Christian M Metallo

List of Publications by Year
in descending order

81 papers	11,260 citations	61945 43 h-index	66879 78 g-index
84 all docs	84 docs citations	84 times ranked	17613 citing authors

#	Article	IF	Citations
1	Daily running enhances molecular and physiological circadian rhythms in skeletal muscle. Molecular Metabolism, 2022, 61, 101504.	3.0	14
2	The lactate-NAD+ axis activates cancer-associated fibroblasts by downregulating p62. Cell Reports, 2022, 39, 110792.	2.9	22
3	Mesaconate is synthesized from itaconate and exerts immunomodulatory effects in macrophages. Nature Metabolism, 2022, 4, 524-533.	5.1	32
4	Serine biosynthesis as a novel therapeutic target for dilated cardiomyopathy. European Heart Journal, 2022, 43, 3477-3489.	1.0	23
5	Extracellular serine and glycine are required for mouse and human skeletal muscle stem and progenitor cell function. Molecular Metabolism, 2021, 43, 101106.	3.0	31
6	Microbiota control of maternal behavior regulates early postnatal growth of offspring. Science Advances, 2021, 7, .	4.7	13
7	Itaconate Alters Succinate and Coenzyme A Metabolism via Inhibition of Mitochondrial Complex II and Methylmalonyl-CoA Mutase. Metabolites, 2021, 11, 117.	1.3	35
8	Serine biosynthesis defect due to haploinsufficiency of PHGDH causes retinal disease. Nature Metabolism, 2021, 3, 366-377.	5.1	32
9	Exploring the evolutionary roots and physiological function of itaconate. Current Opinion in Biotechnology, 2021, 68, 144-150.	3.3	13
10	Cancer cells escape autophagy inhibition via NRF2-induced macropinocytosis. Cancer Cell, 2021, 39, 678-693.e11.	7.7	91
11	PI5P4Ks drive metabolic homeostasis through peroxisome-mitochondria interplay. Developmental Cell, 2021, 56, 1661-1676.e10.	3.1	27
12	NaCT/SLC13A5 facilitates citrate import and metabolism under nutrient-limited conditions. Cell Reports, 2021, 36, 109701.	2.9	23
13	Charting oncogenicity of genes and variants across lineages via multiplexed screens in teratomas. IScience, 2021, 24, 103149.	1.9	2
14	Dairy Fat Intake, Plasma Pentadecanoic Acid, and Plasma Isoâ€heptadecanoic Acid Are Inversely Associated With Liver Fat in Children. Journal of Pediatric Gastroenterology and Nutrition, 2021, 72, e90-e96.	0.9	16
15	Progressive alterations in amino acid and lipid metabolism correlate with peripheral neuropathy in Polg ^{D257A} mice. Science Advances, 2021, 7, eabj4077.	4.7	8
16	Itaconate modulates tricarboxylic acid and redox metabolism to mitigate reperfusion injury. Molecular Metabolism, 2020, 32, 122-135.	3.0	83
17	Disruption of redox homeostasis for combinatorial drug efficacy in K-Ras tumors as revealed by metabolic connectivity profiling. Cancer & Metabolism, 2020, 8, 22.	2.4	10
18	Cryptochromes Suppress HIF1Î± in Muscles. IScience, 2020, 23, 101338.	1.9	22

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19	A Small Molecule Fluorogenic Probe for the Detection of Sphingosine in Living Cells. Journal of the American Chemical Society, 2020, 142, 17887-17891.	6.6	18
20	Disruption of the sodium-dependent citrate transporter SLC13A5 in mice causes alterations in brain citrate levels and neuronal network excitability in the hippocampus. Neurobiology of Disease, 2020, 143, 105018.	2.1	30
21	Escher-Trace: a web application for pathway-based visualization of stable isotope tracing data. BMC Bioinformatics, 2020, 21, 297.	1.2	12
22	Tolerance to graded dosages of histidine supplementation in healthy human adults. American Journal of Clinical Nutrition, 2020, 112, 1358-1367.	2.2	8
23	Metabolic Maturation Media Improve Physiological Function of Human iPSC-Derived Cardiomyocytes. Cell Reports, 2020, 32, 107925.	2.9	198
24	Serine restriction alters sphingolipid diversity to constrain tumour growth. Nature, 2020, 586, 790-795.	13.7	166
25	Fructose stimulated de novo lipogenesis is promoted by inflammation. Nature Metabolism, 2020, 2, 1034-1045.	5.1	174
26	TANK-Binding Kinase 1 Regulates the Localization of Acyl-CoA Synthetase ACSL1 to Control Hepatic Fatty Acid Oxidation. Cell Metabolism, 2020, 32, 1012-1027.e7.	7.2	59
27	Sub-nanowatt microfluidic single-cell calorimetry. Nature Communications, 2020, 11, 2982.	5.8	21
28	Tracing insights into de novo lipogenesis in liver and adipose tissues. Seminars in Cell and Developmental Biology, 2020, 108, 65-71.	2.3	53
29	Cystine transporter regulation of pentose phosphate pathway dependency and disulfide stress exposes a targetable metabolic vulnerability in cancer. Nature Cell Biology, 2020, 22, 476-486.	4.6	226
30	PKCÎ»/Î¹ Loss Induces Autophagy, Oxidative Phosphorylation, and NRF2 to Promote Liver Cancer Progression. Cancer Cell, 2020, 38, 247-262.e11.	7.7	73
31	Statins Limit Coenzyme Q Synthesis and Metabolically Synergize with MEK Inhibition in Pancreatic Tumors. Cancer Research, 2020, 80, 151-152.	0.4	10
32	Deuterium Tracing to Interrogate Compartment-Specific NAD(P)H Metabolism in Cultured Mammalian Cells. Methods in Molecular Biology, 2020, 2088, 51-71.	0.4	5
33	3D collagen architecture regulates cell adhesion through degradability, thereby controlling metabolic and oxidative stress. Integrative Biology (United Kingdom), 2019, 11, 221-234.	0.6	33
34	Non-canonical mTORC2 Signaling Regulates Brown Adipocyte Lipid Catabolism through SIRT6-FoxO1. Molecular Cell, 2019, 75, 807-822.e8.	4.5	60
35	Serine and Lipid Metabolism in Macular Disease and Peripheral Neuropathy. New England Journal of Medicine, 2019, 381, 1422-1433.	13.9	166
36	Î³-6-Phosphogluconolactone, a Byproduct of the Oxidative Pentose Phosphate Pathway, Contributes to AMPK Activation through Inhibition of PP2A. Molecular Cell, 2019, 76, 857-871.e9.	4.5	39

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37	Quantifying Intermediary Metabolism and Lipogenesis in Cultured Mammalian Cells Using Stable Isotope Tracing and Mass Spectrometry. Methods in Molecular Biology, 2019, 1978, 219-241.	0.4	48
38	Adipocyte ACLY Facilitates Dietary Carbohydrate Handling to Maintain Metabolic Homeostasis in Females. Cell Reports, 2019, 27, 2772-2784.e6.	2.9	49
39	Increased Serine and One-Carbon Pathway Metabolism by PKCÎ»/Î¹ Deficiency Promotes Neuroendocrine Prostate Cancer. Cancer Cell, 2019, 35, 385-400.e9.	7.7	128
40	Genetic Liver-Specific AMPK Activation Protects against Diet-Induced Obesity and NAFLD. Cell Reports, 2019, 26, 192-208.e6.	2.9	202
41	Combinatorial CRISPR-Cas9 Metabolic Screens Reveal Critical Redox Control Points Dependent on the KEAP1-NRF2 Regulatory Axis. Molecular Cell, 2018, 69, 699-708.e7.	4.5	81
42	The PLAG1-GDH1 Axis Promotes Anoikis Resistance and Tumor Metastasis through CamKK2-AMPK Signaling in LKB1-Deficient Lung Cancer. Molecular Cell, 2018, 69, 87-99.e7.	4.5	217
43	Reverse engineering the cancer metabolic network using flux analysis to understand drivers of human disease. Metabolic Engineering, 2018, 45, 95-108.	3.6	36
44	Brown Fat AKT2 Is a Cold-Induced Kinase that Stimulates ChREBP-Mediated De Novo Lipogenesis to Optimize Fuel Storage and Thermogenesis. Cell Metabolism, 2018, 27, 195-209.e6.	7.2	151
45	Integrated InÂVivo Quantitative Proteomics and Nutrient Tracing Reveals Age-Related Metabolic Rewiring of Pancreatic Î² Cell Function. Cell Reports, 2018, 25, 2904-2918.e8.	2.9	44
46	Oncogenic R132 IDH1 Mutations Limit NADPH for De Novo Lipogenesis through (D)2-Hydroxyglutarate Production in Fibrosarcoma Cells. Cell Reports, 2018, 25, 1018-1026.e4.	2.9	56
47	Enzyme promiscuity drives branched-chain fatty acid synthesis in adipose tissues. Nature Chemical Biology, 2018, 14, 1021-1031.	3.9	165
48	Transaminase Inhibition by 2-Hydroxyglutarate Impairs Glutamate Biosynthesis and Redox Homeostasis in Glioma. Cell, 2018, 175, 101-116.e25.	13.5	234
49	Preserved cardiac function by vinculin enhances glucose oxidation and extends health- and life-span. APL Bioengineering, 2018, 2, .	3.3	5
50	RalA controls glucose homeostasis by regulating glucose uptake in brown fat. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7819-7824.	3.3	36
51	Understanding the interplay between amino acid and lipid metabolism in tumor growth. FASEB Journal, 2018, 32, .	0.2	0
52	Inhibition of the mitochondrial pyruvate carrier protects from excitotoxic neuronal death. Journal of Cell Biology, 2017, 216, 1091-1105.	2.3	140
53	LKB1 promotes metabolic flexibility in response to energy stress. Metabolic Engineering, 2017, 43, 208-217.	3.6	42
54	ATF4-Induced Metabolic Reprograming Is a Synthetic Vulnerability of the p62-Deficient Tumor Stroma. Cell Metabolism, 2017, 26, 817-829.e6.	7.2	81

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55	Reductive carboxylation supports redox homeostasis during anchorage-independent growth. Nature, 2016, 532, 255-258.	13.7	472
56	PGC1Î± drives a metabolic block on prostate cancer progression. Nature Cell Biology, 2016, 18, 589-590.	4.6	13
57	Immunoresponsive Gene 1 and Itaconate Inhibit Succinate Dehydrogenase to Modulate Intracellular Succinate Levels. Journal of Biological Chemistry, 2016, 291, 14274-14284.	1.6	342
58	Distinct Metabolic States Can Support Self-Renewal and Lipogenesis in Human Pluripotent Stem Cells under Different Culture Conditions. Cell Reports, 2016, 16, 1536-1547.	2.9	112
59	Tracing insights into human metabolism using chemical engineering approaches. Current Opinion in Chemical Engineering, 2016, 14, 72-81.	3.8	11
60	Inhibition of acetyl-CoA carboxylase suppresses fatty acid synthesis and tumor growth of non-small-cell lung cancer in preclinical models. Nature Medicine, 2016, 22, 1108-1119.	15.2	357
61	CRY2 and FBXL3 Cooperatively Degrade c-MYC. Molecular Cell, 2016, 64, 774-789.	4.5	159
62	Adipose tissue mTORC2 regulates ChREBP-driven de novo lipogenesis and hepatic glucose metabolism. Nature Communications, 2016, 7, 11365.	5.8	139
63	ATP-Citrate Lyase Controls a Glucose-to-Acetate Metabolic Switch. Cell Reports, 2016, 17, 1037-1052.	2.9	282
64	Chasing One-Carbon Units to Understand the Role of Serine in Epigenetics. Molecular Cell, 2016, 61, 185-186.	4.5	25
65	Branched-chain amino acid catabolism fuels adipocyte differentiation and lipogenesis. Nature Chemical Biology, 2016, 12, 15-21.	3.9	326
66	A roadmap for interpreting 13 C metabolite labeling patterns from cells. Current Opinion in Biotechnology, 2015, 34, 189-201.	3.3	513
67	Mitochondria as biosynthetic factories for cancer proliferation. Cancer & Metabolism, 2015, 3, 1.	2.4	308
68	Metabolic consequences of oncogenic IDH mutations. , 2015, 152, 54-62.		125
69	Loss of succinate dehydrogenase activity results in dependency on pyruvate carboxylation for cellular anabolism. Nature Communications, 2015, 6, 8784.	5.8	169
70	Editorial overview: Systems biology: Advances in multi-scale systems biology applications. Current Opinion in Biotechnology, 2014, 28, vi-viii.	3.3	0
71	Metabolic and transcriptional response to a high-fat diet in Drosophila melanogaster. Molecular Metabolism, 2014, 3, 42-54.	3.0	78
72	Regulation of Substrate Utilization by the Mitochondrial Pyruvate Carrier. Molecular Cell, 2014, 56, 425-435.	4.5	243

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73	IDH1 Mutations Alter Citric Acid Cycle Metabolism and Increase Dependence on Oxidative Mitochondrial Metabolism. Cancer Research, 2014, 74, 3317-3331.	0.4	224
74	Metabolic Reprogramming of Stromal Fibroblasts through p62-mTORC1 Signaling Promotes Inflammation and Tumorigenesis. Cancer Cell, 2014, 26, 121-135.	7.7	258
75	Tracing Compartmentalized NADPH Metabolism in the Cytosol and Mitochondria of Mammalian Cells. Molecular Cell, 2014, 55, 253-263.	4.5	477
76	Understanding Metabolic Regulation and Its Influence on Cell Physiology. Molecular Cell, 2013, 49, 388-398.	4.5	253
77	Expanding the Reach of Cancer Metabolomics. Cancer Prevention Research, 2012, 5, 1337-1340.	0.7	19
78	Reductive glutamine metabolism by IDH1 mediates lipogenesis under hypoxia. Nature, 2012, 481, 380-384.	13.7	1,470
79	Phosphoglycerate dehydrogenase diverts glycolytic flux and contributes to oncogenesis. Nature Genetics, 2011, 43, 869-874.	9.4	945
80	Metabolism strikes back: metabolic flux regulates cell signaling: Figure 1.. Genes and Development, 2010, 24, 2717-2722.	2.7	118
81	Evaluation of 13C isotopic tracers for metabolic flux analysis in mammalian cells. Journal of Biotechnology, 2009, 144, 167-174.	1.9	257