

# Christian M Metallo

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Reductive glutamine metabolism by IDH1 mediates lipogenesis under hypoxia. <i>Nature</i> , 2012, 481, 380-384.	13.7	1,470
2	Phosphoglycerate dehydrogenase diverts glycolytic flux and contributes to oncogenesis. <i>Nature Genetics</i> , 2011, 43, 869-874.	9.4	945
3	A roadmap for interpreting <sup>13</sup> C metabolite labeling patterns from cells. <i>Current Opinion in Biotechnology</i> , 2015, 34, 189-201.	3.3	513
4	Tracing Compartmentalized NADPH Metabolism in the Cytosol and Mitochondria of Mammalian Cells. <i>Molecular Cell</i> , 2014, 55, 253-263.	4.5	477
5	Reductive carboxylation supports redox homeostasis during anchorage-independent growth. <i>Nature</i> , 2016, 532, 255-258.	13.7	472
6	Inhibition of acetyl-CoA carboxylase suppresses fatty acid synthesis and tumor growth of non-small-cell lung cancer in preclinical models. <i>Nature Medicine</i> , 2016, 22, 1108-1119.	15.2	357
7	Immunoresponsive Gene 1 and Itaconate Inhibit Succinate Dehydrogenase to Modulate Intracellular Succinate Levels. <i>Journal of Biological Chemistry</i> , 2016, 291, 14274-14284.	1.6	342
8	Branched-chain amino acid catabolism fuels adipocyte differentiation and lipogenesis. <i>Nature Chemical Biology</i> , 2016, 12, 15-21.	3.9	326
9	Mitochondria as biosynthetic factories for cancer proliferation. <i>Cancer &amp; Metabolism</i> , 2015, 3, 1.	2.4	308
10	ATP-Citrate Lyase Controls a Glucose-to-Acetate Metabolic Switch. <i>Cell Reports</i> , 2016, 17, 1037-1052.	2.9	282
11	Metabolic Reprogramming of Stromal Fibroblasts through p62-mTORC1 Signaling Promotes Inflammation and Tumorigenesis. <i>Cancer Cell</i> , 2014, 26, 121-135.	7.7	258
12	Evaluation of <sup>13</sup> C isotopic tracers for metabolic flux analysis in mammalian cells. <i>Journal of Biotechnology</i> , 2009, 144, 167-174.	1.9	257
13	Understanding Metabolic Regulation and Its Influence on Cell Physiology. <i>Molecular Cell</i> , 2013, 49, 388-398.	4.5	253
14	Regulation of Substrate Utilization by the Mitochondrial Pyruvate Carrier. <i>Molecular Cell</i> , 2014, 56, 425-435.	4.5	243
15	Transaminase Inhibition by 2-Hydroxyglutarate Impairs Glutamate Biosynthesis and Redox Homeostasis in Glioma. <i>Cell</i> , 2018, 175, 101-116.e25.	13.5	234
16	Cystine transporter regulation of pentose phosphate pathway dependency and disulfide stress exposes a targetable metabolic vulnerability in cancer. <i>Nature Cell Biology</i> , 2020, 22, 476-486.	4.6	226
17	IDH1 Mutations Alter Citric Acid Cycle Metabolism and Increase Dependence on Oxidative Mitochondrial Metabolism. <i>Cancer Research</i> , 2014, 74, 3317-3331.	0.4	224
18	The PLAG1-GDH1 Axis Promotes Anoikis Resistance and Tumor Metastasis through CamKK2-AMPK Signaling in LKB1-Deficient Lung Cancer. <i>Molecular Cell</i> , 2018, 69, 87-99.e7.	4.5	217

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19	Genetic Liver-Specific AMPK Activation Protects against Diet-Induced Obesity and NAFLD. <i>Cell Reports</i> , 2019, 26, 192-208.e6.	2.9	202
20	Metabolic Maturation Media Improve Physiological Function of Human iPSC-Derived Cardiomyocytes. <i>Cell Reports</i> , 2020, 32, 107925.	2.9	198
21	Fructose stimulated de novo lipogenesis is promoted by inflammation. <i>Nature Metabolism</i> , 2020, 2, 1034-1045.	5.1	174
22	Loss of succinate dehydrogenase activity results in dependency on pyruvate carboxylation for cellular anabolism. <i>Nature Communications</i> , 2015, 6, 8784.	5.8	169
23	Serine and Lipid Metabolism in Macular Disease and Peripheral Neuropathy. <i>New England Journal of Medicine</i> , 2019, 381, 1422-1433.	13.9	166
24	Serine restriction alters sphingolipid diversity to constrain tumour growth. <i>Nature</i> , 2020, 586, 790-795.	13.7	166
25	Enzyme promiscuity drives branched-chain fatty acid synthesis in adipose tissues. <i>Nature Chemical Biology</i> , 2018, 14, 1021-1031.	3.9	165
26	CRY2 and FBXL3 Cooperatively Degrade c-MYC. <i>Molecular Cell</i> , 2016, 64, 774-789.	4.5	159
27	Brown Fat AKT2 Is a Cold-Induced Kinase that Stimulates ChREBP-Mediated De Novo Lipogenesis to Optimize Fuel Storage and Thermogenesis. <i>Cell Metabolism</i> , 2018, 27, 195-209.e6.	7.2	151
28	Inhibition of the mitochondrial pyruvate carrier protects from excitotoxic neuronal death. <i>Journal of Cell Biology</i> , 2017, 216, 1091-1105.	2.3	140
29	Adipose tissue mTORC2 regulates ChREBP-driven de novo lipogenesis and hepatic glucose metabolism. <i>Nature Communications</i> , 2016, 7, 11365.	5.8	139
30	Increased Serine and One-Carbon Pathway Metabolism by PKC $\delta$ Deficiency Promotes Neuroendocrine Prostate Cancer. <i>Cancer Cell</i> , 2019, 35, 385-400.e9.	7.7	128
31	Metabolic consequences of oncogenic IDH mutations. , 2015, 152, 54-62.		125
32	Metabolism strikes back: metabolic flux regulates cell signaling: Figure 1.. <i>Genes and Development</i> , 2010, 24, 2717-2722.	2.7	118
33	Distinct Metabolic States Can Support Self-Renewal and Lipogenesis in Human Pluripotent Stem Cells under Different Culture Conditions. <i>Cell Reports</i> , 2016, 16, 1536-1547.	2.9	112
34	Cancer cells escape autophagy inhibition via NRF2-induced macropinocytosis. <i>Cancer Cell</i> , 2021, 39, 678-693.e11.	7.7	91
35	Itaconate modulates tricarboxylic acid and redox metabolism to mitigate reperfusion injury. <i>Molecular Metabolism</i> , 2020, 32, 122-135.	3.0	83
36	ATF4-Induced Metabolic Reprogramming Is a Synthetic Vulnerability of the p62-Deficient Tumor Stroma. <i>Cell Metabolism</i> , 2017, 26, 817-829.e6.	7.2	81

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37	Combinatorial CRISPR-Cas9 Metabolic Screens Reveal Critical Redox Control Points Dependent on the KEAP1-NRF2 Regulatory Axis. <i>Molecular Cell</i> , 2018, 69, 699-708.e7.	4.5	81
38	Metabolic and transcriptional response to a high-fat diet in <i>Drosophila melanogaster</i> . <i>Molecular Metabolism</i> , 2014, 3, 42-54.	3.0	78
39	PKC $\delta$ /1 Loss Induces Autophagy, Oxidative Phosphorylation, and NRF2 to Promote Liver Cancer Progression. <i>Cancer Cell</i> , 2020, 38, 247-262.e11.	7.7	73
40	Non-canonical mTORC2 Signaling Regulates Brown Adipocyte Lipid Catabolism through SIRT6-FoxO1. <i>Molecular Cell</i> , 2019, 75, 807-822.e8.	4.5	60
41	TANK-Binding Kinase 1 Regulates the Localization of Acyl-CoA Synthetase ACSL1 to Control Hepatic Fatty Acid Oxidation. <i>Cell Metabolism</i> , 2020, 32, 1012-1027.e7.	7.2	59
42	Oncogenic R132 IDH1 Mutations Limit NADPH for De Novo Lipogenesis through (D)2-Hydroxyglutarate Production in Fibrosarcoma Cells. <i>Cell Reports</i> , 2018, 25, 1018-1026.e4.	2.9	56
43	Tracing insights into de novo lipogenesis in liver and adipose tissues. <i>Seminars in Cell and Developmental Biology</i> , 2020, 108, 65-71.	2.3	53
44	Adipocyte ACLY Facilitates Dietary Carbohydrate Handling to Maintain Metabolic Homeostasis in Females. <i>Cell Reports</i> , 2019, 27, 2772-2784.e6.	2.9	49
45	Quantifying Intermediary Metabolism and Lipogenesis in Cultured Mammalian Cells Using Stable Isotope Tracing and Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2019, 1978, 219-241.	0.4	48
46	Integrated In Vivo Quantitative Proteomics and Nutrient Tracing Reveals Age-Related Metabolic Rewiring of Pancreatic $\beta$ Cell Function. <i>Cell Reports</i> , 2018, 25, 2904-2918.e8.	2.9	44
47	LKB1 promotes metabolic flexibility in response to energy stress. <i>Metabolic Engineering</i> , 2017, 43, 208-217.	3.6	42
48	$\delta$ -6-Phosphogluconolactone, a Byproduct of the Oxidative Pentose Phosphate Pathway, Contributes to AMPK Activation through Inhibition of PP2A. <i>Molecular Cell</i> , 2019, 76, 857-871.e9.	4.5	39
49	Reverse engineering the cancer metabolic network using flux analysis to understand drivers of human disease. <i>Metabolic Engineering</i> , 2018, 45, 95-108.	3.6	36
50	Ra1A controls glucose homeostasis by regulating glucose uptake in brown fat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7819-7824.	3.3	36
51	Itaconate Alters Succinate and Coenzyme A Metabolism via Inhibition of Mitochondrial Complex II and Methylmalonyl-CoA Mutase. <i>Metabolites</i> , 2021, 11, 117.	1.3	35
52	3D collagen architecture regulates cell adhesion through degradability, thereby controlling metabolic and oxidative stress. <i>Integrative Biology (United Kingdom)</i> , 2019, 11, 221-234.	0.6	33
53	Serine biosynthesis defect due to haploinsufficiency of PHGDH causes retinal disease. <i>Nature Metabolism</i> , 2021, 3, 366-377.	5.1	32
54	Mesaconate is synthesized from itaconate and exerts immunomodulatory effects in macrophages. <i>Nature Metabolism</i> , 2022, 4, 524-533.	5.1	32

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55	Extracellular serine and glycine are required for mouse and human skeletal muscle stem and progenitor cell function. <i>Molecular Metabolism</i> , 2021, 43, 101106.	3.0	31
56	Disruption of the sodium-dependent citrate transporter SLC13A5 in mice causes alterations in brain citrate levels and neuronal network excitability in the hippocampus. <i>Neurobiology of Disease</i> , 2020, 143, 105018.	2.1	30
57	PI5P4Ks drive metabolic homeostasis through peroxisome-mitochondria interplay. <i>Developmental Cell</i> , 2021, 56, 1661-1676.e10.	3.1	27
58	Chasing One-Carbon Units to Understand the Role of Serine in Epigenetics. <i>Molecular Cell</i> , 2016, 61, 185-186.	4.5	25
59	NaCT/SLC13A5 facilitates citrate import and metabolism under nutrient-limited conditions. <i>Cell Reports</i> , 2021, 36, 109701.	2.9	23
60	Serine biosynthesis as a novel therapeutic target for dilated cardiomyopathy. <i>European Heart Journal</i> , 2022, 43, 3477-3489.	1.0	23
61	Cryptochromes Suppress HIF1 $\alpha$ in Muscles. <i>IScience</i> , 2020, 23, 101338.	1.9	22
62	The lactate-NAD <sup>+</sup> axis activates cancer-associated fibroblasts by downregulating p62. <i>Cell Reports</i> , 2022, 39, 110792.	2.9	22
63	Sub-nanowatt microfluidic single-cell calorimetry. <i>Nature Communications</i> , 2020, 11, 2982.	5.8	21
64	Expanding the Reach of Cancer Metabolomics. <i>Cancer Prevention Research</i> , 2012, 5, 1337-1340.	0.7	19
65	A Small Molecule Fluorogenic Probe for the Detection of Sphingosine in Living Cells. <i>Journal of the American Chemical Society</i> , 2020, 142, 17887-17891.	6.6	18
66	Dairy Fat Intake, Plasma Pentadecanoic Acid, and Plasma Isoheptadecanoic Acid Are Inversely Associated With Liver Fat in Children. <i>Journal of Pediatric Gastroenterology and Nutrition</i> , 2021, 72, e90-e96.	0.9	16
67	Daily running enhances molecular and physiological circadian rhythms in skeletal muscle. <i>Molecular Metabolism</i> , 2022, 61, 101504.	3.0	14
68	PGC1 $\alpha$ drives a metabolic block on prostate cancer progression. <i>Nature Cell Biology</i> , 2016, 18, 589-590.	4.6	13
69	Microbiota control of maternal behavior regulates early postnatal growth of offspring. <i>Science Advances</i> , 2021, 7, .	4.7	13
70	Exploring the evolutionary roots and physiological function of itaconate. <i>Current Opinion in Biotechnology</i> , 2021, 68, 144-150.	3.3	13
71	Escher-Trace: a web application for pathway-based visualization of stable isotope tracing data. <i>BMC Bioinformatics</i> , 2020, 21, 297.	1.2	12
72	Tracing insights into human metabolism using chemical engineering approaches. <i>Current Opinion in Chemical Engineering</i> , 2016, 14, 72-81.	3.8	11

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73	Disruption of redox homeostasis for combinatorial drug efficacy in K-Ras tumors as revealed by metabolic connectivity profiling. <i>Cancer &amp; Metabolism</i> , 2020, 8, 22.	2.4	10
74	Statins Limit Coenzyme Q Synthesis and Metabolically Synergize with MEK Inhibition in Pancreatic Tumors. <i>Cancer Research</i> , 2020, 80, 151-152.	0.4	10
75	Tolerance to graded dosages of histidine supplementation in healthy human adults. <i>American Journal of Clinical Nutrition</i> , 2020, 112, 1358-1367.	2.2	8
76	Progressive alterations in amino acid and lipid metabolism correlate with peripheral neuropathy in <i>Polg</i> <sup>D257A</sup> mice. <i>Science Advances</i> , 2021, 7, eabj4077.	4.7	8
77	Preserved cardiac function by vinculin enhances glucose oxidation and extends health- and life-span. <i>APL Bioengineering</i> , 2018, 2, .	3.3	5
78	Deuterium Tracing to Interrogate Compartment-Specific NAD(P)H Metabolism in Cultured Mammalian Cells. <i>Methods in Molecular Biology</i> , 2020, 2088, 51-71.	0.4	5
79	Charting oncogenicity of genes and variants across lineages via multiplexed screens in teratomas. <i>IScience</i> , 2021, 24, 103149.	1.9	2
80	Editorial overview: Systems biology: Advances in multi-scale systems biology applications. <i>Current Opinion in Biotechnology</i> , 2014, 28, vi-viii.	3.3	0
81	Understanding the interplay between amino acid and lipid metabolism in tumor growth. <i>FASEB Journal</i> , 2018, 32, .	0.2	0