Oliver Fiehn

List of Publications by Year in descending order

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		9756	3815
229	35,118	73	178
papers	citations	h-index	g-index
255	255	255	35847
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Proposed minimum reporting standards for chemical analysis. Metabolomics, 2007, 3, 211-221.	1.4	3,589
2	Metabolomics $\hat{a} \in \hat{~}$ the link between genotypes and phenotypes. Plant Molecular Biology, 2002, 48, 155-171.	2.0	2,932
3	MS-DIAL: data-independent MS/MS deconvolution for comprehensive metabolome analysis. Nature Methods, 2015, 12, 523-526.	9.0	1,955
4	Metabolite profiling for plant functional genomics. Nature Biotechnology, 2000, 18, 1157-1161.	9.4	1,936
5	FiehnLib: Mass Spectral and Retention Index Libraries for Metabolomics Based on Quadrupole and Time-of-Flight Gas Chromatography/Mass Spectrometry. Analytical Chemistry, 2009, 81, 10038-10048.	3.2	1,294
6	Metabolomicsthe link between genotypes and phenotypes. Plant Molecular Biology, 2002, 48, 155-71.	2.0	1,030
7	Seven Golden Rules for heuristic filtering of molecular formulas obtained by accurate mass spectrometry. BMC Bioinformatics, 2007, 8, 105.	1.2	929
8	LipidBlast in silico tandem mass spectrometry database for lipid identification. Nature Methods, 2013, 10, 755-758.	9.0	783
9	Toward Merging Untargeted and Targeted Methods in Mass Spectrometry-Based Metabolomics and Lipidomics. Analytical Chemistry, 2016, 88, 524-545.	3.2	609
10	Quality control for plant metabolomics: reporting MSI ompliant studies. Plant Journal, 2008, 53, 691-704.	2.8	591
11	Metabolomics Workbench: An international repository for metabolomics data and metadata, metabolite standards, protocols, tutorials and training, and analysis tools. Nucleic Acids Research, 2016, 44, D463-D470.	6.5	568
12	Metabolomic database annotations via query of elemental compositions: mass accuracy is insufficient even at less than 1 ppm. BMC Bioinformatics, 2006, 7, 234.	1.2	532
13	Metabolomics by Gas Chromatography–Mass Spectrometry: Combined Targeted and Untargeted Profiling. Current Protocols in Molecular Biology, 2016, 114, 30.4.1-30.4.32.	2.9	496
14	Comprehensive analysis of lipids in biological systems by liquid chromatography-mass spectrometry. TrAC - Trends in Analytical Chemistry, 2014, 61, 192-206.	5.8	478
15	Software Tools and Approaches for Compound Identification of LC-MS/MS Data in Metabolomics. Metabolites, 2018, 8, 31.	1.3	461
16	Analysis of Highly Polar Compounds of Plant Origin: Combination of Hydrophilic Interaction Chromatography and Electrospray Ion Trap Mass Spectrometry. Analytical Biochemistry, 2002, 301, 298-307.	1.1	449
17	Hydrogen Rearrangement Rules: Computational MS/MS Fragmentation and Structure Elucidation Using MS-FINDER Software. Analytical Chemistry, 2016, 88, 7946-7958.	3.2	441
18	Metabolomics enables precision medicine: "A White Paper, Community Perspective― Metabolomics, 2016, 12, 149.	1.4	434

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19	A comprehensive urinary metabolomic approach for identifying kidney cancer. Analytical Biochemistry, 2007, 363, 185-195.	1.1	427
20	A lipidome atlas in MS-DIAL 4. Nature Biotechnology, 2020, 38, 1159-1163.	9.4	424
21	A Cardiovascular Disease-Linked Gut Microbial Metabolite Acts via Adrenergic Receptors. Cell, 2020, 180, 862-877.e22.	13.5	397
22	The metabolomics standards initiative (MSI). Metabolomics, 2007, 3, 175-178.	1.4	396
23	Advances in structure elucidation of small molecules using mass spectrometry. Bioanalytical Reviews, 2010, 2, 23-60.	0.1	393
24	Identifying metabolites by integrating metabolome databases with mass spectrometry cheminformatics. Nature Methods, 2018, 15, 53-56.	9.0	368
25	Plasma Metabolomic Profiles Reflective of Glucose Homeostasis in Non-Diabetic and Type 2 Diabetic Obese African-American Women. PLoS ONE, 2010, 5, e15234.	1.1	367
26	Mass Spectrometry–Based Metabolic Profiling Reveals Different Metabolite Patterns in Invasive Ovarian Carcinomas and Ovarian Borderline Tumors. Cancer Research, 2006, 66, 10795-10804.	0.4	366
27	The metabolome regulates the epigenetic landscape during naive-to-primed human embryonic stem cellÂtransition. Nature Cell Biology, 2015, 17, 1523-1535.	4.6	360
28	Proteomics reveals NNMT as a master metabolic regulator of cancer-associated fibroblasts. Nature, 2019, 569, 723-728.	13.7	330
29	Metabolite Measurement: Pitfalls to Avoid and Practices to Follow. Annual Review of Biochemistry, 2017, 86, 277-304.	5.0	322
30	Harmonizing lipidomics: NIST interlaboratory comparison exercise for lipidomics using SRM 1950–Metabolites in Frozen Human Plasma. Journal of Lipid Research, 2017, 58, 2275-2288.	2.0	312
31	Identification of small molecules using accurate mass MS/MS search. Mass Spectrometry Reviews, 2018, 37, 513-532.	2.8	292
32	Metabolite profiling of human colon carcinoma – deregulation of TCA cycle and amino acid turnover. Molecular Cancer, 2008, 7, 72.	7.9	285
33	Human gut microbiome adopts an alternative state following small bowel transplantation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17187-17192.	3.3	281
34	Chemical Similarity Enrichment Analysis (ChemRICH) as alternative to biochemical pathway mapping for metabolomic datasets. Scientific Reports, 2017, 7, 14567.	1.6	257
35	A non-hallucinogenic psychedelic analogue with therapeutic potential. Nature, 2021, 589, 474-479.	13.7	221
36	Metabolite identification: are you sure? And how do your peers gauge your confidence?. Metabolomics, 2014, 10, 350-353.	1.4	205

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37	MetaMapp: mapping and visualizing metabolomic data by integrating information from biochemical pathways and chemical and mass spectral similarity. BMC Bioinformatics, 2012, 13, 99.	1.2	203
38	Bacteria engineered to produce IL-22 in intestine induce expression of REG3G to reduce ethanol-induced liver disease in mice. Gut, 2019, 68, 1504-1515.	6.1	202
39	Metabolite Profiling of Chlamydomonas reinhardtii under Nutrient Deprivation. Plant Physiology, 2005, 139, 1995-2005.	2.3	193
40	Extending the breadth of metabolite profiling by gas chromatography coupled to mass spectrometry. TrAC - Trends in Analytical Chemistry, 2008, 27, 261-269.	5.8	192
41	Validating Quantitative Untargeted Lipidomics Across Nine Liquid Chromatography–High-Resolution Mass Spectrometry Platforms. Analytical Chemistry, 2017, 89, 12360-12368.	3.2	179
42	The volatile compound BinBase mass spectral database. BMC Bioinformatics, 2011, 12, 321.	1.2	173
43	MINEs: open access databases of computationally predicted enzyme promiscuity products for untargeted metabolomics. Journal of Cheminformatics, 2015, 7, 44.	2.8	172
44	Systematic Error Removal Using Random Forest for Normalizing Large-Scale Untargeted Lipidomics Data. Analytical Chemistry, 2019, 91, 3590-3596.	3.2	163
45	High quality metabolomic data for Chlamydomonas reinhardtii. Plant Methods, 2008, 4, 7.	1.9	160
46	Generating the Blood Exposome Database Using a Comprehensive Text Mining and Database Fusion Approach. Environmental Health Perspectives, 2019, 127, 97008.	2.8	157
47	Comparative metabolomics of estrogen receptor positive and estrogen receptor negative breast cancer: alterations in glutamine and beta-alanine metabolism. Journal of Proteomics, 2013, 94, 279-288.	1.2	144
48	Associations of Trimethylamine N-Oxide With Nutritional and Inflammatory Biomarkers and Cardiovascular Outcomes in Patients New to Dialysis. , 2015, 25, 351-356.		141
49	Mass Spectral Feature List Optimizer (MS-FLO): A Tool To Minimize False Positive Peak Reports in Untargeted Liquid Chromatography–Mass Spectroscopy (LC-MS) Data Processing. Analytical Chemistry, 2017, 89, 3250-3255.	3.2	139
50	Adipocyte-Induced FABP4 Expression in Ovarian Cancer Cells Promotes Metastasis and Mediates Carboplatin Resistance. Cancer Research, 2020, 80, 1748-1761.	0.4	139
51	Structure Annotation of All Mass Spectra in Untargeted Metabolomics. Analytical Chemistry, 2019, 91, 2155-2162.	3.2	131
52	Setup and Annotation of Metabolomic Experiments by Integrating Biological and Mass Spectrometric Metadata. Lecture Notes in Computer Science, 2005, , 224-239.	1.0	131
53	Retip: Retention Time Prediction for Compound Annotation in Untargeted Metabolomics. Analytical Chemistry, 2020, 92, 7515-7522.	3.2	128
54	Remodeling of central metabolism in invasive breast cancer compared to normal breast tissue – a GC-TOFMS based metabolomics study. BMC Genomics, 2012, 13, 334.	1.2	123

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55	Critical Assessment of Small Molecule Identification 2016: automated methods. Journal of Cheminformatics, 2017, 9, 22.	2.8	122
56	Untargeted metabolomics identifies trimethyllysine, a TMAO-producing nutrient precursor, as a predictor of incident cardiovascular disease risk. JCI Insight, 2018, 3, .	2.3	122
57	The Chemical Translation Service—a web-based tool to improve standardization of metabolomic reports. Bioinformatics, 2010, 26, 2647-2648.	1.8	117
58	Preanalytical Processing and Biobanking Procedures of Biological Samples for Metabolomics Research: A White Paper, Community Perspective (for "Precision Medicine and Pharmacometabolomics) Tj ET	ପୁ գ ጩ0 0 rg	gB T 1/Overlocl
59	Using fragmentation trees and mass spectral trees for identifying unknown compounds in metabolomics. TrAC - Trends in Analytical Chemistry, 2015, 69, 52-61.	5.8	110
60	Chronic, Intermittent Microdoses of the Psychedelic <i>N</i> , <i>N</i> -Dimethyltryptamine (DMT) Produce Positive Effects on Mood and Anxiety in Rodents. ACS Chemical Neuroscience, 2019, 10, 3261-3270.	1.7	104
61	Increasing lipidomic coverage by selecting optimal mobile-phase modifiers in LC–MS of blood plasma. Metabolomics, 2016, 12, 1.	1.4	102
62	MetaMapR: pathway independent metabolomic network analysis incorporating unknowns. Bioinformatics, 2015, 31, 2757-2760.	1.8	101
63	Metabolite Profiling in Blood Plasma. Methods in Molecular Biology, 2007, 358, 3-17.	0.4	101
64	System Response of Metabolic Networks in Chlamydomonas reinhardtii to Total Available Ammonium. Molecular and Cellular Proteomics, 2012, 11, 973-988.	2.5	93
65	A metabolome atlas of the aging mouse brain. Nature Communications, 2021, 12, 6021.	5.8	91
66	Primed mesenchymal stem cells package exosomes with metabolites associated with immunomodulation. Biochemical and Biophysical Research Communications, 2019, 512, 729-735.	1.0	89
67	Metabolomics of human breast cancer: new approaches for tumor typing and biomarker discovery. Genome Medicine, 2012, 4, 37.	3.6	88
68	Diacetylspermine Is a Novel Prediagnostic Serum Biomarker for Non–Small-Cell Lung Cancer and Has Additive Performance With Pro-Surfactant Protein B. Journal of Clinical Oncology, 2015, 33, 3880-3886.	0.8	88
69	Metabox: A Toolbox for Metabolomic Data Analysis, Interpretation and Integrative Exploration. PLoS ONE, 2017, 12, e0171046.	1.1	85
70	Pharmacometabolomics of Response to Sertraline and to Placebo in Major Depressive Disorder – Possible Role for Methoxyindole Pathway. PLoS ONE, 2013, 8, e68283.	1.1	83
71	MS2Analyzer: A Software for Small Molecule Substructure Annotations from Accurate Tandem Mass Spectra. Analytical Chemistry, 2014, 86, 10724-10731.	3.2	82

72 Metabolomics Standards Workshop and the development of international standards for reporting 3.2 81 metabolomics experimental results. Briefings in Bioinformatics, 2006, 7, 159-165.

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73	RORÎ ³ is a targetable master regulator of cholesterol biosynthesis in a cancer subtype. Nature Communications, 2019, 10, 4621.	5.8	81
74	Comprehensive comparison of in silico MS/MS fragmentation tools of the CASMI contest: database boosting is needed to achieve 93% accuracy. Journal of Cheminformatics, 2017, 9, 32.	2.8	80
75	Metabolomic Markers of Altered Nucleotide Metabolism in Early Stage Adenocarcinoma. Cancer Prevention Research, 2015, 8, 410-418.	0.7	79
76	Insights into myalgic encephalomyelitis/chronic fatigue syndrome phenotypes through comprehensive metabolomics. Scientific Reports, 2018, 8, 10056.	1.6	79
77	Perspective: Dietary Biomarkers of Intake and Exposure—Exploration with Omics Approaches. Advances in Nutrition, 2020, 11, 200-215.	2.9	79
78	Metabolic Control over mTOR-Dependent Diapause-like State. Developmental Cell, 2020, 52, 236-250.e7.	3.1	79
79	Association genetics of the loblolly pine (<i>Pinus taeda</i> , Pinaceae) metabolome. New Phytologist, 2012, 193, 890-902.	3.5	78
80	Applying <i>In-Silico</i> Retention Index and Mass Spectra Matching for Identification of Unknown Metabolites in Accurate Mass GC-TOF Mass Spectrometry. Analytical Chemistry, 2011, 83, 5895-5902.	3.2	77
81	TFPa/HADHA is required for fatty acid beta-oxidation and cardiolipin re-modeling in human cardiomyocytes. Nature Communications, 2019, 10, 4671.	5.8	77
82	SetupX–a public study design database for metabolomic projects. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2007, , 169-80.	0.7	77
83	â€~Nothing of chemistry disappears in biology': the Top 30 damage-prone endogenous metabolites. Biochemical Society Transactions, 2016, 44, 961-971.	1.6	76
84	Gut microbial and metabolomic profiles after fecal microbiota transplantation in pediatric ulcerative colitis patients. FEMS Microbiology Ecology, 2018, 94, .	1.3	73
85	Spectral entropy outperforms MS/MS dot product similarity for small-molecule compound identification. Nature Methods, 2021, 18, 1524-1531.	9.0	71
86	Genomic and experimental evidence for multiple metabolic functions in the RidA/YjgF/YER057c/UK114 (Rid) protein family. BMC Genomics, 2015, 16, 382.	1.2	70
87	Systemic Metabolomic Changes in Blood Samples of Lung Cancer Patients Identified by Gas Chromatography Time-of-Flight Mass Spectrometry. Metabolites, 2015, 5, 192-210.	1.3	69
88	LC–MS-Based Lipidomics and Automated Identification of Lipids Using the LipidBlast In-Silico MS/MS Library. Methods in Molecular Biology, 2017, 1609, 149-170.	0.4	68
89	Metabolic Reprogramming by MYCN Confers Dependence on the Serine-Glycine-One-Carbon Biosynthetic Pathway. Cancer Research, 2019, 79, 3837-3850.	0.4	68
90	Extending Biochemical Databases by Metabolomic Surveys. Journal of Biological Chemistry, 2011, 286, 23637-23643.	1.6	67

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91	Metabolic variations in different citrus rootstock cultivars associated with different responses to Huanglongbing. Plant Physiology and Biochemistry, 2016, 107, 33-44.	2.8	66
92	International Ring Trial of a High Resolution Targeted Metabolomics and Lipidomics Platform for Serum and Plasma Analysis. Analytical Chemistry, 2019, 91, 14407-14416.	3.2	66
93	Increasing Compound Identification Rates in Untargeted Lipidomics Research with Liquid Chromatography Drift Time–Ion Mobility Mass Spectrometry. Analytical Chemistry, 2018, 90, 10758-10764.	3.2	63
94	Serum triglycerides in Alzheimer disease. Neurology, 2020, 94, e2088-e2098.	1.5	63
95	Metabolomic characteristics of cholesterol-induced non-obese nonalcoholic fatty liver disease in mice. Scientific Reports, 2017, 7, 6120.	1.6	62
96	SPLASH, a hashed identifier for mass spectra. Nature Biotechnology, 2016, 34, 1099-1101.	9.4	61
97	An in silico MS/MS library for automatic annotation of novel FAHFA lipids. Journal of Cheminformatics, 2015, 7, 53.	2.8	59
98	Obesogenic diets alter metabolism in mice. PLoS ONE, 2018, 13, e0190632.	1.1	59
99	Structure of human GABAB receptor in an inactive state. Nature, 2020, 584, 304-309.	13.7	59
100	Investigation of Metabolomic Blood Biomarkers for Detection of Adenocarcinoma Lung Cancer. Cancer Epidemiology Biomarkers and Prevention, 2015, 24, 1716-1723.	1.1	58
101	Metabolic changes associated with methionine stress sensitivity in MDA-MB-468 breast cancer cells. Cancer & Metabolism, 2016, 4, 9.	2.4	58
102	Inborn Errors of Metabolism in the Era of Untargeted Metabolomics and Lipidomics. Metabolites, 2019, 9, 242.	1.3	58
103	Integrated Metabolomics and Proteomics Highlight Altered Nicotinamide- and Polyamine Pathways in Lung Adenocarcinoma. Carcinogenesis, 2017, 38, bgw205.	1.3	56
104	Patterns of Metabolite Changes Identified from Large-Scale Gene Perturbations in Arabidopsis Using a Genome-Scale Metabolic Network Â. Plant Physiology, 2015, 167, 1685-1698.	2.3	55
105	Generation and quality control of lipidomics data for the alzheimer's disease neuroimaging initiative cohort. Scientific Data, 2018, 5, 180263.	2.4	55
106	Metabolite Profiling of <i>Arabidopsis</i> Inoculated with <i>Alternaria brassicicola</i> Reveals That Ascorbate Reduces Disease Severity. Molecular Plant-Microbe Interactions, 2012, 25, 1628-1638.	1.4	54
107	Eighteen new oleaginous yeast species. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 887-900.	1.4	53
108	Cofactor symbiosis for enhanced algal growth, biofuel production, and wastewater treatment. Algal Research, 2016, 17, 308-315.	2.4	53

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109	The Emerging and Diverse Roles of Bis(monoacylglycero) Phosphate Lipids in Cellular Physiology and Disease. International Journal of Molecular Sciences, 2020, 21, 8067.	1.8	53
110	LipidBlast Templates As Flexible Tools for Creating New in-Silico Tandem Mass Spectral Libraries. Analytical Chemistry, 2014, 86, 11024-11027.	3.2	52
111	Lipidomic Analysis of Chlamydomonas reinhardtii under Nitrogen and Sulfur Deprivation. PLoS ONE, 2015, 10, e0137948.	1.1	51
112	Integrating bioinformatics approaches for a comprehensive interpretation of metabolomics datasets. Current Opinion in Biotechnology, 2018, 54, 1-9.	3.3	50
113	A family of metal-dependent phosphatases implicated in metabolite damage-control. Nature Chemical Biology, 2016, 12, 621-627.	3.9	48
114	Mass spectral fragmentation of trimethylsilylated small molecules. Mass Spectrometry Reviews, 2018, 37, 245-257.	2.8	48
115	Retention projection enables accurate calculation of liquid chromatographic retention times across labs and methods. Journal of Chromatography A, 2015, 1412, 43-51.	1.8	47
116	Quantum Chemistry Calculations for Metabolomics. Chemical Reviews, 2021, 121, 5633-5670.	23.0	47
117	Systemic alterations in the metabolome of diabetic NOD mice delineate increased oxidative stress accompanied by reduced inflammation and hypertriglyceremia. American Journal of Physiology - Endocrinology and Metabolism, 2015, 308, E978-E989.	1.8	46
118	Omega-6 and omega-3 oxylipins are implicated in soybean oil-induced obesity in mice. Scientific Reports, 2017, 7, 12488.	1.6	46
119	Hunter-gatherer tobacco smoking: earliest evidence from the Pacific Northwest Coast of North America. Journal of Archaeological Science, 2013, 40, 1397-1407.	1.2	45
120	Epimetabolites: discovering metabolism beyond building and burning. Current Opinion in Chemical Biology, 2017, 36, 70-76.	2.8	45
121	Sets of coregulated serum lipids are associated with Alzheimer's disease pathophysiology. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2019, 11, 619-627.	1.2	45
122	Serum phosphatidylethanolamine levels distinguish benign from malignant solitary pulmonary nodules and represent a potential diagnostic biomarker for lung cancer. Cancer Biomarkers, 2016, 16, 609-617.	0.8	42
123	Alternative outlets for sustaining photosynthetic electron transport during dark-to-light transitions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11518-11527.	3.3	42
124	A Comprehensive Plasma Metabolomics Dataset for a Cohort of Mouse Knockouts within the International Mouse Phenotyping Consortium. Metabolites, 2019, 9, 101.	1.3	40
125	Changes in plasma metabolites and glucose homeostasis during omega-3 polyunsaturated fatty acid supplementation in women with polycystic ovary syndrome. BBA Clinical, 2016, 5, 179-185.	4.1	39
126	17â€Î± estradiol ameliorates ageâ€associated sarcopenia and improves lateâ€life physical function in male mice but not in females or castrated males. Aging Cell, 2019, 18, e12920.	3.0	38

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127	Indoxyl sulfate, a gut microbiome-derived uremic toxin, is associated with psychic anxiety and its functional magnetic resonance imaging-based neurologic signature. Scientific Reports, 2021, 11, 21011.	1.6	37
128	Tracking Polymicrobial Metabolism in Cystic Fibrosis Airways: Pseudomonas aeruginosa Metabolism and Physiology Are Influenced by Rothia mucilaginosa-Derived Metabolites. MSphere, 2018, 3, .	1.3	34
129	Metabolite-related dietary patterns and the development of islet autoimmunity. Scientific Reports, 2019, 9, 14819.	1.6	34
130	Diabetes associated metabolomic perturbations in NOD mice. Metabolomics, 2015, 11, 425-437.	1.4	33
131	Interstitial Cystitis-Associated Urinary Metabolites Identified by Mass-Spectrometry Based Metabolomics Analysis. Scientific Reports, 2016, 6, 39227.	1.6	33
132	Metabolomic and inflammatory signatures of symptom dimensions in major depression. Brain, Behavior, and Immunity, 2022, 102, 42-52.	2.0	33
133	Metabolomics unveils the influence of dietary phytochemicals on residual pesticide concentrations in honey bees. Environment International, 2021, 152, 106503.	4.8	32
134	Distinctive Patterns of Flavonoid Biosynthesis in Roots and Nodules of Datisca glomerata and Medicago spp. Revealed by Metabolomic and Gene Expression Profiles. Frontiers in Plant Science, 2018, 9, 1463.	1.7	31
135	Plasma lipidomics profile in pregnancy and gestational diabetes risk: a prospective study in a multiracial/ethnic cohort. BMJ Open Diabetes Research and Care, 2021, 9, e001551.	1.2	31
136	Efficiency of short, small-diameter columns for reversed-phase liquid chromatography under practical operating conditions. Journal of Chromatography A, 2015, 1383, 47-57.	1.8	30
137	Cervicovaginal Microbiome Composition Is Associated with Metabolic Profiles in Healthy Pregnancy. MBio, 2020, 11, .	1.8	30
138	Longitudinal Metabolome-Wide Signals Prior to the Appearance of a First Islet Autoantibody in Children Participating in the TEDDY Study. Diabetes, 2020, 69, 465-476.	0.3	30
139	Using untargeted metabolomics for detecting exposome compounds. Current Opinion in Toxicology, 2018, 8, 87-92.	2.6	29
140	Diversity of Neuropeptide Cell-Cell Signaling Molecules Generated by Proteolytic Processing Revealed by Neuropeptidomics Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 807-816.	1.2	29
141	Pharmacometabolomic Assessment of Metformin in Non-diabetic, African Americans. Frontiers in Pharmacology, 2016, 7, 135.	1.6	28
142	Sex-associated differences in baseline urinary metabolites of healthy adults. Scientific Reports, 2018, 8, 11883.	1.6	27
143	Multi-Omics Analyses Detail Metabolic Reprogramming in Lipids, Carnitines, and Use of Glycolytic Intermediates between Prostate Small Cell Neuroendocrine Carcinoma and Prostate Adenocarcinoma. Metabolites, 2019, 9, 82.	1.3	27
144	Pharmacophore hybridisation and nanoscale assembly to discover self-delivering lysosomotropic new-chemical entities for cancer therapy. Nature Communications, 2020, 11, 4615.	5.8	27

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145	Mesothelial Cell HIF1α Expression Is Metabolically Downregulated by Metformin to Prevent Oncogenic Tumor-Stromal Crosstalk. Cell Reports, 2019, 29, 4086-4098.e6.	2.9	26
146	Hexosamine biosynthetic pathway and O-GlcNAc-processing enzymes regulate daily rhythms in protein O-GlcNAcylation. Nature Communications, 2021, 12, 4173.	5.8	26
147	Using Accurate Mass Gas Chromatography–Mass Spectrometry with the MINE Database for Epimetabolite Annotation. Analytical Chemistry, 2017, 89, 10171-10180.	3.2	25
148	Exercise plasma metabolomics and xenometabolomics in obese, sedentary, insulin-resistant women: impact of a fitness and weight loss intervention. American Journal of Physiology - Endocrinology and Metabolism, 2019, 317, E999-E1014.	1.8	25
149	Tissue-Specific Transcriptome Analysis Reveals Candidate Genes for Terpenoid and Phenylpropanoid Metabolism in the Medicinal Plant <i>Ferula assafoetida</i> . G3: Genes, Genomes, Genetics, 2019, 9, 807-816.	0.8	25
150	Plasma amino acid and metabolite signatures tracking diabetes progression in the UCD-T2DM rat model. American Journal of Physiology - Endocrinology and Metabolism, 2016, 310, E958-E969.	1.8	24
151	Multiplatform Mass Spectrometry-Based Approach Identifies Extracellular Glycolipids of the Yeast <i>Rhodotorula babjevae</i> UCDFST 04-877. Journal of Natural Products, 2016, 79, 2580-2589.	1.5	24
152	Comprehensive metabolomic study of the response of HK-2 cells to hyperglycemic hypoxic diabetic-like milieu. Scientific Reports, 2021, 11, 5058.	1.6	24
153	In-Silico-Generated Library for Sensitive Detection of 2-Dimethylaminoethylamine Derivatized FAHFA Lipids Using High-Resolution Tandem Mass Spectrometry. Analytical Chemistry, 2020, 92, 5960-5968.	3.2	23
154	Impact of post-collection freezing delay on the reliability of serum metabolomics in samples reflecting the California mid-term pregnancy biobank. Metabolomics, 2018, 14, 151.	1.4	22
155	Mevalonate Pathway Promiscuity Enables Noncanonical Terpene Production. ACS Synthetic Biology, 2019, 8, 2238-2247.	1.9	22
156	Skeletal muscle interstitial fluid metabolomics at rest and associated with an exercise bout: application in rats and humans. American Journal of Physiology - Endocrinology and Metabolism, 2019, 316, E43-E53.	1.8	22
157	Remodeling Lipids in the Transition from Chronic Liver Disease to Hepatocellular Carcinoma. Cancers, 2021, 13, 88.	1.7	22
158	Intratracheal instillation of pravastatin for the treatment of murine allergic asthma: a lung-targeted approach to deliver statins. Physiological Reports, 2015, 3, e12352.	0.7	21
159	Biosynthesis of the microtubule-destabilizing diterpene pseudolaric acid B from golden larch involves an unusual diterpene synthase. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 974-979.	3.3	21
160	Using MS-FINDER for identifying 19 natural products in the CASMI 2016 contest. Phytochemistry Letters, 2017, 21, 306-312.	0.6	21
161	An adaptive teosinte <i>mexicana</i> introgression modulates phosphatidylcholine levels and is associated with maize flowering time. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	21
162	Informatics for improved algal taxonomic classification and research: A case study of UTEX 2341. Algal Research, 2015, 12, 545-549.	2.4	20

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163	Evidence that the metabolite repair enzyme NAD(P)HX epimerase has a moonlighting function. Bioscience Reports, 2018, 38, .	1.1	20
164	Predicting in silico electron ionization mass spectra using quantum chemistry. Journal of Cheminformatics, 2020, 12, 63.	2.8	20
165	Temporal metabolomic responses of cultured HepG2 liver cells to high fructose and high glucose exposures. Metabolomics, 2015, 11, 707-721.	1.4	19
166	Discovery of synthesis and secretion of polyol esters of fatty acids by four basidiomycetous yeast species in the order Sporidiobolales. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 923-936.	1.4	19
167	Human-like hyperplastic prostate with low ZIP1 induced solely by Zn deficiency in rats. Proceedings of the United States of America, 2018, 115, E11091-E11100.	3.3	19
168	Comparative analysis of obesity-related cardiometabolic and renal biomarkers in human plasma and serum. Scientific Reports, 2019, 9, 15385.	1.6	19
169	Abrogation of esophageal carcinoma development in miR-31 knockout rats. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6075-6085.	3.3	19
170	l-Arginine supplementation in severe asthma. JCI Insight, 2020, 5, .	2.3	19
171	The Use of Metabolomics in Population-Based Research. Advances in Nutrition, 2014, 5, 785-788.	2.9	18
172	Evaluation of metabolomics profiles of grain from maize hybrids derived from near-isogenic GM positive and negative segregant inbreds demonstrates that observed differences cannot be attributed unequivocally to the GM trait. Metabolomics, 2016, 12, 82.	1.4	18
173	The Human Serum Metabolome of Vitamin B-12 Deficiency and Repletion, and Associations with Neurological Function in Elderly Adults. Journal of Nutrition, 2017, 147, 1839-1849.	1.3	18
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