The dynamic range of the human metabolome revealed

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Citation Report

#	Article	IF	Citations
1	Metabolome 2.0: quantitative genetics and network biology of metabolic phenotypes. Molecular BioSystems, 2012, 8, 2494.	2.9	55
2	Application of metabolomics approaches to the study of respiratory diseases. Bioanalysis, 2012, 4, 2265-2290.	0.6	55
3	Genetic variation in metabolic phenotypes: study designs and applications. Nature Reviews Genetics, 2012, 13, 759-769.	7.7	165
4	Molecular Nutrition Researchâ€"The Modern Way Of Performing Nutritional Science. Nutrients, 2012, 4, 1898-1944.	1.7	58
5	Metabolomics in Cerebrospinal Fluid of Patients with Amyotrophic Lateral Sclerosis: An Untargeted Approach via High-Resolution Mass Spectrometry. Journal of Proteome Research, 2013, 12, 3746-3754.	1.8	77
6	Patterns of time since last meal revealed by sparse PCA in an observational LCâ€"MS based metabolomics study. Metabolomics, 2013, 9, 1073-1081.	1.4	7
7	Review of Mass Spectrometryâ€"Based Metabolomics in Cancer Research. Cancer Epidemiology Biomarkers and Prevention, 2013, 22, 2182-2201.	1.1	123
8	Systems Epidemiology: A New Direction in Nutrition and Metabolic Disease Research. Current Nutrition Reports, 2013, 2, 225-235.	2.1	43
9	Mass-spectrometry-based metabolomics analysis for foodomics. TrAC - Trends in Analytical Chemistry, 2013, 52, 36-46.	5.8	81
10	Development of a Standard Reference Material for Metabolomics Research. Analytical Chemistry, 2013, 85, 11732-11738.	3.2	95
11	Serum Metabolic Signatures Induced By a Three-Day Intensified Exercise Period Persist After 14 h of Recovery in Runners. Journal of Proteome Research, 2013, 12, 4577-4584.	1.8	77
12	Human metabolomics: strategies to understand biology. Current Opinion in Chemical Biology, 2013, 17, 841-846.	2.8	124
13	Lipidomics in nutrition and food research. Molecular Nutrition and Food Research, 2013, 57, 1306-1318.	1.5	60
14	Testing the nanoparticle-allostatic cross-adaptation-sensitization model for homeopathic remedy effects. Homeopathy, 2013, 102, 66-81.	0.5	25
15	New Advances in Separation Science for Metabolomics: Resolving Chemical Diversity in a Post-Genomic Era. Chemical Reviews, 2013, 113, 2437-2468.	23.0	298
19	Nutrigenomics â€" Linking food to human metabolism. Trends in Food Science and Technology, 2013, 31, 6-12.	7.8	14
20	1Hâ€"13C NMR-based urine metabolic profiling in autism spectrum disorders. Talanta, 2013, 114, 95-102.	2.9	79
21	GC-MS-based urine metabolic profiling of autism spectrum disorders. Analytical and Bioanalytical Chemistry, 2013, 405, 5291-5300.	1.9	109

#	Article	IF	Citations
22	COMPUTATIONAL TOOLS FOR THE SECONDARY ANALYSIS OF METABOLOMICS EXPERIMENTS. Computational and Structural Biotechnology Journal, 2013, 4, e201301003.	1.9	62
23	Tools for the functional interpretation of metabolomic experiments. Briefings in Bioinformatics, 2013, 14, 737-744.	3.2	56
24	Metabolomics Reveals Unexpected Responses to Oral Glucose. Diabetes, 2013, 62, 2651-2653.	0.3	7
25	Application of â€™omics technologies to biomarker discovery in inflammatory lung diseases. European Respiratory Journal, 2013, 42, 802-825.	3.1	234
27	Within-person variation in the postprandial lipemic response of healthy adults. American Journal of Clinical Nutrition, 2013, 97, 261-267.	2.2	33
28	Familial Resemblance for Serum Metabolite Concentrations. Twin Research and Human Genetics, 2013, 16, 948-961.	0.3	14
29	Biological and neuroimaging biomarkers for amyotrophic lateral sclerosis: 2013 and beyond. Neurodegenerative Disease Management, 2013, 3, 427-444.	1.2	1
30	Identification of biomarkers for apoptosis in cancer cell lines using metabolomics: tools for individualized medicine. Journal of Internal Medicine, 2013, 274, 425-439.	2.7	60
31	Alcohol-induced metabolomic differences in humans. Translational Psychiatry, 2013, 3, e276-e276.	2.4	79
33	Assessment of inflammatory resilience in healthy subjects using dietary lipid and glucose challenges. BMC Medical Genomics, 2013, 6, 44.	0.7	45
34	Advances in Nutritional Metabolomics. Current Metabolomics, 2013, 1, 109-120.	0.5	26
35	Improved Metabolic Health Alters Host Metabolism in Parallel with Changes in Systemic Xeno-Metabolites of Gut Origin. PLoS ONE, 2014, 9, e84260.	1.1	39
36	Mealtime, Temporal, and Daily Variability of the Human Urinary and Plasma Metabolomes in a Tightly Controlled Environment. PLoS ONE, 2014, 9, e86223.	1.1	72
37	Circadian Variation of the Human Metabolome Captured by Real-Time Breath Analysis. PLoS ONE, 2014, 9, e114422.	1.1	65
38	Metabolite profile deviations in an oral glucose tolerance test-a comparison between lean and obese individuals. Obesity, 2014, 22, 2388-2395.	1.5	37
39	Metabolome and fecal microbiota in monozygotic twin pairs discordant for weight: a Big Mac challenge. FASEB Journal, 2014, 28, 4169-4179.	0.2	30
40	Metabolic profiling in diabetes. Journal of Endocrinology, 2014, 221, R75-R85.	1.2	83
41	Novel genetic associations with serum level metabolites identified by phenotype set enrichment analyses. Human Molecular Genetics, 2014, 23, 5847-5857.	1.4	26

#	Article	IF	Citations
42	Dynamic Metabolic Footprinting Reveals the Key Components of Metabolic Network in YeastSaccharomyces cerevisiae. International Journal of Genomics, 2014, 2014, 1-14.	0.8	16
43	NMR-Based Metabolomic Profiling of Overweight Adolescents: An Elucidation of the Effects of Inter-/Intraindividual Differences, Gender, and Pubertal Development. BioMed Research International, 2014, 2014, 1-10.	0.9	28
44	NMR-Spektroskopie â€“ ein modernes Werkzeug zur Serum-Analytik von Lipoproteinen und Metaboliten. Laboratoriums Medizin, 2014, 38, 137-149.	0.1	1
45	Associations between thyroid hormones and serum metabolite profiles in an euthyroid population. Metabolomics, 2014, 10, 152-164.	1.4	21
46	Postprandial activation of metabolic and inflammatory signalling pathways in human peripheral mononuclear cells. British Journal of Nutrition, 2014, 111, 2167-2175.	1.2	13
47	Long term conservation of human metabolic phenotypes and link to heritability. Metabolomics, 2014, 10, 1005-1017.	1.4	58
48	The future of yogurt: scientific and regulatory needs. American Journal of Clinical Nutrition, 2014, 99, 1271S-1278S.	2.2	14
49	Development of a Metabolomic Radiation Signature in Urine from Patients Undergoing Total Body Irradiation. Radiation Research, 2014, 181, 350.	0.7	76
50	Recent developments in sample-pretreatment techniques for mass spectrometry-based metabolomics. TrAC - Trends in Analytical Chemistry, 2014, 61, 157-167.	5.8	108
51	Systems biology strategies to study lipidomes in health and disease. Progress in Lipid Research, 2014, 55, 43-60.	5.3	71
52	The food metabolome: a window over dietary exposure. American Journal of Clinical Nutrition, 2014, 99, 1286-1308.	2.2	411
53	Metabolite Content Profiling of Bottlenose Dolphin Exhaled Breath. Analytical Chemistry, 2014, 86, 10616-10624.	3.2	36
54	Phenotypic flexibility as key factor in the human nutrition and health relationship. Genes and Nutrition, 2014, 9, 423.	1.2	101
55	Metabolomics of Ramadan fasting: an opportunity for the controlled study of physiological responses to food intake. Journal of Translational Medicine, 2014, 12, 161.	1.8	27
56	Comparative analysis of plasma metabolomics response to metabolic challenge tests in healthy subjects and influence of the FTO obesity risk allele. Metabolomics, 2014, 10, 386-401.	1.4	16
57	Linking diet, physical activity, cardiorespiratory fitness and obesity to serum metabolite networks: findings from a population-based study. International Journal of Obesity, 2014, 38, 1388-1396.	1.6	83
58	A technical note on challenge tests in human volunteers for multidimensional phenotyping. Chemometrics and Intelligent Laboratory Systems, 2014, 136, 81-84.	1.8	2
60	Human nutrition, environment, and health. Genes and Nutrition, 2015, 10, 489.	1.2	9

#	Article	IF	Citations
61	Missing value imputation strategies for metabolomics data. Electrophoresis, 2015, 36, 3050-3060.	1.3	118
62	Modulation of the lipidomic profile due to a lipid challenge and fitness level: a postprandial study. Lipids in Health and Disease, 2015, 14, 65.	1.2	21
63	Metabolomic Approaches in Cancer Epidemiology. Diseases (Basel, Switzerland), 2015, 3, 167-175.	1.0	7
64	A Study of the Effects of Exercise on the Urinary Metabolome Using Normalisation to Individual Metabolic Output. Metabolites, 2015, 5, 119-139.	1.3	46
65	Postprandial Responses to Lipid and Carbohydrate Ingestion in Repeated Subcutaneous Adipose Tissue Biopsies in Healthy Adults. Nutrients, 2015, 7, 5347-5361.	1.7	9
66	Urinary F2-Isoprostanes and Metabolic Markers of Fat Oxidation. Oxidative Medicine and Cellular Longevity, 2015, 2015, 1-5.	1.9	7
67	The compositional space of exhaled breath condensate and its link to the human breath volatilome. Journal of Breath Research, 2015, 9, 027105.	1.5	21
68	Amino acids, lipid metabolites, and ferritin as potential mediators linking red meat consumption to type 2 diabetes. American Journal of Clinical Nutrition, 2015, 101, 1241-1250.	2.2	95
69	N -lactoyl-amino acids are ubiquitous metabolites that originate from CNDP2-mediated reverse proteolysis of lactate and amino acids. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6601-6606.	3.3	63
70	Phenotypic flexibility as a measure of health: the optimal nutritional stress response test. Genes and Nutrition, 2015, 10, 13.	1.2	98
71	Gender-specific pathway differences in the human serum metabolome. Metabolomics, 2015, 11, 1815-1833.	1.4	218
72	Bioanalytical methods for metabolomic profiling: Detection of head and neck cancer, including oral cancer. Chinese Chemical Letters, 2015, 26, 407-415.	4.8	24
73	Metabolomics in the developmental origins of obesity and its cardiometabolic consequences. Journal of Developmental Origins of Health and Disease, 2015, 6, 65-78.	0.7	43
74	Metabolome responses to physiological and nutritional challenges. Current Opinion in Food Science, 2015, 4, 111-115.	4.1	16
75	Recent Advances in NMR Studies of Lipids. Annual Reports on NMR Spectroscopy, 2015, 85, 195-246.	0.7	4
76	Metabolomics â€“ the complementary field in systems biology: a review on obesity and type 2 diabetes. Molecular BioSystems, 2015, 11, 1742-1774.	2.9	103
77	Postprandial metabolic events in mini-pigs: new insights from a combined approach using plasma metabolomics, tissue gene expression, and enzyme activity. Metabolomics, 2015, 11, 964-979.	1.4	6
78	Human Experimental Endotoxemia in Modeling the Pathophysiology, Genomics, and Therapeutics of Innate Immunity in Complex Cardiometabolic Diseases. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 525-534.	1.1	46

#	Article	IF	Citations
79	Omics: Potential Role in Early-Phase Drug Development. , 2015, , 189-222.		0
80	Metabolomics and nutritional challenge tests. , 2015, , 197-202.		0
81	The maternal-age-associated risk of congenital heart disease is modifiable. Nature, 2015, 520, 230-233.	13.7	67
82	Optimizing the lipidomics workflow for clinical studiesâ€"practical considerations. Analytical and Bioanalytical Chemistry, 2015, 407, 4973-4993.	1.9	70
83	Quantifying phenotypic flexibility as the response to a highâ€fat challenge test in different states of metabolic health. FASEB Journal, 2015, 29, 4600-4613.	0.2	71
84	Physiological conditions can be reflected in human urine proteome and metabolome. Expert Review of Proteomics, 2015, 12, 623-636.	1.3	148
85	NMR spectroscopy â€“ a modern analytical tool for serum analytics of lipoproteins and metabolites. Laboratoriums Medizin, 2015, 38, .	0.1	2
86	Metabolomics predicts stroke recurrence after transient ischemic attack. Neurology, 2015, 84, 36-45.	1.5	93
87	Network-Based Approach for Analyzing Intra- and Interfluid Metabolite Associations in Human Blood, Urine, and Saliva. Journal of Proteome Research, 2015, 14, 1183-1194.	1.8	40
89	Analyzing metabolomics-based challenge tests. Metabolomics, 2015, 11, 50-63.	1.4	17
90	Personalized Metabolomics for Predicting Glucose Tolerance Changes in Sedentary Women After High-Intensity Interval Training. Scientific Reports, 2015, 4, 6166.	1.6	40
91	MetaboTools: A Comprehensive Toolbox for Analysis of Genome-Scale Metabolic Models. Frontiers in Physiology, 2016, 7, 327.	1.3	41
92	Cognitive and hedonic responses to meal ingestion correlate with changes in circulating metabolites. Neurogastroenterology and Motility, 2016, 28, 1806-1814.	1.6	27
93	Fastingâ€induced liver <scp>GADD</scp> 45Î² restrains hepatic fatty acid uptake and improves metabolic health. EMBO Molecular Medicine, 2016, 8, 654-669.	3.3	32
94	Changes in glucose-elicited blood metabolite responses following weight loss and long term weight maintenance in obese individuals with impaired glucose tolerance. Diabetes Research and Clinical Practice, 2016, 113, 187-197.	1.1	13
95	Metabolic Networks and Metabolites Underlie Associations Between Maternal Glucose During Pregnancy and Newborn Size at Birth. Diabetes, 2016, 65, 2039-2050.	0.3	49
96	Metabolomic Biomarkers of Prostate Cancer: Prediction, Diagnosis, Progression, Prognosis, and Recurrence. Cancer Epidemiology Biomarkers and Prevention, 2016, 25, 887-906.	1.1	98
97	Nutrigenomics, the Microbiome, and Gene-Environment Interactions: New Directions in Cardiovascular Disease Research, Prevention, and Treatment. Circulation: Cardiovascular Genetics, 2016, 9, 291-313.	5.1	99

#	Article	IF	Citations
98	1H NMR based metabolomic approach to monitoring of the head and neck cancer treatment toxicity. Metabolomics, 2016, 12, 1.	1.4	17
99	A systems approach to personalised nutrition: Report on the Keystone Symposium â€œHuman Nutrition, Environment and Healthâ€• Applied & Translational Genomics, 2016, 10, 16-18.	2.1	6
100	Intensive determination of storage condition effects on human plasma metabolomics. Metabolomics, 2016, 12, 1.	1.4	21
101	Key elements of metabolomics in the study of biomarkers of diabetes. Diabetologia, 2016, 59, 2497-2502.	2.9	33
102	Development and Application of Ultra-Performance Liquid Chromatography-TOF MS for Precision Large Scale Urinary Metabolic Phenotyping. Analytical Chemistry, 2016, 88, 9004-9013.	3.2	113
103	Translating novel insights from age-related loss of skeletal muscle mass and phenotypic flexibility into diet and lifestyle recommendations for the elderly. Current Opinion in Food Science, 2016, 10, 60-67.	4.1	4
104	Mid- and long-term correlations of plasma metabolite concentrations measured by a targeted metabolomics approach. Metabolomics, 2016, 12, 1.	1.4	4
105	Discovering and validating between-subject variations in plasma lipids in healthy subjects. Scientific Reports, 2016, 6, 19139.	1.6	45
106	A Multiplatform Metabolomics Approach to Characterize Plasma Levels of Phenylalanine and Tyrosine in Phenylketonuria. JIMD Reports, 2016, 32, 69-79.	0.7	18
107	Association of Plasma Small-Molecule Intermediate Metabolites With Age and Body Mass Index Across Six Diverse Study Populations. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 1507-1513.	1.7	22
108	Medium-chain plasma acylcarnitines, ketone levels, cognition, and gray matter volumes in healthy elderly, mildly cognitively impaired, or Alzheimer's disease subjects. Neurobiology of Aging, 2016, 43, 1-12.	1.5	70
109	Bioanalytical techniques in nontargeted clinical lipidomics. Bioanalysis, 2016, 8, 351-364.	0.6	37
110	Metabolomics in diabetes, a review. Annals of Medicine, 2016, 48, 89-102.	1.5	93
111	Computational Modeling of Human Metabolism and Its Application to Systems Biomedicine. Methods in Molecular Biology, 2016, 1386, 253-281.	0.4	32
112	Metabolic changes in serum metabolome in response to a meal. European Journal of Nutrition, 2017, 56, 671-681.	1.8	44
113	Analytes related to erythrocyte metabolism are reliable biomarkers for preanalytical error due to delayed plasma processing in metabolomics studies. Clinica Chimica Acta, 2017, 466, 105-111.	0.5	30
114	JIMD Reports, Volume 32. JIMD Reports, 2017, , .	0.7	0
115	Improvement of myocardial infarction risk prediction via inflammation-associated metabolite biomarkers. Heart, 2017, 103, 1278-1285.	1.2	38

#	Article	IF	Citations
116	Metabolomics for clinical use and research in chronic kidney disease. Nature Reviews Nephrology, 2017, 13, 269-284.	4.1	248
118	Metabolomics-Mediated Characterization of Endophytic Species in Recalcitrant Tree Species. , 2017, , 251-257.		1
119	Oxidative stress in asthmatic and nonâ€asthmatic adolescent swimmersâ€"A breathomics approach. Pediatric Allergy and Immunology, 2017, 28, 452-457.	1.1	23
120	Metabolomics: An emerging tool to evaluate the impact of nutritional and physiological challenges. TrAC - Trends in Analytical Chemistry, 2017, 96, 79-88.	5.8	23
121	A Metabolomic Signature of Acute Caloric Restriction. Journal of Clinical Endocrinology and Metabolism, 2017, 102, 4486-4495.	1.8	52
122	Twentyâ€fourâ€hour rhythmicity of circulating metabolites: effect of body mass and type 2 diabetes. FASEB Journal, 2017, 31, 5557-5567.	0.2	54
123	Military training elicits marked increases in plasma metabolomic signatures of energy metabolism, lipolysis, fatty acid oxidation, and ketogenesis. Physiological Reports, 2017, 5, e13407.	0.7	48
124	Metabotyping and its application in targeted nutrition: an overview. British Journal of Nutrition, 2017, 117, 1631-1644.	1.2	58
125	Making It Last: Storage Time and Temperature Have Differential Impacts on Metabolite Profiles of Airway Samples from Cystic Fibrosis Patients. MSystems, 2017, 2, .	1.7	11
126	Blood lactose after dairy product intake in healthy men. British Journal of Nutrition, 2017, 118, 1070-1077.	1.2	18
127	Systemic F2-Isoprostane Levels in Predisposition to Obesity and Type 2 Diabetes: Emphasis on Racial Differences. Diversity and Equality in Health and Care, 2017, 14, 91-101.	0.2	4
128	Visceral adipose tissue but not subcutaneous adipose tissue is associated with urine and serum metabolites. PLoS ONE, 2017, 12, e0175133.	1.1	26
129	Multi-parameter comparison of a standardized mixed meal tolerance test in healthy and type 2 diabetic subjects: the PhenFlex challenge. Genes and Nutrition, 2017, 12, 21.	1.2	59
130	A scheme for a flexible classification of dietary and health biomarkers. Genes and Nutrition, 2017, 12, 34.	1.2	76
131	Metabolomics of postprandial plasma alterations: a comprehensive Japanese study. Journal of Biochemistry, 2018, 163, 113-121.	0.9	6
132	Postprandial metabolite profiles associated with type 2 diabetes clearly stratify individuals with impaired fasting glucose. Metabolomics, 2018, 14, 13.	1.4	17
133	Weight loss moderately affects the mixed meal challenge response of the plasma metabolome and transcriptome of peripheral blood mononuclear cells in abdominally obese subjects. Metabolomics, 2018, 14, 46.	1.4	18
134	Altered metabolism distinguishes high-risk from stable carotid atherosclerotic plaques. European Heart Journal, 2018, 39, 2301-2310.	1.0	104

#	Article	IF	Citations
135	The application of ion mobility mass spectrometry to metabolomics. Current Opinion in Chemical Biology, 2018, 42, 60-66.	2.8	90
136	The repeatability of the abbreviated (4-h) Oral Fat Tolerance Test and influence of prior acute aerobic exercise. European Journal of Nutrition, 2018, 57, 309-318.	1.8	9
137	Metabolomic analysis of obesity, metabolic syndrome, and type 2 diabetes: amino acid and acylcarnitine levels change along a spectrum of metabolic wellness. PeerJ, 2018, 6, e5410.	0.9	121
138	Roux-en-Y Gastric Bypass Surgery Induces Distinct but Frequently Transient Effects on Acylcarnitine, Bile Acid and Phospholipid Levels. Metabolites, 2018, 8, 83.	1.3	11
139	Effects of Meal Timing on Postprandial Glucose Metabolism and Blood Metabolites in Healthy Adults. Nutrients, 2018, 10, 1763.	1.7	55
140	Global testing of shifts in metabolic phenotype. Metabolomics, 2018, 14, 139.	1.4	4
141	Lifetime cognition and late midlife blood metabolites: findings from a British birth cohort. Translational Psychiatry, 2018, 8, 203.	2.4	21
142	Biomarker of food intake for assessing the consumption of dairy and egg products. Genes and Nutrition, 2018, 13, 26.	1.2	40
143	Metabolic changes of the blood metabolome after a date fruit challenge. Journal of Functional Foods, 2018, 49, 267-276.	1.6	10
144	Identification of Comprehensive Metabotypes Associated with Cardiometabolic Diseases in the Populationâ€Based KORA Study. Molecular Nutrition and Food Research, 2018, 62, e1800117.	1.5	17
145	Plasma metabolome analysis identifies distinct human metabotypes in the postprandial state with different susceptibility to weight lossâ€mediated metabolic improvements. FASEB Journal, 2018, 32, 5447-5458.	0.2	54
146	Dilution correction for dynamically influenced urinary analyte data. Analytica Chimica Acta, 2018, 1032, 18-31.	2.6	12
147	From Diabetes Care to Diabetes Cureâ€"The Integration of Systems Biology, eHealth, and Behavioral Change. Frontiers in Endocrinology, 2017, 8, 381.	1.5	55
148	Instability of personal human metabotype is linked to all-cause mortality. Scientific Reports, 2018, 8, 9810.	1.6	16
149	Associations between Single Nucleotide Polymorphisms and Total Energy, Carbohydrate, and Fat Intakes: A Systematic Review. Advances in Nutrition, 2018, 9, 425-453.	2.9	27
150	Glucose challenge metabolomics implicates medium-chain acylcarnitines in insulin resistance. Scientific Reports, 2018, 8, 8691.	1.6	47
151	Human metabolomics reveal daily variations under nutritional challenges specific to serum and skeletal muscle. Molecular Metabolism, 2018, 16, 1-11.	3.0	55
152	Highâ€Throughput Metabolomics by 1D NMR. Angewandte Chemie - International Edition, 2019, 58, 968-994.	7.2	254

#	Article	IF	Citations
153	Hochdurchsatzâ€Metabolomik mit 1Dâ€NMR. Angewandte Chemie, 2019, 131, 980-1007.	1.6	8
155	Metabolome-Wide Association Study of the Relationship Between Habitual Physical Activity and Plasma Metabolite Levels. American Journal of Epidemiology, 2019, 188, 1932-1943.	1.6	26
156	Proteomics and metabolomics research in exercise and sport. , 2019, , 539-566.		2
157	Diverse metabolic reactions activated during 58-hr fasting are revealed by non-targeted metabolomic analysis of human blood. Scientific Reports, 2019, 9, 854.	1.6	50
158	Identification of serological markers for pre- and postoperative fasting periods. Clinical Nutrition ESPEN, 2019, 30, 131-137.	0.5	3
159	Dynamic modelling of an ACADS genotype in fatty acid oxidation â€“ Application of cellular models for the analysis of common genetic variants. PLoS ONE, 2019, 14, e0216110.	1.1	1
160	Near-roadway air pollution exposure and altered fatty acid oxidation among adolescents and young adults â€“ The interplay with obesity. Environment International, 2019, 130, 104935.	4.8	35
161	Characterization of Bulk Phosphatidylcholine Compositions in Human Plasma Using Side-Chain Resolving Lipidomics. Metabolites, 2019, 9, 109.	1.3	15
162	Postprandial Metabolic Effects of Fiber Mixes Revealed by in vivo Stable Isotope Labeling in Humans. Metabolites, 2019, 9, 91.	1.3	4
163	Gallic acid functionalized UiO-66 for the recovery of ribosylated metabolites from human urine samples. Talanta, 2019, 201, 23-32.	2.9	22
164	Ageing Investigation Using Two-Time-Point Metabolomics Data from KORA and CARLA Studies. Metabolites, 2019, 9, 44.	1.3	39
165	A Scientific Perspective of Personalised Gene-Based Dietary Recommendations for Weight Management. Nutrients, 2019, 11, 617.	1.7	29
166	Omics: Potential Role in Early Phase Drug Development. , 2019, , 309-347.		0
167	Nutrimetabolomics: An Integrative Action for Metabolomic Analyses in Human Nutritional Studies. Molecular Nutrition and Food Research, 2019, 63, e1800384.	1.5	173
168	Familial resemblances in human plasma metabolites are attributable to both genetic and common environmental effects. Nutrition Research, 2019, 61, 22-30.	1.3	18
169	Univariate Statistical Modeling, Multiple Testing Correction, and Visualization in Metabolome-Wide Association Studies. , 2019, , 237-260.		0
170	Non-targeted metabolomics in sport and exercise science. Journal of Sports Sciences, 2019, 37, 959-967.	1.0	65
171	Developing preliminary blood metabolomics-based biomarkers of insufficient sleep in humans. Sleep, 2020, 43, .	0.6	21

#	Article	IF	Citations
172	Beta-aminoisobutyric acid is released by contracting human skeletal muscle and lowers insulin release from INS-1 832/3Âcells by mediating mitochondrial energy metabolism. Metabolism Open, 2020, 7, 100053.	1.4	18
173	Metabolomics, physical activity, exercise and health: A review of the current evidence. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165936.	1.8	77
174	Effects of Short-Term Dietary Protein Restriction on Blood Amino Acid Levels in Young Men. Nutrients, 2020, 12, 2195.	1.7	5
175	Identification of metabolites associated with prostate cancer risk: a nested case-control study with long follow-up in the Northern Sweden Health and Disease Study. BMC Medicine, 2020, 18, 187.	2.3	21
176	Confounders in metabolomics. , 2020, , 17-32.		3
177	Metabolomics of human fasting: new insights about old questions. Open Biology, 2020, 10, 200176.	1.5	19
178	Mining for Peaks in LC-HRMS Datasets Using Finnee â€“ A Case Study with Exhaled Breath Condensates from Healthy, Asthmatic, and COPD Patients. ACS Omega, 2020, 5, 16089-16098.	1.6	3
179	Associations between Genotypeâ€“Diet Interactions and Weight Lossâ€”A Systematic Review. Nutrients, 2020, 12, 2891.	1.7	19
180	Time-restricted feeding alters lipid and amino acid metabolite rhythmicity without perturbing clock gene expression. Nature Communications, 2020, 11, 4643.	5.8	69
181	Metabolomic Profiling Reveals Distinct and Mutual Effects of Diet and Inflammation in Shaping Systemic Metabolism in Ldlrâ¯/â¯ Mice. Metabolites, 2020, 10, 336.	1.3	5
182	Intergenerational Metabolomic Analysis of Mothers with a History of Gestational Diabetes Mellitus and Their Offspring. International Journal of Molecular Sciences, 2020, 21, 9647.	1.8	7
183	Running on Empty: A Metabolomics Approach to Investigating Changing Energy Metabolism during Fasted Exercise and Rest. Metabolites, 2020, 10, 399.	1.3	7
184	Evaluation of Non-Uniform Sampling 2D 1Hâ€“13C HSQC Spectra for Semi-Quantitative Metabolomics. Metabolites, 2020, 10, 203.	1.3	17
185	Metabolic signatures associated with Western and Prudent dietary patterns in women. American Journal of Clinical Nutrition, 2020, 112, 268-283.	2.2	18
186	Exploring the Diversity of Sugar Compounds in Healthy, Prediabetic, and Diabetic Volunteers. Molecular Nutrition and Food Research, 2020, 64, e1901190.	1.5	7
187	Modelâ€based data analysis of individual human postprandial plasma bile acid responses indicates a major role for the gallbladder and intestine. Physiological Reports, 2020, 8, e14358.	0.7	6
188	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
189	Postprandial Metabolism is Impaired in Overweight Normoglycemic Young Adults without Family History of Diabetes. Scientific Reports, 2020, 10, 353.	1.6	26

#	Article	IF	Citations
191	Specificity, Dose Dependency, and Kinetics of Markers of Chicken and Beef Intake Using Targeted Quantitative LCâ€MS/MS: A Human Intervention Trial. Molecular Nutrition and Food Research, 2020, 64, e1900921.	1.5	8
192	Metabolomics â€“ Nutritional and Physiological Challenges. , 2021, , 14-31.		0
193	Perspective: A potential role for NUS in metaboliteâ€based in vitro diagnostics. Magnetic Resonance in Chemistry, 2021, 59, 257-263.	1.1	3
194	Diet, blood pressure, and heart diseaseâ€"precision nutrition approaches to understand response to diet and predict disease risk. American Journal of Clinical Nutrition, 2021, 114, 1581-1582.	2.2	2
195	Metabolomics and Lipidomics: Expanding the Molecular Landscape of Exercise Biology. Metabolites, 2021, 11, 151.	1.3	39
196	Slotting metabolomics into routine precision medicine. Expert Review of Precision Medicine and Drug Development, 2021, 6, 173-187.	0.4	11
197	Global biochemical analysis of plasma, serum and whole blood collected using various anticoagulant additives. PLoS ONE, 2021, 16, e0249797.	1.1	13
198	Kernel weighted least square approach for imputing missing values of metabolomics data. Scientific Reports, 2021, 11, 11108.	1.6	7
200	Effects of intermittent (5:2) or continuous energy restriction on basal and postprandial metabolism: a randomised study in normal-weight, young participants. European Journal of Clinical Nutrition, 2022, 76, 65-73.	1.3	9
201	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
202	Acoustic Mist Ionization Mass Spectrometry for Ultrahigh-Throughput Metabolomics Screening. Analytical Chemistry, 2021, 93, 9258-9266.	3.2	11
203	Physiological extremes of the human blood metabolome: A metabolomics analysis of highly glycolytic, oxidative, and anabolic athletes. Physiological Reports, 2021, 9, e14885.	0.7	18
204	Changes in plasma phospholipids and sphingomyelins with aging in men and women: A comprehensive systematic review of longitudinal cohort studies. Ageing Research Reviews, 2021, 68, 101340.	5.0	7
205	Linking the FTO obesity rs1421085 variant circuitry to cellular, metabolic, and organismal phenotypes in vivo. Science Advances, 2021, 7, .	4.7	19
206	Advantages of Studying the Metabolome in Response to Mixed-Macronutrient Challenges and Suggestions for Future Research Designs. Journal of Nutrition, 2021, 151, 2868-2881.	1.3	8
207	Gadolinium-Based Paramagnetic Relaxation Enhancement Agent Enhances Sensitivity for NUS Multidimensional NMR-Based Metabolomics. Molecules, 2021, 26, 5115.	1.7	3
208	Metabolic flexibility during normal pregnancy allows appropriate adaptation during gestation independently of BMI. Clinical Nutrition ESPEN, 2021, 44, 254-262.	0.5	0
209	Metabolomics analysis reveals altered metabolites in lean compared with obese adolescents and additional metabolic shifts associated with hyperinsulinaemia and insulin resistance in obese adolescents: a cross-sectional study. Metabolomics, 2021, 17, 11.	1.4	15

#	Article	IF	Citations
210	Application of Metabolomics to Renal and Cardiometabolic Diseases. Methods in Molecular Biology, 2020, 2104, 401-417.	0.4	2
211	The postprandial metabolome â€" a source of Nutritional Biomarkers of Health. Current Opinion in Food Science, 2017, 16, 67-73.	4.1	10
212	Human urine 1H NMR metabolomics reveals alterations of protein and carbohydrate metabolism when comparing habitual Average Danish diet vs. healthy New Nordic diet. Nutrition, 2020, 79-80, 110867.	1.1	11
213	Lipidomic profiles, lipid trajectories and clinical biomarkers in female elite endurance athletes. Scientific Reports, 2020, 10, 2349.	1.6	9
215	Identification of Differential Responses to an Oral Glucose Tolerance Test in Healthy Adults. PLoS ONE, 2013, 8, e72890.	1.1	72
216	Metabolomics Reveals Metabolically Healthy and Unhealthy Obese Individuals Differ in their Response to a Caloric Challenge. PLoS ONE, 2015, 10, e0134613.	1.1	44
217	Combined 3 Tesla MRI Biomarkers Improve the Differentiation between Benign vs Malignant Single Ring Enhancing Brain Masses. PLoS ONE, 2016, 11, e0159047.	1.1	7
218	An Untargeted Metabolomics Approach to Characterize Short-Term and Long-Term Metabolic Changes after Bariatric Surgery. PLoS ONE, 2016, 11, e0161425.	1.1	51
219	The impact of Roux-en-Y gastric bypass surgery on normal metabolism in a porcine model. PLoS ONE, 2017, 12, e0173137.	1.1	10
220	The human plasma-metabolome: Reference values in 800 French healthy volunteers; impact of cholesterol, gender and age. PLoS ONE, 2017, 12, e0173615.	1.1	117
221	The urine metabolome differs between lean and overweight Labrador Retriever dogs during a feed-challenge. PLoS ONE, 2017, 12, e0180086.	1.1	14
222	Metabolite patterns predicting sex and age in participants of the Karlsruhe Metabolomics and Nutrition (KarMeN) study. PLoS ONE, 2017, 12, e0183228.	1.1	150
223	Integrated Analyses of Microbiome and Longitudinal Metabolome Data Reveal Microbial-Host Interactions on Sulfur Metabolism in Parkinson's Disease. SSRN Electronic Journal, 0, , .	0.4	2
224	The Application of Metabolomic Profiling to the Effects of Physical Activity. Current Metabolomics, 2015, 2, 233-263.	0.5	22
225	Significance of 5â€™AMP-activated protein kinase in metabolomic regulation by skeletal muscle contraction. The Journal of Physical Fitness and Sports Medicine, 2015, 4, 93-102.	0.2	4
226	Serum metabolomics analysis reveals increased lipid catabolism in mildly hyperbilirubinemic Gilbert's syndrome individuals. Metabolism: Clinical and Experimental, 2021, 125, 154913.	1.5	3
227	Genetic Studies of Metabolomics Change After a Liquid Meal Illuminate Novel Pathways for Glucose and Lipid Metabolism. Diabetes, 2021, 70, 2932-2946.	0.3	17
231	NMR in Environmental and Nutritional Research. New Developments in NMR, 2018, , 168-182.	0.1	0

#	Article	IF	Citations
233	Metabolomics in Exercise and Sports: A Systematic Review. Sports Medicine, 2022, 52, 547-583.	3.1	34
234	Starvation. , 2020, , 95-129.		0
235	Serum Branched-Chain Amino Acid Metabolites Increase in Males When Aerobic Exercise Is Initiated with Low Muscle Glycogen. Metabolites, 2021, 11, 828.	1.3	14
236	Effect of Mori ramulus on the postprandial blood glucose levels and inflammatory responses of healthy subjects subjected to an oral high-fat/sucrose challenge: A double-blind, randomized, crossover clinical trial. Biomedicine and Pharmacotherapy, 2022, 146, 112552.	2.5	2
237	Investigating the Postprandial Metabolome after Challenge Tests to Assess Metabolic Flexibility and Dysregulations Associated with Cardiometabolic Diseases. Nutrients, 2022, 14, 472.	1.7	18
238	Effect of BMI on the Thermogenic Response to Cold Exposure and Associated Changes in Metabolism and Browning Markers in Adult Humans. Obesity Facts, 2022, 15, 405-415.	1.6	5
239	Four features of temporal patterns characterize similarity among individuals and molecules by glucose ingestion in humans. Npj Systems Biology and Applications, 2022, 8, 6.	1.4	5
240	Integrated metagenomics and metabolomics analysis illustrates the systemic impact of the gut microbiota on host metabolism after bariatric surgery. Diabetes, Obesity and Metabolism, 2022, 24, 1224-1234.	2.2	9
241	Systems-Level Nutrition Approaches to Define Phenotypes Resulting from Complex Gene-Environment Interactions. Nestle Nutrition Institute Workshop Series, 2016, 84, 1-13.	1.5	1
242	Plasma Metabolic Signatures of Healthy Overweight Subjects Challenged With an Oral Glucose Tolerance Test. Frontiers in Nutrition, 0, 9, .	1.6	4
243	Association between Habitual Diet and the Postprandial Glucose Responseâ€"An Enable Study. Molecular Nutrition and Food Research, 2022, 66, .	1.5	1
244	Lipidomics in nutrition research. Current Opinion in Clinical Nutrition and Metabolic Care, 2022, 25, 311-318.	1.3	1
245	Branched-chain and aromatic amino acid levels response to an oral glucose load associated with gestational diabetes mellitus. Scientific Reports, 2022, 12, .	1.6	2
246	Dynamics and determinants of human plasma bile acid profiles during dietary challenges. Frontiers in Nutrition, 0, 9, .	1.6	1
247	Identification of prediagnostic metabolites associated with prostate cancer risk by untargeted mass spectrometryâ€based metabolomics: A caseâ€control study nested in the Northern Sweden Health and Disease Study. International Journal of Cancer, 2022, 151, 2115-2127.	2.3	3
248	Breath response following a nutritional challenge monitored by secondary electrospray ionization high-resolution mass spectrometry. Journal of Breath Research, 2022, 16, 046007.	1.5	8
249	The Diurnal Blood Metabolome and Effects of Vitamin D Supplementation: A Randomised Crossover Trial in Postmenopausal Women. International Journal of Molecular Sciences, 2022, 23, 9748.	1.8	1
250	Dynamic patterns of postprandial metabolic responses to three dietary challenges. Frontiers in Nutrition, 0, 9, .	1.6	2

#	Article	IF	Citations
251	Response of circulating metabolites to an oral glucose challenge and risk of cardiovascular disease and mortality in the community. Cardiovascular Diabetology, 2022, 21, .	2.7	1
252	Postprandial Metabolome Following a Low Glycaemic Index Meal-Challenge Test: A Narrative Review. The Malaysian Journal of Medical Sciences, 2022, 29, 5-16.	0.3	0
253	The exercise metabolome: acute aerobic and anaerobic signatures. Journal of the International Society of Sports Nutrition, 2022, 19, 603-622.	1.7	9
254	Phenotypic flexibility in nutrition research to quantify human variability: building the bridge to personalized nutrition. Proceedings of the Nutrition Society, 0, , 1-31.	0.4	0
255	Integrating ion mobility into comprehensive multidimensional metabolomics workflows: critical considerations. Metabolomics, 2022, 18, .	1.4	8
256	Acute effects of moderate vs. vigorous endurance exercise on urinary metabolites in healthy, young, physically active menâ€"A multi-platform metabolomics approach. Frontiers in Physiology, 0, 14, .	1.3	0
257	The role of exercise and hypoxia on glucose transport and regulation. European Journal of Applied Physiology, 2023, 123, 1147-1165.	1.2	3
258	Single and Joined Behaviour of Circulating Biomarkers and Metabolic Parameters in High-Fit and Low-Fit Healthy Females. International Journal of Molecular Sciences, 2023, 24, 4202.	1.8	2
259	Association between Genotype and the Glycemic Response to an Oral Glucose Tolerance Test: A Systematic Review. Nutrients, 2023, 15, 1695.	1.7	0
260	Sex differences in body composition and serum metabolome responses to sustained, physical training suggest enhanced fat oxidation in women compared with men. Physiological Genomics, 2023, 55, 235-247.	1.0	1