## Oliver Fiehn

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/5392608/oliver-fiehn-publications-by-year.pdf

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

226 papers **24,669** citations

66 h-index

156 g-index

255 ext. papers

30,448 ext. citations

8.5 avg, IF

7.52 L-index

#	Paper	IF	Citations
226	Metabolomic and inflammatory signatures of symptom dimensions in major depression <i>Brain, Behavior, and Immunity,</i> <b>2022</b> , 102, 42-52	16.6	1
225	Quantum Chemical Prediction of Electron Ionization Mass Spectra of Trimethylsilylated Metabolites <i>Analytical Chemistry</i> , <b>2022</b> ,	7.8	1
224	Untargeted Metabolomics Analysis of the Serum Metabolic Signature of Childhood Obesity <i>Nutrients</i> , <b>2022</b> , 14,	6.7	1
223	Evidence for Peroxisomal Dysfunction and Dysregulation of the CDP-Choline Pathway in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome. <b>2022</b> ,		1
222	Almond Consumption for 8 Weeks Altered Host and Microbial Metabolism in Comparison to a Control Snack in Young Adults. <b>2022</b> , 1-13		
221	Triglyceride profiles are associated with subacute exposure to bisphenol A in healthy young adults <i>Science of the Total Environment</i> , <b>2022</b> , 825, 153991	10.2	
220	Multi-Site Observational Study to Assess Biomarkers for Susceptibility or Resilience to Chronic Pain: The Acute to Chronic Pain Signatures (A2CPS) Study Protocol <i>Frontiers in Medicine</i> , <b>2022</b> , 9, 849214	4.9	O
219	Arachidonic acid metabolism and inflammatory biomarkers associated with exposure to polycyclic aromatic hydrocarbons. <i>Environmental Research</i> , <b>2022</b> , 212, 113498	7.9	0
218	Maternal Pyrroloquinoline Quinone Supplementation Improves Offspring Liver Bioactive Lipid Profiles throughout the Lifespan and Protects against the Development of Adult NAFLD. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23, 6043	6.3	O
217	Spectral entropy outperforms MS/MS dot product similarity for small-molecule compound identification. <i>Nature Methods</i> , <b>2021</b> , 18, 1524-1531	21.6	7
216	Indoxyl sulfate, a gut microbiome-derived uremic toxin, is associated with psychic anxiety and its functional magnetic resonance imaging-based neurologic signature. <i>Scientific Reports</i> , <b>2021</b> , 11, 21011	4.9	7
215	Longitudinal Plasma Lipidome and Risk of Type 2 Diabetes in a Large Sample of American Indians With Normal Fasting Glucose: The Strong Heart Family Study. <i>Diabetes Care</i> , <b>2021</b> , 44, 2664-2672	14.6	1
214	A metabolome atlas of the aging mouse brain. <i>Nature Communications</i> , <b>2021</b> , 12, 6021	17.4	9
213	Leucoselect Phytosome Modulates Serum Eicosapentaenoic Acid, Docosahexaenoic Acid, and Prostaglandin E3 in a Phase I Lung Cancer Chemoprevention Study. <i>Cancer Prevention Research</i> , <b>2021</b> , 14, 619-626	3.2	4
212	Comprehensive metabolomic study of the response of HK-2 cells to hyperglycemic hypoxic diabetic-like milieu. <i>Scientific Reports</i> , <b>2021</b> , 11, 5058	4.9	5
211	L-arginine as a potential GLP-1-mediated immunomodulator of Th17-related cytokines in people with obesity and asthma. <i>Obesity Science and Practice</i> , <b>2021</b> , 7, 339-345	2.6	6
210	Identifying Toxicologically Significant Compounds in Urban Wildfire Ash Using Bioassays and High-Resolution Mass Spectrometry. <i>Environmental Science &amp; Environmental Science </i>	10.3	3

## (2020-2021)

209	Plasma lipidomics profile in pregnancy and gestational diabetes risk: a prospective study in a multiracial/ethnic cohort. <i>BMJ Open Diabetes Research and Care</i> , <b>2021</b> , 9,	4.5	7
208	Exogenous GLP-1 stimulates TCA cycle and suppresses gluconeogenesis and ketogenesis in late-fasted northern elephant seals pups. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>2021</b> , 320, R393-R403	3.2	0
207	Exposure to DMSO during infancy alters neurochemistry, social interactions, and brain morphology in long-evans rats. <i>Brain and Behavior</i> , <b>2021</b> , 11, e02146	3.4	1
206	Phospholipid Levels at Seroconversion Are Associated With Resolution of Persistent Islet Autoimmunity: The Diabetes Autoimmunity Study in the Young. <i>Diabetes</i> , <b>2021</b> , 70, 1592-1601	0.9	O
205	Gestational long-term hypoxia induces metabolomic reprogramming and phenotypic transformations in fetal sheep pulmonary arteries. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , <b>2021</b> , 320, L770-L784	5.8	2
204	Quantum Chemistry Calculations for Metabolomics. <i>Chemical Reviews</i> , <b>2021</b> , 121, 5633-5670	68.1	18
203	Metabolomics unveils the influence of dietary phytochemicals on residual pesticide concentrations in honey bees. <i>Environment International</i> , <b>2021</b> , 152, 106503	12.9	11
202	A non-hallucinogenic psychedelic analogue with therapeutic potential. <i>Nature</i> , <b>2021</b> , 589, 474-479	50.4	56
201	Quantification of N-formylated lysine in bacterial protein digests using liquid chromatography/tandem mass spectrometry despite spontaneous formation and matrix effects. <i>Rapid Communications in Mass Spectrometry</i> , <b>2021</b> , 35, e9019	2.2	
200	Metabolomics analysis of time-series human small intestine lumen samples collected. <i>Food and Function</i> , <b>2021</b> , 12, 9405-9415	6.1	2
199	Comparing Stable Isotope Enrichment by Gas Chromatography with Time-of-Flight, Quadrupole Time-of-Flight, and Quadrupole Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 2174-2182	7.8	3
198	Human Placenta Buffers the Fetus from Adverse Effects of Perceived Maternal Stress. <i>Cells</i> , <b>2021</b> , 10,	7.9	3
197	Hexosamine biosynthetic pathway and O-GlcNAc-processing enzymes regulate daily rhythms in protein O-GlcNAcylation. <i>Nature Communications</i> , <b>2021</b> , 12, 4173	17.4	9
196	Ethnicity-specific alterations of plasma and hepatic lipidomic profiles are related to high NAFLD rate and severity in Hispanic Americans, a pilot study. <i>Free Radical Biology and Medicine</i> , <b>2021</b> , 172, 490-	502	4
195	Metabolomics of Lung Microdissections Reveals Region- and Sex-Specific Metabolic Effects of Acute Naphthalene Exposure in Mice. <i>Toxicological Sciences</i> , <b>2021</b> , 184, 214-222	4.4	О
194	Bioinformatics Approaches for Interpreting Metabolomics Datasets <b>2021</b> , 370-384		
193	Chemical set enrichment analysis: Novel insights into sex-specific alterations in primary metabolites in posttraumatic stress and disturbed sleep <i>Clinical and Translational Medicine</i> , <b>2021</b> , 11, e511	5.7	
192	Mass Spectrometry-Based Metabolomics Reveals a Concurrent Action of Several Chemical Mechanisms in Compatible and Incompatible Interactions. <i>Journal of Agricultural and Food Chemistry</i> , <b>2020</b> , 68, 15335-15344	5.7	1

191	Predicting in silico electron ionization mass spectra using quantum chemistry. <i>Journal of Cheminformatics</i> , <b>2020</b> , 12, 63	8.6	12
190	The Emerging and Diverse Roles of Bis(monoacylglycero) Phosphate Lipids in Cellular Physiology and Disease. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	11
189	Serum triglycerides in Alzheimer disease: Relation to neuroimaging and CSF biomarkers. <i>Neurology</i> , <b>2020</b> , 94, e2088-e2098	6.5	17
188	Retip: Retention Time Prediction for Compound Annotation in Untargeted Metabolomics. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 7515-7522	7.8	44
187	Longitudinal Metabolome-Wide Signals Prior to the Appearance of a First Islet Autoantibody in Children Participating in the TEDDY Study. <i>Diabetes</i> , <b>2020</b> , 69, 465-476	0.9	13
186	A lipidome atlas in MS-DIAL 4. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 1159-1163	44.5	141
185	Structure of human GABA receptor in an inactive state. <i>Nature</i> , <b>2020</b> , 584, 304-309	50.4	32
184	In-Silico-Generated Library for Sensitive Detection of 2-Dimethylaminoethylamine Derivatized FAHFA Lipids Using High-Resolution Tandem Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 5960-5	968	9
183	Abrogation of esophageal carcinoma development in miR-31 knockout rats. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 6075-6085	11.5	11
182	A Cardiovascular Disease-Linked Gut Microbial Metabolite Acts via Adrenergic Receptors. <i>Cell</i> , <b>2020</b> , 180, 862-877.e22	56.2	146
181	A lipidome-wide association study of the lipoprotein insulin resistance index. <i>Lipids in Health and Disease</i> , <b>2020</b> , 19, 153	4.4	2
180	Sugar Alcohols Have a Key Role in Pathogenesis of Chronic Liver Disease and Hepatocellular Carcinoma in Whole Blood and Liver Tissues. <i>Cancers</i> , <b>2020</b> , 12,	6.6	5
179	Adipocyte-Induced FABP4 Expression in Ovarian Cancer Cells Promotes Metastasis and Mediates Carboplatin Resistance. <i>Cancer Research</i> , <b>2020</b> , 80, 1748-1761	10.1	44
178	Metabolic Control over mTOR-Dependent Diapause-like State. <i>Developmental Cell</i> , <b>2020</b> , 52, 236-250.e.	710.2	29
177	Perspective: Dietary Biomarkers of Intake and Exposure-Exploration with Omics Approaches. <i>Advances in Nutrition</i> , <b>2020</b> , 11, 200-215	10	35
176	l-Arginine supplementation in severe asthma. <i>JCI Insight</i> , <b>2020</b> , 5,	9.9	7
175	Mid-gestation serum lipidomic profile associations with spontaneous preterm birth are influenced by body mass index. <i>PLoS ONE</i> , <b>2020</b> , 15, e0239115	3.7	7
174	Acarbose has sex-dependent and -independent effects on age-related physical function, cardiac health, and lipid biology. <i>JCI Insight</i> , <b>2020</b> , 5,	9.9	5

#### (2019-2020)

173	Remodeling Lipids in the Transition from Chronic Liver Disease to Hepatocellular Carcinoma. <i>Cancers</i> , <b>2020</b> , 13,	6.6	10
172	Hyperosmotic stress in Chlamydomonas induces metabolomic changes in biosynthesis of complex lipids. <i>European Journal of Phycology</i> , <b>2020</b> , 55, 11-29	2.2	7
171	Metabolomics-related nutrient patterns at seroconversion and risk of progression to type 1 diabetes. <i>Pediatric Diabetes</i> , <b>2020</b> , 21, 1202-1209	3.6	5
170	Cervicovaginal Microbiome Composition Is Associated with Metabolic Profiles in Healthy Pregnancy. <i>MBio</i> , <b>2020</b> , 11,	7.8	12
169	Pharmacophore hybridisation and nanoscale assembly to discover self-delivering lysosomotropic new-chemical entities for cancer therapy. <i>Nature Communications</i> , <b>2020</b> , 11, 4615	17.4	10
168	Sets of coregulated serum lipids are associated with Alzheimer's disease pathophysiology. <i>Alzheimerls and Dementia: Diagnosis, Assessment and Disease Monitoring</i> , <b>2019</b> , 11, 619-627	5.2	24
167	Exercise plasma metabolomics and xenometabolomics in obese, sedentary, insulin-resistant women: impact of a fitness and weight loss intervention. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2019</b> , 317, E999-E1014	6	14
166	Serum and urinary metabolomics and outcomes in cirrhosis. <i>PLoS ONE</i> , <b>2019</b> , 14, e0223061	3.7	9
165	Generating the Blood Exposome Database Using a Comprehensive Text Mining and Database Fusion Approach. <i>Environmental Health Perspectives</i> , <b>2019</b> , 127, 97008	8.4	57
164	Mevalonate Pathway Promiscuity Enables Noncanonical Terpene Production. <i>ACS Synthetic Biology</i> , <b>2019</b> , 8, 2238-2247	5.7	13
163	Metabolomics Analyses of 14 Classical Neurotransmitters by GC-TOF with LC-MS Illustrates Secretion of 9 Cell-Cell Signaling Molecules from Sympathoadrenal Chromaffin Cells in the Presence of Lithium. <i>ACS Chemical Neuroscience</i> , <b>2019</b> , 10, 1369-1379	5.7	1
162	Tissue-Specific Transcriptome Analysis Reveals Candidate Genes for Terpenoid and Phenylpropanoid Metabolism in the Medicinal Plant. <i>G3: Genes, Genomes, Genetics</i> , <b>2019</b> , 9, 807-816	3.2	13
161	The metabolite repair enzyme Nit1 is a dual-targeted amidase that disposes of damaged glutathione in. <i>Biochemical Journal</i> , <b>2019</b> , 476, 683-697	3.8	9
160	A Comprehensive Plasma Metabolomics Dataset for a Cohort of Mouse Knockouts within the International Mouse Phenotyping Consortium. <i>Metabolites</i> , <b>2019</b> , 9,	5.6	19
159	Alternative outlets for sustaining photosynthetic electron transport during dark-to-light transitions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 11518-11527	11.5	22
158	Metabolic Reprogramming by MYCN Confers Dependence on the Serine-Glycine-One-Carbon Biosynthetic Pathway. <i>Cancer Research</i> , <b>2019</b> , 79, 3837-3850	10.1	34
157	Multi-Omics Analyses Detail Metabolic Reprogramming in Lipids, Carnitines, and Use of Glycolytic Intermediates between Prostate Small Cell Neuroendocrine Carcinoma and Prostate Adenocarcinoma. <i>Metabolites</i> , <b>2019</b> , 9,	5.6	13
156	Proteomics reveals NNMT as a master metabolic regulator of cancer-associated fibroblasts. <i>Nature</i> , <b>2019</b> , 569, 723-728	50.4	155

155	Chronic, Intermittent Microdoses of the Psychedelic ,-Dimethyltryptamine (DMT) Produce Positive Effects on Mood and Anxiety in Rodents. <i>ACS Chemical Neuroscience</i> , <b>2019</b> , 10, 3261-3270	5.7	49
154	Functional characterization of the cytochrome P450 monooxygenase CYP71AU87 indicates a role in marrubiin biosynthesis in the medicinal plant Marrubium vulgare. <i>BMC Plant Biology</i> , <b>2019</b> , 19, 114	5.3	6
153	Primed mesenchymal stem cells package exosomes with metabolites associated with immunomodulation. <i>Biochemical and Biophysical Research Communications</i> , <b>2019</b> , 512, 729-735	3.4	49
152	17-Estradiol ameliorates age-associated sarcopenia and improves late-life physical function in male mice but not in females or castrated males. <i>Aging Cell</i> , <b>2019</b> , 18, e12920	9.9	23
151	Laboratory Screening Protocol to Identify Novel Oleaginous Yeasts. <i>Methods in Molecular Biology</i> , <b>2019</b> , 1995, 33-50	1.4	1
150	Metabolite-related dietary patterns and the development of islet autoimmunity. <i>Scientific Reports</i> , <b>2019</b> , 9, 14819	4.9	19
149	RORlls a targetable master regulator of cholesterol biosynthesis in a cancer subtype. <i>Nature Communications</i> , <b>2019</b> , 10, 4621	17.4	35
148	TFPa/HADHA is required for fatty acid beta-oxidation and cardiolipin re-modeling in human cardiomyocytes. <i>Nature Communications</i> , <b>2019</b> , 10, 4671	17.4	37
147	International Ring Trial of a High Resolution Targeted Metabolomics and Lipidomics Platform for Serum and Plasma Analysis. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 14407-14416	7.8	42
146	Interaction of Gut Microbiota and High-Sodium, Low-Potassium Diet in Altering Plasma Triglyceride Profiles Revealed by Lipidomics Analysis. <i>Molecular Nutrition and Food Research</i> , <b>2019</b> , 63, e1900752	5.9	4
145	Comparative analysis of obesity-related cardiometabolic and renal biomarkers in human plasma and serum. <i>Scientific Reports</i> , <b>2019</b> , 9, 15385	4.9	5
144	Inborn Errors of Metabolism in the Era of Untargeted Metabolomics and Lipidomics. <i>Metabolites</i> , <b>2019</b> , 9,	5.6	31
143	Prioritization of metabolic genes as novel therapeutic targets in estrogen-receptor negative breast tumors using multi-omics data and text mining. <i>Oncotarget</i> , <b>2019</b> , 10, 3894-3909	3.3	9
142	Systematic Error Removal Using Random Forest for Normalizing Large-Scale Untargeted Lipidomics Data. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 3590-3596	7.8	82
141	Rethinking the PDH Bypass and GABA Shunt as Thiamin-Deficiency Workarounds. <i>Plant Physiology</i> , <b>2019</b> , 181, 389-393	6.6	8
140	Mesothelial Cell HIF1Expression Is Metabolically Downregulated by Metformin to Prevent Oncogenic Tumor-Stromal Crosstalk. <i>Cell Reports</i> , <b>2019</b> , 29, 4086-4098.e6	10.6	12
139	Rapid LC-MS/MS quantification of cancer related acetylated polyamines in human biofluids. <i>Talanta</i> , <b>2019</b> , 196, 415-419	6.2	5
138	Structure Annotation of All Mass Spectra in Untargeted Metabolomics. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 2155-2162	7.8	78

#### (2018-2019)

137	Skeletal muscle interstitial fluid metabolomics at rest and associated with an exercise bout: application in rats and humans. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2019</b> , 316, E43-E53	6	9
136	Bacteria engineered to produce IL-22 in intestine induce expression of REG3G to reduce ethanol-induced liver disease in mice. <i>Gut</i> , <b>2019</b> , 68, 1504-1515	19.2	100
135	Using untargeted metabolomics for detecting exposome compounds. <i>Current Opinion in Toxicology</i> , <b>2018</b> , 8, 87-92	4.4	22
134	Evidence that the metabolite repair enzyme NAD(P)HX epimerase has a moonlighting function. <i>Bioscience Reports</i> , <b>2018</b> , 38,	4.1	12
133	Diversity of Neuropeptide Cell-Cell Signaling Molecules Generated by Proteolytic Processing Revealed by Neuropeptidomics Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , <b>2018</b> , 29, 807-816	3.5	16
132	Integrating bioinformatics approaches for a comprehensive interpretation of metabolomics datasets. <i>Current Opinion in Biotechnology</i> , <b>2018</b> , 54, 1-9	11.4	30
131	Mass spectral fragmentation of trimethylsilylated small molecules. <i>Mass Spectrometry Reviews</i> , <b>2018</b> , 37, 245-257	11	33
130	Identification of small molecules using accurate mass MS/MS search. <i>Mass Spectrometry Reviews</i> , <b>2018</b> , 37, 513-532	11	194
129	Software Tools and Approaches for Compound Identification of LC-MS/MS Data in Metabolomics. <i>Metabolites</i> , <b>2018</b> , 8,	5.6	253
128	Gut microbial and metabolomic profiles after fecal microbiota transplantation in pediatric ulcerative colitis patients. <i>FEMS Microbiology Ecology</i> , <b>2018</b> , 94,	4.3	41
127	Tracking Polymicrobial Metabolism in Cystic Fibrosis Airways: Metabolism and Physiology Are Influenced by -Derived Metabolites. <i>MSphere</i> , <b>2018</b> , 3,	5	22
126	Increasing Compound Identification Rates in Untargeted Lipidomics Research with Liquid Chromatography Drift Time-Ion Mobility Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 10758-1076	5 <b>4</b> .8	49
125	Salvage of the 5-deoxyribose byproduct of radical SAM enzymes. <i>Nature Communications</i> , <b>2018</b> , 9, 3105	17.4	9
124	Sex-associated differences in baseline urinary metabolites of healthy adults. <i>Scientific Reports</i> , <b>2018</b> , 8, 11883	4.9	12
123	Impact of thiamine metabolites and spent medium from Chlorella sorokiniana on metabolism in the green algae Auxenochlorella prototheciodes. <i>Algal Research</i> , <b>2018</b> , 33, 197-208	5	8
122	Preanalytical Processing and Biobanking Procedures of Biological Samples for Metabolomics Research: A White Paper, Community Perspective (for "Precision Medicine and Pharmacometabolomics Task Group"-The Metabolomics Society Initiative). Clinical Chemistry, 2018,	5.5	81
121	Obesogenic diets alter metabolism in mice. <i>PLoS ONE</i> , <b>2018</b> , 13, e0190632	3.7	38
120	Identifying metabolites by integrating metabolome databases with mass spectrometry cheminformatics. <i>Nature Methods</i> , <b>2018</b> , 15, 53-56	21.6	200

119	Generation and quality control of lipidomics data for the alzheimer's disease neuroimaging initiative cohort. <i>Scientific Data</i> , <b>2018</b> , 5, 180263	8.2	29
118	Untargeted metabolomics identifies trimethyllysine, a TMAO-producing nutrient precursor, as a predictor of incident cardiovascular disease risk. <i>JCI Insight</i> , <b>2018</b> , 3,	9.9	78
117	Impact of post-collection freezing delay on the reliability of serum metabolomics in samples reflecting the California mid-term pregnancy biobank. <i>Metabolomics</i> , <b>2018</b> , 14, 151	4.7	17
116	Human-like hyperplastic prostate with low ZIP1 induced solely by Zn deficiency in rats. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E11091-E11100	11.5	14
115	Distinctive Patterns of Flavonoid Biosynthesis in Roots and Nodules of and Revealed by Metabolomic and Gene Expression Profiles. <i>Frontiers in Plant Science</i> , <b>2018</b> , 9, 1463	6.2	18
114	Insights into myalgic encephalomyelitis/chronic fatigue syndrome phenotypes through comprehensive metabolomics. <i>Scientific Reports</i> , <b>2018</b> , 8, 10056	4.9	48
113	Biosynthesis of the microtubule-destabilizing diterpene pseudolaric acid B from golden larch involves an unusual diterpene synthase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 974-979	11.5	16
112	Epimetabolites: discovering metabolism beyond building and burning. <i>Current Opinion in Chemical Biology</i> , <b>2017</b> , 36, 70-76	9.7	36
111	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. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 3250-3255	7.8	85
110	Discovery of synthesis and secretion of polyol esters of fatty acids by four basidiomycetous yeast species in the order Sporidiobolales. <i>Journal of Industrial Microbiology and Biotechnology</i> , <b>2017</b> , 44, 923-	936	15
109	Using MS-FINDER for identifying 19 natural products in the CASMI 2016 contest. <i>Phytochemistry Letters</i> , <b>2017</b> , 21, 306-312	1.9	10
108	Integrated Metabolomics and Proteomics Highlight Altered Nicotinamide- and Polyamine Pathways in Lung Adenocarcinoma. <i>Carcinogenesis</i> , <b>2017</b> , 38, 271-280	4.6	42
107	Omega-6 and omega-3 oxylipins are implicated in soybean oil-induced obesity in mice. <i>Scientific Reports</i> , <b>2017</b> , 7, 12488	4.9	23
106	Harmonizing lipidomics: NIST interlaboratory comparison exercise for lipidomics using SRM 1950-Metabolites in Frozen Human Plasma. <i>Journal of Lipid Research</i> , <b>2017</b> , 58, 2275-2288	6.3	220
105	Validating Quantitative Untargeted Lipidomics Across Nine Liquid Chromatography-High-Resolution Mass Spectrometry Platforms. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 12360-	12368	123
104	Integration of metabolomics, transcriptomics, and microRNA expression profiling reveals a miR-143-HK2-glucose network underlying zinc-deficiency-associated esophageal neoplasia. <i>Oncotarget</i> , <b>2017</b> , 8, 81910-81925	3.3	9
103	Using Accurate Mass Gas Chromatography-Mass Spectrometry with the MINE Database for Epimetabolite Annotation. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 10171-10180	7.8	20
102	Metabolomic characteristics of cholesterol-induced non-obese nonalcoholic fatty liver disease in mice. <i>Scientific Reports</i> , <b>2017</b> , 7, 6120	4.9	45

# (2016-2017)

10	The Human Serum Metabolome of Vitamin B-12 Deficiency and Repletion, and Associations with Neurological Function in Elderly Adults. <i>Journal of Nutrition</i> , <b>2017</b> , 147, 1839-1849	4.1	12
10	Chemical Similarity Enrichment Analysis (ChemRICH) as alternative to biochemical pathway mapping for metabolomic datasets. <i>Scientific Reports</i> , <b>2017</b> , 7, 14567	4.9	133
99	Simultaneous production of intracellular triacylglycerols and extracellular polyol esters of fatty acids by Rhodotorula babjevae and Rhodotorula aff. paludigena. <i>Journal of Industrial Microbiology and Biotechnology</i> , <b>2017</b> , 44, 1397-1413	4.2	11
98	Metabolite Measurement: Pitfalls to Avoid and Practices to Follow. <i>Annual Review of Biochemistry</i> , <b>2017</b> , 86, 277-304	29.1	196
97	Critical Assessment of Small Molecule Identification 2016: automated methods. <i>Journal of Cheminformatics</i> , <b>2017</b> , 9, 22	8.6	89
96	Comprehensive comparison of in silico MS/MS fragmentation tools of the CASMI contest: database boosting is needed to achieve 93% accuracy. <i>Journal of Cheminformatics</i> , <b>2017</b> , 9, 32	8.6	64
95	LC-MS-Based Lipidomics and Automated Identification of Lipids Using the LipidBlast In-Silico MS/MS Library. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1609, 149-170	1.4	52
94	Metabox: A Toolbox for Metabolomic Data Analysis, Interpretation and Integrative Exploration. <i>PLoS ONE</i> , <b>2017</b> , 12, e0171046	3.7	67
93	'Nothing of chemistry disappears in biology': the Top 30 damage-prone endogenous metabolites. <i>Biochemical Society Transactions</i> , <b>2016</b> , 44, 961-71	5.1	56
92	Hydrogen Rearrangement Rules: Computational MS/MS Fragmentation and Structure Elucidation Using MS-FINDER Software. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 7946-58	7.8	292
91	SPLASH, a hashed identifier for mass spectra. <i>Nature Biotechnology</i> , <b>2016</b> , 34, 1099-1101	44.5	48
90	Environmental Tobacco Smoke Alters Metabolic Systems in Adult Rats. <i>Chemical Research in Toxicology</i> , <b>2016</b> , 29, 1818-1827	4	12
89	Cofactor symbiosis for enhanced algal growth, biofuel production, and wastewater treatment.  Algal Research, <b>2016</b> , 17, 308-315	5	43
88	A family of metal-dependent phosphatases implicated in metabolite damage-control. <i>Nature Chemical Biology</i> , <b>2016</b> , 12, 621-7	11.7	26
87	Increasing lipidomic coverage by selecting optimal mobile-phase modifiers in LCMS of blood plasma. <i>Metabolomics</i> , <b>2016</b> , 12, 1	4.7	71
86	Toward Merging Untargeted and Targeted Methods in Mass Spectrometry-Based Metabolomics and Lipidomics. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 524-45	7.8	438
85	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. <i>Metabolomics</i> , <b>2016</b> , 12, 82	4.7	17
84	Metabolomics Workbench: An international repository for metabolomics data and metadata, metabolite standards, protocols, tutorials and training, and analysis tools. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, D463-70	20.1	309

83	Pharmacometabolomic Assessment of Metformin in Non-diabetic, African Americans. <i>Frontiers in Pharmacology</i> , <b>2016</b> , 7, 135	5.6	20
82	Using a lipidomics approach for nutritional phenotyping in response to a test meal containing gamma-linolenic acid. <i>Metabolomics</i> , <b>2016</b> , 12, 1	4.7	14
81	Metabolomics by Gas Chromatography-Mass Spectrometry: Combined Targeted and Untargeted Profiling. <i>Current Protocols in Molecular Biology</i> , <b>2016</b> , 114, 30.4.1-30.4.32	2.9	291
80	Plasma amino acid and metabolite signatures tracking diabetes progression in the UCD-T2DM rat model. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2016</b> , 310, E958-69	6	19
79	Serum phosphatidylethanolamine levels distinguish benign from malignant solitary pulmonary nodules and represent a potential diagnostic biomarker for lung cancer. <i>Cancer Biomarkers</i> , <b>2016</b> , 16, 609-17	3.8	31
78	Interstitial Cystitis-Associated Urinary Metabolites Identified by Mass-Spectrometry Based Metabolomics Analysis. <i>Scientific Reports</i> , <b>2016</b> , 6, 39227	4.9	27
77	Changes in plasma metabolites and glucose homeostasis during omega-3 polyunsaturated fatty acid supplementation in women with polycystic ovary syndrome. <i>BBA Clinical</i> , <b>2016</b> , 5, 179-85		24
76	Distinction of synthetic dl-£ocopherol from natural vitamin E (d-£ocopherol) by reversed-phase liquid chromatography. Enhanced selectivity of a polymeric C18 stationary phase at low temperature and/or at high pressure. <i>Journal of Chromatography A</i> , <b>2016</b> , 1450, 45-52	4.5	7
75	Metabolic variations in different citrus rootstock cultivars associated with different responses to Huanglongbing. <i>Plant Physiology and Biochemistry</i> , <b>2016</b> , 107, 33-44	5.4	55
74	Eighteen new oleaginous yeast species. <i>Journal of Industrial Microbiology and Biotechnology</i> , <b>2016</b> , 43, 887-900	4.2	36
73	Metabolic changes associated with methionine stress sensitivity in MDA-MB-468 breast cancer cells. <i>Cancer &amp; Metabolism</i> , <b>2016</b> , 4, 9	5.4	38
72	Metabolomics enables precision medicine: "A White Paper, Community Perspective". <i>Metabolomics</i> , <b>2016</b> , 12, 149	4.7	327
71	Multiplatform Mass Spectrometry-Based Approach Identifies Extracellular Glycolipids of the Yeast Rhodotorula babjevae UCDFST 04-877. <i>Journal of Natural Products</i> , <b>2016</b> , 79, 2580-2589	4.9	21
70	Novel plasma biomarker of atenolol-induced hyperglycemia identified through a metabolomics-genomics integrative approach. <i>Metabolomics</i> , <b>2016</b> , 12, 1	4.7	7
69	Diabetes Associated Metabolomic Perturbations in NOD Mice. <i>Metabolomics</i> , <b>2015</b> , 11, 425-437	4.7	26
68	Retention projection enables accurate calculation of liquid chromatographic retention times across labs and methods. <i>Journal of Chromatography A</i> , <b>2015</b> , 1412, 43-51	4.5	37
67	Patterns of metabolite changes identified from large-scale gene perturbations in Arabidopsis using a genome-scale metabolic network. <i>Plant Physiology</i> , <b>2015</b> , 167, 1685-98	6.6	20
66	Associations of Trimethylamine N-Oxide With Nutritional and Inflammatory Biomarkers and Cardiovascular Outcomes in Patients New to Dialysis. <i>Journal of Renal Nutrition</i> , <b>2015</b> , 25, 351-6	3	112

## (2014-2015)

65	accompanied by reduced inflammation and hypertriglyceremia. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2015</b> , 308, E978-89	6	37
64	Using fragmentation trees and mass spectral trees for identifying unknown compounds in metabolomics. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2015</b> , 69, 52-61	14.6	88
63	MS-DIAL: data-independent MS/MS deconvolution for comprehensive metabolome analysis. <i>Nature Methods</i> , <b>2015</b> , 12, 523-6	21.6	1036
62	MetaMapR: pathway independent metabolomic network analysis incorporating unknowns. <i>Bioinformatics</i> , <b>2015</b> , 31, 2757-60	7.2	82
61	Investigation of metabolomic blood biomarkers for detection of adenocarcinoma lung cancer. <i>Cancer Epidemiology Biomarkers and Prevention</i> , <b>2015</b> , 24, 1716-23	4	44
60	Diacetylspermine Is a Novel Prediagnostic Serum Biomarker for Non-Small-Cell Lung Cancer and Has Additive Performance With Pro-Surfactant Protein B. <i>Journal of Clinical Oncology</i> , <b>2015</b> , 33, 3880-6	2.2	69
59	MINEs: open access databases of computationally predicted enzyme promiscuity products for untargeted metabolomics. <i>Journal of Cheminformatics</i> , <b>2015</b> , 7, 44	8.6	137
58	Informatics for improved algal taxonomic classification and research: A case study of UTEX 2341. <i>Algal Research</i> , <b>2015</b> , 12, 545-549	5	15
57	Intratracheal instillation of pravastatin for the treatment of murine allergic asthma: a lung-targeted approach to deliver statins. <i>Physiological Reports</i> , <b>2015</b> , 3, e12352	2.6	14
56	An in silico MS/MS library for automatic annotation of novel FAHFA lipids. <i>Journal of Cheminformatics</i> , <b>2015</b> , 7, 53	8.6	51
55	Systemic Metabolomic Changes in Blood Samples of Lung Cancer Patients Identified by Gas Chromatography Time-of-Flight Mass Spectrometry. <i>Metabolites</i> , <b>2015</b> , 5, 192-210	5.6	51
54	Metabolomic markers of altered nucleotide metabolism in early stage adenocarcinoma. <i>Cancer Prevention Research</i> , <b>2015</b> , 8, 410-8	3.2	59
53	Genomic and experimental evidence for multiple metabolic functions in the RidA/YjgF/YER057c/UK114 (Rid) protein family. <i>BMC Genomics</i> , <b>2015</b> , 16, 382	4.5	58
52	The metabolome regulates the epigenetic landscape during naive-to-primed human embryonic stem cell transition. <i>Nature Cell Biology</i> , <b>2015</b> , 17, 1523-35	23.4	249
51	Temporal metabolomic responses of cultured HepG2 liver cells to high fructose and high glucose exposures. <i>Metabolomics</i> , <b>2015</b> , 11, 707-721	4.7	14
50	Efficiency of short, small-diameter columns for reversed-phase liquid chromatography under practical operating conditions. <i>Journal of Chromatography A</i> , <b>2015</b> , 1383, 47-57	4.5	28
49	Lipidomic Analysis of Chlamydomonas reinhardtii under Nitrogen and Sulfur Deprivation. <i>PLoS ONE</i> , <b>2015</b> , 10, e0137948	3.7	35
48	Metabolite identification: are you sure? And how do your peers gauge your confidence?.  Metabolomics, <b>2014</b> , 10, 350-353	4.7	162

47	LipidBlast templates as flexible tools for creating new in-silico tandem mass spectral libraries. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 11024-7	7.8	38
46	MS2Analyzer: A software for small molecule substructure annotations from accurate tandem mass spectra. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 10724-31	7.8	67
45	The use of metabolomics in population-based research. Advances in Nutrition, 2014, 5, 785-8	10	15
44	Comprehensive analysis of lipids in biological systems by liquid chromatography-mass spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2014</b> , 61, 192-206	14.6	368
43	Comparative metabolomics of estrogen receptor positive and estrogen receptor negative breast cancer: alterations in glutamine and beta-alanine metabolism. <i>Journal of Proteomics</i> , <b>2013</b> , 94, 279-88	3.9	113
42	Hunter-gatherer tobacco smoking: earliest evidence from the Pacific Northwest Coast of North America. <i>Journal of Archaeological Science</i> , <b>2013</b> , 40, 1397-1407	2.9	30
41	LipidBlast in silico tandem mass spectrometry database for lipid identification. <i>Nature Methods</i> , <b>2013</b> , 10, 755-8	21.6	550
40	Pharmacometabolomics of response to sertraline and to placebo in major depressive disorder - possible role for methoxyindole pathway. <i>PLoS ONE</i> , <b>2013</b> , 8, e68283	3.7	62
39	Metabolomics of human breast cancer: new approaches for tumor typing and biomarker discovery. <i>Genome Medicine</i> , <b>2012</b> , 4, 37	14.4	74
38	MetaMapp: mapping and visualizing metabolomic data by integrating information from biochemical pathways and chemical and mass spectral similarity. <i>BMC Bioinformatics</i> , <b>2012</b> , 13, 99	3.6	161
37	Remodeling of central metabolism in invasive breast cancer compared to normal breast tissue - a GC-TOFMS based metabolomics study. <i>BMC Genomics</i> , <b>2012</b> , 13, 334	4.5	102
36	Metabolite profiling of Arabidopsis inoculated with Alternaria brassicicola reveals that ascorbate reduces disease severity. <i>Molecular Plant-Microbe Interactions</i> , <b>2012</b> , 25, 1628-38	3.6	38
35	Association genetics of the loblolly pine (Pinus taeda, Pinaceae) metabolome. <i>New Phytologist</i> , <b>2012</b> , 193, 890-902	9.8	59
34	System response of metabolic networks in Chlamydomonas reinhardtii to total available ammonium. <i>Molecular and Cellular Proteomics</i> , <b>2012</b> , 11, 973-88	7.6	78
33	Applying in-silico retention index and mass spectra matching for identification of unknown metabolites in accurate mass GC-TOF mass spectrometry. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 5895-902	7.8	67
32	The volatile compound BinBase mass spectral database. <i>BMC Bioinformatics</i> , <b>2011</b> , 12, 321	3.6	123
31	Extending biochemical databases by metabolomic surveys. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 23637-43	5.4	61
30	The Chemical Translation Servicea web-based tool to improve standardization of metabolomic reports. <i>Bioinformatics</i> , <b>2010</b> , 26, 2647-8	7.2	86

# (2006-2010)

29	Advances in structure elucidation of small molecules using mass spectrometry. <i>Bioanalytical Reviews</i> , <b>2010</b> , 2, 23-60	1	343
28	Plasma metabolomic profiles reflective of glucose homeostasis in non-diabetic and type 2 diabetic obese African-American women. <i>PLoS ONE</i> , <b>2010</b> , 5, e15234	3.7	294
27	FiehnLib: mass spectral and retention index libraries for metabolomics based on quadrupole and time-of-flight gas chromatography/mass spectrometry. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 10038-48	7.8	939
26	Human gut microbiome adopts an alternative state following small bowel transplantation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 17187-92	11.5	243
25	Quality control for plant metabolomics: reporting MSI-compliant studies. <i>Plant Journal</i> , <b>2008</b> , 53, 691-7	<b>704</b> .9	457
24	Metabolite profiling of human colon carcinomaderegulation of TCA cycle and amino acid turnover. <i>Molecular Cancer</i> , <b>2008</b> , 7, 72	42.1	235
23	High quality metabolomic data for Chlamydomonas reinhardtii. Plant Methods, 2008, 4, 7	5.8	136
22	Extending the breadth of metabolite profiling by gas chromatography coupled to mass spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2008</b> , 27, 261-269	14.6	178
21	A comprehensive urinary metabolomic approach for identifying kidney cancerr. <i>Analytical Biochemistry</i> , <b>2007</b> , 363, 185-95	3.1	405
20	Seven Golden Rules for heuristic filtering of molecular formulas obtained by accurate mass spectrometry. <i>BMC Bioinformatics</i> , <b>2007</b> , 8, 105	3.6	777
19	The metabolomics standards initiative (MSI). <i>Metabolomics</i> , <b>2007</b> , 3, 175-178	4.7	304
18	Proposed minimum reporting standards for chemical analysis Chemical Analysis Working Group (CAWG) Metabolomics Standards Initiative (MSI). <i>Metabolomics</i> , <b>2007</b> , 3, 211-221	4.7	2472
17	Metabolite profiling in blood plasma. <i>Methods in Molecular Biology</i> , <b>2007</b> , 358, 3-17	1.4	81
16	SetupXa public study design database for metabolomic projects. <i>Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing</i> , <b>2007</b> , 169-80	1.3	76
15	Metabolomic database annotations via query of elemental compositions: mass accuracy is insufficient even at less than 1 ppm. <i>BMC Bioinformatics</i> , <b>2006</b> , 7, 234	3.6	470
14	Metabolomics Standards Workshop and the development of international standards for reporting metabolomics experimental results. <i>Briefings in Bioinformatics</i> , <b>2006</b> , 7, 159-65	13.4	68
13	Mass spectrometry-based metabolic profiling reveals different metabolite patterns in invasive ovarian carcinomas and ovarian borderline tumors. <i>Cancer Research</i> , <b>2006</b> , 66, 10795-804	10.1	323
12	Lipolysis products alter protein and lipid structural characteristics in the plasma membranes of human monocytes. <i>FASEB Journal</i> , <b>2006</b> , 20, A59	0.9	

11	Metabolite profiling of Chlamydomonas reinhardtii under nutrient deprivation. <i>Plant Physiology</i> , <b>2005</b> , 139, 1995-2005	6.6	181
10	Setup and Annotation of Metabolomic Experiments by Integrating Biological and Mass Spectrometric Metadata. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 224-239	0.9	108
9	Analysis of highly polar compounds of plant origin: combination of hydrophilic interaction chromatography and electrospray ion trap mass spectrometry. <i>Analytical Biochemistry</i> , <b>2002</b> , 301, 298-36	37 <sup>1</sup>	407
8	Metabolomics Ithe link between genotypes and phenotypes. <i>Plant Molecular Biology</i> , <b>2002</b> , 48, 155-171 <sub>2</sub>	4.6	2565
7	Metabolomicsthe link between genotypes and phenotypes. <i>Plant Molecular Biology</i> , <b>2002</b> , 48, 155-71	4.6	879
6	Metabolite profiling for plant functional genomics. <i>Nature Biotechnology</i> , <b>2000</b> , 18, 1157-61	44.5	1701
5	Cervicovaginal microbiome composition drives metabolic profiles in healthy pregnancy		2
4	MS-DIAL 4: accelerating lipidomics using an MS/MS, CCS, and retention time atlas		8
3	Serum triglycerides in Alzheimer⊠ disease: Relation to neuroimaging and CSF biomarkers		1
2	Teosinte introgression modulates phosphatidylcholine levels and induces early maize flowering time		3
1	HNF4\(\text{H}\)soforms regulate the circadian balance between carbohydrate and lipid metabolism in the liver		2