KÄ±vanÃ§ Birsoy

List of Publications by Year
in descending order

61 papers	11,940 citations	94269 37 h-index	128067 60 g-index
68 all docs	68 docs citations	68 times ranked	21535 citing authors

#	Article	IF	Citations
1	Identification and characterization of essential genes in the human genome. Science, 2015, 350, 1096-1101.	6.0	1,461
2	Functional genomics reveal that the serine synthesis pathway is essential in breast cancer. Nature, 2011, 476, 346-350.	13.7	1,359
3	An Essential Role of the Mitochondrial Electron Transport Chain in Cell Proliferation Is to Enable Aspartate Synthesis. Cell, 2015, 162, 540-551.	13.5	1,024
4	Identification of White Adipocyte Progenitor Cells In Vivo. Cell, 2008, 135, 240-249.	13.5	828
5	mTORC1 in the Paneth cell niche couples intestinal stem-cell function to calorie intake. Nature, 2012, 486, 490-495.	13.7	631
6	Metabolic determinants of cancer cell sensitivity to glucose limitation and biguanides. Nature, 2014, 508, 108-112.	13.7	585
7	NFS1 undergoes positive selection in lung tumours and protects cells from ferroptosis. Nature, 2017, 551, 639-643.	13.7	478
8	A PHGDH inhibitor reveals coordination of serine synthesis and one-carbon unit fate. Nature Chemical Biology, 2016, 12, 452-458.	3.9	389
9	A Diverse Array of Cancer-Associated <i>MTOR</i> Mutations Are Hyperactivating and Can Predict Rapamycin Sensitivity. Cancer Discovery, 2014, 4, 554-563.	7.7	384
10	Absolute Quantification of Matrix Metabolites Reveals the Dynamics of Mitochondrial Metabolism. Cell, 2016, 166, 1324-1337.e11.	13.5	367
11	Metabolic determinants of cancer cell sensitivity to canonical ferroptosis inducers. Nature Chemical Biology, 2020, 16, 1351-1360.	3.9	339
12	Aspartate is a limiting metabolite for cancer cell proliferation under hypoxia and in tumours. Nature Cell Biology, 2018, 20, 775-781.	4.6	311
13	SHMT2 drives glioma cell survival in ischaemia but imposes a dependence on glycine clearance. Nature, 2015, 520, 363-367.	13.7	303
14	Transcriptional Regulation of Adipogenesis by KLF4. Cell Metabolism, 2008, 7, 339-347.	7.2	293
15	Molecular Profiling of Activated Neurons by Phosphorylated Ribosome Capture. Cell, 2012, 151, 1126-1137.	13.5	270
16	Squalene accumulation in cholesterol auxotrophic lymphomas prevents oxidative cell death. Nature, 2019, 567, 118-122.	13.7	262
17	Antidiabetic Effects of IGFBP2, a Leptin-Regulated Gene. Cell Metabolism, 2010, 11, 11-22.	7.2	251
18	Adipocyte-Derived Lipids Mediate Melanoma Progression via FATP Proteins. Cancer Discovery, 2018, 8, 1006-1025.	7.7	248

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19	Molecular Characterization and Clinical Relevance of Metabolic Expression Subtypes in Human Cancers. Cell Reports, 2018, 23, 255-269.e4.	2.9	204
20	Maintaining Iron Homeostasis Is the Key Role of Lysosomal Acidity for Cell Proliferation. Molecular Cell, 2020, 77, 645-655.e7.	4.5	144
21	Serine Catabolism by SHMT2 Is Required for Proper Mitochondrial Translation Initiation and Maintenance of Formylmethionyl-tRNAs. Molecular Cell, 2018, 69, 610-621.e5.	4.5	139
22	A CRISPR screen identifies a pathway required for paraquat-induced cell death. Nature Chemical Biology, 2017, 13, 1274-1279.	3.9	138
23	A comparative perspective on lipid storage in animals. Journal of Cell Science, 2013, 126, 1541-1552.	1.2	112
24	DEPTOR Cell-Autonomously Promotes Adipogenesis, and Its Expression Is Associated with Obesity. Cell Metabolism, 2012, 16, 202-212.	7.2	99
25	SLC25A39 is necessary for mitochondrial glutathione import in mammalian cells. Nature, 2021, 599, 136-140.	13.7	89
26	Analysis of gene networks in white adipose tissue development reveals a role for ETS2 in adipogenesis. Development (Cambridge), 2011, 138, 4709-4719.	1.2	87
27	CHP1 Regulates Compartmentalized Glycerolipid Synthesis by Activating GPAT4. Molecular Cell, 2019, 74, 45-58.e7.	4.5	83
28	MITO-Tag Mice enable rapid isolation and multimodal profiling of mitochondria from specific cell types in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 303-312.	3.3	80
29	Dysregulation of a long noncoding RNA reduces leptin leading to a leptin-responsive form of obesity. Nature Medicine, 2019, 25, 507-516.	15.2	79
30	A muscle-specific knockout implicates nuclear receptor coactivator MED1 in the regulation of glucose and energy metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10196-10201.	3.3	74
31	A critical role for mTORC1 in erythropoiesis and anemia. ELife, 2014, 3, e01913.	2.8	67
32	Functional Genomics InÂVivo Reveal Metabolic Dependencies of Pancreatic Cancer Cells. Cell Metabolism, 2021, 33, 211-221.e6.	7.2	63
33	Untuning the tumor metabolic machine: Targeting cancer metabolism: a bedside lesson. Nature Medicine, 2012, 18, 1022-1023.	15.2	60
34	Identification of Biologically Active PDE11-Selective Inhibitors Using a Yeast-Based High-Throughput Screen. Chemistry and Biology, 2012, 19, 155-163.	6.2	53
35	Target identification reveals lanosterol synthase as a vulnerability in glioma. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7957-7962.	3.3	52
36	Targeting extracellular nutrient dependencies of cancer cells. Molecular Metabolism, 2020, 33, 67-82.	3.0	50

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37	The anticancer natural product ophiobolin A induces cytotoxicity by covalent modification of phosphatidylethanolamine. ELife, 2016, 5, .	2.8	44
38	ZBTB1 Regulates Asparagine Synthesis and Leukemia Cell Response to L-Asparaginase. Cell Metabolism, 2020, 31, 852-861.e6.	7.2	40
39	<i>PIK3CA</i> mutant tumors depend on oxoglutarate dehydrogenase. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3434-E3443.	3.3	38
40	The Adaptor Protein p66Shc Inhibits mTOR-Dependent Anabolic Metabolism. Science Signaling, 2014, 7, ra17.	1.6	37
41	SUMO-1 Modification of Human Transcription Factor (TF) IID Complex Subunits. Journal of Biological Chemistry, 2005, 280, 9937-9945.	1.6	35
42	The serine hydroxymethyltransferase-2 (SHMT2) initiates lymphoma development through epigenetic tumor suppressor silencing. Nature Cancer, 2020, 1, 653-664.	5.7	35
43	Cellular program controlling the recovery of adipose tissue mass: An <i>in vivo</i> imaging approach. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12985-12990.	3.3	34
44	Nuclear Factor-Y is an adipogenic factor that regulates leptin gene expression. Molecular Metabolism, 2015, 4, 392-405.	3.0	32
45	Metabolic coessentiality mapping identifies C12orf49 as a regulator of SREBP processing and cholesterol metabolism. Nature Metabolism, 2020, 2, 487-498.	5.1	32
46	A mitochondrial gatekeeper that helps cells escape death by ferroptosis. Nature, 2021, 593, 514-515.	13.7	26
47	Adaptive stimulation of macropinocytosis overcomes aspartate limitation in cancer cells under hypoxia. Nature Metabolism, 2022, 4, 724-738.	5.1	20
48	Amplification of Adipogenic Commitment by VSTM2A. Cell Reports, 2017, 18, 93-106.	2.9	18
49	Drugging ACAT1 for Cancer Therapy. Molecular Cell, 2016, 64, 856-857.	4.5	16
50	<i>ATRAID</i> regulates the action of nitrogen-containing bisphosphonates on bone. Science Translational Medicine, 2020, 12, .	5.8	15
51	Metabolic-scale gene activation screens identify SLCO2B1 as a heme transporter that enhances cellular iron availability. Molecular Cell, 2022, 82, 2832-2843.e7.	4.5	13
52	The Transsulfuration Pathway Makes, the Tumor Takes. Cell Metabolism, 2019, 30, 845-846.	7.2	12
53	Dietary thiamine influences <scp>l</scp> -asparaginase sensitivity in a subset of leukemia cells. Science Advances, 2020, 6, .	4.7	9
54	Asparagine, a Key Metabolite in Cellular Response to Mitochondrial Dysfunction. Trends in Cancer, 2021, 7, 479-481.	3.8	5

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55	Limitation of adipose tissue by the number of embryonic progenitor cells. ELife, 2020, 9, .	2.8	4
56	Targeting mitochondrial metabolism in acute myeloid leukemia. Leukemia and Lymphoma, 2022, 63, 530-537.	0.6	3
57	Deciphering cellular heterogeneity of pancreatic tumours. Nature Cell Biology, 2019, 21, 1305-1306.	4.6	2
58	A link between metabolic energetics and pancreatic cancer mechanosensing. Nature Metabolism, 2020, 2, 5-6.	5.1	2
59	The role of metabolism in cellular processes. Molecular Biology of the Cell, 2019, 30, 733-733.	0.9	1
60	STACKing the odds for discoveries. Nature Chemical Biology, 2021, 17, 627-628.	3.9	0
61	Career pathways, part 5. Nature Metabolism, 2021, 3, 887-889.	5.1	0