

Christian M Metallo

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

11,260
citations

61984

43
h-index

66911

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.	27.8	1,470
2	Phosphoglycerate dehydrogenase diverts glycolytic flux and contributes to oncogenesis. <i>Nature Genetics</i> , 2011, 43, 869-874.	21.4	945
3	A roadmap for interpreting ¹³ C metabolite labeling patterns from cells. <i>Current Opinion in Biotechnology</i> , 2015, 34, 189-201.	6.6	513
4	Tracing Compartmentalized NADPH Metabolism in the Cytosol and Mitochondria of Mammalian Cells. <i>Molecular Cell</i> , 2014, 55, 253-263.	9.7	477
5	Reductive carboxylation supports redox homeostasis during anchorage-independent growth. <i>Nature</i> , 2016, 532, 255-258.	27.8	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.	30.7	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.	3.4	342
8	Branched-chain amino acid catabolism fuels adipocyte differentiation and lipogenesis. <i>Nature Chemical Biology</i> , 2016, 12, 15-21.	8.0	326
9	Mitochondria as biosynthetic factories for cancer proliferation. <i>Cancer & Metabolism</i> , 2015, 3, 1.	5.0	308
10	ATP-Citrate Lyase Controls a Glucose-to-Acetate Metabolic Switch. <i>Cell Reports</i> , 2016, 17, 1037-1052.	6.4	282
11	Metabolic Reprogramming of Stromal Fibroblasts through p62-mTORC1 Signaling Promotes Inflammation and Tumorigenesis. <i>Cancer Cell</i> , 2014, 26, 121-135.	16.8	258
12	Evaluation of ¹³ C isotopic tracers for metabolic flux analysis in mammalian cells. <i>Journal of Biotechnology</i> , 2009, 144, 167-174.	3.8	257
13	Understanding Metabolic Regulation and Its Influence on Cell Physiology. <i>Molecular Cell</i> , 2013, 49, 388-398.	9.7	253
14	Regulation of Substrate Utilization by the Mitochondrial Pyruvate Carrier. <i>Molecular Cell</i> , 2014, 56, 425-435.	9.7	243
15	Transaminase Inhibition by 2-Hydroxyglutarate Impairs Glutamate Biosynthesis and Redox Homeostasis in Glioma. <i>Cell</i> , 2018, 175, 101-116.e25.	28.9	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.	10.3	226
17	IDH1 Mutations Alter Citric Acid Cycle Metabolism and Increase Dependence on Oxidative Mitochondrial Metabolism. <i>Cancer Research</i> , 2014, 74, 3317-3331.	0.9	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.	9.7	217

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19	Genetic Liver-Specific AMPK Activation Protects against Diet-Induced Obesity and NAFLD. Cell Reports, 2019, 26, 192-208.e6.	6.4	202
20	Metabolic Maturation Media Improve Physiological Function of Human iPSC-Derived Cardiomyocytes. Cell Reports, 2020, 32, 107925.	6.4	198
21	Fructose stimulated de novo lipogenesis is promoted by inflammation. Nature Metabolism, 2020, 2, 1034-1045.	11.9	174
22	Loss of succinate dehydrogenase activity results in dependency on pyruvate carboxylation for cellular anabolism. Nature Communications, 2015, 6, 8784.	12.8	169
23	Serine and Lipid Metabolism in Macular Disease and Peripheral Neuropathy. New England Journal of Medicine, 2019, 381, 1422-1433.	27.0	166
24	Serine restriction alters sphingolipid diversity to constrain tumour growth. Nature, 2020, 586, 790-795.	27.8	166
25	Enzyme promiscuity drives branched-chain fatty acid synthesis in adipose tissues. Nature Chemical Biology, 2018, 14, 1021-1031.	8.0	165
26	CRY2 and FBXL3 Cooperatively Degrade c-MYC. Molecular Cell, 2016, 64, 774-789.	9.7	159
27	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.	16.2	151
28	Inhibition of the mitochondrial pyruvate carrier protects from excitotoxic neuronal death. Journal of Cell Biology, 2017, 216, 1091-1105.	5.2	140
29	Adipose tissue mTORC2 regulates ChREBP-driven de novo lipogenesis and hepatic glucose metabolism. Nature Communications, 2016, 7, 11365.	12.8	139
30	Increased Serine and One-Carbon Pathway Metabolism by PKC δ Deficiency Promotes Neuroendocrine Prostate Cancer. Cancer Cell, 2019, 35, 385-400.e9.	16.8	128
31	Metabolic consequences of oncogenic IDH mutations. , 2015, 152, 54-62.		125
32	Metabolism strikes back: metabolic flux regulates cell signaling: Figure 1.. Genes and Development, 2010, 24, 2717-2722.	5.9	118
33	Distinct Metabolic States Can Support Self-Renewal and Lipogenesis in Human Pluripotent Stem Cells under Different Culture Conditions. Cell Reports, 2016, 16, 1536-1547.	6.4	112
34	Cancer cells escape autophagy inhibition via NRF2-induced macropinocytosis. Cancer Cell, 2021, 39, 678-693.e11.	16.8	91
35	Itaconate modulates tricarboxylic acid and redox metabolism to mitigate reperfusion injury. Molecular Metabolism, 2020, 32, 122-135.	6.5	83
36	ATF4-Induced Metabolic Reprogramming Is a Synthetic Vulnerability of the p62-Deficient Tumor Stroma. Cell Metabolism, 2017, 26, 817-829.e6.	16.2	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.	9.7	81
38	Metabolic and transcriptional response to a high-fat diet in <i>Drosophila melanogaster</i> . <i>Molecular Metabolism</i> , 2014, 3, 42-54.	6.5	78
39	PKC δ /p1 Loss Induces Autophagy, Oxidative Phosphorylation, and NRF2 to Promote Liver Cancer Progression. <i>Cancer Cell</i> , 2020, 38, 247-262.e11.	16.8	73
40	Non-canonical mTORC2 Signaling Regulates Brown Adipocyte Lipid Catabolism through SIRT6-FoxO1. <i>Molecular Cell</i> , 2019, 75, 807-822.e8.	9.7	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.	16.2	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.	6.4	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.	5.0	53
44	Adipocyte ACLY Facilitates Dietary Carbohydrate Handling to Maintain Metabolic Homeostasis in Females. <i>Cell Reports</i> , 2019, 27, 2772-2784.e6.	6.4	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.	0.9	48
46	Integrated In Vivo Quantitative Proteomics and Nutrient Tracing Reveals Age-Related Metabolic Rewiring of Pancreatic β Cell Function. <i>Cell Reports</i> , 2018, 25, 2904-2918.e8.	6.4	44
47	LKB1 promotes metabolic flexibility in response to energy stress. <i>Metabolic Engineering</i> , 2017, 43, 208-217.	7.0	42
48	β -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.	9.7	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.	7.0	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.	7.1	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.	2.9	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.	1.3	33
53	Serine biosynthesis defect due to haploinsufficiency of PHGDH causes retinal disease. <i>Nature Metabolism</i> , 2021, 3, 366-377.	11.9	32
54	Mesaconate is synthesized from itaconate and exerts immunomodulatory effects in macrophages. <i>Nature Metabolism</i> , 2022, 4, 524-533.	11.9	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.	6.5	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.	4.4	30
57	PI5P4Ks drive metabolic homeostasis through peroxisome-mitochondria interplay. <i>Developmental Cell</i> , 2021, 56, 1661-1676.e10.	7.0	27
58	Chasing One-Carbon Units to Understand the Role of Serine in Epigenetics. <i>Molecular Cell</i> , 2016, 61, 185-186.	9.7	25
59	NaCT/SLC13A5 facilitates citrate import and metabolism under nutrient-limited conditions. <i>Cell Reports</i> , 2021, 36, 109701.	6.4	23
60	Serine biosynthesis as a novel therapeutic target for dilated cardiomyopathy. <i>European Heart Journal</i> , 2022, 43, 3477-3489.	2.2	23
61	Cryptochromes Suppress HIF1 α in Muscles. <i>IScience</i> , 2020, 23, 101338.	4.1	22
62	The lactate-NAD ⁺ axis activates cancer-associated fibroblasts by downregulating p62. <i>Cell Reports</i> , 2022, 39, 110792.	6.4	22
63	Sub-nanowatt microfluidic single-cell calorimetry. <i>Nature Communications</i> , 2020, 11, 2982.	12.8	21
64	Expanding the Reach of Cancer Metabolomics. <i>Cancer Prevention Research</i> , 2012, 5, 1337-1340.	1.5	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.	13.7	18
66	Dairy Fat Intake, Plasma Pentadecanoic Acid, and Plasma Iso α -heptadecanoic Acid Are Inversely Associated With Liver Fat in Children. <i>Journal of Pediatric Gastroenterology and Nutrition</i> , 2021, 72, e90-e96.	1.8	16
67	Daily running enhances molecular and physiological circadian rhythms in skeletal muscle. <i>Molecular Metabolism</i> , 2022, 61, 101504.	6.5	14
68	PGC1 α drives a metabolic block on prostate cancer progression. <i>Nature Cell Biology</i> , 2016, 18, 589-590.	10.3	13
69	Microbiota control of maternal behavior regulates early postnatal growth of offspring. <i>Science Advances</i> , 2021, 7, .	10.3	13
70	Exploring the evolutionary roots and physiological function of itaconate. <i>Current Opinion in Biotechnology</i> , 2021, 68, 144-150.	6.6	13
71	Escher-Trace: a web application for pathway-based visualization of stable isotope tracing data. <i>BMC Bioinformatics</i> , 2020, 21, 297.	2.6	12
72	Tracing insights into human metabolism using chemical engineering approaches. <i>Current Opinion in Chemical Engineering</i> , 2016, 14, 72-81.	7.8	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 & Metabolism</i> , 2020, 8, 22.	5.0	10
74	Statins Limit Coenzyme Q Synthesis and Metabolically Synergize with MEK Inhibition in Pancreatic Tumors. <i>Cancer Research</i> , 2020, 80, 151-152.	0.9	10
75	Tolerance to graded dosages of histidine supplementation in healthy human adults. <i>American Journal of Clinical Nutrition</i> , 2020, 112, 1358-1367.	4.7	8
76	Progressive alterations in amino acid and lipid metabolism correlate with peripheral neuropathy in Polg ^{D257A} mice. <i>Science Advances</i> , 2021, 7, eabj4077.	10.3	8
77	Preserved cardiac function by vinculin enhances glucose oxidation and extends health- and life-span. <i>APL Bioengineering</i> , 2018, 2, .	6.2	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.	0.9	5
79	Charting oncogenicity of genes and variants across lineages via multiplexed screens in teratomas. <i>IScience</i> , 2021, 24, 103149.	4.1	2
80	Editorial overview: Systems biology: Advances in multi-scale systems biology applications. <i>Current Opinion in Biotechnology</i> , 2014, 28, vi-viii.	6.6	0
81	Understanding the interplay between amino acid and lipid metabolism in tumor growth. <i>FASEB Journal</i> , 2018, 32, .	0.5	0