiation Research, 2021, 196, 468-477.	0.7	7
1697	Plasma profiling reveals a blood-based metabolic fingerprint of obstructive sleep apnea. Biomedicine and Pharmacotherapy, 2022, 145, 112425.	2.5	14
1698	A multi-omics study to boost continuous bolaform sophorolipid production. New Biotechnology, 2022, 66, 107-115.	2.4	9
1699	NMR-based metabolomics of dried berries in comparison with dietary supplements. Journal of Pharmaceutical and Biomedical Analysis, 2022, 209, 114494.	1.4	2
1701	Toxicity of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) in early development: A wide-scope metabolomics assay in zebrafish embryos. Journal of Hazardous Materials, 2022, 429, 127746.	6.5	10
1702	1H HR-MAS NMR Based Metabolic Profiling of Lung Cancer Cells with Induced and De-Induced Cisplatin Resistance to Reveal Metabolic Resistance Adaptations. Molecules, 2021, 26, 6766.	1.7	6

#	Article	IF	CITATIONS
1703	A metabolite panel that differentiates Alzheimer's disease from other dementia types. Alzheimer's and Dementia, 2022, 18, 1345-1356.	0.4	20
1704	Biochemical Response to Freezing in the Siberian Salamander Salamandrella keyserlingii. Biology, 2021, 10, 1172.	1.3	7
1705	Identification of an Analytical Method Interference for Perfluorobutanoic Acid in Biological Samples. Environmental Science and Technology Letters, 2021, 8, 1085-1090.	3.9	20
1706	Discovery of Natural Veterinary Herbal Medicine Products in Commercial Cow Milk by Using Nontargeted Profiling on LC–ESI–TOF Platform. Food Analytical Methods, 2022, 15, 868.	1.3	0
1707	PALP: A rapid imaging technique for stratifying ferroptosis sensitivity in normal and tumor tissues in situ. Cell Chemical Biology, 2022, 29, 157-170.e6.	2.5	17
1708	Generation and Characterization of the Drosophila melanogaster paralytic Gene Knock-Out as a Model for Dravet Syndrome. Life, 2021, 11, 1261.	1.1	4
1709	Computational simulation of ¹ H NMR profiles of complex biofluid analyte mixtures at differential operating frequencies: Applications to lowâ€field benchtop spectra. Magnetic Resonance in Chemistry, 2022, 60, 1097-1112.	1.1	6
1710	Stable Isotopes for Tracing Cardiac Metabolism in Diseases. Frontiers in Cardiovascular Medicine, 2021, 8, 734364.	1.1	5
1711	Discovering metabolite quantitative trait loci in asthma using an isolated population. Journal of Allergy and Clinical Immunology, 2022, 149, 1807-1811.e16.	1.5	8
1712	Machine Learning-Based Prediction of Drug-Drug Interactions for Histamine Antagonist Using Hybrid Chemical Features. Cells, 2021, 10, 3092.	1.8	13
1713	Gut Microbial Metabolite-Mediated Regulation of the Intestinal Barrier in the Pathogenesis of Inflammatory Bowel Disease. Nutrients, 2021, 13, 4259.	1.7	24
1714	Improved coverage of plant metabolites using powder laser desorption/ionization coupled with Fourier-transform ion cyclotron mass spectrometry. Food Chemistry, 2022, 373, 131541.	4.2	2
1716	A Standardized Brain Molecular Atlas: A Resource for Systems Modeling and Simulation. Frontiers in Molecular Neuroscience, 2021, 14, 604559.	1.4	3
1717	Navigating Multi-Scale Cancer Systems Biology Towards Model-Driven Clinical Oncology and Its Applications in Personalized Therapeutics. Frontiers in Oncology, 2021, 11, 712505.	1.3	3
1718	The Metabolic Signature of Cardiorespiratory Fitness: A Systematic Review. Sports Medicine, 2022, 52, 527-546.	3.1	5
1719	Deep Neural Network Pretrained by Weighted Autoencoders and Transfer Learning for Retention Time Prediction of Small Molecules. Analytical Chemistry, 2021, 93, 15651-15658.	3.2	13
1720	Emerging technologies and their impact on regulatory science. Experimental Biology and Medicine, 2022, 247, 1-75.	1.1	22
1721	Regulation of blood–brain barrier integrity by microbiome-associated methylamines and cognition by trimethylamine N-oxide. Microbiome, 2021, 9, 235.	4.9	65

#	Article	IF	CITATIONS
1722	A High-Throughput HILIC-MS-Based Metabolomic Assay for the Analysis of Polar Metabolites. Methods in Molecular Biology, 2022, 2396, 137-159.	0.4	4
1723	An Asp to Strike Out Cancer? Therapeutic Possibilities Arising from Aspartate's Emerging Roles in Cell Proliferation and Survival. Biomolecules, 2021, 11, 1666.	1.8	10
1724	Metabolite Identification Using Infrared Ion Spectroscopy─Novel Biomarkers for Pyridoxine-Dependent Epilepsy. Analytical Chemistry, 2021, 93, 15340-15348.	3.2	20
1726	A systematic review of metabolomic studies of childhood obesity: State of the evidence for metabolic determinants and consequences. Obesity Reviews, 2022, 23, e13384.	3.1	26
1727	A molecular spectroscopy approach for the investigation of early phase ochronotic pigment development in Alkaptonuria. Scientific Reports, 2021, 11, 22562.	1.6	7
1728	NGAL as a Potential Target in Tumor Microenvironment. International Journal of Molecular Sciences, 2021, 22, 12333.	1.8	16
1729	Metabolomic Characterization of Cerebrospinal Fluid from Intracranial Bacterial Infection Pediatric Patients: A Pilot Study. Molecules, 2021, 26, 6871.	1.7	3
1730	Untargeted Microbial Exometabolomics and Metabolomics Analysis of Helicobacter pylori J99 and jhp0106 Mutant. Metabolites, 2021, 11, 808.	1.3	2
1731	Current state-of-the-art of separation methods used in LC-MS based metabolomics and lipidomics. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2022, 1188, 123069.	1.2	44
1732	Monitoring Retinoblastoma by Machine Learning of Aqueous Humor Metabolic Fingerprinting. Small Methods, 2022, 6, e2101220.	4.6	20
1733	Genes and Society., 2022, , 199-235.		0
1734	In vitro interaction network of a synthetic gut bacterial community. ISME Journal, 2022, 16, 1095-1109.	4.4	66
1735	Bacterial challenge-associated metabolic phenotypes in Hermetia illucens defining nutritional and functional benefits. Scientific Reports, 2021, 11, 23316.	1.6	7
1736	Multimodal Mass Spectrometry Imaging of Rat Brain Using IR-MALDESI and NanoPOTS-LC-MS/MS. Journal of Proteome Research, 2021, , .	1.8	8
1737	Statistical mediation of the relationships between chronological age and lipoproteins by nonessential amino acids in healthy men. Computational and Structural Biotechnology Journal, 2021, 19, 6169-6178.	1.9	1
1738	A review on molecular docking analysis of phytocompounds against SARS-CoV-2 druggable targets. International Journal of Transgender Health, 2021, 14, 1100-1128.	1.1	6
1739	A framework for automated structure elucidation from routine NMR spectra. Chemical Science, 2021, 12, 15329-15338.	3.7	15
1740	Modifying current thin-film microextraction (TFME) solutions for analyzing prohibited substances: Evaluating new coatings using liquid chromatography. Journal of Pharmaceutical Analysis, 2022, 12, 470-480.	2.4	5

#	Article	IF	CITATIONS
1741	Metabogenomic analysis to functionally annotate the regulatory role of long non-coding RNAs in the liver of cows with different nutrient partitioning phenotype. Genomics, 2022, 114, 202-214.	1.3	5
1742	Molecular Music: A Modern Accompaniment to NMR Pedagogy. Journal of Chemical Education, 2022, 99, 810-818.	1.1	1
1743	Urinary Volatomic Expression Pattern: Paving the Way for Identification of Potential Candidate Biosignatures for Lung Cancer. Metabolites, 2022, 12, 36.	1.3	3
1744	Effects of changing from a diet with saturated fat to a diet with n-6 polyunsaturated fat on the serum metabolome in relation to cardiovascular disease risk factors. European Journal of Nutrition, 2022, 61, 2079-2089.	1.8	10
1745	Parahydrogen hyperpolarization of minimally altered urine samples for sensitivity enhanced NMR metabolomics. Chemical Communications, 2022, 58, 463-466.	2.2	11
1746	Combining MALDI-MS with machine learning for metabolomic characterization of lung cancer patient sera. Analytical Methods, 2022, 14, 499-507.	1.3	2
1747	Integrated molecular networking strategy enhance the accuracy and visualization of components identification: A case study of Ginkgo biloba leaf extract. Journal of Pharmaceutical and Biomedical Analysis, 2022, 209, 114523.	1.4	9
1748	The genus Rudbeckia: A critical review of its traditional medicinal uses, phytochemistry, and pharmacology. Journal of Herbal Medicine, 2022, 31, 100530.	1.0	1
1749	Metabolomics in diagnostics of inborn metabolic disorders. Current Opinion in Systems Biology, 2022, 29, 100409.	1.3	9
1750	Reconstruction of tissue-specific genome-scale metabolic models for human cancer stem cells. Computers in Biology and Medicine, 2022, 142, 105177.	3.9	7
1751	Predominance of oleanane-type ginsenoside RO and malonyl esters of protopanaxadiol-type ginsenosides in the 20-year-old suspension cell culture of Panax japonicus C.A. Meyer. Industrial Crops and Products, 2022, 177, 114417.	2.5	9
1752	Internal calibration as an emerging approach for endogenous analyte quantification: Application to steroids. Talanta, 2022, 240, 123149.	2.9	18
1753	Biochemical Effects of Routine Gonadectomy on Blood of Domestic Ferrets (Mustela putorius furo). Journal of the American Association for Laboratory Animal Science, 2020, 59, 567-574.	0.6	0
1754	Historical exposomics and high resolution mass spectrometry. Exposome, 2021, 1, .	1.2	11
1755	The Application of In Silico Methods on Umami Taste Receptor. Handbook of Experimental Pharmacology, 2021, , .	0.9	1
1757	Metabolite Profiling of Peltophorum africanum Sond. & Saraca indica L. Leaves via HR-UPLC/PDA/ESI/MS Analysis and Assessment of their Anti-Diabetic Potential. Journal of Biologically Active Products From Nature, 2021, 11, 442-466.	0.1	0
1758	Assessment of Aspartate and Bicarbonate Produced From Hyperpolarized [1-13C]Pyruvate as Markers of Renal Gluconeogenesis. Frontiers in Physiology, 2021, 12, 792769.	1.3	4
1759	Mass Spectrometry Imaging of Metabolites by Nanostructure Initiator Mass Spectrometry with Fluorinated Gold Nanoparticles. Methods in Molecular Biology, 2022, 2437, 117-125.	0.4	2

#	Article	IF	CITATIONS
1760	Emerging effects of tryptophan pathway metabolites and intestinal microbiota on metabolism and intestinal function. Amino Acids, 2022, 54, 57-70.	1.2	34
1761	Biomedical data, computational methods and tools for evaluating disease–disease associations. Briefings in Bioinformatics, 2022, 23, .	3.2	12
1762	New Metabolic Signature for Chagas Disease Reveals Sex Steroid Perturbation in Humans and Mice. SSRN Electronic Journal, 0, , .	0.4	0
1763	Metabolomic Profiles of the Creeping Wood Sorrel Oxalis corniculata in Radioactively Contaminated Fields in Fukushima: Dose-Dependent Changes in Key Metabolites. Life, 2022, 12, 115.	1.1	5
1765	Analytical perspective on biomarkers research: from untargeted to targeted metabolomics. , 2022, , 545-586.		1
1766	Metabolite discovery: Biochemistry's scientific driver. Cell Metabolism, 2022, 34, 21-34.	7.2	36
1767	Medications Activating Tubular Fatty Acid Oxidation Enhance the Protective Effects of Roux-en-Y Gastric Bypass Surgery in a Rat Model of Early Diabetic Kidney Disease. Frontiers in Endocrinology, 2021, 12, 757228.	1.5	4
1768	BrnQ-Type Branched-Chain Amino Acid Transporters Influence Bacillus anthracis Growth and Virulence. MBio, 2022, 13, e0364021.	1.8	5
1769	Small phenolic and indolic gut-dependent molecules in the primate central nervous system: levels vs. bioactivity. Metabolomics, 2022, 18, 8.	1.4	1
1770	Investigating the Postprandial Metabolome after Challenge Tests to Assess Metabolic Flexibility and Dysregulations Associated with Cardiometabolic Diseases. Nutrients, 2022, 14, 472.	1.7	18
1771	Updates and Original Case Studies Focused on the NMR-Linked Metabolomics Analysis of Human Oral Fluids Part I: Emerging Platforms and Perspectives. Applied Sciences (Switzerland), 2022, 12, 1235.	1.3	4
1772	Deep Metabolomic Profiling Reveals Alterations in Fatty Acid Synthesis and Ketone Body Degradations in Spermatozoa and Seminal Plasma of Astheno-Oligozoospermic Bulls. Frontiers in Veterinary Science, 2021, 8, 755560.	0.9	2
1773	Comparison of oral metabolome profiles of stimulated saliva, unstimulated saliva, and mouth-rinsed water. Scientific Reports, 2022, 12, 689.	1.6	12
1774	Bioengineered models of Parkinson's disease using patient-derived dopaminergic neurons exhibit distinct biological profiles in a 3D microenvironment. Cellular and Molecular Life Sciences, 2022, 79, 78.	2.4	12
1775	Metabolic composition and authenticity evaluation of bergamot essential oil assessed by nuclear magnetic resonance spectroscopy. Analytical and Bioanalytical Chemistry, 2022, 414, 2297-2313.	1.9	4
1776	Antiviral metabolite 3′-deoxy-3′,4′-didehydro-cytidine is detectable in serum and identifies acute viral infections including COVID-19. Med, 2022, 3, 204-215.e6.	2.2	12
1777	Oxygen Isotope Exchange Reaction for Untargeted LC–MS Analysis. Journal of the American Society for Mass Spectrometry, 2022, 33, 390-398.	1,2	7
1778	Combining Isotopologue Workflows and Simultaneous Multidimensional Separations to Detect, Identify, and Validate Metabolites in Untargeted Analyses. Analytical Chemistry, 2022, 94, 2527-2535.	3.2	6

#	Article	IF	CITATIONS
1779	Alterations of Gut Microbiome and Serum Metabolome in Coronary Artery Disease Patients Complicated With Non-alcoholic Fatty Liver Disease Are Associated With Adverse Cardiovascular Outcomes. Frontiers in Cardiovascular Medicine, 2021, 8, 805812.	1.1	8
1780	Gut Microbiota as a Source of Uremic Toxins. International Journal of Molecular Sciences, 2022, 23, 483.	1.8	19
1781	Exploring the synergistic effects of cabozantinib and a programmed cell death protein 1 inhibitor in metastatic renal cell carcinoma with machine learning. Oncotarget, 2022, 13, 237-256.	0.8	2
1782	LCâ€HRMSâ€based targeted metabolomics for highâ€throughput and quantitative analysis of 21 growth inhibitionâ€related metabolites in Chinese hamster ovary cell fedâ€batch cultures. Biomedical Chromatography, 2022, 36, .	0.8	2
1783	TransDiscovery: Discovering Biotransformation from Human Microbiota by Integrating Metagenomic and Metabolomic Data. Metabolites, 2022, 12, 119.	1.3	2
1784	Adaptive Metabolism of <i>Staphylococcus aureus</i> Revealed by Untargeted Metabolomics. Journal of Proteome Research, 2022, 21, 470-481.	1.8	10
1785	Ultrasonication of Milk Decreases the Content of Exosomes and MicroRNAs in an Exosome-Defined Rodent Diet. Journal of Nutrition, 2022, 152, 961-970.	1.3	8
1786	Effects of Cage and Floor Rearing Systems on the Metabolic Components of the Uropygial Gland in Ducks. Animals, 2022, 12, 214.	1.0	1
1787	1H-NMR metabolomics-based surrogates to impute common clinical risk factors and endpoints. EBioMedicine, 2022, 75, 103764.	2.7	15
1789	Structure Elucidation and Mitigation of Endogenous Interferences in LC-MS-Based Metabolic Profiling of Urine. Analytical Chemistry, 2022, 94, 1760-1768.	3.2	5
1790	LCMD: Lung Cancer Metabolome Database. Computational and Structural Biotechnology Journal, 2022, 20, 65-78.	1.9	8
1791	Senecavirus A- and Non-Infected Cells at Early Stage of Infection: Comparative Metabolomic Profiles. Frontiers in Cellular and Infection Microbiology, 2021, 11, 736506.	1.8	4
1792	Advances in Proteomic and Metabolomic Profiling of Neurodegenerative Diseases. Frontiers in Neurology, 2021, 12, 792227.	1.1	17
1793	The Biosynthesis and Metabolism of the N-Acylated Aromatic Amino Acids: N-Acylphenylalanine, N-Acyltyrosine, N-Acyltryptophan, and N-Acylhistidine. Frontiers in Molecular Biosciences, 2021, 8, 801749.	1.6	3
1794	The Qingchangligan Formula Alleviates Acute Liver Failure by Regulating Galactose Metabolism and Gut Microbiota. Frontiers in Cellular and Infection Microbiology, 2021, 11, 771483.	1.8	7
1796	Deep models of integrated multiscale molecular data decipher the endothelial cell response to ionizing radiation. IScience, 2022, 25, 103685.	1.9	7
1797	Plasma Metabolites Associated with a Proteinâ€Rich Dietary Pattern: Results from the OmniHeart Trial. Molecular Nutrition and Food Research, 2022, 66, e2100890.	1.5	7
1798	Inferring early-life host and microbiome functions by mass spectrometry-based metaproteomics and metabolomics. Computational and Structural Biotechnology Journal, 2022, 20, 274-286.	1.9	5

#	Article	IF	Citations
1799	Knowledge-Driven Approaches to Create the MTox700+ Metabolite Panel for Predicting Toxicity. Toxicological Sciences, 2022, 186, 208-220.	1.4	7
1800	A systematic review: metabolomicsâ€based identification of altered metabolites and pathways in the skin caused by internal and external factors. Experimental Dermatology, 2022, 31, 700-714.	1.4	12
1801	The SwissSimilarity 2021 Web Tool: Novel Chemical Libraries and Additional Methods for an Enhanced Ligand-Based Virtual Screening Experience. International Journal of Molecular Sciences, 2022, 23, 811.	1.8	53
1802	Metabolomic Biomarkers in Blood Samples Identify Cancers in a Mixed Population of Patients with Nonspecific Symptoms. Clinical Cancer Research, 2022, 28, 1651-1661.	3.2	28
1803	Metabolic Impact of Anticancer Drugs Pd2Spermine and Cisplatin on the Brain of Healthy Mice. Pharmaceutics, 2022, 14, 259.	2.0	4
1804	Experimental determination of Escherichia coli biomass composition for constraint-based metabolic modeling. PLoS ONE, 2022, 17, e0262450.	1.1	8
1805	Circulating Metabolome and White Matter Hyperintensities in Women and Men. Circulation, 2022, 145, 1040-1052.	1.6	17
1806	Potential Biomarkers for Liver Cancer Diagnosis Based on Multi-Omics Strategy. Frontiers in Oncology, 2022, 12, 822449.	1.3	12
1807	Exploring Human Milk Dynamics: Interindividual Variation in Milk Proteome, Peptidome, and Metabolome. Journal of Proteome Research, 2022, 21, 1002-1016.	1.8	7
1808	Integrated Metabolomics and Network Pharmacology Revealed Hong-Hua-Xiao-Yao Tablet's Effect of Mediating Hormone Synthesis in the Treatment of Mammary Gland Hyperplasia. Frontiers in Pharmacology, 2022, 13, 788019.	1.6	4
1809	Metabolomics combined with systematic pharmacology reveals the therapeutic effects of Salvia miltiorrhiza and Radix Pueraria lobata herb pair on type 2 diabetes rats. Journal of Functional Foods, 2022, 89, 104950.	1.6	3
1810	Enzymatic and structural characterization of HAD5, an essential phosphomannomutase of malaria-causing parasites. Journal of Biological Chemistry, 2022, 298, 101550.	1.6	3
1811	Analytical Techniques for Phytocannabinoid Profiling of Cannabis and Cannabis-Based Products—A Comprehensive Review. Molecules, 2022, 27, 975.	1.7	27
1812	Discovery of Urinary Biomarkers of Spinach Consumption Using Untargeted LCâ€MS Metabolomics in a Human Intervention Trial. Molecular Nutrition and Food Research, 2022, 66, e2100260.	1.5	2
1813	SALDI-MS and SERS Multimodal Imaging: One Nanostructured Substrate to Rule Them Both. Analytical Chemistry, 2022, 94, 2785-2793.	3.2	18
1814	The regulating effect of light on the content of flavan-3-ols and derivatives of hydroxybenzoic acids in the callus culture of the tea plant, Camellia sinensis L. Biochemical Systematics and Ecology, 2022, 101, 104383.	0.6	7
1815	Short chain fatty acids: Microbial metabolites for gut-brain axis signalling. Molecular and Cellular Endocrinology, 2022, 546, 111572.	1.6	117
1816	Impact of the pre-examination phase on multicenter metabolomic studies. New Biotechnology, 2022, 68, 37-47.	2.4	10

#	Article	IF	CITATIONS
1817	Metabolomics of peripheral artery disease. Advances in Clinical Chemistry, 2022, 106, 67-89.	1.8	0
1818	Serine, N-acetylaspartate differentiate adolescents with juvenile idiopathic arthritis compared with healthy controls: a metabolomics cross-sectional study. Pediatric Rheumatology, 2022, 20, 12.	0.9	1
1819	Targeting intestinal flora and its metabolism to explore the laxative effects of rhubarb. Applied Microbiology and Biotechnology, 2022, 106, 1615-1631.	1.7	22
1820	Developments in high-resolution mass spectrometric analyses of new psychoactive substances. Archives of Toxicology, 2022, 96, 949-967.	1.9	12
1821	Investigation of Urinary Exosome Metabolic Patterns in Membranous Nephropathy by Titaniaâ€Assisted Intact Exosome Mass Spectrometry. Small Science, 2022, 2, .	5.8	8
1822	Lipidome Alterations following Mild Traumatic Brain Injury in the Rat. Metabolites, 2022, 12, 150.	1.3	7
1824	Plasma lipidomics analysis reveals altered lipids signature in patients with osteonecrosis of the femoral head. Metabolomics, 2022, 18, 14.	1.4	7
1826	Fecal 1H-NMR Metabolomics: A Comparison of Sample Preparation Methods for NMR and Novel in Silico Baseline Correction. Metabolites, 2022, 12, 148.	1.3	6
1827	Urinary Metabolomic Changes Accompanying Albuminuria Remission following Gastric Bypass Surgery for Type 2 Diabetic Kidney Disease. Metabolites, 2022, 12, 139.	1.3	6
1829	Deglutarylation of glutaryl-CoA dehydrogenase by deacylating enzyme SIRT5 promotes lysine oxidation in mice. Journal of Biological Chemistry, 2022, 298, 101723.	1.6	5
1830	Indole-3-Acetic Acid Alters Intestinal Microbiota and Alleviates Ankylosing Spondylitis in Mice. Frontiers in Immunology, 2022, 13, 762580.	2.2	39
1831	Unique volatile metabolite signature of sinonasal inverted papilloma detectable in plasma and nasal secretions. International Forum of Allergy and Rhinology, 2022, 12, 1254-1262.	1.5	1
1832	Metabolomics and lipidomics to identify biomarkers of effect related to exposure to non-dioxin-like polychlorinated biphenyls in pigs. Chemosphere, 2022, 296, 133957.	4.2	5
1833	All Polyphenols Are Not Created Equal: Exploring the Diversity of Phenolic Metabolites. Journal of Agricultural and Food Chemistry, 2022, 70, 2077-2091.	2.4	8
1834	Guided assembly of cellular network models from knowledge in literature. , 2021, 2021, 4458-4464.		1
1835	Plasma Metabolite Markers of Parkinson's Disease and Atypical Parkinsonism. Metabolites, 2021, 11, 860.	1.3	10
1836	Integration of Metabolomic and Clinical Data Improves the Prediction of Intensive Care Unit Length of Stay Following Major Traumatic Injury. Metabolites, 2022, 12, 29.	1.3	2
1837	Open Data to Support CANCER Scienceâ€"A Bioinformatics Perspective on Glioma Research. Onco, 2021, 1, 219-229.	0.2	1

#	Article	IF	Citations
1838	Semi-automated NMR Pipeline for Environmental Exposures: New Insights on the Metabolomics of Smokers versus Non-smokers. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2021, 26, 316-327.	0.7	0
1839	Metabolomics in Chronic Kidney Diseases: Here to Stay. Timisoara Medical Journal, 2021, 2020, 1.	0.1	0
1840	Pathway analysis. , 2022, , 399-412.		0
1841	Pathway Analysis for Cancer Research and Precision Oncology Applications. Advances in Experimental Medicine and Biology, 2022, 1361, 143-161.	0.8	2
1842	High-Throughput Metabolomics and Diabetic Kidney Disease Progression: Evidence from the Chronic Renal Insufficiency (CRIC) Study. American Journal of Nephrology, 2022, 53, 215-225.	1.4	14
1843	An open source computational workflow for the discovery of autocatalytic networks in abiotic reactions. Chemical Science, 2022, 13, 4838-4853.	3.7	8
1844	Targeted metabolomics., 2022,, 219-236.		4
1845	Mass spectrometry in metabolomics. , 2022, , 109-147.		0
1848	The Metabolome of Pink-Footed Goose: Heavy Metals and Lipid Metabolism. SSRN Electronic Journal, 0, ,	0.4	0
1849	Influence of Ecological Factors on Metabolomic Composition of the Fish Lens. SSRN Electronic Journal, 0, , .	0.4	1
1850	Experimental design in metabolomics. , 2022, , 27-61.		1
1851	Nuclear magnetic resonance in metabolomics. , 2022, , 149-218.		2
1852	Metabolomic markers of biological fluid in women with reproductive failure: a systematic review of current literatures. Biology of Reproduction, 2022, 106, 1049-1058.	1.2	4
1853	Characterization of the Metabolites and Construction of a Novel Diagnostic Panel in Calcium Oxalate Urolithiasis by Electrospray Ionization – Mass Spectrometry (ESI-MS) Metabolomics. Analytical Letters, 2022, 55, 1997-2010.	1.0	2
1854	Optimized integration of metabolomics and lipidomics reveals brain region-specific changes of oxidative stress and neuroinflammation in type 1 diabetic mice with cognitive decline. Journal of Advanced Research, 2023, 43, 233-245.	4.4	14
1856	Combining CRISPRi and metabolomics for functional annotation of compound libraries. Nature Chemical Biology, 2022, 18, 482-491.	3.9	33
1857	Understanding the Significance of Sample Preparation in Studies of the Nanoparticle Metabolite Corona. ACS Measurement Science Au, 2022, 2, 251-260.	1.9	5
1859	Early Time-Restricted Feeding Amends Circadian Clock Function and Improves Metabolic Health in Male and Female Nile Grass Rats. Medicines (Basel, Switzerland), 2022, 9, 15.	0.7	4

#	Article	IF	CITATIONS
1861	Gut-brain axis: Focus on gut metabolites short-chain fatty acids. World Journal of Clinical Cases, 2022, 10, 1754-1763.	0.3	21
1862	Longitudinal Serum Metabolomics in Extremely Premature Infants: Relationships With Gestational Age, Nutrition, and Morbidities. Frontiers in Neuroscience, 2022, 16, 830884.	1.4	12
1863	Recent Advances in Understanding of Alzheimer's Disease Progression Through Mass Spectrometry-Based Metabolomics. Phenomics, 2022, 2, 1-17.	0.9	10
1864	Diffusion- and Chemometric-Based Separation of Complex Electrochemical Signals That Originated from Multiple Redox-Active Molecules. Polymers, 2022, 14, 717.	2.0	3
1865	Plasma Metabolite Profiles of Red Meat, Poultry, and Fish Consumption, and Their Associations with Colorectal Cancer Risk. Nutrients, 2022, 14, 978.	1.7	8
1866	Automated Annotation of Untargeted All-lon Fragmentation LC–MS Metabolomics Data with MetaboAnnotatoR. Analytical Chemistry, 2022, 94, 3446-3455.	3.2	18
1868	Orotic acid production from crude glycerol by engineered Ashbya gossypii. Bioresource Technology Reports, 2022, 17, 100992.	1.5	1
1869	Serum metabolomic signatures of plant-based diets and incident chronic kidney disease. American Journal of Clinical Nutrition, 2022, 116, 151-164.	2.2	11
1870	Dietary Omega-3 Polyunsaturated Fatty-Acid Supplementation Upregulates Protective Cellular Pathways in Patients with Type 2 Diabetes Exhibiting Improvement in Painful Diabetic Neuropathy. Nutrients, 2022, 14, 761.	1.7	16
1871	Chiral secondary amino acids, their importance, and methods of analysis. Amino Acids, 2022, 54, 687-719.	1.2	3
1872	A Modular and Expandable Ecosystem for Metabolomics Data Annotation in R. Metabolites, 2022, 12, 173.	1.3	43
1873	The Impact of the hAPP695SW Transgene and Associated Amyloid-β Accumulation on Murine Hippocampal Biochemical Pathways. Journal of Alzheimer's Disease, 2022, 85, 1601-1619.	1.2	12
1875	Untargeted Metabolomics Identify a Panel of Urinary Biomarkers for the Diagnosis of Urothelial Carcinoma of the Bladder, as Compared to Urolithiasis with or without Urinary Tract Infection in Dogs. Metabolites, 2022, 12, 200.	1.3	1
1876	Imaging and Direct Sampling Capabilities of Nanospray Desorption Electrospray Ionization with Absorption-Mode 21 Tesla Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Analytical Chemistry, 2022, 94, 3629-3636.	3.2	14
1877	Basic fibroblast growth factor alleviates metabolic abnormalities in the heart of streptozotocin-induced diabetic rats. International Journal of Diabetes in Developing Countries, 0, , 1.	0.3	0
1878	Systemâ€level metabolic modeling facilitates unveiling metabolic signature in exceptional longevity. Aging Cell, 2022, 21, e13595.	3.0	13
1880	Effect of chronic and acute enterotoxigenic E. coli challenge on growth performance, intestinal inflammation, microbiome, and metabolome of weaned piglets. Scientific Reports, 2022, 12, 5024.	1.6	8
1881	Phytochemicals From Vicia faba Beans as Ligands of the Aryl Hydrocarbon Receptor to Regulate Autoimmune Diseases. Frontiers in Nutrition, 2022, 9, 790440.	1.6	2

#	Article	IF	CITATIONS
1882	Finding Correspondence between Metabolomic Features in Untargeted Liquid Chromatography–Mass Spectrometry Metabolomics Datasets. Analytical Chemistry, 2022, 94, 5493-5503.	3.2	9
1883	Methane emissions and rumen metabolite concentrations in cattle fed two different silages. Scientific Reports, 2022, 12, 5441.	1.6	9
1884	Cryo-EM structures reveal multiple stages of bacterial outer membrane protein folding. Cell, 2022, 185, 1143-1156.e13.	13.5	45
1885	A toolbox to study metabolic status of Drosophila melanogaster larvae. STAR Protocols, 2022, 3, 101195.	0.5	5
1886	A network-based approach to integrate nutrient microenvironment in the prediction of synthetic lethality in cancer metabolism. PLoS Computational Biology, 2022, 18, e1009395.	1.5	5
1887	Multi-Omics Strategies for Investigating the Microbiome in Toxicology Research. Toxicological Sciences, 2022, 187, 189-213.	1.4	6
1888	Growth-stage-related shifts in diatom endometabolome composition set the stage for bacterial heterotrophy. ISME Communications, 2022, 2, .	1.7	6
1889	Metabolomics analysis highlights <i>Yashtimadhu</i> (<i>Glycyrrhiza glabra</i> L.) <i>â€</i> mediated neuroprotection in a rotenoneâ€induced cellular model of Parkinson's disease by restoring the <scp>mTORC1â€AMPK1</scp> axis in autophagic regulation. Phytotherapy Research, 2022, 36, 2207-2222.	2.8	6
1890	First Application of Fecal Microbiota Transplantation in Adult Asperger Syndrome With Digestive Symptomsâ€"A Case Report. Frontiers in Psychiatry, 2022, 13, 695481.	1.3	4
1891	Non-targeted NMR approach to unveil and promote the biodiversity of globe artichoke in the Mediterranean area. Journal of Food Composition and Analysis, 2022, 110, 104539.	1.9	2
1892	Investigating Casual Associations Among Gut Microbiota, Metabolites, and Neurodegenerative Diseases: A Mendelian Randomization Study. Journal of Alzheimer's Disease, 2022, 87, 211-222.	1.2	43
1893	Small Molecule Signatures of Mice Lacking T-cell p38 Alternate Activation, a Model for Immunosuppression Conditions, after Total-Body Irradiation. Radiation Research, 2022, , .	0.7	0
1894	Adrenal tropism of SARS-CoV-2 and adrenal findings in a post-mortem case series of patients with severe fatal COVID-19. Nature Communications, 2022, 13, 1589.	5.8	24
1895	Fluxomics - New Metabolomics Approaches to Monitor Metabolic Pathways. Frontiers in Pharmacology, 2022, 13, 805782.	1.6	17
1896	Antimicrobial Treatment Options for Difficult-to-Treat Resistant Gram-Negative Bacteria Causing Cystitis, Pyelonephritis, and Prostatitis: A Narrative Review. Drugs, 2022, 82, 407-438.	4.9	4
1897	Mapping the Influence of the Gut Microbiota on Small Molecules across the Microbiome Gut Brain Axis. Journal of the American Society for Mass Spectrometry, 2022, 33, 649-659.	1.2	6
1898	Integrative interactomics applied to bovine fescue toxicosis. Scientific Reports, 2022, 12, 4899.	1.6	3
1899	Systemic Lactate Acts as a Metabolic Buffer in Humans and Prevents Nutrient Overflow in the Postprandial Phase. Frontiers in Nutrition, 2022, 9, 785999.	1.6	1

#	Article	IF	CITATIONS
1900	Serum Metabolomics of Incident Diabetes and Glycemic Changes in a Population With High Diabetes Burden: The Hispanic Community Health Study/Study of Latinos. Diabetes, 2022, 71, 1338-1349.	0.3	4
1902	DIAMetAlyzer allows automated false-discovery rate-controlled analysis for data-independent acquisition in metabolomics. Nature Communications, 2022, 13, 1347.	5.8	11
1903	NMR Spectroscopy Identifies Chemicals in Cigarette Smoke Condensate That Impair Skeletal Muscle Mitochondrial Function. Toxics, 2022, 10, 140.	1.6	7
1904	Metabolic Adaptations in an Endocrine-Related Breast Cancer Mouse Model Unveil Potential Markers of Tumor Response to Hormonal Therapy. Frontiers in Oncology, 2022, 12, 786931.	1.3	1
1905	Investigation of the Degradation Behavior of Cyclophosphamide by Catalytic Ozonation Based on Mg(OH)2. Energies, 2022, 15, 2274.	1.6	0
1906	MetOrigin: Discriminating the origins of microbial metabolites for integrative analysis of the gut microbiome and metabolome. , 2022, $1,\dots$		61
1907	Genome-wide association studies of metabolites in Finnish men identify disease-relevant loci. Nature Communications, 2022, 13, 1644.	5.8	63
1908	Discovery of a Ni2+-dependent guanidine hydrolase in bacteria. Nature, 2022, 603, 515-521.	13.7	20
1909	A Resourceful Race: Bacterial Scavenging of Host Sulfur Metabolism during Colonization. Infection and Immunity, 2022, , e0057921.	1.0	0
1910	Coenzyme A Restriction as a Factor Underlying Pre-Eclampsia with Polycystic Ovary Syndrome as a Risk Factor. International Journal of Molecular Sciences, 2022, 23, 2785.	1.8	3
1911	Feature Selection Pipelines with Classification for Non-targeted Metabolomics Combining the Neural Network and Genetic Algorithm. Analytical Chemistry, 2022, 94, 5474-5482.	3.2	1
1912	Artifactual FA dimers mimic FAHFA signals in untargeted metabolomics pipelines. Journal of Lipid Research, 2022, 63, 100201.	2.0	9
1913	Comparison of Two Automated Targeted Metabolomics Programs to Manual Profiling by an Experienced Spectroscopist for 1H-NMR Spectra. Metabolites, 2022, 12, 227.	1.3	1
1914	Prediction of Low-Dose Aspirin-Induced Gastric Toxicity Using Nuclear Magnetic Resonance Spectroscopy-Based Pharmacometabolomics in Rats. Molecules, 2022, 27, 2126.	1.7	1
1915	Plasma proteomic and metabolomic characterization of COVID-19 survivors 6 months after discharge. Cell Death and Disease, 2022, 13, 235.	2.7	21
1916	Improving confidence in lipidomic annotations by incorporating empirical ion mobility regression analysis and chemical class prediction. Bioinformatics, 2022, 38, 2872-2879.	1.8	5
1917	Exhaled metabolic markers and relevant dysregulated pathways of lung cancer: a pilot study. Annals of Medicine, 2022, 54, 790-802.	1.5	9
1918	Investigating Causal Relations Between Circulating Metabolites and Alzheimer's Disease: A Mendelian Randomization Study. Journal of Alzheimer's Disease, 2022, 87, 463-477.	1.2	10

#	Article	IF	CITATIONS
1920	Plasma metabolite profiles related to plant-based diets and the risk of type 2 diabetes. Diabetologia, 2022, 65, 1119-1132.	2.9	35
1921	Comprehending Cardiac Dysfunction by Oxidative Stress: Untargeted Metabolomics of In Vitro Samples. Frontiers in Chemistry, 2022, 10, 836478.	1.8	4
1922	Acute aerobic exercise reveals that FAHFAs distinguish the metabolomes of overweight and normal-weight runners. JCI Insight, 2022, 7, .	2.3	11
1923	A mixture of innate cryoprotectants is key for freeze tolerance and cryopreservation of a drosophilid fly larva. Journal of Experimental Biology, 2022, 225, .	0.8	9
1924	Use of Physiologically Based Pharmacokinetic Modeling to Evaluate the Impact of Chronic Kidney Disease on CYP3A4â€Mediated Metabolism of Saxagliptin. Journal of Clinical Pharmacology, 2022, 62, 1018-1029.	1.0	6
1925	Uncovering the interference from lipid fragments on the qualification and quantification of serum metabolites in matrixâ€assisted laser desorption/ionization timeâ€ofâ€flight mass spectrometric analysis. Rapid Communications in Mass Spectrometry, 2022, 36, e9293.	0.7	1
1926	Logistic role of carnitine shuttle system on radiation-induced L-carnitine and acylcarnitines alteration. International Journal of Radiation Biology, 2022, 98, 1595-1608.	1.0	2
1927	Metabolomics-based phenotypic screens for evaluation of drug synergy via direct-infusion mass spectrometry. IScience, 2022, 25, 104221.	1.9	8
1928	<i>In Silico</i> Collision Cross Section Calculations to Aid Metabolite Annotation. Journal of the American Society for Mass Spectrometry, 2022, 33, 750-759.	1,2	11
1929	Hyperglycemia alters N-glycans on colon cancer cells through increased production of activated monosaccharides. Glycoconjugate Journal, 2022, 39, 663-675.	1.4	1
1930	Intermittent prednisone treatment in mice promotes exercise tolerance in obesity through adiponectin. Journal of Experimental Medicine, 2022, 219, .	4.2	7
1931	Explore potential disease related metabolites based on latent factor model. BMC Genomics, 2022, 23, 269.	1.2	5
1932	Single cell mass spectrometry analysis of drug-resistant cancer cells: Metabolomics studies of synergetic effect of combinational treatment. Analytica Chimica Acta, 2022, 1201, 339621.	2.6	18
1933	Metabonomics analysis reveals the protective effect of nanoâ€'selenium against heat stress of rainbow trout (Oncorhynchus mykiss). Journal of Proteomics, 2022, 259, 104545.	1.2	13
1934	XMN polymorphism along with HU administration renders alterations to RBC membrane lipidome in \hat{l}^2 -thalassemia patients. Chemistry and Physics of Lipids, 2022, 244, 105195.	1.5	2
1935	Single cell mass spectrometry studies reveal metabolomic features and potential mechanisms of drug-resistant cancer cell lines. Analytica Chimica Acta, 2022, 1206, 339761.	2.6	13
1936	Time-dependent influence of high glucose environment on the metabolism of neuronal immortalized cells. Analytical Biochemistry, 2022, 645, 114607.	1.1	1
1937	Association of nanoparticle exposure with serum metabolic disorders of healthy adults in printing centers. Journal of Hazardous Materials, 2022, 432, 128710.	6.5	6

#	Article	IF	CITATIONS
1938	Fundamentals of in situ postmortem magnetic resonance spectroscopy of the brain in the forensic framework - a review and outlook. Forensic Imaging, 2022, 29, 200499.	0.4	0
1939	Non-targeted metabolomics revealing the effects of bisphenol analogues on human liver cancer cells. Chemosphere, 2022, 297, 134088.	4.2	8
1940	Potential obesogenic effects of TBBPA and its alternatives TBBPS and TCBPA revealed by metabolic perturbations in human hepatoma cells. Science of the Total Environment, 2022, 832, 154847.	3.9	14
1941	On the use of nuclear magnetic resonance spectroscopy in music composition- principles, practice and possibilities. Journal of New Music Research, 2021, 50, 487-501.	0.6	1
1942	Metabolomic Profiles of Mouse Tissues Reveal an Interplay between Aging and Energy Metabolism. Metabolites, 2022, 12, 17.	1.3	10
1943	Urinary organic acids spectra in children with altered gut microbiota composition and autistic spectrum disorder. Nordic Journal of Psychiatry, 2022, 76, 523-529.	0.7	8
1944	Spatially resolved freeâ€induction decay spectroscopy using a 3D ultraâ€short echo time multiâ€echo imaging sequence with systematic echo shifting and compensation of B ₀ field drifts. Magnetic Resonance in Medicine, 2022, 87, 2099-2110.	1.9	2
1945	1H-Nuclear Magnetic Resonance Analysis of Urine as Diagnostic Tool for Organic Acidemias and Aminoacidopathies. Metabolites, 2021, 11, 891.	1.3	6
1946	The Potential Role of Phytonutrients Flavonoids Influencing Gut Microbiota in the Prophylaxis and Treatment of Inflammatory Bowel Disease. Frontiers in Nutrition, 2021, 8, 798038.	1.6	25
1947	Study on the Mechanism of Reducing Hepatotoxicity of Water-Grinding Realgar by Metabolomics, Morphology, and Chemical Analysis. Evidence-based Complementary and Alternative Medicine, 2021, 2021, 1-14.	0.5	1
1948	SMARTâ€Miner: A convolutional neural networkâ€based metabolite identification from ¹ Hâ€ ¹³ C HSQC spectra. Magnetic Resonance in Chemistry, 2022, 60, 1070-1075.	1.1	10
1949	Mass Spectrometry as a Crucial Analytical Basis for Omics Sciences. Journal of Analytical Chemistry, 2021, 76, 1567-1587.	0.4	9
1950	Integrated Metabolic Profiling and Transcriptional Analysis Reveals Therapeutic Modalities for Targeting Rapidly Proliferating Breast Cancers. Cancer Research, 2022, 82, 665-680.	0.4	5
1951	What do we know about osmoadaptation of Yersinia pestis?. Archives of Microbiology, 2022, 204, 11.	1.0	1
1953	The metabolic landscape in chronic rotator cuff tear reveals tissueâ€regionâ€specific signatures. Journal of Cachexia, Sarcopenia and Muscle, 2022, 13, 532-543.	2.9	7
1955	Exosome-Enriched Plasma Analysis as a Tool for the Early Detection of Hypertensive Gestations. Frontiers in Physiology, 2021, 12, 767112.	1.3	10
1956	IDENTIFICATION AND CONTENT OF PHENOLIC COMPOUNDS IN A BUTANOL FRACTION OF EXTRACT FROM THE FLOWERS OF TANACETUM VULGARE. Khimiya Rastitel'nogo Syr'ya, 2021, , 129-137.	0.0	0
1957	Protective effects of Fufang Ejiao Jiang against aplastic anemia assessed by network pharmacology and metabolomics strategy. Digital Chinese Medicine, 2021, 4, 328-342.	0.5	O

#	Article	IF	CITATIONS
1959	Small molecules for cell reprogramming: a systems biology analysis. Aging, 2021, 13, 25739-25762.	1.4	8
1960	Development of RIKEN Plant Metabolome MetaDatabase. Plant and Cell Physiology, 2022, 63, 433-440.	1.5	6
1961	Lipidomic and Metabolomic Signature of Progression of Chronic Kidney Disease in Patients with Severe Obesity. Metabolites, 2021, 11, 836.	1.3	19
1962	Multiâ€Omic Approaches to Identify Genetic Factors in Metabolic Syndrome. , 2021, 12, 3045-3084.		4
1963	Impacts of Enriched Human Milk Cells on Fecal Metabolome and Gut Microbiome of Premature Infants with Stage I Necrotizing Enterocolitis: A Pilot Study. Molecular Nutrition and Food Research, 2022, 66, e2100342.	1.5	4
1964	Defining Blood Plasma and Serum Metabolome by GC-MS. Metabolites, 2022, 12, 15.	1.3	20
1965	MODOMICS: a database of RNA modification pathways. 2021 update. Nucleic Acids Research, 2022, 50, D231-D235.	6. 5	374
1966	Regional Brain Analysis of Modified Amino Acids and Dipeptides during the Sleep/Wake Cycle. Metabolites, 2022, 12, 21.	1.3	5
1967	<i>Lactobacillus lactis</i> and <i>Pediococcus pentosaceus</i> â€driven reprogramming of gut microbiome and metabolome ameliorates the progression of nonâ€alcoholic fatty liver disease. Clinical and Translational Medicine, 2021, 11, e634.	1.7	56
1968	New Metabolic Signature for Chagas Disease Reveals Sex Steroid Perturbation in Humans and Mice. SSRN Electronic Journal, 0, , .	0.4	0
1969	Deep kernel learning improves molecular fingerprint prediction from tandem mass spectra. Bioinformatics, 2022, 38, i342-i349.	1.8	4
1970	Valuing the Diversity of Research Methods to Advance Nutrition Science. Advances in Nutrition, 2022, 13, 1324-1393.	2.9	16
1971	SERS optical accumulators as unified nanoplatforms for tear sampling and sensing in soft contact lenses. Nanoscale, 2022, 14, 7991-7999.	2.8	2
1972	Multiomics implicate gut microbiota in altered lipid and energy metabolism in Parkinson's disease. Npj Parkinson's Disease, 2022, 8, 39.	2.5	12
1973	HBM4EU Chromates Study: Urinary Metabolomics Study of Workers Exposed to Hexavalent Chromium. Metabolites, 2022, 12, 362.	1.3	5
1974	Food Ingredients Derived from Lemongrass Byproduct Hydrodistillation: Essential Oil, Hydrolate, and Decoction. Molecules, 2022, 27, 2493.	1.7	9
1975	Compositional Analysis of Four Kinds of Citrus Fruits with an NMR-Based Method for Understanding Nutritional Value and Rational Utilization: From Pericarp to Juice. Molecules, 2022, 27, 2579.	1.7	7
1976	Development and validation of an LC-MS/MS method for determination of 8-iso-prostaglandin f2 Alpha in human saliva. Journal of Medical Biochemistry, 2022, 41, 466-473.	0.7	4

#	Article	IF	CITATIONS
1977	Enzyme Promiscuity in Serotonin Biosynthesis, From Bacteria to Plants and Humans. Frontiers in Microbiology, 2022, 13, 873555.	1.5	12
1978	Identification and molecular characterization of a novel non-specific lipid transfer protein (TdLTP2) from durum wheat. PLoS ONE, 2022, 17, e0266971.	1.1	5
1979	Guide to Metabolomics Analysis: A Bioinformatics Workflow. Metabolites, 2022, 12, 357.	1.3	58
1980	Understanding signaling and metabolic paths using semantified and harmonized information about biological interactions. PLoS ONE, 2022, 17, e0263057.	1.1	1
1981	foodMASST a mass spectrometry search tool for foods and beverages. Npj Science of Food, 2022, 6, 22.	2.5	9
1982	Untargeted plasma metabolomic analysis of wild bottlenose dolphins (Tursiops truncatus) indicate protein degradation when in poorer health. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2022, 42, 100991.	0.4	1
1983	Urinary Metabolomics From a Dose-Fractionated Polymyxin B Rat Model of Acute Kidney Injury. International Journal of Antimicrobial Agents, 2022, 60, 106593.	1.1	2
1984	Omics-based ecosurveillance for the assessment of ecosystem function, health, and resilience. Emerging Topics in Life Sciences, 2022, 6, 185-199.	1.1	9
1985	Metabolomics in environmental toxicology: Applications and challenges. Trends in Environmental Analytical Chemistry, 2022, 34, e00161.	5.3	24
1986	Titanium dioxide nanoparticles induced reactive oxygen species (ROS) related changes of metabolomics signatures in human normal bronchial epithelial (BEAS-2B) cells. Toxicology and Applied Pharmacology, 2022, 444, 116020.	1.3	12
2061	Prediction of pregnancy-related hypertensive disorders using metabolomics: a systematic review. BMJ Open, 2022, 12, e054697.	0.8	7
2062	Profiling metabolites and lipoproteins in COMETA, an Italian cohort of COVID-19 patients. PLoS Pathogens, 2022, 18, e1010443.	2.1	30
2063	MetaboListem and TABoLiSTM: Two Deep Learning Algorithms for Metabolite Named Entity Recognition. Metabolites, 2022, 12, 276.	1.3	3
2064	IVS I-5 (G > C) is associated with changes to the RBC membrane lipidome in response to hydroxyurea treatment in \hat{l}^2 -thalassemia patients. Molecular Omics, 2022, 18, 534-544.	1.4	2
2065	Towards a mechanistic understanding of microalgae–bacteria interactions: integration of metabolomic analysis and computational models. FEMS Microbiology Reviews, 2022, 46, .	3.9	5
2066	Metabolomics study reveals the alteration of fatty acid oxidation in the hearts of diabetic mice by empagliflozin. Molecular Omics, 2022, 18, 643-651.	1.4	7
2067	Untargeted Metabolomics Sensitively Differentiates Gut Bacterial Species in Single Culture and Co-Culture Systems. ACS Omega, 2022, 7, 14643-14652.	1.6	3
2068	Metabolic preference assay for rapid diagnosis of bloodstream infections. Nature Communications, 2022, 13, 2332.	5.8	20

#	Article	IF	CITATIONS
2069	Metabolomic Profiling of the Blood of Patients with Chronic Consciousness Disorders. Obshchaya Reanimatologiya, 2022, 18, 22-36.	0.2	2
2070	Evaluating Cefoperazone-Induced Gut Metabolic Functional Changes in MR1-Deficient Mice. Metabolites, 2022, 12, 380.	1.3	1
2071	Space- and Time-Resolved Metabolomics of a High-Grade Serous Ovarian Cancer Mouse Model. Cancers, 2022, 14, 2262.	1.7	17
2072	A rapid LC-MS/MS assay for detection and monitoring of underivatized branched-chain amino acids in maple syrup urine disease. Journal of Mass Spectrometry and Advances in the Clinical Lab, 2022, 24, 107-117.	1.3	7
2073	Metabolomic Study on Tridacna maxima Giant Clams Reveals Metabolic Fingerprint of Environmental Pollutants. Frontiers in Marine Science, 2022, 9, .	1.2	3
2074	The N-Terminus of Human Sulfotransferase 2B1b─a Sterol-Sensing Allosteric Site. Biochemistry, 2022, 61, 843-855.	1.2	3
2075	Application of MS-Based Metabolomic Approaches in Analysis of Starfish and Sea Cucumber Bioactive Compounds. Marine Drugs, 2022, 20, 320.	2,2	9
2076	Diet- and microbiota-related metabolite, 5-aminovaleric acid betaine (5-AVAB), in health and disease. Trends in Endocrinology and Metabolism, 2022, 33, 463-480.	3.1	19
2077	Shifting-corrected regularized regression for $1 < i > H < / i > NMR$ metabolomics identification and quantification. Biostatistics, 2022, 24, 140-160.	0.9	3
2078	OncoboxPD: human 51 672 molecular pathways database with tools for activity calculating and visualization. Computational and Structural Biotechnology Journal, 2022, 20, 2280-2291.	1.9	16
2079	Preliminary authentication of apple juices using untargeted UHPLC-HRMS analysis combined to chemometrics. Food Control, 2022, 139, 109098.	2.8	6
2080	Application of metabolite set enrichment analysis on untargeted metabolomics data prioritises relevant pathways and detects novel biomarkers for inherited metabolic disorders. Journal of Inherited Metabolic Disease, 2022, 45, 682-695.	1.7	6
2081	Optimised systematic review tool: Application to candidate biomarkers for the diagnosis of hepatocellular carcinoma. Cancer Epidemiology Biomarkers and Prevention, 2022, , .	1.1	1
2082	Widely quasi-quantitative analysis enables temporal bile acids-targeted metabolomics in rat after oral administration of ursodeoxycholic acid. Analytica Chimica Acta, 2022, 1212, 339885.	2.6	8
2083	An optimal variant to gene distance window derived from an empirical definition of cis and trans protein QTLs. BMC Bioinformatics, 2022, 23, 169.	1.2	22
2084	Differences in Exudates Between Strains of Chlorella sorokiniana Affect the Interaction with the Microalga Growth-Promoting Bacteria Azospirillum brasilense. Microbial Ecology, 2022, , 1.	1.4	2
2085	The Integration of Proteomics and Metabolomics Data Paving the Way for a Better Understanding of the Mechanisms Underlying Microbial Acquired Drug Resistance. Frontiers in Medicine, 2022, 9, .	1,2	5
2086	The Human Meconium Metabolome and Its Evolution during the First Days of Life. Metabolites, 2022, 12, 414.	1.3	3

#	ARTICLE	IF	CITATIONS
2087	A randomized controlled trial for response of microbiome network to exercise and diet intervention in patients with nonalcoholic fatty liver disease. Nature Communications, 2022, 13, 2555.	5.8	40
2088	Biochemistry of human tear film: A review. Experimental Eye Research, 2022, 220, 109101.	1.2	25
2089	Bacteria in human lumbar discs – subclinical infection or contamination? Metabolomic evidence for colonization, multiplication, and cell-cell cross-talk of bacteria. Spine Journal, 2023, 23, 163-177.	0.6	4
2090	Metabolomics studies of cell–cell interactions using single cell mass spectrometry combined with fluorescence microscopy. Chemical Science, 2022, 13, 6687-6695.	3.7	14
2091	Circulating Metabolites as Biomarkers of Disease in Patients with Mesial Temporal Lobe Epilepsy. Metabolites, 2022, 12, 446.	1.3	1
2092	MIAOME: Human microbiome affect the host epigenome. Computational and Structural Biotechnology Journal, 2022, 20, 2455-2463.	1.9	6
2093	Spatial metabolomics for evaluating response to neoadjuvant therapy in nonâ€small cell lung cancer patients. Cancer Communications, 2022, 42, 517-535.	3.7	19
2094	Duodenal Metabolic Profile Changes in Heat-Stressed Broilers. Animals, 2022, 12, 1337.	1.0	4
2095	Host-genotype-dependent cecal microbes are linked to breast muscle metabolites in Chinese chickens. IScience, 2022, 25, 104469.	1.9	5
2096	Joint effect of indoor size-fractioned particulate matters and black carbon on cardiopulmonary function and relevant metabolic mechanism: A panel study among school children. Environmental Pollution, 2022, 307, 119533.	3.7	3
2097	Metabolomic Analysis Reveals That the Moor Frog Rana arvalis Uses Both Glucose and Glycerol as Cryoprotectants. Animals, 2022, 12, 1286.	1.0	7
2098	Migration time correction for dual pressure capillary electrophoresis in semiâ€ŧargeted metabolomics study. Electrophoresis, 2022, 43, 1626-1637.	1.3	5
2099	Metabolomics-based study of the potential interventional effects of Xiao-Xu-Ming Decoction on cerebral ischemia/reperfusion rats. Journal of Ethnopharmacology, 2022, 295, 115379.	2.0	6
2101	A thiol chemistry perspective on redox medicine. , 2022, , 617-642.		1
2102	Belgian endive-derived biostimulants promote shoot and root growth in vitro. Scientific Reports, 2022, 12, .	1.6	7
2104	Metabolomes of Lewis lung carcinoma metastases and normal lung tissue from mice fed different diets. Journal of Nutritional Biochemistry, 2022, 107, 109051.	1.9	5
2105	Comparison of gut microbiome and plasma metabolome profiles between domesticated and wild Eurasian perch (<i>Perca fluviatilis </i>). Aquaculture Research, 2022, 53, 4076-4086.	0.9	1
2106	MSNovelist: de novo structure generation from mass spectra. Nature Methods, 2022, 19, 865-870.	9.0	49

#	Article	IF	CITATIONS
2107	Analytical strategies to profile the internal chemical exposome and the metabolome of human placenta. Analytica Chimica Acta, 2022, 1219, 339983.	2.6	5
2108	Short-chain fatty acids promote the effect of environmental signals on the gut microbiome and metabolome in mice. Communications Biology, 2022, 5, .	2.0	16
2110	Integrated Analysis of Glutathione Metabolic Pathway in Pancreatic Cancer. Frontiers in Cell and Developmental Biology, 2022, 10, .	1.8	1
2112	Metabolomic Profiling of Phloem Sap from Different Pine Species and Implications on Black Capuchin. Journal of Chemical Ecology, 2022, 48, 660-669.	0.9	4
2113	Archeochemistry reveals the first steps into modern industrial brewing. Scientific Reports, 2022, 12, .	1.6	1
2114	Metabolic Alterations in Sputum and Exhaled Breath Condensate of Early Stage Non-Small Cell Lung Cancer Patients After Surgical Resection: A Pilot Study. Frontiers in Oncology, 0, 12, .	1.3	3
2115	Biofluid Metabolomics and Lipidomics of Mice Exposed to External Very High-Dose Rate Radiation. Metabolites, 2022, 12, 520.	1.3	3
2116	Uncovering PFAS and Other Xenobiotics in the Dark Metabolome Using Ion Mobility Spectrometry, Mass Defect Analysis, and Machine Learning. Environmental Science & Environmental Science & 2022, 56, 9133-9143.	4.6	34
2119	The future of environmental metabolomics. , 2022, , 399-407.		0
2120	Imaging mass spectrometry differentiates the effects of doxorubicin formulations on non-targeted tissues. Analyst, The, 2022, 147, 3201-3208.	1.7	1
2121	Temporal trends in metabolite profiles correspond with seasonal patterns of temperature and rainfall during field-scale ecotoxicology assessment., 2022,, 107-120.		0
2122	Food Diary, Food Frequency Questionnaire, and 24-Hour Dietary Recall., 2022, , 223-247.		1
2123	Environmental assessment of metal impacted soils using community metabolic profiling., 2022,, 45-59.		0
2124	KGNMDA: A Knowledge Graph Neural Network Method for Predicting Microbe-Disease Associations. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2023, 20, 1147-1155.	1.9	7
2125	Data Augmentation Techniques toÂlmprove Metabolomic Analysis inÂNiemann-Pick Type C Disease. Lecture Notes in Computer Science, 2022, , 78-91.	1.0	1
2126	Urinary volatile recognition for COVID-19 diagnosis. , 2022, , .		0
2127	Maximization of the recovery of phenolic compounds from sugar maple leaves. Biomass Conversion and Biorefinery, 2024, 14, 6251-6266.	2.9	2
2128	Deep Learning-Based Method for Compound Identification in NMR Spectra of Mixtures. Molecules, 2022, 27, 3653.	1.7	10

#	ARTICLE	IF	CITATIONS
2129	High-throughput single cell metabolomics and cellular heterogeneity exploration by inertial microfluidics coupled with pulsed electric field-induced electrospray ionization-high resolution mass spectrometry. Analytica Chimica Acta, 2022, 1221, 340116.	2.6	18
2130	Untargeted metabolomics study and identification of potential biomarkers in the six sections of the genus <i>Stachys</i> L. (Lamiaceae) using HPLCâ€MQâ€APIâ€MS/MS. Phytochemical Analysis, 2022, 33, 915-942	1.2	3
2131	Spatially resolved multi-omics deciphers bidirectional tumor-host interdependence in glioblastoma. Cancer Cell, 2022, 40, 639-655.e13.	7.7	166
2132	High-throughput metabolomics reveals dysregulation of hydrophobic metabolomes in cancer cell lines by Eleusine indica. Scientific Reports, 2022, 12, .	1.6	O
2133	Advancement of omics techniques for chemical profile analysis and authentication of milk. Trends in Food Science and Technology, 2022, 127, 114-128.	7.8	11
2134	Urine and Fecal 1H-NMR Metabolomes Differ Significantly between Pre-Term and Full-Term Born Physically Fit Healthy Adult Males. Metabolites, 2022, 12, 536.	1.3	2
2135	Metabolomic Analysis Points to Bioactive Lipid Species and Acireductone Dioxygenase 1 (ADI1) as Potential Therapeutic Targets in Poor Prognosis Endometrial Cancer. Cancers, 2022, 14, 2842.	1.7	6
2136	Reproducibility of the Blood and Urine Exposome: A Systematic Literature Review and Meta-Analysis. Cancer Epidemiology Biomarkers and Prevention, 2022, 31, 1683-1692.	1.1	2
2137	Selective Probiotic Treatment Positively Modulates the Microbiota–Gut–Brain Axis in the BTBR Mouse Model of Autism. Brain Sciences, 2022, 12, 781.	1.1	10
2138	First Metabolomic Signature of Blood-Brain Barrier Opening Induced by Microbubble-Assisted Ultrasound. Frontiers in Molecular Neuroscience, 0, 15 , .	1.4	3
2139	An Overview of Food Metabolomics: CE-MS Based Targeted and Non-targeted Analysis. Current and Future Developments in Food Science, 2022, , 487-518.	0.0	0
2140	Probabilistic metabolite annotation using retention time prediction and meta-learned projections. Journal of Cheminformatics, 2022, 14, .	2.8	9
2141	Metabolomics of Esophageal Squamous Cell Carcinoma Tissues: Potential Biomarkers for Diagnosis and Promising Targets for Therapy. BioMed Research International, 2022, 2022, 1-24.	0.9	2
2142	Identification and Quantification of Urinary Microbial Phenolic Metabolites by HPLC-ESI-LTQ-Orbitrap-HRMS and Their Relationship with Dietary Polyphenols in Adolescents. Antioxidants, 2022, 11, 1167.	2.2	12
2143	MetEx: A Targeted Extraction Strategy for Improving the Coverage and Accuracy of Metabolite Annotation in Liquid Chromatography–High-Resolution Mass Spectrometry Data. Analytical Chemistry, 2022, 94, 8561-8569.	3.2	10
2144	A Divergent Selection on Breast Meat Ultimate pH, a Key Factor for Chicken Meat Quality, is Associated With Different Circulating Lipid Profiles. Frontiers in Physiology, 0, 13 , .	1.3	6
2145	Rapid and Automatic Annotation of Multiple On-Tissue Chemical Modifications in Mass Spectrometry Imaging with Metaspace. Analytical Chemistry, 2022, 94, 8983-8991.	3.2	6
2146	Integrative metabolomics and transcriptomics analysis reveals novel therapeutic vulnerabilities in lung cancer. Cancer Medicine, 0, , .	1.3	4

#	Article	IF	CITATIONS
2147	Genomic, Metabolic, and Immunological Characterization of GMP-Grade Mycobacterium phlei. Microbiology Spectrum, 0 , , .	1.2	0
2148	PeakForest: a multi-platform digital infrastructure for interoperable metabolite spectral data and metadata management. Metabolomics, 2022, 18, .	1.4	4
2149	Identification of characteristic metabolic panels for different stages of prostate cancer by 1H NMR-based metabolomics analysis. Journal of Translational Medicine, 2022, 20, .	1.8	9
2150	Single-Cell Metabolic Profiling of Macrophages Using 3D OrbiSIMS: Correlations with Phenotype. Analytical Chemistry, 2022, 94, 9389-9398.	3.2	12
2151	Dietary fiber ameliorates leadâ€induced gut microbiota disturbance and alleviates neuroinflammation. Journal of the Science of Food and Agriculture, 2022, 102, 6795-6803.	1.7	7
2152	Acylcarnitines: Nomenclature, Biomarkers, Therapeutic Potential, Drug Targets, and Clinical Trials. Pharmacological Reviews, 2022, 74, 506-551.	7.1	106
2154	High Intensity Concentric-Eccentric Exercise Under Hypoxia Changes the Blood Metabolome of Trained Athletes. Frontiers in Physiology, $0,13,.$	1.3	3
2155	A Current Encyclopedia of Bioinformatics Tools, Data Formats and Resources for Mass Spectrometry Lipidomics. Metabolites, 2022, 12, 584.	1.3	10
2156	The metabolome of Mexican cavefish shows a convergent signature highlighting sugar, antioxidant, and Ageing-Related metabolites. ELife, $0,11,1$	2.8	16
2157	Metabolic differences of the oral microbiome related to dental caries – A pilot study. Archives of Oral Biology, 2022, 141, 105471.	0.8	2
2158	Changes in the concentration, distribution, and speciation of arsenic in the hyperaccumulator Pteris vittata at different growth stages. Science of the Total Environment, 2022, 841, 156708.	3.9	6
2159	Two-dimensional correlated spectroscopy distinguishes clear cell renal cell carcinoma from other kidney neoplasms and non-cancer kidney. Translational Andrology and Urology, 2022, 11, 929-942.	0.6	3
2161	Ultra-HPLC-MS pseudo-targeted metabolomic profiling reveals metabolites and associated metabolic		

#	Article	IF	CITATIONS
2167	Metabolite, protein, and tissue dysfunction associated with COVID-19 disease severity. Scientific Reports, 2022, 12 , .	1.6	11
2168	Terahertz optoacoustic detection of aqueous salt solutions. IScience, 2022, 25, 104668.	1.9	3
2169	Studying the Parkinson's disease metabolome and exposome in biological samples through different analytical and cheminformatics approaches: a pilot study. Analytical and Bioanalytical Chemistry, 2022, 414, 7399-7419.	1.9	12
2170	Highly perturbed genes and hub genes associated with type 2 diabetes in different tissues of adult humans: a bioinformatics analytic workflow. Functional and Integrative Genomics, 2022, 22, 1003-1029.	1.4	3
2171	Fungal consortium of two Beauveria bassiana strains increases their virulence, growth, and resistance to stress: A metabolomic approach. PLoS ONE, 2022, 17, e0271460.	1.1	5
2172	Prediction of degradation pathways of phenolic compounds in the human gut microbiota through enzyme promiscuity methods. Npj Systems Biology and Applications, 2022, 8, .	1.4	8
2173	Metabolic composition of the cyanobacterium Nostoc muscorum as a function of culture time: A 1H NMR metabolomics study. Algal Research, 2022, 66, 102792.	2.4	3
2174	Integration of metabolites from meta-analysis with transcriptome reveals enhanced SPHK1 in PDAC with a background of pancreatitis. BMC Cancer, 2022, 22, .	1.1	2
2175	Immunomodulatory effects of microbiota-derived metabolites at the crossroad of neurodegenerative diseases and viral infection: network-based bioinformatics insights. Frontiers in Immunology, 0, 13, .	2.2	5
2176	Protein–Ligand Docking in the Machine-Learning Era. Molecules, 2022, 27, 4568.	1.7	37
2177	Exploring the Association between Habitual Food Intake and the Urine and Blood Metabolome in Adolescents and Young Adults: A Cohort Study. Molecular Nutrition and Food Research, 2022, 66, .	1.5	5
2178	Clinical effects of probiotics on the functioning of the gut-brain axis in children. Meditsinskiy Sovet, 2022, , 152-159.	0.1	0
2179	Application of Metabolomics in Various Types of Diabetes. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy, 0, Volume 15, 2051-2059.	1.1	7
2180	Persistence of Metabolomic Changes in Patients during Post-COVID Phase: A Prospective, Observational Study. Metabolites, 2022, 12, 641.	1.3	12
2181	Metabolomics: A New Approach in the Evaluation of Effects in Human Beings and Wildlife Associated with Environmental Exposition to POPs. Toxics, 2022, 10, 380.	1.6	3
2182	What are we imaging? Software tools and experimental strategies for annotation and identification of small molecules in mass spectrometry imaging. Mass Spectrometry Reviews, 2023, 42, 1927-1964.	2.8	14
2183	Chemicals Affecting Cyanobacterial Poly(3-hydroxybutyrate) Accumulation: 2-Phenylethanol Treatment Combined with Nitrogen Deprivation Synergistically Enhanced Poly(3-hydroxybutyrate) Storage in <i>Synechocystis</i> sp. PCC6803 and <i>Anabaena</i> sp. TISTR8076. Plant and Cell Physiology, 2022, 63, 1253-1272.	1.5	5
2184	Enhancing untargeted metabolomics using metadata-based source annotation. Nature Biotechnology, 2022, 40, 1774-1779.	9.4	25

#	Article	IF	CITATIONS
2185	Diagnostic Performance of a Noninvasive Breath Test forÂColorectal Cancer: COBRA1 Study. Gastroenterology, 2022, 163, 1447-1449.e8.	0.6	9
2186	Adaptation of the infant gut microbiome during the complementary feeding transition. PLoS ONE, 2022, 17, e0270213.	1.1	5
2187	The association between plasma metabolites and future risk of allâ€cause mortality. Journal of Internal Medicine, 2022, 292, 804-815.	2.7	8
2188	REGLIV: Molecular regulation data of diverse living systems facilitating current multiomics research. Computers in Biology and Medicine, 2022, 148, 105825.	3.9	10
2190	Sarcodia suae modulates the immunity and disease resistance of white shrimp Litopenaeus vannamei against Vibrio alginolyticus via the purine metabolism and phenylalanine metabolism. Fish and Shellfish Immunology, 2022, 127, 766-777.	1.6	10
2191	Bias caused by incomplete metabolite extraction and matrix effect: Evaluation of critical factors for plasma sample preparation prior to metabolomics. Journal of Pharmaceutical and Biomedical Analysis, 2022, 219, 114930.	1.4	3
2192	Nutrigenomics in livestock sector and its human-animal interface-a review. Veterinary and Animal Science, 2022, 17, 100262.	0.6	3
2193	Biomarker enrichment medium: A defined medium for metabolomic analysis of microbial pathogens. Frontiers in Microbiology, $0,13,.$	1.5	3
2194	Postnatal persistence of nonhuman primate sexâ€dependent renal structural and molecular changes programmed by intrauterine growth restriction. Journal of Medical Primatology, 0, , .	0.3	1
2195	Rapid nutrient depletion to below the physiological range by cancer cells cultured in Plasmax. American Journal of Physiology - Cell Physiology, 2022, 323, C823-C834.	2.1	7
2196	Preanalytical Pitfalls in Untargeted Plasma Nuclear Magnetic Resonance Metabolomics of Endocrine Hypertension. Metabolites, 2022, 12, 679.	1.3	2
2198	Complexity reduction and opportunities in the design, integration and intensification of biocatalytic processes for metabolite synthesis. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	3
2199	Regulation of metabolic and transcriptional responses by the thyroid hormone in cellular models of murine macrophages. Frontiers in Immunology, 0, 13 , .	2.2	1
2200	<i>deepGraphh</i> : Al-driven web service for graph-based quantitative structure–activity relationship analysis. Briefings in Bioinformatics, 2022, 23, .	3.2	3
2201	Spatial metabolomics shows contrasting phosphonolipid distributions in tissues of marine bivalves., 0, 4, e21.		4
2202	Application of data augmentation techniques towards metabolomics. Computers in Biology and Medicine, 2022, 148, 105916.	3.9	5
2203	Comprehensive two-dimensional gas chromatography with mass spectrometry: an advanced bioanalytical technique for clinical metabolomics studies. Analyst, The, 2022, 147, 3974-3992.	1.7	3
2204	Microbiota-derived metabolites as drivers of gut–brain communication. Gut Microbes, 2022, 14, .	4.3	74

#	Article	IF	CITATIONS
2205	Re-routing Metabolism by the Mitochondrial Pyruvate Carrier Inhibitor MSDC-0160 Attenuates Neurodegeneration in a Rat Model of Parkinson's Disease. Molecular Neurobiology, 2022, 59, 6170-6182.	1.9	6
2206	Graph Properties of Mass-Difference Networks for Profiling and Discrimination in Untargeted Metabolomics. Frontiers in Molecular Biosciences, 0, 9, .	1.6	3
2207	A diagnostic model for overweight and obesity from untargeted urine metabolomics of soldiers. PeerJ, 0, 10, e13754.	0.9	1
2208	Differential In Vitro Effects of SGLT2 Inhibitors on Mitochondrial Oxidative Phosphorylation, Glucose Uptake and Cell Metabolism. International Journal of Molecular Sciences, 2022, 23, 7966.	1.8	8
2210	Crocins for Ischemic Stroke: A Review of Current Evidence. Frontiers in Pharmacology, 0, 13, .	1.6	2
2211	Metabolomic Profiling Reveals Common Metabolic Alterations in Plasma of Patients with Toxoplasma Infection and Schizophrenia. Genes, 2022, 13, 1482.	1.0	3
2212	Multi-omics analyses of airway host–microbe interactions in chronic obstructive pulmonary disease identify potential therapeutic interventions. Nature Microbiology, 2022, 7, 1361-1375.	5.9	43
2213	Computational studies indicated the effectiveness of human metabolites against SARS-Cov-2 main protease. Molecular Diversity, 2023, 27, 1587-1602.	2.1	3
2214	Metabolite Signature of Simvastatin Treatment Involves Multiple Metabolic Pathways. Metabolites, 2022, 12, 753.	1.3	4
2215	Vibrational Circular Dichroism Unravels Supramolecular Chirality and Hydration Polymorphism of Nucleoside Crystals. Chemistry - A European Journal, 2022, 28, .	1.7	9
2217	A Key Metabolic Regulator of Bone and Cartilage Health. Endocrinology and Metabolism, 2022, 37, 559-574.	1.3	4
2218	Effects of variety and origin on the metabolic and texture characteristics of quinoa seeds based on ultrahigh-performance liquid chromatography coupled with high-field quadrupole-orbitrap high-resolution mass spectrometry. Food Research International, 2022, 162, 111693.	2.9	4
2219	Review of Current Human Genome-Scale Metabolic Models for Brain Cancer and Neurodegenerative Diseases. Cells, 2022, 11, 2486.	1.8	2
2220	Molecular effects of the consumption of margarine and butter varying in trans fat composition: a parallel human intervention study. Lipids in Health and Disease, 2022, 21, .	1.2	2
2222	A drugâ€disease model for predicting survival in an Ebola outbreak. Clinical and Translational Science, 2022, 15, 2538-2550.	1.5	4
2223	Obligately aerobic human gut microbe expresses an oxygen resistant tungsten-containing oxidoreductase for detoxifying gut aldehydes. Frontiers in Microbiology, $0,13,.$	1.5	3
2224	Metabolic profiling of induced acute pancreatitis and pancreatic cancer progression in a mutant Kras mouse model. Frontiers in Molecular Biosciences, 0, 9, .	1.6	3
2225	Antihypertensive Activity of Milk Fermented by LactiplantibacillusÂplantarum SR37-3 and SR61-2 in L-NAME-Induced Hypertensive Rats. Foods, 2022, 11, 2332.	1.9	10

#	Article	IF	CITATIONS
2226	Metabolic profiling as a powerful tool for the analysis of cellular alterations caused by 20 mycotoxins in HepG2 cells. Archives of Toxicology, 2022, 96, 2983-2998.	1.9	10
2227	Dietary Energy Intake and Presence of Aberrant Crypt Foci are Associated with Phospholipid, Purine, and Taurine Metabolite Abundances in C57BL/6N Mouse Colon. Molecular Nutrition and Food Research, 0, , 2200180.	1.5	1
2228	1H NMR Urinary Metabolomic Analysis in Older Adults after Hip Fracture Surgery May Provide Valuable Information for Patient Profiling—A Preliminary Investigation. Metabolites, 2022, 12, 744.	1.3	2
2229	Metabolomic and transcriptomic signatures of influenza vaccine response in healthy young and older adults. Aging Cell, 2022, 21, .	3.0	9
2230	Metabolomics of Human Semen: A Review of Different Analytical Methods to Unravel Biomarkers for Male Fertility Disorders. International Journal of Molecular Sciences, 2022, 23, 9031.	1.8	12
2231	Prediction of semen analysis parameter improvement after varicocoelectomy using 1 H NMRâ€based metabonomics assays. Andrology, 2022, 10, 1581-1592.	1.9	2
2232	Multi-omic Analysis of the Gut Microbiome in Rats with Lithium-Pilocarpine-Induced Temporal Lobe Epilepsy. Molecular Neurobiology, 2022, 59, 6429-6446.	1.9	6
2233	Systematic Analysis and Prediction of the Target Space of Bioactive Food Compounds: Filling the Chemobiological Gaps. Journal of Chemical Information and Modeling, 2022, 62, 3734-3751.	2.5	5
2234	Identification of biomarkers and the mechanisms of multiple trauma complicated with sepsis using metabolomics. Frontiers in Public Health, 0, 10 , .	1.3	8
2235	Effects of dietary branched-chain amino acid supplementation on serum and milk metabolome profiles in dairy cows during early lactation. Journal of Dairy Science, 2022, 105, 8497-8508.	1.4	6
2236	Comprehensive metabolomics study on the pathogenesis of anaplastic astrocytoma via UPLC-Q/TOF-MS. Medicine (United States), 2022, 101, e29594.	0.4	1
2237	Metabolomics profiles in acute-on-chronic liver failure: Unveiling pathogenesis and predicting progression. Frontiers in Pharmacology, 0, 13 , .	1.6	6
2238	Mass Spectrometry-Based Nontargeted and Targeted Analytical Approaches in Fingerprinting and Metabolomics of Food and Agricultural Research. Journal of Agricultural and Food Chemistry, 2022, 70, 11138-11153.	2.4	16
2239	Analyzing cell-type-specific dynamics of metabolism in kidney repair. Nature Metabolism, 2022, 4, 1109-1118.	5.1	61
2241	Artificial intelligence uncovers carcinogenic human metabolites. Nature Chemical Biology, 2022, 18, 1204-1213.	3.9	9
2242	Chemotherapeutic resistant cholangiocarcinoma displayed distinct intratumoral microbial composition and metabolic profiles. PeerJ, 0, 10, e13876.	0.9	3
2243	Structural characteristics of locust bean gum hydrolysate and its alleviating effect on dextran sulfate sodium-induced colitis. Frontiers in Microbiology, 0, 13, .	1.5	1
2244	Quantification of Gut Microbiota Dysbiosis-Related Organic Acids in Human Urine Using LC-MS/MS. Molecules, 2022, 27, 5363.	1.7	2

#	Article	IF	CITATIONS
2245	Dioxin-elicited decrease in cobalamin redirects propionyl-CoA metabolism to the $\hat{l}^2\hat{a}$ e"oxidation-like pathway resulting in acrylyl-CoA conjugate buildup. Journal of Biological Chemistry, 2022, 298, 102301.	1.6	5
2246	Long time stability of 35 small endogenous biomolecules in dried urine spotted on various surfaces and environmental conditions. Forensic Science International, 2022, 339, 111420.	1.3	3
2247	Setting impurity limits for endogenous substances: Recommendations for a harmonized procedure and an example using fatty acids. Regulatory Toxicology and Pharmacology, 2022, 134, 105242.	1.3	0
2248	Effects of sulfamethoxazole exposure on mussels (Mytilus galloprovincialis) metabolome using retrospective non-target high-resolution mass spectrometry and chemometric tools. Talanta, 2023, 252, 123804.	2.9	5
2249	Antiparasitic Potential of Methanol Extract of Brown Alga Sargassum polycystum (Phaeophyceae) and Its LC-MS/MS Metabolite Profiling. Diversity, 2022, 14, 796.	0.7	4
2250	A Comprehensive 2D-LC/MS/MS Profile of the Normal Human Urinary Metabolome. Diagnostics, 2022, 12, 2184.	1.3	3
2251	Metabolomic profiling of intrauterine growth-restricted preterm infants: a matched case–control study. Pediatric Research, 0, , .	1.1	2
2252	Renal Transcriptome and Metabolome in Mice with Principal Cell-Specific Ablation of the Tsc1 Gene: Derangements in Pathways Associated with Cell Metabolism, Growth and Acid Secretion. International Journal of Molecular Sciences, 2022, 23, 10601.	1.8	1
2253	Amaranth as a natural food colorant source: Survey of germplasm and optimization of extraction methods for betalain pigments. Frontiers in Plant Science, 0, 13 , .	1.7	4
2254	Towards computational solutions for precision medicine based big data healthcare system using deep learning models: A review. Computers in Biology and Medicine, 2022, 149, 106020.	3.9	20
2255	Hippocampal metabolic recovery as a manifestation of the protective effect of ischemic preconditioning in rats. Neurochemistry International, 2022, 160, 105419.	1.9	2
2256	Metabolomics analysis reveals differences in milk metabolism and fermentation rate between individual Lactococcus lactis subsp. lactis strains. Food Research International, 2022, 162, 111920.	2.9	9
2257	Microbiome-Related Indole and Serotonin Metabolites are Linked to Inflammation and Psychiatric Symptoms in People Living with HIV. International Journal of Tryptophan Research, 2022, 15, 117864692211268.	1.0	4
2258	A Primer for Circadian Metabolic Profile Analysis Using Multi-platform Metabolomics. Neuromethods, 2022, , 333-357.	0.2	0
2259	Whole proteome mapping of compound-protein interactions. Current Research in Chemical Biology, 2022, 2, 100035.	1.4	1
2260	Single-Cell Mass Spectrometry of Metabolites and Proteins for Systems and Functional Biology. Neuromethods, 2022, , 87-114.	0.2	0
2261	Metabolomics. , 2024, , 161-170.		0
2262	Alteration in Plasma Metabolome in High-Fat Diet-Fed Monocyte Chemotactic Protein-1 Knockout Mice Bearing Pulmonary Metastases of Lewis Lung Carcinoma. Nutrition and Metabolic Insights, 2022, 15, 117863882211111.	0.8	O

#	Article	IF	CITATIONS
2263	Validation of the Anticolitis Efficacy of the Jian-Wei-Yu-Yang Formula. Evidence-based Complementary and Alternative Medicine, 2022, 2022, 1-20.	0.5	0
2264	How Well Can We Predict Mass Spectra from Structures? Benchmarking Competitive Fragmentation Modeling for Metabolite Identification on Untrained Tandem Mass Spectra. Journal of Chemical Information and Modeling, 2022, 62, 4049-4056.	2.5	6
2265	Development and Evaluation of a Physiologically Based Pharmacokinetic Model for Predicting Haloperidol Exposure in Healthy and Disease Populations. Pharmaceutics, 2022, 14, 1795.	2.0	2
2266	A look beyond dietary (poly)phenols: The low molecular weight phenolic metabolites and their concentrations in human circulation. Comprehensive Reviews in Food Science and Food Safety, 2022, 21, 3931-3962.	5.9	19
2267	The rapeutic mechanisms of mulberry leaves in type 2 diabetes based on metabolomics. Frontiers in Pharmacology, $0,13,\ldots$	1.6	2
2268	Pharmacometabolomics-Based Translational Biomarkers: How to Navigate the Data Ocean. OMICS A Journal of Integrative Biology, 0, , .	1.0	0
2269	BuDb: A Curated Drug Discovery Database for Buruli Ulcer. Journal of Computational Biophysics and Chemistry, 2023, 22, 31-41.	1.0	1
2270	TurboPutative: A web server for data handling and metabolite classification in untargeted metabolomics. Frontiers in Molecular Biosciences, 0, 9, .	1.6	1
2271	Metabolomics in Otorhinolaryngology. Frontiers in Molecular Biosciences, 0, 9, .	1.6	2
2272	Machine learning for identification of silylated derivatives from mass spectra. Journal of Cheminformatics, 2022, 14, .	2.8	3
2273	Innovative Application of Metabolomics on Bioactive Ingredients of Foods. Foods, 2022, 11, 2974.	1.9	3
2274	Strain-specific impacts of probiotics are a significant driver of gut microbiome development in very preterm infants. Nature Microbiology, 2022, 7, 1525-1535.	5.9	48
2275	Integrative analysis of the mouse fecal microbiome and metabolome reveal dynamic phenotypes in the development of colorectal cancer. Frontiers in Microbiology, 0, 13, .	1.5	2
2276	Data Processing and Analysis in Mass Spectrometry-Based Metabolomics. Methods in Molecular Biology, 2023, , 207-239.	0.4	0
2277	Optimization of a GC-MS Injection-Port Derivatization Methodology to Enhance Metabolomics Analysis Throughput in Biological Samples. Journal of Proteome Research, 2022, 21, 2555-2565.	1.8	5
2278	An initial investigation of accuracy required for the identification of small molecules in complex samples using quantum chemical calculated NMR chemical shifts. Journal of Cheminformatics, 2022, 14, .	2.8	0
2279	Colitis-associated intestinal microbiota regulates brain glycine and host behavior in mice. Scientific Reports, 2022, 12, .	1.6	9
2280	Microbe-bridged disease-metabolite associations identification by heterogeneous graph fusion. Briefings in Bioinformatics, 2022, 23, .	3.2	3

#	Article	IF	CITATIONS
2281	In Vitro Gene Expression Responses of Bovine Rumen Epithelial Cells to Different pH Stresses. Animals, 2022, 12, 2621.	1.0	1
2282	Four layer multi-omics reveals molecular responses to aneuploidy in Leishmania. PLoS Pathogens, 2022, 18, e1010848.	2.1	6
2283	Compounds from human odor induce attraction and landing in female yellow fever mosquitoes (Aedes aegypti). Scientific Reports, 2022, 12, .	1.6	7
2284	RTX-KG2: a system for building a semantically standardized knowledge graph for translational biomedicine. BMC Bioinformatics, 2022, 23, .	1.2	15
2285	Sleep duration, plasma metabolites, and obesity and diabetes: a metabolome-wide association study in US women. Sleep, 2023, 46, .	0.6	8
2286	The Cao-Xiang-Wei-Kang formula attenuates the progression of experimental colitis by restoring the homeostasis of the microbiome and suppressing inflammation. Frontiers in Pharmacology, $0,13,.$	1.6	4
2287	Sortingâ€free metabolic profiling uncovers the vulnerability of fatty acid βâ€oxidation in <i>in vitro</i> quiescence models. Molecular Systems Biology, 2022, 18, .	3.2	6
2288	Combining Machine Learning with Metabolomic and Embryologic Data Improves Embryo Implantation Prediction. Reproductive Sciences, 2023, 30, 984-994.	1.1	5
2289	High Expression of ACOT2 Predicts Worse Overall Survival and Abnormal Lipid Metabolism: A Potential Target for Acute Myeloid Leukemia. Journal of Healthcare Engineering, 2022, 2022, 1-15.	1,1	2
2290	Maternal plasma diacylglycerols and triacylglycerols in the prediction of gestational diabetes mellitus. BJOG: an International Journal of Obstetrics and Gynaecology, 2023, 130, 247-256.	1.1	4
2291	Serum Uric Acid and Metabolic Markers in Diabetes. Biomarkers in Disease, 2023, , 239-259.	0.0	0
2292	Landscape of circulating metabolic fingerprinting for keloid. Frontiers in Immunology, 0, 13, .	2.2	1
2293	Paper Spray Ionization Ion Mobility Mass Spectrometry of Sebum Classifies Biomarker Classes for the Diagnosis of Parkinson's Disease. Jacs Au, 2022, 2, 2013-2022.	3.6	12
2294	MetaboAnnotator: an efficient toolbox to annotate metabolites in genome-scale metabolic reconstructions. Bioinformatics, 2022, 38, 4831-4832.	1.8	2
2295	Immunomodulatory and biological properties of helminth-derived small molecules: Potential applications in diagnostics and therapeutics. , 0, 1 , .		8
2296	Characterizing the follicular fluid metabolome: quantifying the correlation across follicles and differences with the serum metabolome. Fertility and Sterility, 2022, 118, 970-979.	0.5	8
2297	Investigation of sulfur-containing compounds in spears of green and white Asparagus officinalis through LC-MS and HS-GC–MS. Food Research International, 2022, 162, 111992.	2.9	4
2298	Metabolic impact of infant formulas in young infants. An outlook from the urine metabolome. Heliyon, 2022, 8, e10432.	1.4	1

#	Article	IF	CITATIONS
2299	The serum metabolomic profile of a distinct, inflammatory subtype of acute psychosis. Molecular Psychiatry, 2022, 27, 4722-4730.	4.1	1
2300	High field <i>ex vivo</i> and <i>in vivo</i> 2D NMR spectroscopy in mice brain: Resolving and exploring the molecular environments. NMR in Biomedicine, 0, , .	1.6	3
2301	Databases and Tools to Investigate Protein-Metabolite Interactions. Methods in Molecular Biology, 2023, , 231-249.	0.4	0
2302	Chemical Triggering Cyanobacterial Glycogen Accumulation: Methyl Viologen Treatment Increases <i>Synechocystis</i> sp. PCC 6803 Glycogen Storage by Enhancing Levels of Gene Transcript and Substrates in Glycogen Synthesis. Plant and Cell Physiology, 2023, 63, 2027-2041.	1.5	2
2303	Serum metabolites associated with wholegrain consumption using nontargeted metabolic profiling: a discovery and reproducibility study. European Journal of Nutrition, 0, , .	1.8	0
2304	Hyperpolarized (1- ¹³ C)Alaninamide Is a Multifunctional In Vivo Sensor of Aminopeptidase N Activity, pH, and CO ₂ . ACS Sensors, 2022, 7, 2987-2994.	4.0	4
2305	Plasma Metabolomics Reveals Systemic Metabolic Alterations of Subclinical and Clinical Hypothyroidism. Journal of Clinical Endocrinology and Metabolism, 2022, 108, 13-25.	1.8	7
2307	Mixed Tree Nuts, Cognition, and Gut Microbiota: A 4-Week, Placebo-Controlled, Randomized Crossover Trial in Healthy Nonelderly Adults. Journal of Nutrition, 2022, 152, 2778-2788.	1.3	2
2308	The rapeutic drug repositioning with special emphasis on neurodegenerative diseases: Threats and issues. Frontiers in Pharmacology, $0,13,.$	1.6	4
2309	Metabolite profiling of Nymphaea rubra (Burm. f.) flower extracts using cyclic ion mobility–mass spectrometry and their associated biological activities. Food Chemistry, 2023, 404, 134544.	4.2	7
2310	Omics profiling identifies the regulatory functions of the MAPK/ERK pathway in nephron progenitor metabolism. Development (Cambridge), 2022, 149, .	1.2	1
2311	Mouse organoids as an in vitro tool to study the in vivo intestinal response to cytotoxicants. Archives of Toxicology, 2023, 97, 235-254.	1.9	7
2312	Prospective Metabolomic Studies in Precision Medicine: The AKRIBEA Project. Handbook of Experimental Pharmacology, 2022, , 275-297.	0.9	1
2313	Practical Aspects of NMR-Based Metabolomics. Handbook of Experimental Pharmacology, 2022, , .	0.9	0
2314	Defining atherosclerotic plaque biology by mass spectrometry-based omics approaches. Molecular Omics, 2023, 19, 6-26.	1.4	4
2315	Automated analysis for multiplet identification from ultra-high resolution 2D-1H,13C-HSQC NMR spectra. Wellcome Open Research, 0, 7, 262.	0.9	0
2316	Untargeted Metabolomics Reveals New Markers of Food Processing for Strawberry and Apple Purees. Molecules, 2022, 27, 7275.	1.7	1
2318	Microbial and metabolic characterization of organic artisanal sauerkraut fermentation and study of gut health-promoting properties of sauerkraut brine. Frontiers in Microbiology, $0,13,.$	1.5	5

#	Article	IF	CITATIONS
2319	Metabolic biomarkers of radiotherapy response in plasma and tissue of an IDH1 mutant astrocytoma mouse model. Frontiers in Oncology, 0, 12 , .	1.3	0
2320	Metabolic reprogramming enables the auxiliary diagnosis of breast cancer by automated breast volume scanner. Frontiers in Oncology, 0, 12 , .	1.3	1
2321	The metabolomics of human aging: Advances, challenges, and opportunities. Science Advances, 2022, 8,	4.7	31
2323	Sensing nitriles with THz spectroscopy of urine vapours from cancers patients subject to chemotherapy. Scientific Reports, 2022, 12, .	1.6	12
2324	The gut microbiome-metabolome dataset collection: a curated resource for integrative meta-analysis. Npj Biofilms and Microbiomes, 2022, 8, .	2.9	13
2325	The impact of ethnicity and intra-pancreatic fat on the postprandial metabolome response to whey protein in overweight Asian Chinese and European Caucasian women with prediabetes. Frontiers in Clinical Diabetes and Healthcare, 0, 3, .	0.3	1
2326	The NAD Interactome, Identification of Putative New NAD-Binding Proteins. Lecture Notes in Networks and Systems, 2023, , 43-54.	0.5	1
2327	Indoor microbiome and allergic diseases: From theoretical advances to prevention strategies. , 2022, 1, $133-146$.		14
2328	Retention Time Prediction with Message-Passing Neural Networks. Separations, 2022, 9, 291.	1.1	7
2329	The effects of rhein on D-GalN/LPS-induced acute liver injury in mice: Results from gut microbiome-metabolomics and host transcriptome analysis. Frontiers in Immunology, 0, 13, .	2.2	4
2330	The Global Regulator MftR Controls Virulence and Siderophore Production in Burkholderia thailandensis. Journal of Bacteriology, 2022, 204, .	1.0	1
2331	Potential cardiotoxicity induced by Euodiae Fructus: In vivo and in vitro experiments and untargeted metabolomics research. Frontiers in Pharmacology, $0,13,.$	1.6	3
2332	Influence of the microbiome, diet and genetics on inter-individual variation in the human plasma metabolome. Nature Medicine, 2022, 28, 2333-2343.	15.2	71
2333	Biosynthetic regulatory network of flavonoid metabolites in stems and leaves of Salvia miltiorrhiza. Scientific Reports, 2022, 12, .	1.6	6
2334	The influence of machine learning technologies in gut microbiome research and cancer studies - A review. Life Sciences, 2022, 311, 121118.	2.0	5
2335	Metabolomic Profiling of Cardiac Fibrosis and Steatosis in Women With or at Risk for HIV. Journal of Acquired Immune Deficiency Syndromes (1999), 2023, 92, 162-172.	0.9	2
2336	The novel distribution of intracellular and extracellular flavonoids produced by Aspergillus sp. Gbtc 2, an endophytic fungus from Ginkgo biloba root. Frontiers in Microbiology, 0, 13, .	1.5	2
2337	Metabolome-wide association study on <i>ABCA7</i> indicates a role of ceramide metabolism in Alzheimer's disease. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	11

#	Article	IF	CITATIONS
2338	Microbiota independent effects of oligosaccharides on Caco-2 cells -A semi-targeted metabolomics approach using DI-FT-ICR-MS coupled with pathway enrichment analysis. Frontiers in Molecular Biosciences, 0, 9, .	1.6	5
2339	Chitosan Film as a Replacement for Conventional Sulphur Dioxide Treatment of White Wines: A 1H NMR Metabolomic Study. Foods, 2022, 11, 3428.	1.9	1
2340	Spatial metabolomics reveals upregulation of several pyrophosphate-producing pathways in cortical bone of Hyp mice. JCI Insight, 2022, 7, .	2.3	4
2341	Cluster Analysis Statistical Spectroscopy for the Identification of Metabolites in 1H NMR Metabolomics. Metabolites, 2022, 12, 992.	1.3	2
2342	Insights into eco-corona formation and its role in the biological effects of nanomaterials from a molecular mechanisms perspective. Science of the Total Environment, 2023, 858, 159867.	3.9	4
2343	Dietary restriction and medical therapy drives PPARα-regulated improvements in early diabetic kidney disease in male rats. Clinical Science, 2022, 136, 1485-1511.	1.8	4
2344	Spatial dynamic metabolomics identifies metabolic cell fate trajectories in human kidney differentiation. Cell Stem Cell, 2022, 29, 1580-1593.e7.	5. 2	31
2345	Blood-based lipidomic signature of severe obstructive sleep apnoea in Alzheimer's disease. Alzheimer's Research and Therapy, 2022, 14, .	3.0	3
2346	Assessing the Fate of Dissolved Organic Compounds in Landfill Leachate and Wastewater Treatment Systems. ACS ES&T Water, 2022, 2, 2502-2509.	2.3	3
2347	Nutrigenomics research: Methods and applications. , 2023, , 35-82.		1
2347	Nutrigenomics research: Methods and applications. , 2023, , 35-82. Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport, and storage. Molecular Omics, 2023, 19, 95-104.	1.4	2
	Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport,	1.4	
2348	Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport, and storage. Molecular Omics, 2023, 19, 95-104. Plasma Metabolomic and Lipidomic Profiling of Metabolic Dysfunction-Associated Fatty Liver Disease		2
2348 2349	Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport, and storage. Molecular Omics, 2023, 19, 95-104. Plasma Metabolomic and Lipidomic Profiling of Metabolic Dysfunction-Associated Fatty Liver Disease in Humans Using an Untargeted Multiplatform Approach. Metabolites, 2022, 12, 1081. Calculation of Mass Spectra with the QCxMS Method for Negatively and Multiply Charged Molecules.	1.3	2
2348 2349 2350	Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport, and storage. Molecular Omics, 2023, 19, 95-104. Plasma Metabolomic and Lipidomic Profiling of Metabolic Dysfunction-Associated Fatty Liver Disease in Humans Using an Untargeted Multiplatform Approach. Metabolites, 2022, 12, 1081. Calculation of Mass Spectra with the QCxMS Method for Negatively and Multiply Charged Molecules. Journal of the American Society for Mass Spectrometry, 2022, 33, 2226-2242. Psychological distress and metabolomic markers: A systematic review of posttraumatic stress	1.3	2 2
2348 2349 2350 2351	Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport, and storage. Molecular Omics, 2023, 19, 95-104. Plasma Metabolomic and Lipidomic Profiling of Metabolic Dysfunction-Associated Fatty Liver Disease in Humans Using an Untargeted Multiplatform Approach. Metabolites, 2022, 12, 1081. Calculation of Mass Spectra with the QCxMS Method for Negatively and Multiply Charged Molecules. Journal of the American Society for Mass Spectrometry, 2022, 33, 2226-2242. Psychological distress and metabolomic markers: A systematic review of posttraumatic stress disorder, anxiety, and subclinical distress. Neuroscience and Biobehavioral Reviews, 2022, 143, 104954. Untargeted metabolomics of human keratinocytes reveals the impact of exposure to 2,6-dichloro-1,4-benzoquinone and 2,6-dichloro-3-hydroxy-1,4-benzoquinone as emerging disinfection	1.3 1.2 2.9	2 2 6
2348 2349 2350 2351 2352	Pre-analytical aspects in metabolomics of human biofluids – sample collection, handling, transport, and storage. Molecular Omics, 2023, 19, 95-104. Plasma Metabolomic and Lipidomic Profiling of Metabolic Dysfunction-Associated Fatty Liver Disease in Humans Using an Untargeted Multiplatform Approach. Metabolites, 2022, 12, 1081. Calculation of Mass Spectra with the QCxMS Method for Negatively and Multiply Charged Molecules. Journal of the American Society for Mass Spectrometry, 2022, 33, 2226-2242. Psychological distress and metabolomic markers: A systematic review of posttraumatic stress disorder, anxiety, and subclinical distress. Neuroscience and Biobehavioral Reviews, 2022, 143, 104954. Untargeted metabolomics of human keratinocytes reveals the impact of exposure to 2,6-dichloro-1,4-benzoquinone and 2,6-dichloro-3-hydroxy-1,4-benzoquinone as emerging disinfection by-products. Metabolomics, 2022, 18, . Shared genetic influences between blood analyte levels and risk of severe COVID-19. Cell Reports, 2022,	1.3 1.2 2.9	2 2 2 6

#	Article	IF	CITATIONS
2357	Potential mechanism of pyrotinib-induced diarrhea was explored by gut microbiome and ileum metabolomics. Anti-Cancer Drugs, 2023, 34, 747-762.	0.7	1
2358	RaMP-DB 2.0: a renovated knowledgebase for deriving biological and chemical insight from metabolites, proteins, and genes. Bioinformatics, 2023, 39, .	1.8	10
2359	Metabolite annotation from knowns to unknowns through knowledge-guided multi-layer metabolic networking. Nature Communications, 2022, 13, .	5.8	38
2360	Identification of PCSK9-like human gene knockouts using metabolomics, proteomics, and whole-genome sequencing in a consanguineous population. Cell Genomics, 2023, 3, 100218.	3.0	4
2361	Free triiodothyronine levels and age influences the metabolic profile and COVID-19 severity parameters in euthyroid and levothyroxine-treated patients. Frontiers in Endocrinology, 0, 13, .	1.5	0
2362	Evidence for Cardiac Glycosides in Foliage of Colorado Potato Beetle-Resistant <i>Solanum okadae</i> . Journal of Agricultural and Food Chemistry, 2022, 70, 14613-14621.	2.4	0
2363	IR-MALDI Mass Spectrometry Imaging with Plasma Post-Ionization of Nonpolar Metabolites. Analytical Chemistry, 2022, 94, 16086-16094.	3.2	7
2364	In FUS[1â^'359]â€ŧg mice O,S-dibenzoyl thiamine reduces muscle atrophy, decreases glycogen synthase kinase 3 beta, and normalizes the metabolome. Biomedicine and Pharmacotherapy, 2022, 156, 113986.	2.5	4
2365	Mass Spectrometry for the Advancement of Lipid Analysis in Alzheimer's Research. Methods in Molecular Biology, 2023, , 245-259.	0.4	3
2368	Exploring New Methods to Study and Moderate Proton Beam Damage for Multimodal Imaging on a Single Tissue Section. Journal of the American Society for Mass Spectrometry, 0, , .	1.2	1
2369	An Untargeted Metabolomics Approach on Carfilzomib-Induced Nephrotoxicity. Molecules, 2022, 27, 7929.	1.7	1
2370	Time-dependent metabolome and fatty acid profile changes following a high-fat diet exposure in Drosophila melanogaster. Insect Biochemistry and Molecular Biology, 2023, 152, 103892.	1.2	1
2371	Network pharmacology and LC-MS approachs to explore the active compounds and mechanisms of Yuanjiang decoction for treating bradyarrhythmia. Computers in Biology and Medicine, 2023, 152, 106435.	3.9	2
2372	Genetic influences on human blood metabolites in the Japanese population. IScience, 2023, 26, 105738.	1.9	1
2374	Metabolomic Analysis of Renal Cell Carcinoma in the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial. Metabolites, 2022, 12, 1189.	1.3	0
2375	Label-Free Assessment of Mannitol Accumulation Following Osmotic Blood–Brain Barrier Opening Using Chemical Exchange Saturation Transfer Magnetic Resonance Imaging. Pharmaceutics, 2022, 14, 2529.	2.0	6
2377	Influence of Ecological Factors on the Metabolomic Composition of Fish Lenses. Biology, 2022, 11, 1709.	1.3	0
2379	Metabolomics- and systems-biology-guided discovery of metabolite lead compounds and druggable targets. Drug Discovery Today, 2023, 28, 103460.	3.2	9

#	Article	IF	Citations
2380	Enhanced polyglucan contents in divergent cyanobacteria under nutrient-deprived photoautotrophy: transcriptional and metabolic changes in response to increased glycogen accumulation in nitrogen-deprived Synechocystis sp. PCC 6803. World Journal of Microbiology and Biotechnology, 2023, 39, .	1.7	0
2381	Predictive Models Built Upon Annotated and Validated Intake Biomarkers in Urine Using Paired or Unpaired Analysis Helped to Classify Cranberry Juice Consumers in a Randomized, Double-Blinded, Placebo-controlled, and Cross-over Study. Nutrition Research, 2022, , .	1.3	0
2382	The mechanism of Renshen-Fuzi herb pair for treating heart failureâ€"Integrating a cardiovascular pharmacological assessment with serum metabolomics. Frontiers in Pharmacology, 0, 13, .	1.6	3
2383	ZnO Nanostructures Doped with Various Chloride Ion Concentrations for Efficient Photocatalytic Degradation of Methylene Blue in Alkaline and Acidic Media. Molecules, 2022, 27, 8726.	1.7	2
2384	The effects of fatty acid–based dietary interventions on circulating bioactive lipid levels as intermediate biomarkers of health, cardiovascular disease, and cardiovascular disease risk factors: a systematic review and meta-analysis of randomized clinical trials. Nutrition Reviews, 0, , .	2.6	1
2385	An Untargeted Metabolomics Workflow that Scales to Thousands of Samples for Population-Based Studies. Analytical Chemistry, 2022, 94, 17370-17378.	3.2	8
2387	Antibacterial and anti-quorum sensing activities of the different solvent extracts of Embelia ruminata. South African Journal of Botany, 2022, 151, 996-1007.	1.2	1
2388	Integration of transcriptomic and metabolomic profiling of encystation in Cryptocaryon irritans regulated by rapamycin. Veterinary Parasitology, 2023, 314, 109868.	0.7	0
2389	New metabolic signature for Chagas disease reveals sex steroid perturbation in humans and mice. Heliyon, 2022, 8, e12380.	1.4	7
2390	In Situ Metabolomics of Cortisol-Producing Adenomas. Clinical Chemistry, 2023, 69, 149-159.	1.5	3
2391	Omics as a Tool to Help Determine the Effectiveness of Supplements. Nutrients, 2022, 14, 5305.	1.7	1
2392	Joint structural annotation of small molecules using liquid chromatography retention order and tandem mass spectrometry data. Nature Machine Intelligence, 2022, 4, 1224-1237.	8.3	12
2393	Guanidino acid hydrolysis by the human enzyme annotated as agmatinase. Scientific Reports, 2022, 12, .	1.6	2
2394	Nonâ€targeted Metabolomics Intergrated with ¹ H NMR and LCâ€Qâ€TOFâ€MS/MS Methods to Depict a More Comprehensive Metabolic Profile in Response to Chrysosplenetin and Artemisinin Coâ€Treatment against Artemisininâ€Sensitive and â€Resistant <i>Plasmodium berghei</i> K173. Biomedical Chromatography, 0,	0.8	0
2395	Mass Spectrometric Methods for Non-Targeted Screening of Metabolites: A Future Perspective for the Identification of Unknown Compounds in Plant Extracts. Separations, 2022, 9, 415.	1.1	2
2396	Mapping of Fatty Aldehydes in the Diabetic Rat Brain Using On-Tissue Chemical Derivatization and Air-Flow-Assisted Desorption Electrospray Ionization-Mass Spectrometry Imaging. Journal of Proteome Research, 2023, 22, 36-46.	1.8	3
2397	Grape Berry Responses to Sequential Flooding and Heatwave Events: A Physiological, Transcriptional, and Metabolic Overview. Plants, 2022, 11, 3574.	1.6	0
2398	An investigation of metabolome in blood in patients with chronic peripheral, posttraumatic/postsurgical neuropathic pain. Scientific Reports, 2022, 12, .	1.6	4

#	Article	IF	CITATIONS
2399	Untargeted Metabolomics Reveals Lipid Impairment in the Liver of Adult Zebrafish (<i>Danio rerio</i>) Exposed to Carbendazim. Environmental Toxicology and Chemistry, 2023, 42, 437-448.	2.2	2
2400	Chemical characterization and antineoplastic effect of oligosaccharides from Cabernet Franc red wine in mammary tumor model in mice. Journal of Nutritional Biochemistry, 2023, 113, 109253.	1.9	2
2402	Circulating Metabolites Associated with Albuminuria in a Hispanic/Latino Population. Clinical Journal of the American Society of Nephrology: CJASN, 2023, 18, 204-212.	2.2	1
2403	Multimodal Learning for Multi-omics: A Survey. , 2023, 01, .		1
2404	Interplay between Cruciferous Vegetables and the Gut Microbiome: A Multi-Omic Approach. Nutrients, 2023, 15, 42.	1.7	7
2405	Machine learning of plasma metabolome identifies biomarker panels for metabolic syndrome: findings from the China Suboptimal Health Cohort. Cardiovascular Diabetology, 2022, 21, .	2.7	8
2406	Untargeted Fecal Metabolomic Analyses across an Industrialization Gradient Reveal Shared Metabolites and Impact of Industrialization on Fecal Microbiome-Metabolome Interactions. MSystems, 2022, 7, .	1.7	2
2407	Analysis approaches for the identification and prediction of $\langle i \rangle N \langle i \rangle \langle \sup \rangle 6 \langle \sup \rangle$ -methyladenosine sites. Epigenetics, 2023, 18, .	1.3	2
2408	Effects of autophagy inhibition by 3-methyladenine on encystation, morphology, and metabolites of Cryptocaryon irritans. Parasitology Research, 0, , .	0.6	0
2410	Relationship between 4-Hydroxynonenal (4-HNE) as Systemic Biomarker of Lipid Peroxidation and Metabolomic Profiling of Patients with Prostate Cancer. Biomolecules, 2023, 13, 145.	1.8	8
2411	Liquid chromatography-mass spectrometry metabolite library for metabolomics: Evaluating column suitability using a scoring approach. Journal of Chromatography A, 2023, 1690, 463779.	1.8	2
2412	An exposome connectivity paradigm for the mechanistic assessment of the effects of prenatal and early life exposure to metals on neurodevelopment. Frontiers in Public Health, 0, 10, .	1.3	1
2413	KODAMA exploratory analysis in metabolic phenotyping. Frontiers in Molecular Biosciences, 0, 9, .	1.6	1
2414	Supplementation with Tribulus Terrestris Extract Exhibits Protective Effects on MCAO Rats via Modulating Inflammation-Related Metabolic and Signaling Pathways. ACS Omega, 2023, 8, 2306-2314.	1.6	5
2415	Introduction to Multi-Omics. Translational Bioinformatics, 2023, , 1-10.	0.0	0
2416	Genomic atlas of the plasma metabolome prioritizes metabolites implicated in human diseases. Nature Genetics, 2023, 55, 44-53.	9.4	59
2417	Multi-omics profiling of PC-3 cells reveals bufadienolides-induced lipid metabolic remodeling by regulating long-chain lipids synthesis and hydrolysis. Metabolomics, 2023, 19, .	1.4	1
2418	Ultrasoundâ€essisted extraction of bioactive compounds from giloy (<i>Tinospora cordifolia</i>) stem: Quantitative process optimization and bioactives analysis. Journal of Food Process Engineering, 2023, 46, .	1.5	4

#	Article	IF	CITATIONS
2419	Metabolomics Profiles Reveal New Insights of Herpes Simplex Virus Type 1 Infection. International Journal of Molecular Sciences, 2023, 24, 1521.	1.8	2
2420	Temporal metabolic profiling of bone healing in a caprine tibia segmental defect model. Frontiers in Veterinary Science, 0, 9, .	0.9	0
2421	Targeting gut dysbiosis against inflammation and impaired autophagy in Duchenne muscular dystrophy. EMBO Molecular Medicine, 2023, 15, .	3.3	13
2422	Management of Brain Cancer and Neurodegenerative Disorders with Polymer-Based Nanoparticles as a Biocompatible Platform. Molecules, 2023, 28, 841.	1.7	7
2423	Protective Effect of Vegan Microbiota on Liver Steatosis Is Conveyed by Dietary Fiber: Implications for Fecal Microbiota Transfer Therapy. Nutrients, 2023, 15, 454.	1.7	1
2424	Rectal swabs as a viable alternative to faecal sampling for the analysis of gut microbiota functionality and composition. Scientific Reports, 2023, 13, .	1.6	5
2425	Food for thought—The link between Clostridioides difficile metabolism and pathogenesis. PLoS Pathogens, 2023, 19, e1011034.	2.1	10
2426	L-lactic and 2-ketoglutaric Acids, Odors from Human Skin, Govern Attraction and Landing in Host-Seeking Female Aedes aegypti Mosquitoes. Journal of Insect Behavior, 0, , .	0.4	0
2427	Gut bacterial species in late trimester of pregnant sows influence the occurrence of stillborn piglet through pro-inflammation response. Frontiers in Immunology, 0, 13, .	2.2	2
2428	Biofilms on Indwelling Artificial Urinary Sphincter Devices Harbor Complex Microbe–Metabolite Interaction Networks and Reconstitute Differentially In Vitro by Material Type. Biomedicines, 2023, 11, 215.	1.4	1
2429	A study of a diauxic growth experiment using an expanded dynamic flux balance framework. PLoS ONE, 2023, 18, e0280077.	1.1	22
2430	1H NMR-based metabolic profile and chemometric analysis for the discrimination of Passiflora species genotypic variations. Food Research International, 2023, 164, 112441.	2.9	1
2431	An Identification and a Quantitative Assessment of Phenolic Compounds in a Butanol Fraction of Extract from Cosmary Flowers (Tanacetum vulgare). Russian Journal of Bioorganic Chemistry, 2022, 48, 1454-1460.	0.3	0
2432	Multiomics Approach Captures Hepatic Metabolic Network Altered by Chronic Ethanol Administration. Biology, 2023, 12, 28.	1.3	2
2433	Inulin and Chinese Gallotannin Affect Meat Quality and Lipid Metabolism on Hu Sheep. Animals, 2023, 13, 160.	1.0	1
2434	Metabolomic profiles of metformin in breast cancer survivors: a pooled analysis of plasmas from two randomized placebo-controlled trials. Journal of Translational Medicine, 2022, 20, .	1.8	4
2435	Microbiome and Metabolomics in Liver Cancer: Scientific Technology. International Journal of Molecular Sciences, 2023, 24, 537.	1.8	13
2437	Relationship between serum thyroid hormones and their associated metabolites, and gene expression bioindicators in the back skin of Rana [Lithobates] catesbeiana tadpoles and frogs during metamorphosis. Frontiers in Endocrinology, 0, 13, .	1.5	2

#	Article	IF	CITATIONS
2438	Genome-scale metabolic reconstruction of 7,302 human microorganisms for personalized medicine. Nature Biotechnology, 2023, 41, 1320-1331.	9.4	55
2439	Metabolomic Alterations in Mammary Glands from Pubertal Mice Fed a High-Fat Diet. Nutrition and Metabolic Insights, 2023, 16, 117863882211488.	0.8	1
2441	Untargeted Metabolomic Analysis in Endolymphatic Sac Luminal Fluid from Patients with Meniere's Disease. JARO - Journal of the Association for Research in Otolaryngology, 0, , .	0.9	0
2442	Metabolic rewiring in MYC-driven medulloblastoma by BET-bromodomain inhibition. Scientific Reports, 2023, 13, .	1.6	3
2443	Nutrient stress is a target for new antibiotics. Trends in Microbiology, 2023, 31, 571-585.	3.5	5
2444	SalivaDBâ€"a comprehensive database for salivary biomarkers in humans. Database: the Journal of Biological Databases and Curation, 2023, 2023, .	1.4	3
2445	Derivation of metabolic point of departure using high-throughput in vitro metabolomics: investigating the importance of sampling time points on benchmark concentration values in the HepaRG cell line. Archives of Toxicology, 2023, 97, 721-735.	1.9	4
2446	Industrial application of metabolomics for personalized medicine: Current status and challenges. , 2023, , 261-291.		0
2447	Assessment of the Xenobiotics Toxicity Taking into Account Their Metabolism. Computational Methods in Engineering & the Sciences, 2023, , 21-51.	0.3	0
2448	1H NMR-based metabolomics of paired tissue, serum and urine samples reveals an optimized panel of biofluids metabolic biomarkers for esophageal cancer. Frontiers in Oncology, $0,13,.$	1.3	6
2449	Metabolomics of diabetes and cardiovascular disease. , 2023, , 239-260.		0
2450	Current advances in noninvasive methods for the diagnosis of oral squamous cell carcinoma: a review. European Journal of Medical Research, 2023, 28, .	0.9	6
2451	Improvement of Caciotta-like cheese nutritional value by means of enrichment with blackcurrant (Ribes nigrum) and Cornelian cherry (Cornus mas). Frontiers in Nutrition, 0, 9, .	1.6	1
2452	Metabolomics of the interaction between a consortium of entomopathogenic fungi and their target insect: Mechanisms of attack and survival. Pesticide Biochemistry and Physiology, 2023, 191, 105369.	1.6	0
2454	Repurposing drugs with specific activity against L-form bacteria. Frontiers in Microbiology, 0, 14, .	1.5	0
2455	Metabolite of chiral cycloxaprid in solvent and in the raw of Puer tea. Food Chemistry: X, 2023, 18, 100654.	1.8	0
2456	Development of a root exudate collection protocol for metabolomics analysis using Nuclear Magnetic Resonance. Plant Science, 2023, 331, 111694.	1.7	1
2457	The influence of temperature rise on the metabolic response of Ruditapes philippinarum clams to $17-\hat{l}\pm$ -ethinylestradiol. Science of the Total Environment, 2023, 877, 162898.	3.9	1

#	Article	IF	CITATIONS
2458	Sequential isolation of metabolites and lipids from a single sample to achieve multiomics by using TRIzol reagent. Talanta, 2023, 258, 124416.	2.9	2
2459	Clinical Metabolomics: Expanding the Metabolome Coverage Using Advanced Analytical Techniques. Lc-gc Europe, 2019, , 465-480.	0.2	1
2460	Quantitative challenges and their bioinformatic solutions in mass spectrometry-based metabolomics. TrAC - Trends in Analytical Chemistry, 2023, 161, 117009.	5.8	4
2461	Comprehensive metabolomics reveals correlation between sophorolipid biosynthesis and autophagy. New Biotechnology, 2023, 75, 1-12.	2.4	1
2464	Novel Approaches in the Diagnostics of Ear-Nose-Throat Diseases Using High-Resolution THz Spectroscopy. Applied Sciences (Switzerland), 2023, 13, 1573.	1.3	0
2465	The Genetic Background Is Shaping Cecal Enlargement in the Absence of Intestinal Microbiota. Nutrients, 2023, 15, 636.	1.7	1
2466	Untargeted metabolomic analysis to explore the impact of soil amendments in a non-conventional wastewater treatment. Science of the Total Environment, 2023, 870, 161890.	3.9	1
2467	Nonredundant Dimethyl Sulfoxide Reductases Influence Salmonella enterica Serotype Typhimurium Anaerobic Growth and Virulence. Infection and Immunity, 2023, 91, .	1.0	3
2468	Landscape of Genetic Alterations Underlying Hallmark Signature Changes in Cancer Reveals <i>TP53</i> Aneuploidy–driven Metabolic Reprogramming. Cancer Research Communications, 2023, 3, 281-296.	0.7	0
2469	The human microbial exposome: expanding the Exposome-Explorer database with gut microbial metabolites. Scientific Reports, 2023, 13 , .	1.6	8
2470	Untargeted, Highâ€Resolution Metabolomics in Pediatric Eosinophilic Esophagitis. Journal of Pediatric Gastroenterology and Nutrition, 2023, 76, 355-363.	0.9	1
2472	Large-Scale Genetic Correlation Analysis between Spondyloarthritis and Human Blood Metabolites. Journal of Clinical Medicine, 2023, 12, 1201.	1.0	6
2474	Metabolomics Profiling of Age-Associated Metabolites in Malay Population. Oxidative Medicine and Cellular Longevity, 2023, 2023, 1-12.	1.9	2
2476	Antimicrobial analysis of honey against Staphylococcus aureus isolates from wound, ADMET properties of its bioactive compounds and in-silico evaluation against dihydropteroate synthase. BMC Complementary Medicine and Therapies, 2023, 23, .	1.2	3
2477	New insights in polydopamine formation via surface adsorption. Nature Communications, 2023, 14, .	5.8	39
2479	Untargeted LC-HRMS metabolomics reveals candidate biomarkers for mucopolysaccharidoses. Clinica Chimica Acta, 2023, 541, 117250.	0.5	1
2480	Metabolomic Investigation of Major Depressive Disorder Identifies a Potentially Causal Association With Polyunsaturated Fatty Acids. Biological Psychiatry, 2023, 94, 630-639.	0.7	9
2481	Molecular Signatures of the Eagle Effect Induced by the Artificial Siderophore Conjugate LP-600 in <i>E. coli</i> . ACS Infectious Diseases, 2023, 9, 567-581.	1.8	2

#	Article	lF	CITATIONS
2482	Human tear metabolites associated with nucleoside-signalling pathways in bacterial keratitis. Experimental Eye Research, 2023, 228, 109409.	1.2	2
2483	Stable isotope-resolved metabolomics based on mass spectrometry: Methods and their applications. TrAC - Trends in Analytical Chemistry, 2023, 160, 116985.	5.8	8
2484	A Multimodal Desorption Electrospray Ionisation Workflow Enabling Visualisation of Lipids and Biologically Relevant Elements in a Single Tissue Section. Metabolites, 2023, 13, 262.	1.3	0
2485	How Does Lagenaria siceraria (Bottle Gourd) Metabolome Compare to Cucumis sativus (Cucumber) F. Cucurbitaceae? A Multiplex Approach of HR-UPLC/MS/MS and GC/MS Using Molecular Networking and Chemometrics. Foods, 2023, 12, 771.	1.9	6
2486	Bio-organic fertilizers improve Dendrocalamus farinosus growth by remolding the soil microbiome and metabolome. Frontiers in Microbiology, 0, 14 , .	1. 5	2
2487	Prediction of a Large-Scale Database of Collision Cross-Section and Retention Time Using Machine Learning to Reduce False Positive Annotations in Untargeted Metabolomics. Metabolites, 2023, 13, 282.	1.3	7
2488	Machine learning-enabled retrobiosynthesis of molecules. Nature Catalysis, 2023, 6, 137-151.	16.1	32
2489	Untargeted Metabolomics Identifies Potential Hypertrophic Cardiomyopathy Biomarkers in Carriers of MYBPC3 Founder Variants. International Journal of Molecular Sciences, 2023, 24, 4031.	1.8	3
2490	PMI estimation through metabolomics and potassium analysis on animal vitreous humour. International Journal of Legal Medicine, 2023, 137, 887-895.	1.2	3
2491	Cost-Effective Simultaneous Determination of τ- and π-Methylhistidine in Dairy Bovine Plasma from Large Cohort Studies Using Hydrophilic Interaction Ultra-High Performance Liquid Chromatography Coupled to Tandem Mass Spectrometry. Separations, 2023, 10, 144.	1.1	1
2492	A generalized covariate-adjusted top-scoring pair algorithm with applications to diabetic kidney disease stage classification in the Chronic Renal Insufficiency Cohort (CRIC) Study. BMC Bioinformatics, 2023, 24, .	1.2	0
2493	MAD HATTER Correctly Annotates 98% of Small Molecule Tandem Mass Spectra Searching in PubChem. Metabolites, 2023, 13, 314.	1.3	4
2494	High-quality Cymbidium mannii genome and multifaceted regulation of crassulacean acid metabolism in epiphytes. Plant Communications, 2023, 4, 100564.	3.6	5
2495	Operando NMR metabolomics of a microfluidic cell culture. Journal of Magnetic Resonance, 2023, 349, 107405.	1.2	0
2496	A molecular atlas reveals the tri-sectional spinning mechanism of spider dragline silk. Nature Communications, 2023, 14, .	5.8	2
2497	Bile metabolites as diagnostic biomarkers for perihilar cholangiocarcinoma. Scientific Reports, 2023, 13, .	1.6	2
2498	Replication and mediation of the association between the metabolome and clinical markers of metabolic health in an adolescent cohort study. Scientific Reports, 2023, 13, .	1.6	1
2499	Discovering Hair Biomarkers of Alzheimer's Disease Using High Resolution Mass Spectrometry-Based Untargeted Metabolomics. Molecules, 2023, 28, 2166.	1.7	1

#	Article	IF	CITATIONS
2500	Identifying Plasma and Urinary Biomarkers of Fermented Food Intake and Their Associations with Cardiometabolic Health in a Dutch Observational Cohort. Journal of Agricultural and Food Chemistry, 2023, 71, 4426-4439.	2.4	2
2501	Bifidobacterium-derived short-chain fatty acids and indole compounds attenuate nonalcoholic fatty liver disease by modulating gut-liver axis. Frontiers in Microbiology, 0, 14, .	1.5	12
2502	Non-Invasive Disease Specific Biomarker Detection Using Infrared Spectroscopy: A Review. Molecules, 2023, 28, 2320.	1.7	3
2503	Proteomics- and Metabolomics-Based Analysis of Metabolic Changes in a Swine Model of Pulmonary Hypertension. International Journal of Molecular Sciences, 2023, 24, 4870.	1.8	0
2504	Towards a Rosetta stone for metabolomics: recommendations to overcome inconsistent metabolite nomenclature. Nature Metabolism, 2023, 5, 351-354.	5.1	5
2505	Metabolome × Microbiome Changes Associated with a Diet-Induced Reduction in Hepatic Fat among Adolescent Boys. Metabolites, 2023, 13, 401.	1.3	1
2506	Integrating microbiome and metabolome revealed microbe-metabolism interactions in the stomach of patients with different severity of peptic ulcer disease. Frontiers in Immunology, $0,14,.$	2.2	3
2507	The immunometabolite itaconate stimulates OXGR1 to promote mucociliary clearance during the pulmonary innate immune response. Journal of Clinical Investigation, 2023, 133, .	3.9	16
2508	Metabolomics meets systems immunology. EMBO Reports, 2023, 24, .	2.0	10
2509	A Comprehensive NMR Analysis of Serum and Fecal Metabolites in Familial Dysautonomia Patients Reveals Significant Metabolic Perturbations. Metabolites, 2023, 13, 433.	1.3	0
2510	The Human Milk Metabolome: A Scoping Literature Review. Journal of Human Lactation, 2023, 39, 255-277.	0.8	0
2512	Fruit Beer with the Bisucciu Sardinian Apricot Cultivar (Prunus armeniaca L.): A Technological and Analytical Approach. Fermentation, 2023, 9, 305.	1.4	1
2513	Exposomics as a tool to investigate differences in health and disease by sex and gender. Exposome, 2023, 3, .	1.2	4
2514	A Strategy for Uncovering the Serum Metabolome by Direct-Infusion High-Resolution Mass Spectrometry. Metabolites, 2023, 13, 460.	1.3	1
2515	To metabolomics and beyond: a technological portfolio to investigate cancer metabolism. Signal Transduction and Targeted Therapy, 2023, 8, .	7.1	26
2516	Tumors evade immune cytotoxicity by altering the surface topology of NK cells. Nature Immunology, 2023, 24, 802-813.	7.0	17
2517	Comparison of hepatic responses to glucose perturbation between healthy and obese mice based on the edge type of network structures. Scientific Reports, 2023, 13, .	1.6	1
2518	Plasma acylcarnitines and gutâ€derived aromatic amino acids as sexâ€specific hub metabolites of the human aging metabolome. Aging Cell, 2023, 22, .	3.0	2

#	Article	IF	CITATIONS
2519	Integrative Analysis of the Transcriptome and Metabolome Reveals the Mechanism of Chinese Fir Seed Germination. Forests, 2023, 14, 676.	0.9	2
2520	Astragaloside IV alleviates 1-deoxysphinganine-induced mitochondrial dysfunction during the progression of chronic kidney disease through p62-Nrf2 antioxidant pathway. Frontiers in Pharmacology, 0, 14, .	1.6	2
2521	CDEMI: Characterizing differences in microbial composition and function in microbiome data. Computational and Structural Biotechnology Journal, 2023, 21, 2502-2513.	1.9	0
2522	Chemical compounds and bioactivities of the extracts from radish (Raphanus sativus) sprouts exposed to red and blue light-emitting diodes during cultivation. European Food Research and Technology, 2023, 249, 1551-1562.	1.6	1
2523	Model organism life extending therapeutics modulate diverse nodes in the drug-gene-microbe tripartite human longevity interactome. Journal of Biomolecular Structure and Dynamics, 2024, 42, 393-411.	2.0	1
2525	MS2Query: reliable and scalable MS2 mass spectra-based analogue search. Nature Communications, 2023, 14, .	5.8	13
2526	Studying the metabolites composition for tissues of ENT organs with high-resolution THz spectroscopy. , 2022, , .		0
2527	Combined targeted and untargeted high-resolution mass spectrometry analyses to investigate metabolic alterations in pompe disease. Metabolomics, 2023, 19, .	1.4	2
2528	Protein-metabolite interactomics of carbohydrate metabolism reveal regulation of lactate dehydrogenase. Science, 2023, 379, 996-1003.	6.0	31
2529	No unintended changes in the proteome and metabolome of the cisgenic fire blight resistant apple line C44.4.146. Acta Horticulturae, 2023, , 9-14.	0.1	0
2530	Metaboverse enables automated discovery and visualization of diverse metabolic regulatory patterns. Nature Cell Biology, 2023, 25, 616-625.	4.6	4
2531	Biochemical Response of Human Endothelial and Fibroblast Cells to Silver Nanoparticles. BioNanoScience, 2023, 13, 502-520.	1.5	2
2532	The Associations of Maternal Health Characteristics, Newborn Metabolite Concentrations, and Child Body Mass Index among US Children in the ECHO Program. Metabolites, 2023, 13, 510.	1.3	1
2533	Introduction to Carbon Chemical Biology. , 2023, , 3-42.		0
2534	Exercise training impacts skeletal muscle remodelling induced by metabolic syndrome in ZSF1 rats through metabolism regulation. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2023, 1869, 166709.	1.8	3
2535	N-arachidonylglycine is a caloric state-dependent circulating metabolite which regulates human CD4+T cell responsiveness. IScience, 2023, 26, 106578.	1.9	4
2536	DT-109 ameliorates nonalcoholic steatohepatitis in nonhuman primates. Cell Metabolism, 2023, 35, 742-757.e10.	7.2	10
2537	BUDDY: molecular formula discovery via bottom-up MS/MS interrogation. Nature Methods, 2023, 20, 881-890.	9.0	10

#	Article	IF	CITATIONS
2538	Metabolomic Study of Aging in fa/fa Rats: Multiplatform Urine and Serum Analysis. Metabolites, 2023, 13, 552.	1.3	0
2539	Phosphatidylinositol metabolism of the renal proximal tubule S3 segment is disturbed in response to diabetes. Scientific Reports, 2023, 13, .	1.6	2
2540	Cerebrospinal Fluid Metabolomics: Pilot Study of Using Metabolomics to Assess Diet and Metabolic Interventions in Alzheimer's Disease and Mild Cognitive Impairment. Metabolites, 2023, 13, 569.	1.3	0
2541	Biomarkers of aging. Science China Life Sciences, 2023, 66, 893-1066.	2.3	60
2542	Metabolomic profiles in relapsing–remitting and progressive multiple sclerosis compared to healthy controls: a five-year follow-up study. Metabolomics, 2023, 19, .	1.4	0
2543	cFOS expression in the prefrontal cortex correlates with altered cerebral metabolism in developing germ-free mice. Frontiers in Molecular Neuroscience, $0,16,.$	1.4	1
2544	Analogy or fallacy, unsafe chemical alternatives: Mechanistic insights into energy metabolism dysfunction induced by Bisphenol analogs in HepG2 cells. Environment International, 2023, 175, 107942.	4.8	2
2545	XAI-enabled neural network analysis of metabolite spatial distributions. Analytical and Bioanalytical Chemistry, 0, , .	1.9	0
2546	Metabolic Profiling of Murine Macrophages Exposed to Silver Nanoparticles at Dose and Time Dependencies. Particle and Particle Systems Characterization, 2023, 40, .	1.2	4
2552	Development and application of lipidomics for food research. Advances in Food and Nutrition Research, 2023, , 1-42.	1.5	1
2567	Tracer-Based Metabolic Analysis by NMR in Intact Perfused Human Liver Tissue. Methods in Molecular Biology, 2023, , 167-180.	0.4	0
2586	Synthetic Biology-Related Multiomics Data Integration and Data Mining Techniques. , 2023, , 31-38.		0
2671	Microbial Metabolites Annotation by Mass Spectrometry-Based Metabolomics. Advances in Experimental Medicine and Biology, 2023, , 225-248.	0.8	1
2674	Discovering New Natural Products Using Metabolomics-Based Approaches. Advances in Experimental Medicine and Biology, 2023, , 185-224.	0.8	0
2693	Trailblazing Contemporary Frameworks for Drug Repurposing: A Saga on Drugs' Expedition to Disinter the Veiled Destiny. , 2023, , 235-292.		0
2700	LC-MS-Based Population Metabolomics: A Mini-Review of Recent Studies and Challenges from Sample Collection to Data Processing. , 2023, , 269-299.		0
2707	Omics' Approaches to Analysis of Stress Response Genes in Medicinal Plants. , 2023, , 303-321.		0
2722	Role of Block Copolymers in the Treatment of Brain Disorders. , 2023, , 121-142.		0

#	Article	IF	CITATIONS
2741	Microbial Metabolites: A Potential Weapon Against Phytopathogens. Microorganisms for Sustainability, 2023, , 1-28.	0.4	0
2768	De Novo Molecular Structure Generation from Mass Spectra. , 2023, , .		0
2775	Spatial analysis of the osteoarthritis microenvironment: techniques, insights, and applications. Bone Research, 2024, 12, .	5.4	0
2778	Effects of dietary fibre on metabolic health and obesity. Nature Reviews Gastroenterology and Hepatology, 0, , .	8.2	0
2790	Omics and Network-based Approaches in Understanding HD Pathogenesis. , 0, , .		0
2791	High-Throughput Lipidomic and Metabolomic Profiling for Brain Tissue and Biofluid Samples in Neurodegenerative Disorders. Methods in Molecular Biology, 2024, , 221-260.	0.4	O
2797	Deep Learning Models for LC-MS Untargeted Metabolomics Data Analysis. Lecture Notes in Computer Science, 2024, , 128-144.	1.0	0
2799	Large-Scale Population-Based Studies of Blood Metabolome and Brain Health. Current Topics in Behavioral Neurosciences, 2024, , .	0.8	0
2804	Metabolomics: Metabolite Changes in Response to Cold Stress with a Special Focus on Whole-body Cryostimulation. , 2024, , 81-92.		0